

After DESERT STORM

The U.S. Army and the Reconstruction of Kuwait





Janet A. McDonnell

After Desert Storm

The U.S. Army and the Reconstruction of Kuwait

by

Janet A. McDonnell

DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 1999

Library of Congress Cataloging-in-Publication Data

McDonnell, Janet A., 1952–
After Desert Storm : the U.S. Army and the reconstruction of Kuwait / by Janet A. McDonnell.
p. cm.
Includes bibliographical references (p.) and index.
1. United States. Army—Civic action. 2. Persian Gulf War, 1991—Destruction and pillage—Kuwait. I. Title.
UH723.U54M33 1999
953.67—dc21 99–14015
CIP

CMH Pub 70–59

EP870–1–58

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328
ISBN 0-16-049770-1

ISBN 0-16-049770-1
90000
9 780160 497704

Foreword

One of the most striking features of Operation DESERT STORM's aftermath was the facility with which American soldiers transitioned from offensive warfare to humanitarian relief. Throughout history our soldiers—and the civilians who accompany them—have been quick to assist populations in need, whether the victims of natural disaster, military operations, or calculated oppression. The increasing number of noncombat military operations in recent years underscores the significance of this rehabilitative role of the American soldier.

Not since World War II had U.S. Army soldiers and civilians played as large a role in rebuilding a foreign nation as they did in Kuwait after the Gulf War. *After DESERT STORM* tells the compelling story of how the Army helped to bring a proud but battered country back to life. Our soldiers found themselves performing such diverse roles as repairing police cars, rebuilding damaged power systems, restoring the water supply, and feeding zoo animals. In the process they touched the lives of every Kuwaiti resident, forging bonds of trust and contributing immeasurably to stability in the region.

Though immensely successful, the Kuwaiti recovery operation was not perfect; *After DESERT STORM* highlights key lessons learned. The reconstruction of Kuwait clearly demonstrated that post-hostilities activities can be as important as conflict itself, and that military leaders must plan carefully for such a recovery mission if they are to capitalize fully on battlefield success. *After DESERT STORM* illuminates appropriate roles for American soldiers and civilians in a post-hostilities environment. We would be wise to take its lessons to heart.

JOE N. BALLARD
Lieutenant General, USA
Chief of Engineers

JOHN S. BROWN
Brigadier General, USA
Chief of Military History

Washington, D.C.
4 June 1999

The Author

Janet A. McDonnell, chief historian, Defense Logistics Agency, received her Ph.D. from Marquette University. Dr. McDonnell has published *The Dispossession of the American Indian: Indian Land Policy, 1887–1934*, as well as several articles on Indian land policy. As a senior historian with the U.S. Army Corps of Engineers, she published *Supporting the Troops: The U.S. Army Corps of Engineers in the Persian Gulf War*, *The U.S. Army Corps of Engineers' Response to the* Exxon Valdez *Oil Spill*, and *Response to the Loma Prieta Earthquake*. She has written brief histories of Hurricane Andrew and Operation RESTORE HOPE (Somalia).

Preface

The effort to rebuild Kuwait was unique, complex, and challenging. The reconstruction was rooted in various authorities and paid for from various pots of money. Both the funding and the work itself were diffuse and diverse in unprecedented ways. My goal was to give a structure and sense of order to the complex story of how a small, independent country recovered in record time from the devastating effects of a seven-month occupation by Iraqi troops, in large part through the efforts of the U.S. Army. To promote greater order and clarity, I have presented the operation both topically and chronologically.

This book originated in 1991 when I was documenting the U.S. Army Corps of Engineers' involvement in the Persian Gulf War. Documenting the Corps' critical role in the Kuwait recovery operation after the end of the war was a natural progression. The Corps of Engineers, however, was not the only Army element with significant involvement in the recovery operations. Recognizing this, the U.S. Army Center of Military History requested that I broaden my account to encompass the activities of the other Army elements.

The story of how American soldiers, working alongside Kuwait's residents, helped bring the country back to life within a few short months is truly remarkable. I feel fortunate to have witnessed some of the recovery process firsthand, to have talked to some of the participants, and now to tell their story. I made two trips to Kuwait to collect records, interview participants, and tour project sites such as the Parliament Building and Doha power plant. I made the first trip into Kuwait a week after the Iraqi withdrawal when the sky was still dark with smoke from the oil fires and water and electrical power were in short supply. There I marveled at the courage and commitment of the soldiers and civilians who worked in that dangerous and stressful environment. When I returned the following September, few visible signs of the occupation remained. The city was again bustling, as residents went about their day-to-day activities. There could be no better tribute to the hard work and dedication of the American soldiers and civilians and their Kuwaiti partners.

As this project comes to a close, I have many to thank. Over the past six years, I have received continued assistance from many individuals at

the headquarters of the Army Corps of Engineers, the Corps' Transatlantic Programs Center, Task Force Freedom, Third U.S. Army, and the Pentagon. These individuals provided me with documents and patiently explained critical events or processes. I am particularly indebted to retired Lt. Col. Michael Fisher, retired Lt. Col. Gordon Quesenberry, John Jones, the G–3 staff at Third U.S. Army, officials in the Office of the Assistant Secretary of the Army for Installations, Logistics and Environment, and the many individuals at Transatlantic Programs Center.

Retired Brig. Gen. Ralph Locurcio deserves special thanks. From its inception, he gave this project his enthusiastic support, read various drafts, and has waited patiently for its completion. Both Locurcio and retired Maj. Gen. Patrick Kelly took time for interviews and gave me unrestricted access to their files and to their staffs. Like Locurcio, Kelly graciously reviewed the final manuscript.

Former Ambassador Edward Gnehm, Dr. Ibrahim Al-Shaheen, Maj. Gen. Howard Mooney, Maj. Gen. Robert S. Frix, and many other soldiers and civilians agreed to be interviewed and took time out of their often hectic schedules to share their insights, fill in factual details, or explain complex processes to me. Since the record of written documents was incomplete, their interviews became an invaluable source of information and perspective.

Col. David E. Peixotto, Russell Plaisance, Wynne Fuller, and Lt. Col. Albert F. Kaminsky—all key participants in the recovery operations—sat for interviews, read draft chapters, and provided comments. Maj. Gen. Howard Mooney, Col. Ed King, and Col. Arthur H. Walz, who led the civil affairs effort in Kuwait, were particularly helpful in reviewing the chapters dealing with civil affairs activities.

Several historians and many subject matter experts reviewed parts or all of the manuscript. Frank Schubert with the Joint History Office read the entire manuscript and contributed his own keen perspective and analysis. Martin A. Reuss and Paul Walker of the Corps of Engineers Office of History read the entire manuscript and offered comments. Joan Kibler at the Transatlantic Programs Center read the manuscript twice with a careful eye for detail. My friends and coworkers at the Corps of Engineers, Frank Bizzoco, Harry Painton, and Jim Parker also read the draft manuscript.

Jim Parker from the Corps' office in Savannah, Georgia, who at the time was serving as General Kelly's public affairs officer in Kuwait, made sure that I got where I needed to be during my second visit. Jonas Jordan, also from the Savannah office, provided almost all of the superb photographs that so vividly capture not only the damage in Kuwait but the strength and resilience of the Kuwaiti people. I am grateful to

Marilyn Hunter for her skilled editing and unflagging enthusiasm for this project. At the Center of Military History, Beth MacKenzie and John Birmingham designed and formatted the book. Susan Carroll compiled the index.

The views expressed in this volume are mine and do not reflect official policy or position of the Department of Defense or the U.S. government.

Washington, D.C.
4 June 1999

JANET A. McDONNELL

Contents

Chapter	*Page*
INTRODUCTION	3
PROLOGUE	7
1. PLANNING FOR EMERGENCY RESPONSE	13
Origins of the Kuwait Emergency Recovery Program	13
The Pentagon Response	16
Formation of the Kuwait Task Force	23
Kuwait Task Force Activities	27
Civil Affairs Operations Plan	32
U.S. Army Corps of Engineers Involvement	35
Kuwaiti and Kuwait Task Force Deployment to Saudi Arabia	40
2. PLANNING IN THEATER	43
The Kuwait Task Force in Theater	43
CENTCOM Planning for Civil-Military Operations	47
ARCENT Planning for Civil-Military Operations	49
Formation of the Combined Civil Affairs Task Force	51
Creation of Task Force Freedom	54
Kuwait Emergency Recovery Office Organization	57
The Push Into Kuwait	62
3. EMERGENCY RESPONSE PHASE: TASK FORCE FREEDOM	71
Task Force Freedom Elements	73
Task Force Freedom Missions	79
Task Force Freedom Command, Control, and Coordination	91
Task Force Freedom/Kuwaiti Relations	92
Task Force Freedom Closeout	93
EMERGENCY RESPONSE PHASE: THE PENTAGON	99

Chapter *Page*

4. EMERGENCY RESPONSE PHASE: KUWAIT EMERGENCY RECOVERY OFFICE ACTIVITIES 107
Coordination and Communication 107
Organizational Structure 110
Command and Control 117
Damage Assessment 119
Corps Contracting Strategy 120
Contracting Activities 127
Problems for Contractors 143
Funding Authorities 145

SUPPORT TO EXPLOSIVE ORDNANCE DISPOSAL 149

5. RECOVERY PHASE: THE DEFENSE RECONSTRUCTION ASSISTANCE OFFICE AND KUWAIT EMERGENCY RECOVERY OFFICE 155
Command, Control, and Communications 158
Financial Management/607A Process 160
Contracting Strategy 166
Contracting for Civil Infrastructure Repair 175

FIGHTING KUWAIT'S OIL FIRES 183

6. SUPPORTING KUWAIT'S MINISTRY OF DEFENCE 191
Initial Damage Assessments 191
Planning Foreign Military Sales Cases for Defense Facilities 196
Foreign Military Sales Case for Phase I Air Base Work 202
Foreign Military Sales Case for Phase II Air Base Work 205
Construction Contracts for Phase I 209
Problems With Phase I Contracts 212

SUPPORT TO U.S. TROOPS 217

AFTERMATH 227

CONCLUSION 237

ACRONYMS 243

NOTES 245

Chapter *Page*

BIBLIOGRAPHY 275

INDEX 283

Tables

No.

1. Civil Affairs Functional Areas 19
2. Kuwait Task Force Teams 28

Charts

1. National Security Council 20
2. Task Force Freedom 56
3. U.S. Central Command (CENTCOM) 78
4. Kuwait Emergency Recovery Office, Emergency Response Phase 111
5. Kuwait Emergency Recovery Office, Recovery Phase 114
6. Defense Reconstruction Assistance Office 157
7. 607A Work Flow 163
8. Kuwait Program Office 208

Figures

1. Overhead Power Distribution System 129
2. Main Roads 133
3. Water System 137
4. Sanitary System 138

Map

1. Kuwait 14

Illustrations

Kuwaiti child in the ruins of the Seif Palace 9
Kuwaiti children celebrate liberation 9
Defaced monument to Saddam Hussein 10
U.S. Ambassador Edward W. Gnehm, Jr., with Col. Ralph V. Locurcio 59

Page

Destroyed Iraqi tank at Al-Magwa oil field 64
Typical Iraqi-constructed bunker 64
Iraqi artillery in downtown Kuwait City 68
Damaged hotel in downtown Kuwait City 68
Iraqi bunkers fortifying Kuwaiti beach 72
Damage assessment team inspects Seif Palace 72
Task Force Freedom headquarters 74
Checkpoint Charlie, southern Iraq 75
Power cable repair 79
Electrical contractors work on damaged power cables 81
Damaged facilities at Shuwaikh port 85
U.S. soldier feeds an injured elephant 90
KERO press briefing 108
Corps member outside Seif Palace 112
Kuwaiti volunteer at the Amiri Hospital 113
Corps contractor and Kuwaiti volunteer discuss road repair 116
U.S. and Kuwaiti engineers inspect electrical damage 128
Assessing power line damage 130
Ambassador Gnehm and Kuwaiti officials at the Doha power plant 131
Iraqi escape route toward Al-Abdaly 134
Road repair south of Kuwait City 134
Contractors repair roads 135
Damaged conference center at Bayan Palace 141
Unexploded ordnance in the desert 150
French marines remove mines and clear beach obstacles, Kuwait City 151
Colonel Locurcio with Maj. Gen. Patrick J. Kelly 156
Al-Ferdous Girls Middle School 177
Al-Asmah Girls High School 177
Views of damaged and renovated executive office waiting area, Kuwait Parliament building 178
Kuwait International Airport Terminal 2, with damaged control tower 179
The terminal a year later 179
Pools of oil from damaged oil wells 184
Oil well firefighter 186
Firefighters cap oil well 187
Aerial view of Al-Jaber Air Base 192
Destroyed aircraft hangar at Al-Jaber 193

Page

Iraqi T–55 tank inside damaged aircraft hangar 203
Building 9, Al-Jaber Air Base 203
Repair work at Al-Jaber 211
Col. David E. Peixotto with Ambassador Gnehm at Al-Jaber 215
Air conditioning units at Doha Blackhorse Base 220
Soldiers relax at 6th Brigade Army Base 221
Lt. Gen. Henry J. Hatch with troops at Blackhorse Base 225
David Leach, Corps of Engineers, reviews renovations with
Dr. Ibrahim Al-Shaheen and Fatima Al-Sabah 231
Interior view of Parliament building 233
Parliament general assembly hall 233
General Hatch visits Corps engineers at the Parliament 234

Cover: Top, Kuwaiti children celebrate liberation; *center,* aerial view of Kuwait City; *bottom,* destroyed Iraqi tank, Al-Magwa oil field.

Illustrations from Department of Defense files. All photographs except those on pp. 68 and 74 were taken by Jonas Jordan, Corps of Engineers, Savannah District.

After Desert Storm

Introduction

In the wake of the 100-hour ground war against Iraq, the U.S. Army mounted the largest civil–military reconstruction operation since World War II in an effort to restore the shattered country of Kuwait. Never having faced a disaster of this magnitude, the Kuwaiti government simply could not provide for all of its own recovery needs. The U.S. Army played a critical role in rebuilding Kuwait and smoothing the fragile transition from hostilities to peace. Army soldiers and civilians conducted damage assessments, restored electrical power and water supplies, cleared tons of debris, and provided emergency medical care and other essential services. In doing so, they contributed significantly not only to the physical well-being of the Kuwaiti people but also to political and economic stability in the region.

The diffuse, complex Kuwait operation included four basic phases: planning, emergency response, recovery, and the aftermath. But these phases were not always neatly separated nor easily defined. Although the Secretary of Defense defined the emergency response phase as the first 90 days, the distinction between the emergency response phase and the recovery phase quickly became blurred. Sometimes the Army and its contractors made emergency repairs in one area, while more substantial, long-term repairs were undertaken elsewhere. The goal of emergency construction generally was to restore facilities and services to their prewar condition, not to make improvements. Yet, in Kuwait, operators found that there was no clear definition of "emergency construction." For example, did it mean boarding up windows rather than replacing the glass or clearing rubble from a building but not cleaning it? As the recovery proceeded, the expectations of the Kuwaitis understandably increased and the definition of "emergency repairs" expanded.

To further complicate matters, various agencies shaped and executed each phase. The planning phase, for example, was dominated by the Kuwait Emergency Recovery Program made up of Kuwaiti representatives, the 352d Civil Affairs Command and its Kuwait Task Force, and the U.S. Army Corps of Engineers and its Kuwait Emergency Recovery Office. The 352d Civil Affairs Command focused on municipal functions such as the police and fire departments. It ultimately spent nearly half a

billion dollars of Kuwaiti money to get and keep government agencies running. The Corps' Kuwait Emergency Recovery Office, by contrast, dealt with facilities and the physical infrastructure such as power and sanitation facilities and the buildings that housed that infrastructure. It, too, spent just under half a billion dollars, mostly in contracts, to repair this physical infrastructure.

On the eve of the ground war against Iraq, the Army also created Task Force Freedom, made up primarily of civil affairs and various support elements, to help execute the emergency response. Meanwhile, back in Washington, the Army Staff created the Kuwait Recovery Task Force to coordinate emergency response and later recovery issues within the Pentagon.

As emergency repairs were completed and the operation gradually transitioned into a recovery phase, Task Force Freedom gave way to the newly created Defense Reconstruction Assistance Office representing the Secretary of Defense. The Corps of Engineers, through its Kuwait Emergency Recovery Office and its civilian contractors, continued to play a key role during both the emergency response and recovery phases. Finally, nearly a year after the liberation of Kuwait, most repairs to the civil infrastructure were complete, and the Defense Reconstruction Assistance Office closed. The focus then shifted to the reconstruction of Kuwait's military facilities, two air bases in particular. The Corps created the small Kuwait Program Office to administer this effort. Although the role of civil affairs diminished during the recovery phase, the role of the Corps of Engineers expanded.

Although over half a million American soldiers participated in the Persian Gulf War, relatively few were directly involved in the recovery operations. Most of the actual recovery work was done by Corps civilians and contractors. There were certainly areas where U.S. troops could have been more involved. For example, Army engineers could have been used to deliver water and clear debris, but they were not. Using civilian contractors let the military reduce the U.S. force in Kuwait and freed up U.S. troops for redeployment. Military and political leaders were anxious to redeploy American troops—many of whom had been stationed in the Persian Gulf for months—as quickly as possible. In addition, there was concern about how the Kuwaitis would view a prolonged presence of U.S. troops and how the American people would respond to televised images of American soldiers performing nonmilitary functions such as hauling trash.

The Kuwait recovery effort was much more than a humanitarian assistance mission. It was closely linked to U.S. strategic interests in the region. The United States had fought the Persian Gulf War, in part, as a

response to a major regional security threat to the world's oil supply. General Gordon R. Sullivan, Chief of Staff of the Army during much of the reconstruction, observed, "Economically, the [Middle East] region will remain of great importance to other regions of the world—particularly the West—because of their dependence on its energy resources."[1] Defense officials resisted taking on the recovery mission until they acknowledged these strategic interests; until they realized that although they had won a military victory, they could "lose" the peace.

The goal of the United States was to promote long-term political and social stability and economic recovery in Kuwait. U.S. policymakers were anxious to help the Kuwaiti government develop the capability to provide the infrastructure and institutions its citizens expected. Fulfilling those expectations, it was argued, would ensure the legitimacy of the government. This was not the first time that the United States had used humanitarian assistance to achieve its strategic goals. Nor was it the first time that policymakers in Washington had used civil–military construction as an instrument of foreign policy, particularly in the Middle East.

The Kuwait operation must be viewed within the framework of 50 years of U.S. presence in the region, specifically the Corps' large construction programs in Saudi Arabia and Israel. The Corps first became involved in Saudi Arabia in 1951 when it began building an airfield at Dhahran using U.S. Air Force funds. The involvement expanded dramatically after 1965 when the United States and Saudi Arabia signed an engineer assistance agreement in which the United States agreed to advise and assist the construction of certain military facilities for the Saudi Ministry of Defense and Aviation. The Corps worked on a fully reimbursable basis with the government of Saudi Arabia paying for all design and construction. Through its Middle East Division, created in 1976 and headquartered in Riyadh, Saudi Arabia, the Corps managed design and construction programs that by the 1980s totaled an estimated $14 billion. The Corps built many facilities that the U.S. military would use during the Persian Gulf War: Shaikh Isa Air Base in Bahrain, King Khalid Military City in northern Saudi Arabia, King Faisal Military Cantonment at Khamis Mushayt, King Abdulaziz Military Cantonment, and other air and navy bases.[2] Elsewhere in the region (as part of the Camp David Accords), between 1979 and 1982 the Corps constructed two ultramodern air bases in Israel's Negev Desert.[3]

Through these programs, governments in the region had come to know the Corps' work and respected its ability and responsiveness. They also purchased American military equipment creating a need for American construction and, as a side benefit, provided infrastructure that the United States could use in emergencies such as the Gulf War.

During that conflict, American planes could fly right in and use Saudi air bases because they had been built to U.S. specifications. The large and lengthy construction programs had created alliances, trust, and useable facilities and had given the United States valuable knowledge of the region and its construction needs and practices.

The Kuwait program had similarities to the Corps' previous work in the Middle East. As with the Israeli air base program, the Kuwait operation was characterized by a tight schedule, long supply lines, and nagging political pressures. But major differences also set the Kuwait program apart. Although the Israelis covered some of the cost of their air base program, it was funded, for the most part, by the United States. In this case, however, the Kuwaiti government paid the bills. Kuwaiti control of the funding presented some special challenges. Also, unlike the Israeli and Saudi programs, the Kuwait program was a complex series of projects that involved providing services as well as construction for both civil and military facilities. When the Corps arrived, most of the country's civilian work force had fled, and equipment and materials were desperately scarce. The pace of construction was faster than with any previous projects in the Middle East and certainly faster than normal military construction in the States. In the States, a typical military construction project takes five years from programming to construction. In Kuwait, where the Corps had contracts already in place, a similar project took just 30 days, though the standards and thus the final quality were somewhat lower for emergency construction.[4]

The Kuwait operation must also be viewed not only in the context of previous construction in the Middle East, but also in the framework of the American military's long history of humanitarian relief operations, both at home and abroad. Through the years, U.S. forces have been employed in noncombat uses. Soldiers helped combat malaria in Panama and cholera, hunger, and illiteracy in Cuba, Haiti, and Nicaragua. They also established schools, promoted public health, organized elections, and encouraged democracy in those countries. Closer to home, soldiers have repeatedly assisted victims of earthquakes, hurricanes, and other natural disasters since the 19th century.[5]

Rooted as it was in U.S. involvement in the region, the complicated, often remarkable recovery operation would have a lasting impact on U.S.–Kuwaiti relations and the political stability of the Middle East.

Prologue

As Ceasar Santucci gazed out from the 16th floor of the Kuwait Plaza Hotel, he surveyed the ruins of downtown Kuwait. He was distressed to see the sparkling, modern city that he remembered now coated with oily soot and littered with abandoned vehicles, trash, and broken glass. The once noisy, bustling downtown streets were nearly deserted. Before the Iraqi invasion in August 1990, Santucci, a civilian engineer with the U.S. Army Corps of Engineers, had spent six years in Kuwait, part of that time overseeing the construction of a flight crew training center for Kuwait's Air Force.[1] Now in early March, he was among the first of hundreds of U.S. Army soldiers and civilians who, over the ensuing months, would struggle to bring Kuwait back to life.

Kuwait, an Arab state sandwiched between Iraq on the north and west and Saudi Arabia on the south and west, was founded in the early 1700s by a nomadic tribe that migrated into the Persian Gulf. The small Gulf nation derived its early prosperity from pearling, fishing, and trading.

Oil wealth later transformed Kuwait into a modern nation with a high standard of living. Oil exploration in Kuwait began in the 1920s. When oil revenues soared in the early 1950s, Kuwait's ruling Al-Sabah family devised a scheme to distribute the windfall. The Emir began transforming the cluster of mud huts into a clean, modern metropolis with skyscrapers. By 1990, more than half the country's population, roughly 1 million people, lived in Kuwait City, the "pearl of the Gulf."

Each neighborhood became a self-contained microcosm of a city with its own supermarkets, schools, medical centers, and municipal services. These neighborhoods were established as cooperatives. This system of neighborhood communities became especially important after the Iraqi invasion. During the occupation, neighborhoods provided services ranging from food distribution to rudimentary medical assistance and hid scores of foreigners from Iraqi authorities.

Kuwait is 6,880 square miles of desert, slightly smaller than New Jersey. But, for the most part, Kuwait's desert is not scenic dunes and sand seas sprinkled with groves of palm trees. In contrast to images from *Lawrence of Arabia*, the land varies from firm gravel and clay in the north to sandier, looser terrain in the south. The vast sea of beige is broken

occasionally by small shrubs and plants. Only 3 percent of the land is marginally arable and only 1 percent is under cultivation. However, Kuwait exports over 1 billion barrels of oil each year.

Kuwait's wealth, coupled with the small size of its armed forces, made the country an attractive target for neighboring Iraq. Iraq was having financial difficulties because of its military buildup and its exhausting eight-year war with Iran. The war had left Iraq heavily in debt and had impaired its ability to export oil. The annexation of oil-rich Kuwait would ease the financial strain. Iraqi leaders maintained that Kuwait overproduced oil in violation of the OPEC (Organization of Petroleum Exporting Countries) guidelines and thus drove down the price of oil. They estimated that the lower price cost Iraq billions of dollars. Iraqi leaders later demanded $2.4 billion in compensation for oil Kuwait pumped from the disputed Rumaila fields. They also insisted that Kuwait forgive $10 billion to $20 billion in loans that helped fund the war against Iran. Finally, Iraq saw in Kuwait a way to overcome the disadvantages of being virtually landlocked. For years, Iraq had been trying to annex or lease two of Kuwait's islands, Bubiyan and Warbah, but Kuwait had refused.[2]

On 18 July 1990, Iraq's President Saddam Hussein accused Kuwait of driving down the price of crude oil and reasserted Iraq's claim to oil in a disputed border area inside Kuwait. During negotiations, Kuwait indicated that it would pay a sizeable sum for peace. The Iraqis, however, demanded total capitulation on all counts, and discussions between the two nations broke down.

The United States, with growing concern, watched events unfold in the Middle East. The United States had a long-standing interest in supporting its allies in the region and ensuring continued access to the region's rich oil supply. In 1980, President Jimmy Carter announced, in what became the Carter doctrine, that the United States would regard any attempt by an outside force to gain control of the Persian Gulf region as a threat to its vital interests and would repulse that threat by military force if necessary. The U.S. Liaison Office, Kuwait, an arm of the Defense Security Assistance Agency, had been administering a foreign military sales case to provide Kuwait with certain military equipment. A foreign military sales case, administered by the Secretary of Defense, is a process through which eligible foreign governments purchase defense equipment and services from the U.S. government.

In the summer of 1990, U.S. Central Command (CENTCOM), the joint command responsible for military operations in the Middle East, began planning for a possible Iraqi invasion. On 31 July and 1 August, the commander of CENTCOM, General H. Norman Schwarzkopf, presented



Kuwaiti child stands in the ruins of the Seif Palace, March 1991.

deployment options to Chairman of the Joint Chiefs of Staff General Colin Powell, Secretary of Defense Richard Cheney, President George Bush, and the National Security Council.

Before dawn on 2 August, three divisions from Iraq's elite Republican Guard forces—some 140,000 soldiers—pushed across the Kuwaiti border. Within hours they gained control of Kuwait City and drove Kuwait's royal family into exile in Saudi Arabia.

The United Nations Security Council quickly passed a resolution condemning Iraq's actions and demanding the unconditional withdrawal of Iraqi troops from Kuwait. When Saddam Hussein refused to comply, the council imposed economic sanctions on Iraq. President Bush invoked the Carter doctrine and decided that, if invited, the United States would deploy a force large enough to defend Saudi Arabia and deter further Iraqi aggression.

General Schwarzkopf already commanded all U.S. forces in the theater and Lt. Gen. John Yeosock, commander of Third U.S. Army, would command ARCENT, the Army component of CENTCOM. After discussion with Secretary Cheney on 6 August, Saudi Arabia's King Fahd bin Abdul Al-Aziz Al Saud agreed to let U.S. forces enter his country. Two days later, President Bush announced the deployment of U.S. troops to Saudi Arabia as part of a coalition force in what was designated Operation DESERT SHIELD.

The first soldiers from the 82d Airborne Division, XVIII Airborne Corps, deployed on 8



Kuwaiti children celebrate the liberation of their country.



Defaced monument to Saddam Hussein at the Kuwait Ministries Complex, March 1991

August. During the next few months, over half a million U.S. soldiers poured into Saudi Arabia. This massive deployment of U.S. forces culminated in Operation DESERT STORM: a five-week air campaign (17 January–24 February 1991) and a brief ground operation (24–28 February 1991). As a result of these military operations, the United States and its allies liberated Kuwait. By 1 March, the combat situation stabilized enough that the emergency relief and reconstruction of Kuwait could begin.[3]

Senior U.S. officials determined that the United States would help Kuwait recover. If the problems of the postwar period were not adequately addressed, they reasoned, the people of Kuwait would suffer tremendous physical and economic hardship that could lead to further unrest and instability in the region. The U.S. officials realized that winning the war was not enough; they must also secure the peace. The Department of Defense would have the primary responsibility for the recovery operations, and the Army would act as its executive agent.

Several key factors shaped the recovery effort. First, the rapid completion of the ground war meant that the transition from a military offensive to an active restoration effort had to occur much faster than anticipated. Military leaders had not planned nearly as well for the recovery operations as they had planned for the war. As a result, they quickly had to develop various ad hoc organizations to administer the recovery operations: the interagency steering group committee, the Kuwait Task Force, the Combined Civil Affairs Task Force, Task Force Freedom, and the Defense Reconstruction Assistance Office.

In addition, damage caused by the month-long air campaign, especially to roads and power lines, made the recovery work particularly challenging. Political factors, such as the pressure to limit the role of the U.S. Army and to use small and small disadvantaged American firms, also complicated the recovery operation.

Elements of the U.S. Army Corps of Engineers' culture also shaped the operation. Although during the Persian Gulf War the Corps had performed a number of construction projects in Saudi Arabia on a compressed time schedule, for the most part, the Corps was not used to fast-track construction overseas. Nor was it used to operating without being able to describe the scope of the work in advance. Unlike in Saudi Arabia, no labor force or equipment was available in Kuwait. The existing procurement regulations became cumbersome. Decisionmakers in Washington often did not operate with the same sense of urgency as did Corps personnel in Kuwait and granted few exemptions from the federal acquisition regulations.[4]

Finally, the operation was shaped by the extensive, day-to-day involvement of the Kuwaitis in making decisions and executing the work. As both the bill payer and the customer, the Kuwaitis established priorities and shaped recovery operations.

Military planners ultimately found that damage to Kuwait was less extensive than anticipated. With the invaluable assistance of soldiers and civilians from the 352d Civil Affairs Command, the U.S. Army Corps of Engineers, and other Army units, Kuwait came back to life faster than anyone could have envisioned. In the process, the people of the United States and Kuwait forged a bond that would continue long after the recovery work was completed.

Chapter 1

Planning for Emergency Response

Within weeks of the Iraqi invasion of Kuwait, as U.S. forces in Saudi Arabia reinforced Operation DESERT SHIELD, some U.S. and Kuwaiti officials were already turning their attention to the period after Kuwait's liberation. They recognized early that careful planning would be crucial to the recovery of that nation and the restoration of its government. Although the United States had a long history of providing humanitarian assistance to other countries, this situation was unique: Kuwait had many well-educated, qualified individuals to direct the effort and the financial resources to pay for what it needed and wanted. Although U.S. military leaders were initially reluctant to take on major responsibility for the Kuwait recovery effort, they ultimately recognized that the Department of Defense was the only agency that could provide the level of assistance that the Kuwaitis required. Army civil affairs personnel and the U.S. Army Corps of Engineers, in particular, provided the Kuwaitis with invaluable assistance in planning the emergency response effort and helping ensure its success.

Origins of the Kuwait Emergency Recovery Program

The Emir of Kuwait, Sheikh Jaber Al-Ahmed Al-Sabah, who was in the United States to appear before the United Nations General Assembly, traveled to Washington, D.C. on 27 September 1990 to visit President George Bush. During a series of meetings with the President and his advisors, the Emir and his Minister of Foreign Affairs asked the United States to help their government plan for the reconstruction and recovery of Kuwait. *(Map 1)* Some of the ministers also talked to the newly designated U.S. Ambassador to Kuwait, Edward W. "Skip" Gnehm, Jr. (a well-respected and experienced diplomat who was in Washington awaiting


Hawr al Hammar
Tigris River
IRAN
Al Başrah
Jalībah
Khorramshahr
Shatt al Arab
Abadan
Az Zubayr
Ar Rumaylah
oil fields
IRAQ
Safwān
Umm Qaṣr
Ar Rawḍatayn
Bibiyān
KUWAIT
KUWAIT
Wadi al Batin
Al Jahrah
As Sālimīyah
PERSIAN
GULF
Al Aḥmadī
SAUDI
ARABIA
Ra's al Khafji
KUWAIT
0
40
Miles

Map 1

confirmation), about getting assistance from the U.S. government. Kuwaiti officials realized all that the United States had done to restore occupied Germany after World War II. They believed that the United States was probably the only country in the modern world that ever helped put a devastated, occupied country back on its feet.

Kuwait's Minister of Foreign Affairs asked his traveling companions, the Minister of Finance and the Minister of Planning, to bring a group of senior Kuwaiti officials back to Washington the following week. He wanted them to attend a briefing at the Pentagon on the U.S. Department of Defense's capabilities to respond, specifically its civil affairs capability.[1]

Meanwhile, exiled Kuwaiti officials who had set up operations in the Sheraton Hotel in Taif, Saudi Arabia, 40 miles southeast of Mecca, gathered to plan the reconstruction of their nation. They dispatched a team of 20 specialists to Washington to plan for the emergency response after Kuwait was liberated and to enlist U.S. government assistance in the planning. The mix of Kuwaiti planners, oil officials, and health care experts set up operations in 24 glass-paneled offices on K Street in northwest Washington, five blocks from the White House. This group, called the Kuwait Emergency Recovery Program, was headed by Fawzi Al-Sultan, Kuwait's dynamic representative to the World Bank. He was anxious to enlist partners from the U.S. government as quickly as possible.

Most of the Kuwaiti representatives were English-speaking, U.S.-educated government officials. Fawzi Al-Sultan himself attended Yale University. Another team member, Bader Al-Qabandi, who had been the deputy chief engineer of the Ministry of Public Works, graduated from Arizona State University and had a master's degree in civil engineering from the University of California, Los Angeles. He had been directly involved in designing and constructing all the hospitals in Kuwait, as well as schools, ports, and airports. Bader Al-Qabandi and other Ministry of Public Works personnel each had 15 to 20 years of experience in their fields.

By the end of December, the Kuwait Emergency Recovery Program would grow to 40 members with a broad range of expertise, working long hours, seven days a week. Although very capable, Bader Al-Qabandi observed, these leaders had been stunned by news of the invasion and sometimes felt disoriented and overwhelmed. They worried constantly about family members left behind, some of whom had been arrested by the Iraqis.[2]

The Kuwait Emergency Response Program quickly organized itself into 10 teams or work groups: communication, transportation, education, health and food, airports and ports, electricity and water, oil, public works, information, and the legal and political system. Members

focused on the damage the Iraqis might leave behind. They compiled information on which buildings the Iraqis were using, the condition of the roads, the status of the sanitation and electrical systems, and the amount of material stolen from the hospitals. They used this information, collected from Kuwaitis who had remained behind and from other sources, to plan the reconstruction.

The Kuwait Emergency Recovery Program then coordinated with federal officials and American businessmen to replace the infrastructure and equipment that the Iraqis had destroyed such as sewer pipes, lamp posts, telephone lines, public buses, and police cars. The Kuwaiti planners assumed that Kuwait would be left without power and water after the Iraqis retreated. They projected that even if the Iraqis left peacefully, the restoration of services could take up to two years. They developed computerized lists of potential suppliers and contractors interested in contributing to the recovery program.[3]

The huge cost, estimated from $80 billion to $100 billion, would be paid from Kuwait's extensive investment portfolio. The Kuwaiti government had large accounts in foreign banks to fund the recovery effort. According to *Time* magazine, Kuwait's foreign-asset portfolio approached $100 billion, invested in stocks, bonds, and entire companies around the world. Its investments reportedly brought in $20 million a day.[4]

The Pentagon Response

Although the Kuwaiti representatives had considerable business acumen, they had no experience responding to natural disasters or other catastrophes and were uncertain how to proceed. Kuwaiti officials quickly realized that they would need assistance from the United States.

In late September, the Kuwaitis discovered the civil affairs capability in the U.S. Army. The link might have occurred, in part, through the initiative of an Army Reserve colonel—Randall Elliott. As a civilian, Elliott, a career foreign service officer, headed the State Department's Middle East Division. As a reservist, he served as the deputy chief of staff, Capstone Operations (G–5), for the 352d Civil Affairs Command. Recognizing that the Kuwaiti element needed some planning assistance, Elliott raised the issue with State Department officials, including Ambassador designate Gnehm. Gnehm discussed the matter with Kuwaiti Ambassador Saud Nasir Al-Sabah and the Kuwaiti delegation, who were immediately receptive to the idea of using civil affairs personnel. Some members of the Army Staff—such as Anthony J. Auletta and Col. Allen W. Keener with the Operations, Readiness and Mobilization

Directorate, who were very familiar with the Army's civil affairs capability—might have already been considering a possible civil affairs role.

Ambassador Gnehm asked Pentagon officials to tell the Kuwaiti representatives about the military's civil affairs capabilities. Having served in the Pentagon just two years earlier as Deputy Assistant Secretary of Defense for Near Eastern and South Asian Affairs, Gnehm knew some key Pentagon officials and understood the procedures for inserting such a request into the military system. The State Department passed the request to the Assistant Secretary of Defense for International Security Affairs, Henry S. Rowen. Rowen, a tall, lean man, professional in bearing, had held a number of senior government posts and academic positions. He had come to the Pentagon from the Stanford University Graduate School of Business. Fortunately Rowen and Assistant Secretary of Defense for Special Operations and Low Intensity Conflict James R. Locher III, men of vision and action, overrode the Army Staff's tepid response and arranged a briefing for the Kuwaitis.[5]

On 3 October, Rowen asked the Director of the Joint Staff, Lt. Gen. Michael P. C. Carns, to arrange a briefing on civil affairs capabilities for the Kuwaitis. Lt. Col. Dennis C. Barlow from the Psychological Operations/Civil Affairs Branch of the Directorate for Current Operations (J–33) of the Joint Staff delivered the briefing the next day. Barlow had invited Army officials to present the briefing because the Army acted as the executive agent for civil affairs on the Joint Staff, but they declined. In attendance were Fawzi Al-Sultan, Minister of Planning Sulayman Abdul Razaq Al-Mutawa, Minister of Finance Sheikh Ali Al-Khalifa Al-Sabah, Ambassador Gnehm, and the Joint Staff Director of Operations (J–3) Lt. Gen. Thomas W. Kelly, along with representatives from the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, the Assistant Secretary of Defense for International Security Affairs, the General Counsel, and the Army Staff.

The Kuwaiti representatives apparently liked what they heard. After the briefing, they inquired about the proper procedures for requesting assistance from Army civil affairs. Sam Routson, director of mission activities for the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, suggested that they submit a formal request to President Bush.[6] In a letter dated 9 October 1990, Ambassador Al-Sabah formally requested U.S. assistance in the restoration of Kuwait. Specifically, he asked for expertise resident in the U.S. Department of Defense.[7] Although Secretary of State James A. Baker III did not formally respond to the letter until mid-December, the Deputy Assistant Secretary of Defense for Near East and South Asian Affairs received verbal confirmation from the White House staff that President Bush would support the effort.[8]

Meanwhile, plans to assist the Kuwaitis continued to unfold. General Carns wrote back to Assistant Secretary Rowen that the Joint Staff agreed with the idea of providing advice to the Kuwaiti government. Representatives of the Assistant Secretary of Defense for International Security Affairs, the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, the Joint Staff Director for Operations (J–3), the Joint Staff Director of Strategic Plans and Policy (J–5), and the Army Staff met three times during the week after the 4 October briefing to discuss a response to the Kuwaiti request.[9] The Joint Staff and Army Staff continued to discuss the Kuwaiti request for weeks.

The Directorate of Strategic Plans and Policy was instructed to develop a course of action for a Department of Defense response to the Kuwaiti request. On 17 October, the directorate's Middle Eastern Affairs Division hosted a meeting with representatives from International Security Affairs, Special Operations and Low Intensity Conflict, the Army Staff, and the State Department. Participants agreed that if the State Department specifically requested civil affairs support, the Joint Staff would develop guidelines for using Defense Department resources. They discussed the relationship between the Defense and State departments, which agency should take the lead within the Defense Department, and what agreements should be made with the Kuwaiti government.

Two days later, a committee of the President's National Security Council, consisting of the deputy secretaries of selected cabinet departments, met to consider the Kuwaiti request. The committee members agreed that the United States would assist Kuwait in its planning. To make the process more timely and efficient, they recommended that the State Department and the Defense Department, including the Joint Staff, establish a steering committee to make the necessary arrangements. They also recommended that the Assistant Secretary for International Security Affairs take the lead for the Defense Department.

Rowen's staff prepared a draft "Terms of Reference for U.S. Civil Affairs Assistance to the State of Kuwait" and submitted it to the Joint Staff for review. Rowen also asked that a military service be designated the executive agent for the operations and that qualified personnel be assigned to the various working committees outlined in the draft.

The draft specified that the goal of the United States would be to help the legitimate government of Kuwait plan the post-liberation restoration efforts. Although the proposed terms of reference provided for the involvement of a number of federal agencies, the State Department and the Defense Department would have the primary responsibility for developing the restoration program.

The draft also proposed the creation of a U.S. steering group committee, chaired by the State Department, with representatives from the State Department and the Defense Department to oversee the planning effort. It also provided for the formation of a U.S.–Kuwaiti Committee on Emergency and Recovery Programs, consisting of the U.S. steering group committee and Kuwaiti government officials in exile. Working groups would undertake planning in 20 traditional civil affairs functional areas. *(Table 1)*

TABLE 1—CIVIL AFFAIRS FUNCTIONAL AREAS

Arts and Monuments	Property Control
Civil Defense	Public Administration
Civil Information	Public Communications
Civilian Supply	Public Education
Cultural Affairs	Public Finance
Dislocated Civilians	Public Health
Economics and Commerce	Public Safety
Food and Agriculture	Public Welfare
Labor	Public Works and Utilities
Legal	Transportation

The Kuwaiti government would execute all contracts for services and equipment with civilian firms. The U.S. government could request reimbursement for the cost of various services rendered.[10]

On 22 October, Assistant Secretary Locher met with representatives from the State Department, Defense General Counsel, Joint Staff, and Army Staff to develop a memorandum of understanding between the U.S. and Kuwaiti governments that would provide for Department of Defense assistance. The State Department agreed to draft the memorandum.[11]

On 1 November, the deputy secretaries committee of the National Security Council formally created the steering group committee described in the terms of reference to ensure that Kuwait received assistance and to coordinate State Department and Defense Department efforts. *(Chart 1)* The steering group committee consisted of Ambassador Gnehm; Arthur H. Hughes, Deputy Assistant Secretary of Defense for Near Eastern and South Asian Affairs (or his alternate Frederick C. Smith); Rear Adm. J. R. Fitzgerald, Deputy Director for Current Operations (J–33); Rear Adm. Merrill W. Ruck, Assistant Deputy Director of Politico–Military Affairs (J–5); and Brig. Gen. Charles E. Wilhelm, Deputy Assistant Secretary of Defense for Missions and Applications. On 2 November, they met for the first time to review the proposed terms of reference and sent the draft forward for final approval.[12]

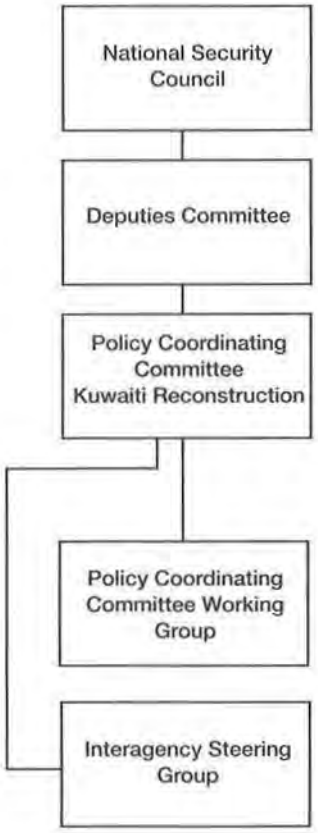


Chart 1–National Security Council

The draft circulated throughout the Defense Department in early November. The responses reflected different opinions on the required level of civil affairs support and the appropriate mechanism for managing the effort. Final comments on the terms of reference contained a matrix that showed responsibilities split among 27 different U.S. government agencies. The comments also reflected a growing sense that some civil affairs support would be needed.

Rowen approved the terms of reference on 5 November, and working groups were established under the steering group committee to oversee the execution of the project. A U.S.–Kuwaiti civil affairs working group consisted of representatives from the Office of the Secretary of Defense, the Joint Staff, and the Army Staff and Kuwaiti officials.[13] Frederick Smith assumed the day-to-day leadership of the working group.

Ambassador Gnehm took the lead for the State Department and attended many Pentagon briefings. He later recounted that there were some awkward moments when the Defense Department lawyers questioned whether the committee's activities violated existing regulations. The Joint Staff posed many questions about the number of people to be called up and the length of service. The constant "bureaucratic tussle," he observed, continued throughout January and February.

Gnehm envisioned civil affairs soldiers moving into Kuwait alongside the exiled Kuwaitis to run a command center for civil–military operations. The Ambassador denied having any desire to control the civil affairs group but insisted that these soldiers be collocated with him and work beside him. Gnehm knew that he would be working closely with Kuwaiti government officials and that they would issue the taskings and requirements. The relationship between the State Department and the Defense Department would improve over time as

the day-to-day activities further delineated the responsibilities between the two agencies.[14]

While the terms of reference circulated, the Joint Staff had drafted a message directing the Army Staff to create a task force of civil affairs and other qualified personnel to assist Kuwait in the 20 designated functional areas. General Kelly approved the basic concept for using civil affairs soldiers, but the activation of a Reserve unit required final approval from the Chairman of the Joint Chiefs of Staff and coordination with the Office of the Secretary of Defense. When the message circulated within the Joint Staff, some members questioned whether assisting the Kuwaiti government was more appropriately a role for the State Department. They decided to delay activating a civil affairs unit.[15]

Civil affairs units originated during World War II to meet the need for military personnel with the appropriate education and training to administer areas liberated from German and Japanese occupation and to govern areas in Germany and Japan occupied by the U.S. Army during and after the war. In the decade after the war, the mission of these newly formed units, now called civil affairs units, became less obvious. Most civil affairs capability was placed in the Army Reserve.

In the 1960s, as interest in counterinsurgency grew, the value of the special skills and abilities of civil affairs soldiers to improve the living conditions of local populations became more apparent. During the Vietnam War, the Army relied heavily on civil affairs methods to counter the Viet Cong. After the war, units were focused primarily on the support of conventional operations in a European battlefield. But civil affairs became a low priority within the Army. In 1987, the Secretary of the Army decided to include civil affairs units in special operations forces.

Civil affairs units typically conduct missions for theater commanders in support of U.S. nation-building activities, regional planning, and intelligence collection. They provide civil assistance to local populations and help host nations maintain stable, viable civil governments. They support tactical commanders at the corps, division, brigade, or regiment level. They identify local resources, facilities, and support that could be useful to those commanders, minimize civilian interference with U.S. military operations, and act as the staff representative for consideration of civilian and cultural factors that could affect military operations. At the time of the Gulf War, Army civil affairs units included 172 Active and 4,650 Reserve personnel. The force structure at the time consisted of four kinds of civil affairs units: commands, brigades, groups, and companies.[16]

The 352d Civil Affairs Command, headquartered in Riverdale, Maryland, was the Reserve unit designated for CENTCOM's area of operations. It had been working with Third U.S. Army and ARCENT since

1982 under the Army's Capstone program, which had been designed to better integrate Reserve components into the Active force by letting them train and plan during peacetime with their designated wartime commands. As an added benefit, members of the 352d Civil Affairs Command could begin work immediately without relocating because their home base was just outside Washington, D.C.

Assistant Secretary Locher maintained that planning for the reconstruction of Kuwait was a doctrinally correct civil affairs mission. As long as the possibility of hostilities as part of the liberation of Kuwait existed, he argued, the Defense Department, and specifically civil affairs, had to be involved in the planning. Locher and his staff saw civil affairs as a medium for bringing the resources of government and private industry to bear on the problem and ensuring that these resources were fully coordinated with military plans. After meeting with Locher, General Carns and Assistant Secretary Rowen agreed to call up the 352d Civil Affairs Command.[17]

Meanwhile, the State Department and the Defense Department continued their effort to involve other federal agencies in the mission. Both departments agreed to use civil affairs soldiers initially to assist the Kuwaitis, but after the liberation, when the military's role changed, they wanted to involve other federal agencies. They could not, however, agree on when and how quickly to bring in those other agencies. They focused primarily on the Federal Emergency Management Agency, created in 1972 to coordinated the federal response to national emergencies and natural disasters, and the State Department's Office of Foreign Disaster Assistance. The Federal Emergency Management Agency, however, only conducted domestic emergency response work. The Office of Foreign Disaster Assistance performed assistance missions outside the United States, but only in developing nations.[18]

Because of the general reluctance of Defense Department officials to take on the mission, the Pentagon made little progress between 5 November when Rowen signed the terms of reference and 19 November when the Office of the Secretary of Defense began actively pushing the effort.

During those first weeks in November, senior officials on the Army Staff and the Joint Staff continued to debate the appropriateness of the military providing such assistance to the Kuwaiti government. They also debated whether the Army was the appropriate agency to lead the effort. These officials were reluctant to involve themselves in a long-term nonmilitary project that might divert critical resources from ongoing operations. They believed the State Department was the proper agency to lead the effort.

Pentagon officials, particularly the Army Staff, feared they would be saddled with a mission that could last for months or even years. They recalled that during Operation JUST CAUSE, a military operation to remove Panamanian dictator Manuel Noriega from power, the Defense Department had found itself serving as "lead" agency long after the fighting stopped. Pentagon officials did not believe they had ever received adequate support from the State Department and other federal agencies that should have assumed a greater role in restoring basic services in Panama. General Carns and other Pentagon officials wanted to ensure that this time other government offices, particularly the State Department, would participate fully. Army leaders did not want to be left again with the bulk of the responsibility for a recovery operation, especially if problems developed.

In addition, Army leaders emphasized the importance of integrating the civil affairs effort into other Army Staff activities. They favored the creation of a composite task force with representatives from various Army elements (medical, military police, communications, engineers, quartermaster) augmented by civil affairs, with the overall structure commanded by an Active Army general officer.[19]

Gnehm and other State Department officials emphasized the important differences between the situations in Panama and Kuwait. Unlike Panama, Kuwait had requested technical expertise and was willing to pay for it. Moreover, the U.S. government needed to support the effort because restoring the legitimate government had important political implications.

Pentagon officials reluctantly acknowledged the importance of the mission. Assistant Secretary Locher and others argued that no other agency could handle the emergency phase. The Executive Branch could not mobilize other government agencies in the early period when hostilities were still underway. The Assistant Secretaries of Defense for International Security Affairs, Special Operations and Low Intensity Conflict, and Reserve Affairs continued to push for the use of Army civil affairs assets.[20]

Formation of the Kuwait Task Force

The 352d Civil Affairs Command had been preparing for its Capstone role in support of ARCENT since 2 August. Brig. Gen. Howard Mooney, a high school administrator who had assumed command in May 1989, had placed 15 soldiers on voluntary active duty to coordinate civil affairs issues with his higher headquarters, the U.S. Army Civil Affairs and Psychological Operations Command at Fort Bragg, North Carolina.

On 1 November, the Civil Affairs and Psychological Operations Command notified the 352d and some of its subordinate units that they might be called up to support Operation DESERT SHIELD. After a series of alert orders and cancellations, Mooney's superiors, on 15 November, informed him that part of his unit would be activated. On 17 November, the chief of staff for the Army Special Operations Command indicated that the unit was on alert, but the next day the Civil Affairs and Psychological Operations Command canceled the alert order.

On 19 November, the commander of the Special Operations Command, Lt. Gen. Michael F. Spigelmire, and the commander of the Civil Affairs and Psychological Operations Command, Brig. Gen. Joseph C. Hurteau, arrived at the 352d's headquarters to follow up on the Defense Department initiative to activate that command. During the hour-long meeting, General Mooney and his staff outlined their concept of civil affairs operations for the theater. General Spigelmire wanted assurance that the command could find individuals with the qualifications the Kuwaitis requested. After gathering the information they needed, the two men departed. Spigelmire's staff awakened Mooney at 4 A.M. the next morning with the news that part of his unit had once again been activated.[21]

When the matter of the activation finally reached General Carns, he again insisted that assisting the Kuwaiti government was more appropriately a role for the State Department. He directed his staff to cancel the alert of the 352d Civil Affairs Command. Hearing this, General Wilhelm armed Assistant Secretary Locher with background information for a meeting with General Carns. That evening Locher convinced General Carns and Rowen that this was a doctrinally correct civil affairs mission. They agreed to restore the call up of the 352d.

On 21 November, General Carns reluctantly approved the formation of a task force made up of civil affairs soldiers. The next day, Chairman of the Joint Chiefs of Staff General Colin Powell sent a message to the Chief of Staff of the Army and to General Spigelmire requesting that the Chief of Staff activate elements of the 352d Civil Affairs Command designated as the 352d Civil Affairs Command HHC (Augmented), a derivative unit. This small unit would be called the Kuwait Task Force.[22] Later that day, General Hurteau informed General Mooney that 50 or 60 of his soldiers would be called up. Unfortunately, by this time the on-again, off-again alerts had caused considerable confusion within the unit.

At a working group committee meeting on 26 November 1991, Frederick Smith, General Mooney, General Wilhelm, and other participants discussed who would command the civil affairs soldiers. Two days later, Mooney briefed the committee on his unit's capabilities, and

Pentagon officials at the meeting established guidelines for the proposed Kuwait Task Force.[23]

The official notification to mobilize 57 civil affairs soldiers came on 29 November. On 1 December, the reservists, who had been selected from the 352d Civil Affairs Command and the 354th Civil Affairs Brigade, gathered at the Army Reserve Center in Riverdale and drove to nearby Fort Meade, Maryland, for processing. The same day, General Mooney and Colonel Elliott visited the Director of Civil Works, Maj. Gen. Patrick J. Kelly, at the Corps of Engineers headquarters in Washington to enlist the Corps' help in locating office space for the task force.[24]

General Mooney was activated along with his command on 1 December, but two days later General Hurteau informed him that the Army Staff had disapproved his activation. The reason for the reversal is unclear. Officials on the Army Staff might have been upset that Mooney had been called up without advanced approval from the Chief of Staff of the Army, General Carl E. Vuono. General Schwarzkopf had not been informed about Mooney's activation either. Another factor might have been the Army's characteristic reluctance to activate Army Reserve generals.[25]

Although General Mooney was directed to remain at the 352d headquarters, he retained an active interest in the task force's activities and provided guidance. Colonel Elliott was placed in charge of the task force. Elliott's extensive experience with the State Department and the Middle East proved valuable. Yet the failure to activate Mooney would create significant problems for the task force. Without a general officer, the task force would have greater difficulty coordinating with ARCENT and CENTCOM.[26]

On 3 December, Mooney and members of the newly formed Kuwait Task Force traveled to the Pentagon to receive briefings from Frederick Smith, Capt. Pete Bolton, Admiral Ruck, and other members of the Joint Staff. No Army Staff representatives attended, perhaps another indicator of the Army's reluctance to take on the mission. Later that afternoon, the task force crossed the Potomac River to meet with their Kuwaiti counterparts on K Street.[27] The task force members quickly set up operations in leased office space that the U.S. Army Corps of Engineers had located three blocks from the Kuwaiti headquarters. They acquired furniture from a General Services Administration facility in Alexandria, Virginia. By 5 December, they had attended all the requisite briefings, met their Kuwaiti counterparts, gathered the resources they needed, and were hard at work.[28]

The creation of the Kuwait Task Force caused some friction between the 352d members who were selected and those who were not. Given the origins and circumstances of the task force, some of its members might have felt closer ties to the Office of the Assistant Secretary of Defense for International Security Affairs than to their parent unit.

The relationship between the task force and the Army Staff was also strained. "A lot of people did not want us [the Kuwait Task Force] to exist," Elliott's deputy, Col. C. H. Sadek, observed.[29] Army officials were concerned that task force members came from high-level civilian jobs and had direct access to powerful senior leadership in Washington. Also, at the request of their Kuwaiti counterparts, who did not want to see American soldiers in uniform in their K Street headquarters, the reservists sometimes wore civilian clothes. Mooney briefed the Director of Operations, Readiness and Mobilization, Maj. Gen. Glynn C. Mallory, Jr., about the task force's missions and activities, but some on the Army Staff continue to believe that the task force was an elite group. Mooney observed that there was a perception that reservists brought added complications to the mobilization effort. He also candidly noted that some of the task force members had an elitist attitude that contributed to the friction. At least one task force member confirmed this perception, conceding that his group might have been somewhat "prideful." He maintained that the friction would impede the mission once the 352d Civil Affairs Command arrived in Saudi Arabia. The friction continued until the task force proved its worth.[30]

Army leaders worried that no clear lines of authority existed for the Kuwait Task Force. It was created as a planning staff, without an operational function. CENTCOM was not its parent organization. Rather, it took its directions from the steering group committee and the working group, which met often to monitor the task force's progress and provide guidance. Task force members gave weekly briefings on their activities to the steering group committee, which was responsible for sharing information with the Army Staff. It evaluated the plans that the task force developed and shared them with the State Department and the Ambassador, who approved the plans and made decisions about implementation. The Army Staff criticized the task force for not sharing information, but the task force members maintained that the steering group committee, not the task force, was responsible for sharing the information.[31]

The friction reflected two opposing perspectives on the role of civil affairs. Historically, civil affairs soldiers have coordinated closely with the State Department. They occasionally dressed in civilian attire and physically located themselves with the State Department. In the 1980s, however, a new perspective evolved. Military leaders began to argue that civil affairs units were part of the military structure and should be treated as such. Civil affairs soldiers, they insisted, should dress in uniforms, be physically located with Army units, and take their direction through the military chain of command.

Colonel Elliott and some of the Kuwait Task Force members upheld the traditional view. They believed they should collocate with

Ambassador Gnehm and the Kuwaitis and work as part of the Ambassador's staff. Some on the Army Staff and other task force members, however, believed the task force should remain within the military chain of command.

The message that activated the task force had directed that it work in support of and report to the Assistant Secretary for International Security Affairs. Yet Anthony Auletta speculated that members of the International Security Affairs staff did not fully recognize their responsibility to exercise control over the task force. The task force members, he observed, ended up working too much in isolation, either because Army Staff elements did not accept them or because they wanted it that way. Moreover, Auletta added, the task force did not have an Active Army general officer in charge who could coordinate with the Army Staff.

Because of the Army's obvious reluctance to use civil affairs reservists, the Secretary of Defense staff initially decided not to designate the Army as the executive agent for the operation, as would normally have been the case. They did not believe the Army would vigorously execute the operation. Auletta indicated that if the Army had been the executive agent, there would have been a smoother process and greater supervision of the task force. The Army Staff, Auletta noted, could have provided invaluable support to the task force's activities. Also, as the executive agent, the Army Staff would have become more involved in directing the recovery operation. The Army's operations and mobilization directorate provided office space, furniture, and computer equipment, but the reservists functioned as an extension of the International Security Assistance Middle East office.[32] The Secretary of Defense did not designate the Army as the executive agent for the Kuwait recovery mission until 30 April 1991, after the recovery work had already begun.

Kuwait Task Force Activities

The Kuwait Task Force helped the Kuwaitis understand and coordinate with various federal agencies. The reservists immediately organized a series of training briefings and visits. Arthur Walz, who as a civilian worked for the Army Corps of Engineers, arranged for Corps representatives to talk to the Kuwaitis about rebuilding infrastructure. Corps representatives also presented a two-hour disaster management class. Walz also arranged for the Federal Emergency Management Agency to give a two-day seminar on disaster response. The Office of Foreign Disaster Assistance gave the Kuwaitis a tour and a class.[33] Since no one could predict the level of fighting and destruction, the reservists developed plans

for varying degrees of conflict. Initially, they based their plans on the belief that Saddam Hussein would leave Kuwait voluntarily on 15 January 1991 in accordance with the United Nations' provisions and that few repairs would be needed. But as the deadline approached, intelligence sources indicated that the Iraqi dictator would not leave voluntarily and military actions probably would be required, so the planning scenario shifted from best case (minor damage) to worst case (great devastation). Planning for the worst case left the task force better prepared to handle the shortages it eventually found in Kuwait, especially in food, medical supplies, and water. Mooney directed the reservists to convince the Kuwaitis to stockpile large amounts of those supplies.[34]

The Kuwaitis emphasized seven areas in their early planning: public safety, public health, public works and utilities, transportation, public administration, public communication, and public welfare. In response, the Kuwait Task Force organized itself into five teams that together covered the 20 civil affairs functional areas.[35] *(Table 2)* The activities of the five teams sometimes overlapped.

TABLE 2—KUWAIT TASK FORCE TEAMS

Public Security and Safety	Public Services
Legal	Public Administration
Public Safety	Arts and Monuments
Property Control	Civil Information
Civil Defense	Cultural Affairs
	Public Communications
Human Services	
Public Health	Commerce
Public Education	Labor
Dislocated Civilians	Public Finance
	Food and Agriculture
Infrastructure	Civilian Supply
Public Works and Utilities	Economics and Commerce
Transportation	Public Welfare

Initially the task force consisted of 56 people—a command management element with 3 and a planning element with 7 plus the five teams: public security and safety with 7, human services with 9, infrastructure with 8, public services with 10, and commerce with 12.

Most of the people were identified through a computerized "Civilian Skills Data Base" that the 352d Civil Affairs Command had developed after Operation JUST CAUSE. The compilation listed each member of the command, along with individual skills, work experi-

ence, and even hobbies. It allowed planners to search for specific civilian skills to complement the military skills of the civil affairs personnel. Planners used the database to identify many potential task force members.

As task force members became more involved in the planning, they found that the Kuwaitis needed help in additional functional areas. If no 352d members had that particular expertise, Mooney requested it from the Special Operations Command. For example, the task force needed military police, psychological operations experts, and medical personnel. Using the database, planners identified the appropriate individuals within the Civil Affairs and Psychological Operations Command and then transferred them to the 352d. They arrived in Riverdale on 20 January, in time to deploy with the main force. The task force also had to bring in additional skills not originally planned for, including explosive ordnance disposal specialists and a petroleum engineer (to deal with the oil fires).[36]

Some team members such as Maj. Tom Wilson, a vice president with Hunt Oil in civilian life, brought a wealth of experience. Maj. George Thomas specialized in international banking, a specialty rarely found in the military, and had helped restore the Panamanian financial system after Operation JUST CAUSE. Having someone who could deal with such questions as how to print a new currency proved very helpful.[37]

As part of the planning effort, task force members helped their Kuwaiti partners contract for the supplies and services they would need after their country was liberated. The Kuwaitis were knowledgeable about contracting and had already initiated a few contracts on their own. The task force immediately joined the contracting process.

When the Kuwaiti government identified a need, various U.S. government agencies provided the task force with the names of potential U.S. contractors, and the reservists presented the list to their Kuwaiti counterparts. The task force helped the Kuwaitis review the bids that the firms submitted, but the Kuwaitis made the final decisions about contract awards. The reservists helped the Kuwaitis define the requirements and locate contractors and also provided advice about contracts. Legal restrictions prohibited them from participating in any contract negotiations or arranging meetings between the Kuwaitis and interested contractors. It was clear from the beginning that the Kuwaitis would sign and pay for all contracts, not the Kuwait Task Force. Task force members had no authority to sign contracts or obligate U.S. or Kuwaiti funds.[38]

Most of these early contracts were for food, water, medical supplies, power generation, emergency communications, uniforms, and vehicles. The U.S. Treasury Department agreed to release part of the Kuwaiti government's assets to pay for the contracts. The U.S. government had

frozen all of Kuwait's assets when Iraq entered the country to prevent Iraq from appropriating them.

The effort to contract for the emergency items proceeded slowly. Kuwaiti officials tended to delay contract awards. Some speculated that the Kuwaitis did not fully comprehend the urgency of the situation. In one glaring example, despite urging from the task force, the Kuwaitis failed to hire any oil firefighters until late February, after Iraq had blown or set fire to hundreds of Kuwait's oil wells. The Kuwaitis were concerned about the $22,000 per-team per-day cost and were only willing to pay $20,000. The difference amounted to about $16,000 a day. Yet they were losing millions of barrels of oil a day. Elliott demonstrated that they would lose close to $1 billion over 30 days. By the time they finally signed contracts with the firefighting companies, the Kuwaitis were in the worst possible bargaining position. Having a firm on retainer would have allowed firefighters to move into Kuwait much sooner than they did, since firms needed a six-week lead time to move in heavy equipment to support their operations. The Kuwaitis ultimately had to airlift firefighting equipment, which increased their costs. Each trip between Houston and Kuwait City cost the Kuwaiti government $500,000.

Kuwait Emergency Response Program members also delayed signing the contract for truck drivers to deliver water. Moreover, despite urging from task force members, the Kuwaitis made no provision to support the truck drivers logistically.

As with the Israeli air base program, strong cultural influences also affected the contracting process. One Kuwaiti official later explained that for the Kuwaiti representatives forcing a contractor to pay attention to them and reduce his price was more important than the actual dollar savings. The reservists learned to accommodate this way of thinking and, according to Elliott, ultimately established a close relationship with their Kuwaiti partners.[39]

American relief organizations quickly offered to help with refugee problems, food distribution, and other requirements. Yet the Kuwaitis balked at signing contracts with these organizations and reimbursing them for their services. It was enough, they maintained, to stockpile the provisions. Why did they need an agency such as the Red Cross to handle distribution?

The Kuwaiti representatives in Washington struggled with logistics details. Ambassador Gnehm observed that these planners had difficulty understanding that the U.S. military was not going to take complete responsibility for the recovery operation. Both Gnehm and the Kuwait Task Force tried to persuade them to hire a single contractor as program manager to administer the entire recovery effort. The Kuwaitis knew

they needed help planning and managing the recovery. Initially, they thought of hiring a private firm to perform this function and solicited proposals from some large construction firms such as Brown and Root, Bechtel Group, Inc., and Parsons. Although at one point the Kuwaitis considered hiring Parsons, a construction and engineering firm that had operated in Kuwait for 30 years, they were never comfortable with the concept of having a private company serve as the project manager and ultimately decided not to do so.[40]

By 11 January, just four days before the United Nations' deadline for a peaceful Iraqi withdrawal, Kuwaiti officials had signed only 11 contracts. By 16 January, the Kuwait Task Force had developed over $30 million in contracts for computer equipment, communications equipment, medical supplies, and other necessities with Motorola, Inc., IBM, Martin Marietta, and other firms. The task force ultimately developed $528 million in contracts, and 75 percent of that money went back to the U.S. businesses that provided services or commodities.[41]

Another part of the task force effort focused on human rights. The reservists recognized, all too well, the potential for massive human rights abuses after liberation. In mid-December their Kuwaiti counterparts began making threatening remarks about Kuwait's Palestinian residents, whom they apparently viewed as Iraqi collaborators. Palestinians made up 25 percent of the prewar population in Kuwait, dominating whole business sectors such as the construction industry, the government bureaucracy, and the legal profession. The Palestinian Liberation Organization had openly supported the Iraqi invasion, and stories of Palestinians colluding with the Iraqis filtered out of the country, much to the distress of Kuwait's representatives in Washington.

Some Kuwait Emergency Recovery Program members indicated that they planned to exact retribution. For example, when Colonel Elliott asked how many people in Kuwait would have to be fed after the liberation, Fatima Al-Sabah, a forceful, outspoken member of the royal family, responded 200,000. Elliott questioned this figure because he had heard that over 500,000 people remained in the city. She informed him that the Palestinians would not have to be fed. Another official quickly explained that the Kuwaiti government planned to deport half of the remaining Palestinians because the Kuwaitis had become too dependent on foreign labor.

After this meeting, the reservists expressed their concerns about treatment of the Palestinians to the Kuwaiti Ambassador. The Ambassador denied that his government was deliberately excluding the Palestinians from its planning for food distribution and assured that all Palestinians would be fed.

The reservists received strong support from Ambassador Gnehm, who was also concerned about the potential for human rights abuses. Early on, the Ambassador had discussions with Kuwaiti officials about the importance of protecting human rights after Kuwait's liberation. He emphatically warned that if the Kuwaitis shot any Palestinian residents U.S. forces would pull out and the international community would conclude that the Kuwaitis were worse than the Iraqis.

Civil Affairs doctrine on preventing human rights abuses was not well developed. Providing water, electricity, food, medical care, and sanitation seemed more immediate. Yet Maj. Andrew Natsios, Director of the Office of Foreign Disaster Assistance in civilian life; Col. Robert Ward, chief of the politico–military division in the CENTCOM J–5; and other CENTCOM J–5 officers recognized the potential for abuses.

Natsios drafted a phased operations plan based on the kind of behavior expected in the three weeks following liberation. The final plan recommended that during the first 72 hours no residents be allowed to leave their homes, that during the following two weeks (when the bulk of the abuses were anticipated) there be a dusk-to-dawn curfew, and that the military patrol Palestinian neighborhoods. The CENTCOM J–5 staff showed little interest in implementing the recommendations at the time, so Natsios put away the document. The day the ground invasion began, however, Natsios resurrected the plan and presented it to Rear Adm. Grant Sharp, the CENTCOM J–5. At the admiral's request, General Schwarzkopf adopted this plan as commanders guidance for all the coalition forces and asked the Saudi Arabian commander of all the Arab forces to issue the plan as commanders guidance. But the Arab forces did little to implement the plan until the Kuwait Task Force arrived in Kuwait.[42]

Civil Affairs Operations Plan

Part of the Kuwait Task Force's mission was to prepare a civil affairs annex to ARCENT's operations plan. Members of the 352d had begun drafting annexes to the CENTCOM and ARCENT operations plans after a joint exercise in the summer of 1990 called INTERNAL LOOK. Mooney wanted the task force to develop and execute a plan that would incorporate and elaborate on the Kuwait Emergency Response Program's plan.

Elliott directed Major Natsios to write a civil affairs annex to the operations plans, a reconstruction plan for Kuwait. This plan became Annex G (Civil Action Plan) to the CENTCOM and the ARCENT operations plans. The reservists completed the draft of Annex G in January

and formally presented it to the Kuwaitis before the task force deployed. They also sent copies to CENTCOM and ARCENT.[43] The reservists had difficulty gathering all the information they needed for their planning. "We couldn't function properly for lack of relatively simple intelligence," one member complained. CENTCOM planners possessed detailed information about the situation in Kuwait City, such as which buildings had been rigged with explosives, that could have been useful to the task force. The reservists needed to know how many structures remained standing and where. The military intelligence community, except for the military medical intelligence service at Fort Detrick, Maryland, refused to share information even though the reservists had the appropriate security clearances.[44]

The reluctance to share information may have been due to the placement of the task force under the steering group committee's command and control. The task force had no formal relationship with CENTCOM, and Schwarzkopf's staff provided almost no information concerning its plans until members of the 352d arrived in Saudi Arabia to work for the CENTCOM J–5 and the ARCENT G–5 (Plans and Policy Directorate).

CENTCOM's J–5 planning cell in Riyadh apparently made no effort to keep the Kuwait Task Force in Washington informed of its plans for civil–military operations. CENTCOM personnel, in turn, knew nothing about the task force's mission and activities until after Elliott came to Riyadh to brief them. From CENTCOM's perspective, the reservists who worked closely with the Kuwaitis were not authorized access to classified information about the mission. There was much sensitivity about sharing information with the Saudis and Kuwaitis. CENTCOM had, in fact, tried to prevent coalition members from having access to the operations plans being developed for fear that the Arabs might compromise the operation before its execution.

Operational security, combined with the Kuwait Task Force's position outside the CENTCOM and the ARCENT command chains, prevented the degree of coordination needed to prepare an effective plan for employing civil affairs. The CENTCOM J–5 asked the task force to send a representative to Riyadh, but the task force declined. The task force asked CENTCOM to send a representative to Washington, but that made little sense to CENTCOM officials because the plans were being drafted in Riyadh. With little information from ARCENT or CENTCOM in the first months, the reservists relied heavily on information that 352d members who worked in the Defense Intelligence Agency and the Central Intelligence Agency provided.[45]

The Kuwait Task Force had different priorities than ARCENT and CENTCOM had. Task force members focused on the long-term restora-

tion of Kuwait's infrastructure, while ARCENT and CENTCOM planners focused on short-term emergency services. Unfortunately, no one would compare the plans until the task force arrived in Saudi Arabia. At that time, ARCENT and CENTCOM officials found the reservists' early planning efforts inappropriate and of little value. The reservists had developed an elaborate plan that had little relationship to the plans CENTCOM developed in Riyadh. Some officials later speculated that the lack of coordination could have caused serious problems if there had been great loss of life in Kuwait City.[46]

In response to the charge that ARCENT withheld information from the task force, the ARCENT G–5, Col. James T. Kerr, Jr., observed that ARCENT's own staff knew little about the plan for offensive operations until December. Moreover, the staff would have been reluctant to share such sensitive information with the task force. The ARCENT commander, Lt. Gen. John Yeosock, with characteristic bluntness, observed that he saw no need to keep the civil affairs planners in Washington informed about the planning in theater. "Washington had nothing to do with the plan," he insisted. He did, however, believe that the reservists should have been mobilized to Saudi Arabia early on to keep ARCENT informed of their activities.[47]

During the planning process, Kuwait Task Force members presented a series of briefings to the Kuwaiti Ambassador. Ambassador Al-Sabah became convinced that the Kuwait Emergency Recovery Program had not prepared adequately or quickly enough for the liberation of Kuwait and the restoration of civil services, so he temporarily discontinued the briefings while he attended to internal problems.[48]

As the director of the Kuwait Emergency Recovery Program, Fawzi Al-Sultan reported directly to the Crown Prince and the Emir and was not accountable to Ambassador Al-Sabah. Tensions between those two strong personalities intensified. In mid-December, Fawzi Al-Sultan was called back to Taif to report on his group's progress. Despite his positive report, Kuwaiti officials, who were perhaps concerned that Fawzi Al-Sultan was operating too independently, removed him from his position. They replaced him with the U.S.-educated Dr. Ibrahim Al-Shaheen, a director in Kuwait's National Housing Authority at the time of the invasion. The two men had different personalities and styles. Al-Sultan was an energetic worker who displayed tremendous initiative. Dr. Shaheen, by contrast, was less dynamic and perhaps more cautious. While at the housing ministry, Dr. Shaheen, a deeply religious man with high principles, had demonstrated his adeptness handling contentious issues and had inspired the confidence and trust of the royal family. He demonstrated this same ability throughout the recov-

ery operation. Dr. Shaheen's calming manner, gentle appearance, and low-key management style belied the authority and responsibility he carried. He was pulled many different directions and felt a deep personal responsibility for the success of the recovery operation.[49]

U.S. Army Corps of Engineers Involvement

Along with the Kuwait Task Force, the U.S. Army Corps of Engineers became more deeply entrenched in planning for the reconstruction. Some task force members were already very familiar with the Corps' unique capabilities, especially James Evans, Arthur Walz, and James P. Huber, who worked for the Corps as civilians. Kuwaiti leaders knew of the work the Corps had done for Saudi Arabia's Ministry of Defense and Aviation in the previous two decades and the Corps' extensive experience responding to natural disasters. Dr. Shaheen and his advisors correctly assumed that the Corps could apply its disaster response expertise as successfully in Kuwait.

In addition, the Corps had been constructing facilities in Kuwait long before the Iraqi invasion. Corps involvement in Kuwait actually dated back to the end of World War II when three Corps employees arrived to supervise contracts for the assembly of prefabricated barges used to carry war materials up the Tigris and Euphrates rivers. During the late 1970s and early 1980s Corps personnel evaluated several buildings used by the American International School in Kuwait.

In the early 1980s, the Corps' Middle East Division worked with Kuwait's Air Force to house a Hawk missile system that it had purchased from the United States. The division established a small resident office in Kuwait headed by Ceasar Santucci. Meanwhile, the Kuwaitis hired an American firm to expand their computer system as a database management system for their personnel records, logistics, and other items. They asked the Corps to review the proposed design. The Corps modified the contract and opened it to competitive bidding, saving Kuwait an estimated $500,000. Over the next six years, the small Corps office in Kuwait became involved in munitions storage and helped design and develop a flight simulator and training center at Ahmed Al-Jaber Air Base.[50] At the time of the invasion, the Corps' Middle East/Africa Projects Office abandoned two main projects in Kuwait: the construction of the nearly complete training center and the construction of a half complete maintenance shop for Hawk antiaircraft missiles.

On 12 December, Corps members met informally with representatives from the Kuwait Task Force and the Kuwait Emergency Recovery

Program to provide an overview of the Corps' emergency response to catastrophic disasters and its application to the restoration of Kuwait. For the next few weeks, the Corps took little action. The Kuwaitis were considering hiring a private firm to act as the contract manager, and Corps officials did not want to interfere. The Corps traditionally avoids putting itself in the position of competing with a private firm.

At the request of the Kuwaitis, on 3 January the Corps provided an informal briefing on its ability to provide emergency and long-term recovery assistance, particularly the capabilities of its Middle East/Africa Projects Office, located in Winchester, Virginia, 80 miles west of Washington. This office was a successor organization to a long line of Corps elements that had worked for decades in the Middle East. Recognizing the importance of the mission, the Chief of Engineers, Lt. Gen. Henry J. Hatch, personally briefed Dr. Shaheen. The director of military programs, Maj. Gen. James W. Ray, and the commander of the South Atlantic Division, Maj. Gen. John Sobke, also attended. The Kuwaiti government was represented by its director of public works and members of his staff.

At the 3 January meeting, Dr. Shaheen indicated that he wanted the Corps immediately to begin providing reimbursable technical assistance and design and construction management services in accordance with the agreement in the 15 December letter from Secretary Baker to the Kuwaiti Ambassador. The Kuwaitis promised to give the Corps their specific requirements the following day.[51]

The next day, Dr. Shaheen formally requested that the Corps provide assistance in the following areas: the Ministry of Public Works—roads and bridges, sanitary collection, pumps and treatment, all public buildings, ports (civil aspects), and airports (civilian airport)—and the Ministry of Electricity and Water—water desalination and distribution (ground water), power distribution and generation, and National Guard facilities repairs. Dr. Shaheen asked General Ray to propose a draft agreement.[52]

By now U.S. military officials and the Kuwaitis recognized that the effort would be primarily construction, not civil affairs. Dr. Shaheen requested another meeting on 7 January to discuss the details of the Kuwaiti requirements and the nature of the Corps' emergency assistance. He also wanted to discuss the development of an agreement between the United States and Kuwait on emergency assistance and related matters that would govern the Corps' activities.

On 7 January, the Corps forwarded its response to the Kuwaiti government's request to the steering group committee for approval. The same day, at a meeting in the Kuwaiti's K Street office, General Sobke and Richard Wiles from the Middle East/Africa Projects Office described the

Corps' past experience in Hurricane Hugo (September 1989), the Loma Prieta earthquake (October 1989), and Operation JUST CAUSE (December 1989) and its current involvement in Operation DESERT SHIELD. They then presented a proposal for how the Corps would organize, prepare for, and execute the recovery work. They outlined the terms of a proposed letter of agreement.[53]

The Kuwaiti representatives realized that the Corps had more experience in recovery and response work than any of the private companies that they had been considering for project manager. They became convinced that the Corps had a level of expertise in emergency response not available elsewhere and was the only agency that could respond immediately. Working with a private firm, they had discovered, would require two to three months of planning and paperwork. Also, as a federal agency, the Corps would be bound by federal requirements and have greater legitimacy. The Kuwaiti government would not have to pay the Corps any profit margin. Moreover, Kuwaiti government agencies would have the security of working with a U.S. government agency.[54]

After meeting with Dr. Shaheen, General Sobke asked Ceasar Santucci and Wayne Henry from the Middle East/Africa Projects Office to draft a scope of work. Since they did not know the extent of the damage, their estimates were very rough. One great advantage was that Santucci knew some of the Kuwaiti representatives personally and understood how the ministries functioned. He was very familiar with the infrastructure of Kuwait City. Santucci and other Corps members talked with the Kuwaitis at length over the next few weeks. The Corps enlisted some of its most experienced emergency managers to work on the project.[55]

The Kuwaitis decided to work with the Army Corps of Engineers not only because of the Corps' unparalleled emergency response experience and capability but also because the Corps planned to incorporate Kuwaiti volunteers in its effort. At the suggestion of Dr. Shaheen, Bader Al-Qabandi, and other Kuwaiti officials, the Corps agreed to integrate Kuwaiti nationals into its organization. The Kuwaitis wanted their engineers to learn about and contribute to the reconstruction process by working alongside the Corps' engineers. Incorporating local nationals was very important, Dr. Shaheen later observed, because it allowed them to feel that they were contributing to their country. It also forged strong personal relationships between the Americans and the Kuwaitis. The Kuwaiti volunteers received invaluable firsthand experience and training.[56]

On 20 November, the Army Staff directed the Chief of Engineers to serve as the subject matter expert and lead agent for dealing with the Kuwaiti representatives on all public works and utilities issues. The Army Staff also directed that working groups established for function-

al areas report their findings and recommendations to the steering group committee for interagency coordination, validation, and approval. Hatch now informed the 352d Civil Affairs Command that the Kuwaiti government had requested the Corps' help in planning and initiating emergency and long-term recovery efforts related to public works and utilities. The Kuwaitis, he reported, were requesting reimbursable planning and technical assistance and design and construction management services.

Hatch explained that the Kuwaiti government's priorities were to determine the condition of the water system and the quality of the water itself, evaluate the condition of the electrical distribution system, and provide for temporary electrical supply needs. The quickest and best way to obtain funding was to use foreign military sales procedures. Hatch enclosed a proposed foreign military sales agreement and a letter of offer and acceptance for the steering group committee's approval. The 352d, in turn, informed the steering group committee about the Kuwaiti request.[57]

On 8 January the steering group committee approved the Corps' proposal. The next day, the Defense Security Assistance Agency approved the $46.35 million foreign military sales case ($45 million plus $1.35 million as a 3 percent surcharge for the Defense Security Assistance Agency to cover administrative expenses). Kuwaiti officials signed the agreement on 14 January and quickly transferred a $20 million acceptance payment to the U.S. Treasury.

Meanwhile, General Hatch directed Col. Ralph V. Locurcio, commander of the Corps' Savannah District, to establish an area office in Kuwait to oversee public works restoration. Locurcio's energetic and even-handed leadership would contribute greatly to the success of the operation. Locurcio traveled to the Middle East/Africa Projects Office headquarters on 13 January. On 16 January he met for the first time with the Kuwaiti representatives in Washington. At the meeting, representatives from the Corps, the 352d Civil Affairs Command, and the Kuwait Emergency Recovery Program began developing a detailed scope of work. As he hurried back to Winchester later that day, Locurcio heard on the car radio that the air war against Iraq had begun.[58]

Representatives from the Corps, the Kuwait Task Force, and the Kuwait Emergency Recovery Program began developing a detailed scope of work. On 19 January, Locurcio met with Fatima Al-Sabah and Kuwait's Minister of Electricity and Water to discuss various contracting options. They agreed with Hatch's plan to expedite the recovery effort by initially awarding letter contracts to prequalified contractors. Later contracts would be opened to competition.[59] A few days later, General Ray

met with Dr. Shaheen to clarify the contracting procedures that the Corps planned to follow.

Meanwhile, Hatch sent out a call for volunteers to go to Kuwait, specifically to perform damage surveys and assessments, contracting, and other services. The response was tremendous. Over 2,000 Corps members, mostly civilians, volunteered.[60]

While the volunteer effort was being organized, Corps leaders made key decisions about mobilizing for the operation. They had decided to draw on personnel throughout the Corps who had emergency experience. The Corps did not have a ready-made district office it could deploy. Locurcio decided to create a structure similar to a Corps district office so these volunteers could quickly orient themselves and to move an advance party into Saudi Arabia as quickly as possible. The advance party was particularly important because the Corps would find it nearly impossible to transport items purchased in the United States into a war theater. The advance team would be able to buy these items locally and obtain logistics support.[61] An eight-person advance team left for Saudi Arabia on 28 January.

As Corps leaders launched their effort, they continued trying to involve other federal agencies in the reconstruction process. As early as late October, Col. Thomas J. Sheehy, from the Assistant Chief of Engineers' office, had recommended that "the full Federal emergency response apparatus should be used as a starting point for organizing this effort." Based on the likely requirements, he added, the U.S. response would involve various government agencies as well as the private sector. Sheehy recommended that Pentagon officials consider using the Federal Emergency Management Agency model for responding to natural disasters in the United States and that the State Department coordinate the entire effort.

Corps officials questioned whether the 352d Civil Affairs Command could provide the necessary coordination. Hatch, a man of perception and insight, expressed concern to the Deputy Chief of Staff for Operations, Lt. Gen. Dennis J. Reimer, that the Corps' emergency assistance activities be an "integral part" of a broader war-to-peace transition in the region. "I believe that such a transition to peacetime support will set the tone for regional stability into the next century," Hatch explained. Although a steering committee had been created, Hatch did not believe the current doctrines and plans dealt with this situation. The State Department and the Defense Department had not yet adequately coordinated the execution of the war-to-peace transition. The theater commander's hand-off to the U.S. Ambassador, Hatch noted, should not mark the end of the Defense Department's involvement. The Defense Department had to establish the necessary mechanisms to provide these nation assistance capabilities, ini-

tially in support of the theater commander and later for the Ambassador to support recovery and reconstruction.

No single department or agency controlled all the capabilities and resources that might be needed in the recovery and postwar period, he continued. Hatch recommended that an interagency group linked to the National Security Council policy group be established to coordinate and implement the operation. He also recommended an executive order or national security decision memorandum directing and clarifying U.S. government assistance in Kuwaiti civil restoration and the relations between the Defense Department and the State Department. As much planning should go into coordinating and executing the recovery as went into fighting the war, he insisted. The Defense Department, and particularly the Army, had much to lose if efforts at managing the peace failed. "Our government's actions," Hatch warned, "will be judged in the years ahead more on how we promoted the conditions for lasting peace than how we waged the war." In closing, he urged Defense Department officials to ensure a successful transition from war to reconstruction by having the theater commander execute the initial civil affairs actions and then support the State Department after the transition.[62]

Kuwaiti and Kuwait Task Force Deployment to Saudi Arabia

As planning progressed, Kuwaiti officials decided to move most of the Kuwait Emergency Recovery Program members from Washington to eastern Saudi Arabia where they could prepare for their return to Kuwait. The members would go home with their government and become the focus of emergency operations.

In early January, Secretary Baker had lengthy discussions with senior Kuwaiti officials about restoring civil services. After a Kuwaiti cabinet session on 12 January, which endorsed the civil affairs efforts, Deputy Prime Minister Sheikh Sabah Al-Ahmed Al-Jaber Al-Sabah formally requested that Ambassador Gnehm ask the U.S. government to permit the Kuwait Task Force to continue working with the Kuwaitis to complete their planning and procurement. He also asked that the task force be allowed to deploy immediately with the Kuwaiti team—first into Saudi Arabia's Eastern Province and then into Kuwait, where they could continue to provide guidance and act as a link between the Kuwaiti team and the U.S. military. "The close association of team members," Gnehm explained, "has built confidence and relationships that can now be invaluably used during the crisis." Close cooperation between the two teams, Gnehm argued, was "absolutely essential" to ensure that the

Kuwaiti government could provide critical services to the civilian population and thus relieve the U.S. military from these tasks. The primary goal of the United States was to restore the legitimate government of Kuwait quickly and effectively, the Ambassador added. The Kuwaiti government had to provide basic services to its population quickly to demonstrate its legitimacy and to relieve U.S. troops of this requirement. Gnehm indicated that he needed the experience and expertise of the civil affairs unit to help him monitor and guide the Kuwaiti government during the crisis period. Secretary Baker, who recognized the need for continued close coordination in reconstruction planning, concurred with the Kuwaiti request.[63]

The Kuwaitis invited the reservists to travel with them from Washington in their chartered aircraft on 16 January. State Department officials asked the Director of the Joint Staff to secure the appropriate orders. General Powell supported Ambassador Gnehm's plan to have the reservists work closely with the Kuwaiti government, Ambassador Gnehm, and General Schwarzkopf. Both Powell and Gnehm believed that the civil affairs team would be the appropriate mechanism for involving other federal agencies.[64] Although senior State Department and Defense Department officials favored accepting the Kuwaiti offer to fly the Kuwait Task Force to Saudi Arabia, the Army Staff insisted that the reservists fly on military aircraft. The Army Staff was perhaps anxious to reaffirm its control over the task force. Liability and policy issues were also involved. As U.S. soldiers, the task force members were required to be processed at a designated mobilization station and deploy in government aircraft. Also, as Mooney explained to Gnehm, the military could not accept gifts over a certain dollar amount, and the flight could be considered a "gift."

On 26 January, 48 of the original task force members climbed aboard a military aircraft at Dover Air Force Base in Delaware and headed for Saudi Arabia. Four members remained in Washington a few days longer to continue working with the Kuwaitis. Despite the uproar, the separate travel arrangements had no impact on the task force's mission.[65]

Upon their arrival, the Kuwait Task Force members rejoined their Kuwaiti counterparts in Dammam, Saudi Arabia, just outside Dhahran. The Kuwaitis invited the reservists to join them at the Oberoi Hotel, but the hotel did not provide adequate security, so the reservists set up operations at the huge Khobar Towers housing complex in Dammam. But the facility had no telephones, work space, furniture, or transportation and was off-limits to Arabs, which would hinder coordination with their Kuwaiti partners. The Kuwaitis lobbied hard to get the reservists out of that facility. When that failed, they paid the Saudis to provide addition-

al security at the Oberoi Hotel. They even offered to acquire a facility behind the hotel where another Army unit was housed to keep all sensitive information and computers. After four days at the Khobar Towers, the task force members moved to the Oberoi Hotel.[66]

By the time the Kuwait Task Force deployed to Saudi Arabia, the roles of the State Department and the Defense Department had become better defined, and Pentagon officials had reluctantly agreed to assume major responsibility for assisting the government of Kuwait. The early planning and contracting efforts of the Kuwait Task Force proved to be very valuable, though the lack of early coordination between the task force and both ARCENT and CENTCOM would create problems once the task force arrived in theater.

Chapter 2

Planning in Theater

In late January, as the first members of the Kuwait Task Force and the Kuwait Emergency Recovery Office arrived in Saudi Arabia, the center of Kuwait reconstruction planning activities shifted from Washington to the theater of operations. Military leaders in theater slowly realized that when the hostilities ended the people of Kuwait would urgently need emergency supplies and services.

Not until the eve of the air war in mid-January, however, did CENTCOM and ARCENT officials position themselves to play a significant role in the immediate postcombat phase. Only then did they begin to craft the organizations—specifically the Combined Civil Affairs Task Force and Task Force Freedom—that would enable them to direct a large-scale recovery operation in Kuwait.

The Kuwait Task Force in Theater

After the Kuwait Task Force arrived in Saudi Arabia, a controversy ensued about command and control. The basic question was would the task force continue to exist and, if so, to whom would it report? The task force was a stepchild of the Army Staff, yet its personnel remained members of the 352d Civil Affairs Command attached to ARCENT through the Army's Capstone program. As in Washington, military leaders in theater held different views on the appropriate role for civil affairs—specifically the Kuwait Task Force.

The task force members had assumed that when they arrived in Saudi Arabia they would continue to work alongside Kuwaiti officials, helping them prepare for long-term restoration and reconstruction. But some CENTCOM and ARCENT officials had a different plan. They wanted to integrate the reservists into the existing chain of command and employ them in emergency restoration missions. These officials wanted to pull individual reservists from the task force to augment their own

staffs. Reservists have often been used in this manner. Rumors that the CENTCOM J–5 planned to dismantle the task force alarmed the newly arriving members.[1]

Elliott was anxious to keep the group intact and focused on its long-term planning mission. CENTCOM staff members, however, argued that they were fighting a war, and every soldier had to focus on the present events. The task force, they insisted, was no longer an independent planning entity but a CENTCOM asset to be used as the theater commander saw fit. The theater commander, they added, was in charge until the end of the hostilities when Ambassador Gnehm and the Kuwaitis assumed responsibility. Some staff members later complained that initially Gnehm and the task force members had difficulty understanding this relationship.[2]

The task force members, in turn, reported that CENTCOM and ARCENT staff were "suspicious" of and even "hostile" towards them. Neither command had been involved in the task force's activation nor in its shift from a planning cell to an operational, in theater asset, and neither knew exactly what to do with this asset. The task force had been operating in Washington under the direction of the high-level steering group committee. It had developed and maintained close ties to Ambassador Gnehm and to the Kuwaiti government, but not to U.S. forces in Saudi Arabia.

ARCENT and CENTCOM had never requested the task force and knew little about it. Colonel Kerr indicated that ARCENT and the CENTCOM commander "never felt sufficiently plugged into" the process of establishing the task force. Kerr had not been kept well informed of the task force's activities in the States. Kerr observed that many ARCENT officials believed that the task force mission was self-generated, that Elliott had initiated the mission using his civilian connections at the State Department. They were concerned that the reservists were "getting themselves in an area where they didn't belong."[3] At one point, Kerr bluntly informed Elliott that he worked for ARCENT.

Reflecting the level of ARCENT's skepticism about the task force, General Yeosock later complained that he had "no earthly idea of what this Kuwait Task Force was doing in Washington or what it was they thought they were doing or what utility it had to me once it got there." He suggested that a task force representative should have briefed him because the civil work function could not be performed independently in a vacuum. Moreover, General Yeosock initially questioned whether this relatively small group of reservists could make a significant contribution. The ARCENT and CENTCOM staffs viewed the Kuwait Task Force as an "orphan" thrust upon them, with no sponsor in theater. The

task force, they insisted, was not their responsibility and would have to provide its own logistics support.[4]

While CENTCOM and ARCENT questioned the usefulness of the task force, Ambassador Gnehm, who had moved to Taif in the first week of January, had a different view. He was delighted to have the reservists at hand because they gave him capabilities that he would not otherwise have had with his small five-person staff. Gnehm was understandably anxious to keep the task force intact. When the time came to move into Kuwait, he wanted the reservists nearby where they could consult with him and apprise him of any problems and, more important, where they would be close to the Kuwaiti planners.

Ambassador Gnehm joined in the struggle to preserve the integrity of the task force, but quickly met resistance from General Schwarzkopf, Admiral Sharp (the CENTCOM J–5), and General Yeosock. Gnehm did not believe General Yeosock understood the importance of the task force nor the concept that this group would collocate in Dhahran and prepare itself to go into Kuwait and establish a civil–military operations center. Yeosock, in turn, maintained that Gnehm had the "whole Army" to help him restore Kuwait, not just the Kuwait Task Force.[5]

Ambassador Gnehm had a CENTCOM representative on his staff, Maj. Terry Potter, who provided regular updates on the military operations. Potter was Gnehm's liaison on reconstruction issues with General Schwarzkopf's staff. However, the Ambassador often dealt directly with Admiral Sharp and occasionally with General Schwarzkopf. During his discussions at CENTCOM headquarters, Gnehm detected little interest in preparing for post-liberation in Kuwait. General Schwarzkopf's staff was understandably preoccupied with executing the offensive operations.

The Ambassador later noted that after failing to find a senior CENTCOM official who would argue the case for reconstruction, he assumed that mission himself. Gnehm was particularly anxious to avoid massive deaths caused by shortages of food and water. Like General Hatch, he found himself reminding military officers that the success of the operation after liberation, not the ground war, would determine whether victory "was sweet or sour." The military victory and liberation of Kuwait would be clouded if people were dying in the street. He argued that the goal of the President and the theater commander was to restore the legitimate government of Kuwait as quickly as possible so the U.S. forces were not viewed as an occupying army. The Kuwait Task Force, he explained, was designed to help meet this goal. The Ambassador pleaded with General Schwarzkopf to leave the task force intact so it could continue its work.[6]

As a result of private discussions, General Schwarzkopf and the Ambassador agreed that some task force members would join the CENT-

COM and ARCENT staffs to help with planning, but they would later rejoin their unit to execute the plans. Meanwhile, other task force members would continue their own planning effort.[7]

The Ambassador's vision of the task force working alongside himself and the Kuwaitis never materialized. Although the State Department encouraged Kuwait's exiled government officials to return to their country as quickly as possible, they were reluctant to do so. As a result, Gnehm would enter Kuwait City on 1 March, before a single exiled Kuwaiti government official arrived. The Crown Prince arrived a few days later, followed in time by other ministers and their staffs. The Emir would not follow until much later, after suitable accommodations had been prepared and safety concerns had been adequately addressed.[8]

With the Ambassador's help, Kuwait Task Force members successfully fended off those who would dismember their organization. Their work took on a new urgency. The members had not planned to enter Kuwait until at least a month after hostilities ceased, but both they and the CENTCOM staff began to see a need to get the task force and emergency supplies into Kuwait as soon as possible. It became increasingly clear to CENTCOM and to General Mooney that no one had planned adequately for the initial emergency phase in Kuwait. General Yeosock and Lt. Gen. William "Gus" Pagonis, commander of the 22d Support Command, directed Mooney to expand the focus of the task force to include short-term recovery, concentrating on food, water, medical supplies, transportation, telecommunications, sanitation, and electrical power. The reservists encouraged their Kuwaiti counterparts to step up effort to assemble supplies and trucks, and the number of Kuwaiti contracts climbed dramatically in February.

Task force members in Dammam worked feverishly to obtain food, water, and medical supplies; prepackage supplies for distribution; stage supplies for loading; and arrange for trucks and drivers to deliver these items into Kuwait immediately after liberation. General Mooney; Brig. Gen. Kenneth Guest, the deputy commander of the 22d Support Command; and Col. William Mercurio, the commander of the 301st Area Support Group, planned to deliver so-called "push packages"—flatbed trucks loaded with food, water, and medical supplies. The reservists put together these packages, sometimes with help from the U.S. Navy. Mooney wanted three-day packages that could go into specific areas so the U.S. military would not have to replenish supplies every day. The packages would be trucked up the coast road because the airport was heavily damaged.[9]

Although the task force originally planned for each truck in the initial convoy to carry the same proportion of food, water, and medical supplies,

in case of an accident or mechanical failure, they found that medical supplies had to be distributed differently than the other items. Ultimately they created separate truckloads of food, water, and medical supplies, and these trucks went forward to do partial distribution. The medical supplies were delivered directly to the hospitals. The "push packages" allowed civil affairs personnel to provide critical items on site faster.[10]

As the ground war approached, the task force not only massed supplies, it also increased pressure on the Kuwaitis to make better preparations for medical assistance. During one tense exchange, task force member Maj. John W. Harbell asked Dr. Shaheen how many dead Kuwaitis the Emir would tolerate, because without adequate preparation, the number would climb with each passing day. If the deaths were unacceptable, Harbell warned, the Kuwaitis had to take certain measures. The reservists and the Kuwaitis began to stage medical supplies on Army pallets in a small warehouse in Dammam owned by a Saudi trash collection service. The first truck that pulled up with emergency medical supplies was filled with antacid, which the Kuwaitis had purchased in bulk because stomach ulcers were a common affliction in Kuwait.[11]

Despite the task force's efforts, ARCENT planners remained concerned that the Kuwaiti government would not be able to deliver enough supplies. The task force had reported only the food purchased by the Kuwaiti government that was already loaded on flatbeds ready to move north on short notice. It had not reported the additional emergency supplies stored in a Dhahran warehouse that had not yet been loaded on trucks. Receiving the task force's understated reports, on 26 February the ARCENT staff ordered nearly $10 million in emergency food and water to be delivered in U.S. Army trucks by the 301st Area Support Group. When they discovered the reporting problem, they reduced this amount to $1.4 million.

The trucks that the task force loaded with the Kuwaiti purchases reached Kuwait City several days before the area support group. Thus, the Kuwaiti government, rather than ARCENT, provided the bulk of the relief supplies in the emergency response period. Although the supplies that the reservists had encouraged the Kuwaiti government to buy were not originally intended for emergency relief, they turned out to be the only supplies available immediately after the liberation.[12]

CENTCOM Planning for Civil-Military Operations

Before mid-January, CENTCOM gave little attention to planning for civil–military operations in Kuwait after the liberation. CENTCOM's

operations plan for DESERT STORM basically stopped with eliminating the threat of Iraq's Republican Guard and did not address the post-conflict phase. Under the plan, the coalition forces, particularly Arab members, would liberate Kuwait City, rather than American soldiers. Joint Forces Command–East, made up of Saudi and other Arab forces, would move north along the Persian Gulf coast into Iraq.

The Marines, situated to the west of Joint Forces Command–East, would also push north, but they would stop at the outskirts of Kuwait City and secure the area around Kuwait International Airport. Arab forces from Joint Forces Command–North, situated on the Marines' western flank, would sweep north and enter Kuwait from the west. U.S., British, and French troops would push north and west of Kuwait City to seal Iraqi units inside, but would not be directly involved in retaking the city.[13]

Although neither CENTCOM nor ARCENT originally envisioned playing a large role in the immediate response phase, they had asked several officers from the 352d Civil Affairs Command to plan civil–military operations. Col. Lawrence C. Blount had arrived in Riyadh, Saudi Arabia, on 18 December with a team of seven soldiers from the civil affairs command to form the Civil Affairs Branch of Colonel Ward's politico–military division in CENTCOM's Plans and Policy Directorate. Blount's group now became CENTCOM's principal link with the Kuwait Task Force. The task force coordinated with Blount as much as possible as he struggled to integrate the emergency services and reconstruction into the war plan, sending him copies of its reports and plans by registered mail.

When the Kuwait Task Force arrived in Saudi Arabia in January, Colonel Elliott went to Riyadh to brief the ARCENT and CENTCOM Plans and Policy directorates. Three task force members remained in Riyadh for about two weeks until the task force moved into Kuwait. They completed contracts for food, water, and other essentials. At that time, ARCENT remained focused exclusively on attacking Iraqi forces, so the CENTCOM Plans and Policy Directorate, particularly Blount's group, did most of the planning for emergency relief in Kuwait. Admiral Sharp remained keenly interested in the task force's plans for restoring emergency services and received daily briefings.[14]

The civil affairs specialists who worked in the directorate provided civil–military operations planning and policy guidance for the theater and coordinated the deployment of the remaining civil affairs units to the theater. Their planning focused on five areas: minimizing hazards to the civilian population in Saudi Arabia, establishing temporary civil authority in occupied areas of southern Iraq, handling large numbers of dislocated civilians in Kuwait, restoring emergency services in Kuwait, and repatriating enemy prisoners of war.

The planners drew on information provided by members of the resistance operating in Kuwait. Reports indicated that food and water were generally available. However, the Iraqis had stripped most of the sophisticated equipment and supplies from hospitals and shipped them to Iraq. They had looted communications equipment, radios, telephones, and computers; confiscated commercial and privately owned vehicles; and placed mines around the oil wells, roads, and bridges.[15]

Ward and Blount occasionally drove to the Kuwaiti Embassy in Saudi Arabia to gather information from Kuwaitis who had recently escaped. Blount had on his planning staff a battalion commander for one of Kuwait's armored brigades who had stayed in Kuwait until mid-November as part of the resistance. He worked with the staff until a week before the ground campaign started, when he rejoined his unit. Blount indicated that he and others on the J–5 staff had "remarkably good" information about the situation in Kuwait. The planning effort went extremely well, he observed. They had anticipated virtually all of the problems they later encountered.[16]

ARCENT Planning for Civil-Military Operations

Initially, Admiral Sharp's staff had favored retaining responsibility for civil affairs at the CENTCOM level. But on 4 January 1991, Admiral Sharp designated ARCENT as the executive agent for civil–military operations for Operation DESERT STORM. As the executive agent, ARCENT exercised command and control over all echelons above corps civil affairs units in theater. It was also responsible for restoring civil order and emergency services to Kuwait. CENTCOM directed ARCENT to provide all necessary emergency food, water, medical care and supplies, temporary shelter, and public services after the liberation of Kuwait. General Schwarzkopf placed General Yeosock in charge of restoring Kuwait's essential services and infrastructure, and Yeosock delegated this task to his subordinate commander, Brig. Gen. (later Maj. Gen.) Robert S. Frix.[17]

Back in December, the same day that Blount and his team joined the CENTCOM staff, six members of the 352d Civil Affairs Command joined ARCENT's Plans and Policy Directorate (G–5), which assumed the lead for civil–military operations. The staff worked hard to convince ARCENT of the need to purchase emergency relief supplies for dislocated civilians in southern Iraq, but they encountered opposition. Other civil affairs members in the directorate focused almost exclusively on the final version of the operations plan for DESERT STORM. But, as indicated, in late December neither ARCENT nor CENTCOM were overly con-

cerned about requirements in the period after the liberation of Kuwait. Their operations plan for "defense and reconstruction of Kuwait" envisaged a peaceful withdrawal leaving U.S. forces with little to do. The ARCENT G–5 began planning for Kuwait only after Admiral Sharp ordered him to do so.[18]

By mid-January, the realization grew that the Iraqis were not going to leave Kuwait City peacefully. Elliott's early briefing for the ARCENT G–5 and CENTCOM J–5 highlighted the gap between the time when coalition forces liberated the city and Kuwaiti officials could safely return. No one knew how long that gap would last, and no one had planned for providing emergency relief during that period.[19]

ARCENT officials recommended the immediate activation of the entire 352d Civil Affairs Command to oversee the Kuwait reconstruction effort and to provide command and control for nearly 2,220 civil affairs personnel. Planning for the post-liberation period, they explained, was a "potentially enormous undertaking" likely to consume a substantial number of civil affairs companies. This reconfirmed the need for a civil affairs command and control element.[20]

As the massive air war progressed, officials became even more convinced that Kuwait City would be heavily damaged. Reports indicated that as many as 600,000 people could be left in need of food and water and without communication and electrical power. Thus, the Army would have to build up its civil affairs capability to respond effectively.[21]

Meanwhile, General Schwarzkopf warned General Powell and Secretary of Defense Cheney that the period after Iraqi forces left Kuwait would be critical. Until Kuwait's legitimate government was reestablished, he explained, coalition forces must be prepared to help that government provide for its people. As the largest force in the coalition and the predominate leader in the liberation, the United States would be expected to provide the necessary services.

General Schwarzkopf asked that his command be given the missions of conducting disaster relief operations and administering civil affairs operations in Kuwait. Without such authority, CENTCOM could not legally use U.S. manpower, equipment, or materials to provide relief to the civilian population. The next day, General Schwarzkopf issued guidance on U.S. involvement in Kuwait City, which stipulated that he would be responsible for emergency relief until the Crown Prince and his cabinet returned.

The draft operations plan for the defense and restoration of Kuwait governed planning for the theater commander's emergency relief mission. Within the ARCENT Plans and Policy Directorate this planning effort gave birth to the Civil Affairs Task Force Planning Cell,

headed by Col. Richard C. Brackney from the 352d Civil Affairs Command. The directorate closely coordinated its planning effort with its CENTCOM counterparts.

Toward the end of January, however, a separate group was organized within the ARCENT Plans and Policy Directorate to consider both the organization and staffing of the Kuwait relief effort. Only within the context of planning for the emergency relief of Kuwait City did ARCENT consent to mobilize General Mooney and the rest of his command.[22]

Formation of the Combined Civil Affairs Task Force

General Mooney arrived in Riyadh on 2 February. The rest of his command, under his chief of staff, Col. Edward A. King, followed on 15 February. As soon as the general arrived at his hotel, he called ARCENT headquarters to arrange for a meeting with General Yeosock. At this initial meeting, Yeosock emphasized that Mooney's mission was to turn management of the reconstruction over to the Kuwaitis as quickly as possible.[23]

After the meeting, a member of the ARCENT staff politely informed Mooney that, contrary to Army doctrine, he would not serve as the ARCENT G–5, commanding all the civil affairs troops in theater. Rather he would command a newly formed Civil Affairs Task Force (CATF), while Colonel Kerr continued to serve as the G–5. Yeosock later explained that he placed Mooney as commander of the task force, rather than as G–5, to make the best use of his skill and experience. Moreover, because of the importance of the Kuwait mission and the short execution period, Yeosock wanted Mooney in a position where he could use his authority and his general officer rank to put together the task force. He needed Mooney to command troops and direct the day-to-day reconstruction, rather than serve as a staff advisor and get involved in policy issues. Mooney later conceded that he did not need the additional burden of being responsible for all civil affairs.

Yeosock's decision reflected certain political sensitivities. Plans before Operations DESERT SHIELD and DESERT STORM called for the commander of the 352d to be both a staff advisor to the ARCENT commander and the commander of a major subordinate command. Early on, however, Yeosock had attached the various civil affairs companies to the corps and divisions. If Mooney became the G–5, the whole attachment versus operational control issue would resurface, something Yeosock did not want.[24]

On 14 February 1991, ARCENT formally established the Civil Affairs Task Force, a group of 550 soldiers, mostly reservists, with a

broad range of skills in the public service areas. The Civil Affairs Task Force consisted of the Kuwait Task Force; the 352d Civil Affairs Command (–); the 431st Civil Affairs Company out of Little Rock, Arkansas; the 432d Civil Affairs Company out of Green Bay, Wisconsin; and the 96th Civil Affairs Battalion (–) out of Fort Bragg, North Carolina. The 96th Civil Affairs Battalion (–), though assigned to the task force, remained under ARCENT's operational control.

Staffing the Civil Affairs Task Force proved challenging. The new task force needed civil affairs companies to conduct civil–military operations in Kuwait City, but these were hard to find. Twelve Army Reserve civil affairs companies were in the theater. Existing Army civil affairs doctrine dictated that these units be attached to the 352d Civil Affairs Command for further attachment to combat units. As noted, however, ARCENT had already attached these units to divisions and corps. Division and corps commanders, uncertain about what they would face as hostilities ended, were understandably reluctant to surrender those civil affairs units. Ultimately, the ARCENT G–5 persuaded the XVIII Airborne Corps and the VII Corps each to release a single civil affairs company, the 431st and 432d respectively, to join the task force.

Planners quickly recognized the need to coordinate the activities of the task force with the civil affairs activities of the coalition partners. The Civil Affairs Task Force became a Combined Civil Affairs Task Force (CCATF) with the addition of civil affairs elements from France, Canada, Britain, Saudi Arabia, and Kuwait. The task force was also a de facto joint task force, embracing elements from the Army, Air Force, Navy, and Marine Corps. It even included representatives from the International Committee of the Red Cross, the Kuwaiti Red Crescent, and a team from the Office of Foreign Disaster Assistance.[25]

The task force incorporated some unusual organizational concepts. First, it had a deputy chief of staff for security, plans, and operations who oversaw both the task force's intelligence (G–2) and operations (G–3) functions. The deputy was considered the centerpiece of the operation, gathering information on the status of Kuwait City, setting priorities, and assigning relief tasks.

Second, the task force formed a coalition warfare branch to provide a much-needed link to the Arab forces, specifically the Eastern and Northern Area Commands. At an earlier meeting in Al Khobar, Maj. Gen. Jaber Khalid Al-Sabah, commander of Kuwait's Land Forces, had indicated that his forces needed civil affairs support. After that, G–5 planner Maj. Chuck Trombetta tried to provide General Jaber with a civil affairs liaison team, an effort that did not bear fruit until just before the task

force deployed to Kuwait City. Trombetta worked to crystallize the concept of civil affairs support to coalition forces by creating and leading the coalition warfare branch.

Initially, the relationship of the new task force to ARCENT was unclear. Early planning placed the task force firmly at the center of the emergency relief effort, with ARCENT medical, engineer, military police, and supply assets attached to it as needed. Yeosock strongly opposed this concept. Rather, he decided to place the task force under a small ARCENT (Forward) control element and provided that element with all the support it required.

The Combined Civil Affairs Task Force would coordinate the delivery of emergency relief to Kuwait City, but would control no assets except its people. Food, water, trucks, medical supplies, and other essentials would belong to the government of Kuwait or the 301st Area Support Group.[26]

Most of the task force members assembled at Camp #1 near Jubail, 50 miles north of Dhahran on the Saudi Arabian coast, on 14 February to begin planning and training for Kuwait reconstruction. The headquarters element of the 352d Civil Affairs Command, which had just arrived in Dhahran, moved to Camp #1 on 15 February. Mooney arrived the next day after a series of meetings with Generals Frix, Yeosock, and Pagonis. Formal training began on 18 February.

By the end of the first week of training, Mooney had divided Kuwait City into sectors and given each company responsibility for various sectors. Training increasingly focused on detailed analysis of each sector. By the time task force personnel entered the city, they would be very familiar with the locations of key facilities such as hospitals and power plants. Their training ultimately contributed to their success.[27]

The 96th Civil Affairs Battalion (–) moved from Riyadh to join the Combined Civil Affairs Task Force at Camp #1 on 17 February. It trained the Reserve companies on communication and military operations in preparation for combat in Kuwait City. It placed representatives in the headquarters of the Joint Forces Command–East and the Joint Forces Command–North to serve as critical links between U.S. civil affairs forces and coalition forces preparing to enter Kuwait City. The battalion provided the coalition troops with some initial civil affairs training. The battalion's support to the planned coalition assault was critical because no coalition forces were dedicated to tactical civil affairs.[28]

Mooney apportioned the 70 Kuwaiti interpreters assigned to the 352d to the civil affairs companies. Their knowledge of the language and the city made these interpreters "a tremendous asset," he observed. They would make the task of damage assessment easier for the civil affairs personnel.[29]

Creation of Task Force Freedom

In January, amid growing concern about the immediate post-liberation period, General Schwarzkopf directed ARCENT to provide a command and control headquarters for civil–military operations in Kuwait. On 12 January, General Yeosock dispatched General Frix and a small staff to the vicinity of King Khalid Military City in northern Saudi Arabia with a mobile command post called LUCKY TAC (after General Patton's forward headquarters).

Frix's command post would monitor the movement of U.S. forces into western Saudi Arabia and direct the echelons above corps elements in the forward areas. ARCENT established a forward headquarters at King Khalid Military City, a self-contained command and control element that would operate forward during the ground campaign and ensure communication with ARCENT headquarters in Riyadh.[30] As the ground war approached, Frix and his staff solidified their operations. A special cell in ARCENT (Forward) planned the restoration of Kuwait, while other elements crafted the ground campaign.[31]

ARCENT officials concluded that they needed a command and control element that would combine the assessment capabilities of the civil affairs command with the logistics support capabilities of an Army area support group. Planners recognized that the Combined Civil Affairs Task Force could not accomplish the recovery mission without support from other Army elements. The civil affairs element, though a key player, would need Army vehicles, communications capability, and other types of logistics support. The task force they envisioned was not a doctrinal organization but a small version of a corps support command tailored to the specific mission. It was designed to provide area support, not to support combat. Planners began with an area support group, then added military police, engineer, medical, and other elements.

The ARCENT (Forward) staff and General Guest put together the organization during January. It consisted of military personnel who were not fully occupied with the combat operations. Since these units had never had to perform their intended missions during the combat phase, they were able to turn their attention more quickly to the post-combat phase.[32]

In mid-February, after the planning had been underway for some weeks, General Frix requested a briefing by all the elements involved in restoring emergency services and rebuilding Kuwait. On 20 February, Frix held a meeting at King Khalid Military City to review the operations plan for the defense and restoration of Kuwait. General Guest attended along with more than 40 representatives from CENTCOM, ARCENT, the special operations element of CENTCOM, and key echelons above corps

units such as signal, engineer, and medical commands. In his opening remarks, Frix expressed concern that the United States might win the war, but lose the peace.

CENTCOM had advocated forming a task force with Army civil affairs and Marine Corps representatives, but hazardous weather prevented the Marines from traveling to King Khalid Military City for the meeting. The Marines had already indicated they had limited resources and would have to defer to the Army for the bulk of the recovery effort.

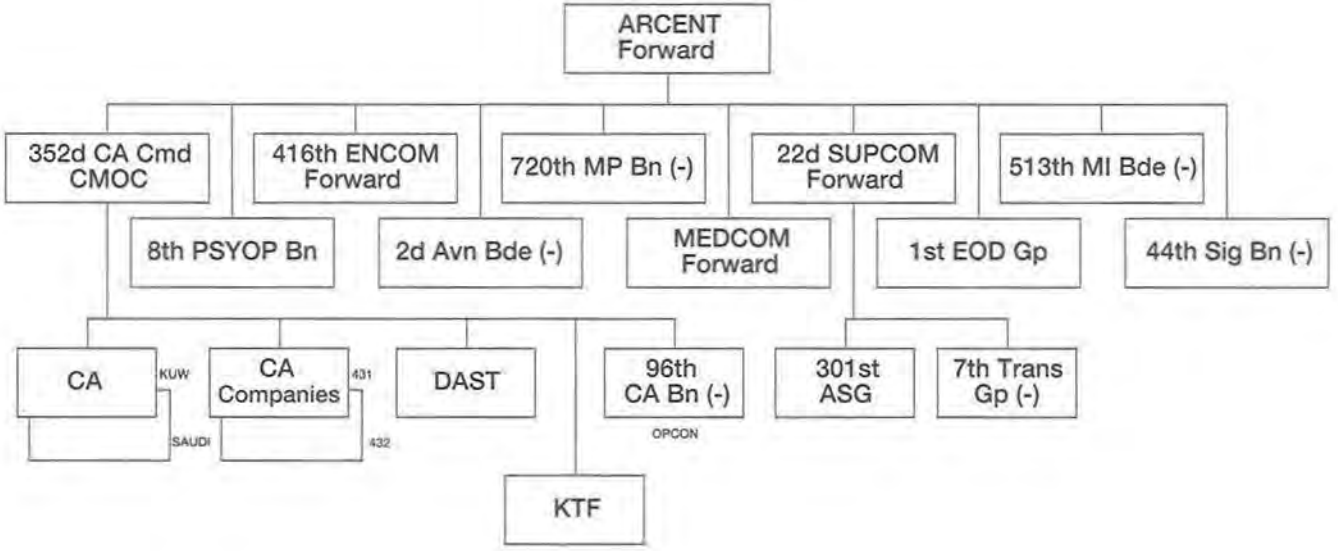
After presenting their concepts for operations, CENTCOM, ARCENT, and Special Operations representatives discussed issues related to command and control, operations, and civil affairs. General Frix realized that even if Arab rather than U.S. forces liberated Kuwait, U.S. military assets would be needed quickly. He stressed the importance of establishing clear missions, responsibilities, and timelines.[33]

The meeting highlighted the need for much closer coordination than any operations plan could provide. At the meeting's end, Frix announced the establishment of Task Force Freedom to bring together the Combined Civil Affairs Task Force and other elements. *(Chart 2)* He indicated that General Guest would be his main support, particularly for transportation, engineers, and military police. He also announced that once inside Kuwait City, he would operate out of Kuwait International Airport.[34]

Initially, Frix would use the mobile command post as Task Force Freedom headquarters, and staff elements would report to him each evening on the progress in their particular areas. Using the command post was a good decision because it could perform a variety of missions. Task Force Freedom would function as an umbrella organization for all U.S. military relief and reconstruction activities in Kuwait. It would resolve outstanding issues and coordinate the activities of the various Army elements.[35]

Task Force Freedom was not a standard military organization. In deciding which elements would go into the task force, Frix and others looked at the anticipated requirements. The organization, which grew to over 3,500 soldiers and civilians at one point, included the Combined Civil Affairs Task Force; an element of the 22d Support Command [301st Area Support Group and 7th Transportation Group (–)] under General Guest that provided all the logistics, transportation, and food; the 416th Engineer Command (Forward), an Army Reserve unit out of Chicago under its deputy commander Brig. Gen. Max L. Schardein; the 2d Aviation Brigade (–); an element of the ARCENT Medical Command; elements from the 11th Signal Brigade; military police from the 720th Military Police Battalion; the 8th Psychological Operations Battalion; the 513th Military Intelligence Brigade (–); and the 1st Explosive Ordnance

Chart 2–Task Force Freedom



Disposal Group. As the senior commander in Kuwait, Frix would also oversee and coordinate the activities of the Corps' Kuwait Emergency Recovery Office. The beauty of Task Force Freedom, Frix's executive officer Lt. Col. Mark Yates observed, was that it allowed the civil affairs units to concentrate on uniquely civil affairs missions, while other elements in the task force handled all the support missions. ARCENT (Forward) provided Frix with a small staff for command, control, and communication. Col. Glenn Lackey from ARCENT directed that a portion of ARCENT's mobile command post provide an operations element for the task force, and he became Frix's operations officer.[36]

The task force's mission, Yeosock indicated, was "to ensure unity of effort in the restoration and reconstruction of Kuwait and provide for the transition of responsibility to the Secretary of the Army." The mission was short-term—to provide emergency support only. Task Force Freedom was to accomplish certain tasks specified by CENTCOM: help restore emergency services in Kuwait, serve as CENTCOM's executive agent for civil affairs, and serve as coordinating authority for CENTCOM tactical military psychological operations. It was designed to conduct damage assessments and provide interim emergency services during the initial phase of restoring Kuwait.[37] The task force was similar to the organization that had been created to execute civil–military operations in Panama a few years earlier. Both the task force and the U.S. Military Support Group in Panama contained civil affairs, combat support, and combat service support elements. Both integrated Reserve and Active Army components.[38]

Kuwait Emergency Recovery Office Organization

As ARCENT stepped up its planning for the post-liberation period, the Corps of Engineers did the same. However, as the ground war approached, many key questions remained. Who would the Corps' Kuwait Emergency Recovery Office work for in theater? How much would U.S. troops do to repair the ports and airport, and how much would be left to Corps contractors? Who would tell the Corps when to initiate the recovery operations? How soon after hostilities ended would Corps members be able to enter Kuwait and begin work?[39]

At a 6 February meeting, General Hatch reminded Colonel Locurcio and others that the theater commander's policy was to "provide maximum opportunity for U.S. private sector involvement in Kuwait recovery." He reiterated the Corps' longstanding policy of hiring contractors rather than competing with private industry.

A few days later, Locurcio met with Dr. Shaheen's representative, Fatima Al-Sabah, and representatives from the ministries served by the Corps' foreign military sales agreement. Locurcio provided copies of the memorandum of understanding that the Corps had signed with Dr. Shaheen on 24 January and then presented the Corps' plan for contracting operations for emergency recovery in Kuwait.

After Locurcio's presentation, Julius "Bo" Bounds, an experienced contracting specialist from the Middle East/Africa Projects Office, outlined the contracting procedures the Corps planned to follow. He explained that the Corps would obtain competitive proposals before Kuwait's liberation. If time did not allow for full competition, the Corps would use letter contracts as an emergency measure. Later, the Corps would convert the letter contracts into definitive documents. Locurcio emphasized that the Corps intended to obtain as much competition as possible.[40]

Each Kuwaiti ministry and the Corps would formally agree on a contract's scope of work. Before solicitations went out, the Kuwaiti officials would decide whether they or the Corps would award the final contract. Together, the Kuwaiti ministries and the Corps would develop a list of prequalified contractors, solicit proposals from them, and form a joint U.S.–Kuwaiti committee to review the proposals and select the most qualified firm.

If the Corps was to award the contract, the Kuwaiti ministry would provide a written request to award the contract to the firm the committee had selected. If the Kuwaitis planned to award the contract, the Corps would help prepare the contract documents for signature by the appropriate ministry.[41]

Locurcio and his deputy, Ben Wood, met with Ambassador Gnehm and his staff in Taif on 12 February 1991 to discuss the Corps' mission in Kuwait. They explained the Kuwait Emergency Recovery Office's organization and deployment plans, the damage assessment and damage survey report process, and the budget and contracting plans. In laying out the Corps' extensive capabilities for the Ambassador, Locurcio drew on his own experience as a district engineer and a facilities engineer, as well as his experience responding to natural disasters, where the Corps often handled debris removal, water supply, and other missions. Gnehm indicated his support for all plans, especially the plan to contract with eight different firms to handle various sectors of the city. He also favored giving preference to U.S. firms when awarding contracts, as long as the mission did not suffer.

After the formal briefings, however, the Ambassador pulled Locurcio and Wood aside. During this private two-hour meeting, Gnehm complained that he had not been adequately informed about the Kuwait



Ambassador Gnehm confers with Colonel Locurcio, March 1991.

Emergency Recovery Office's mission and activities. The breakdown in communications, Locurcio quickly explained, resulted from the absence of firm information with which to plan and the physical separation of the Ambassador and Kuwaiti ministers. Gnehm stressed the importance of coordinating with him and the Kuwait Task Force before and after entering Kuwait.[42]

Gnehm had apparently interpreted Locurcio's discussion of the Corps' capabilities as an effort by the Corps to expand its role. He emphasized that the Kuwait Task Force was the primary agent for U.S. involvement in planning and implementing the recovery program. The role of the U.S. Army Corps of Engineers would be limited. "While the Corps of Engineers has a significant role to play in the emergency recovery program," he emphasized, "they are only one part of a much larger picture." Gnehm made it clear that the Corps was responsible only for damage assessment and contracting for infrastructure repair and that he would oppose any Corps involvement in life support activities such as providing food, medical supplies, and transportation. He directed Locurcio to refer missions beyond his scope to the task force.

After the meeting, Gnehm reported to the Secretary of State that he strenuously objected to any expansion of the Corps' role beyond its orig-

inal scope, especially the role of a management services contractor. Gnehm insisted that the Kuwait Task Force remain in the forefront. The absence of an overall project manager, he added, was causing serious coordination problems.[43]

When General Hatch heard of Gnehm's concerns, he quickly reassured the Ambassador that he supported the Ambassador's concept for the Corps' role in the recovery effort. Hatch agreed that the Corps' greatest contribution would be repairing the infrastructure and supported the Ambassador's idea of hiring a civilian contractor as the project manager.[44]

At Hatch's insistence, Locurcio tried to shape an organizational structure that would be responsive to the needs of the Kuwaitis without pushing the Kuwaiti government in a particular direction or taking over the recovery effort. Locurcio wanted a self-sufficient organization that would resemble a small district office so individuals from throughout the Corps would already be familiar with the organization when they arrived.[45]

Locurcio could find little information about similar Army operations in the past from which to draw. In shaping his organization, he relied heavily on some of the Corps' most experienced emergency management specialists. For example, he recruited Wynne Fuller from the Mobile District and Ronald Moore from the South Atlantic Division, both of whom had helped reconstruct the Virgin Islands after Hurricane Hugo struck in 1989.

Fuller and others helped the Middle East/Africa Projects Office develop an organizational structure. Planners drew on their knowledge of the types of damage they had seen after natural disasters such as lack of water and power. They also used information that Kuwait Emergency Recovery Program members and the Central Intelligence Agency provided to get a picture of what they would be facing. Before leaving the United States, the Kuwaiti members gave the Corps a prioritized list of public buildings that would have to be inspected, along with information about the status of the water and power distribution systems. They had indicated that restoring power, sanitation, and other emergency services and cleaning and repairing certain ministry buildings were the highest priorities. This provided the framework for shaping the mission and organizing the Kuwait Emergency Recovery Office.

After determining the areas to be addressed, the planners defined the skills that would be needed and began recruiting personnel—primarily those with previous disaster experience. Planners took into consideration the type of organization they could support logistically in Kuwait. Fuller emphasized the need for a flexible organization, one that could expand as needed and shift from emergency response to restoration. Locurcio, too, wanted a flexible organization with an emergency man-

agement office that could later convert into a resident engineer or area office to manage construction.[46]

Determining the proper size of the organization was difficult because planners were unsure of what they would be facing in Kuwait. They initially planned to have 275 Corps members, but the decision to integrate Kuwaiti nationals let Locurcio reduce this number. Later, as planners received reports that the damage was less than anticipated, they reduced the number still further. All Corps members who deployed to Kuwait would be processed through the Middle East/Africa Projects Office in Winchester. This office had successfully deployed hundreds of Corps members to Saudi Arabia in support of Operations DESERT SHIELD and DESERT STORM.[47]

While Locurcio crafted his organization, Corps leaders struggled to sort out thorny command and control issues. They did not know at the time what kind of command structure U.S. military leaders would establish for the post-liberation period. For the present, Hatch directed the Kuwait Emergency Recovery Office to work for the U.S. Ambassador through the 352d Civil Affairs Command. He also directed Locurcio to coordinate with the 352d and the Ambassador to ensure that the Corps could accept taskings directly from Kuwaiti ministries as long as it kept the 352d and the Ambassador informed.

Initially, Locurcio and his staff were not to enter Kuwait until the Ambassador had established himself, and they would work under the Ambassador in support of the Kuwaiti government. Gnehm did not want to be left without a work force or the resources to respond to the Kuwaitis. He wanted the Corps' office to interact directly with Kuwaiti ministers, and he wanted direct access to that office without going through the civil affairs command.[48]

In addition to addressing command and control issues, Corps planners also had to provide for critical logistics support. They recognized that engineers could not perform their mission if they did not eat and sleep properly and have the necessary materials and supplies. "In short," Locurcio aptly observed, "the success of an operation of this magnitude and duration revolves around the efficiency and effectiveness of its logistics operation."[49]

In mid-January, planners in Winchester spent three days compiling a list of all the items that Corps personnel might need in Kuwait: from food, water, and vehicles to rubber bands, file folders, paper, pencils, cameras, toothpaste, detergent, sunscreen, and shampoo. Much to their credit, they anticipated everything Corps members would need—except, as they later discovered, saline solution for contact lens wearers.

Corps planners had to assume that absolutely no resources would be available in Kuwait, except perhaps a structure for shelter. Since the

Kuwait Emergency Recovery Office was a newly formed ad hoc organization, it had no organic equipment and no property book. Also, since the Kuwaiti government had agreed to cover the costs, new equipment would have to be purchased on short notice with Kuwaiti funds and turned over to the Kuwaitis at the end of the operation.

Corps personnel in Saudi Arabia had just 10 days to purchase everything they needed to sustain operations for 30 days—food, water, vehicles, copiers, and other items—and load those supplies on semitrailers for the journey to Kuwait. Locurcio later recalled the startled expression on a local automobile dealer's face when a Corps representative strolled into his showroom and purchased 62 four-wheel-drive vehicles for immediate delivery.

Planners tried to buy as many items as they could in the Middle East because transporting goods from the States on military flights could take three to four weeks. Transporting soldiers and supplies in support of Operations DESERT SHIELD and DESERT STORM took priority. What the Corps could not buy locally, it shipped into Saudi Arabia, often as carry-on baggage. Each Corps member who deployed carried as many as 20 bags.[50]

The Kuwait Emergency Recovery Office had difficulty procuring equipment. After the money provided in the foreign military sales agreement came to the U.S. government, it became subject to federal procurement regulations. The regulations provided no exemptions for emergency situations, which resulted in frustrating delays. For example, the Kuwaiti government asked the Corps to purchase computers, but federal regulations required General Services Administration approval. A General Services Administration official challenged the request, delaying the purchase for several days. Locurcio later insisted that when the Corps responds to a disaster, it should not be encumbered by the regulations of the General Services Administration and other federal agencies. He recommended that the acquisition process be streamlined.[51]

The Push Into Kuwait

The coalition forces launched their ground campaign against the Iraqis on 24 February 1991. According to General Schwarzkopf, in his book *It Doesn't Take a Hero*, the reports arriving late morning on 24 February of the Iraqis blowing up the Kuwaiti desalinization plant convinced him that the Iraqis were leaving Kuwait. In consultation with Saudi Lt. Gen. Khalid bin Sultan, commander of the multinational Joint Forces Command, he decided to accelerate the timetable to 24 February for the Arab forces to begin their assault.

The XVIII Airborne Corps quickly sealed the western flank of the theater of operations while the VII Corps surrounded and began its assault on the Republican Guard. Joint Forces Command–North, with its Egyptian corps, composite Saudi–Kuwaiti division, and Syrian division, attacked through the obstacle belt and moved east to liberate Kuwait City. The 1st Marine Expeditionary Force moved north toward Kuwait City, and Joint Forces Command–East attacked along the coastal plain and also moved toward the city. As CENTCOM had planned, Arab forces, not American, liberated Kuwait City.[52]

On 28 February, just two hours after the coalition forces suspended offensive operations, a Black Hawk helicopter carrying the advance command and control element of Task Force Freedom landed at Kuwait International Airport. Frix described the dramatic scene they encountered: "Even though it was early afternoon, it was so dark because of billowing smoke from burning oil wells ... we had to use flashlights to read the maps and journals we were keeping. The atmosphere that we went in was dramatic, like Dante's Inferno, the dark billowing smoke, there was still a rattle of gunfire, towering flames from oil fields, damage at the airport."[53]

The soldiers quickly set up operations in one of the damaged support buildings under the tower of the airport. They later discovered Iraqi soldiers hiding in the tower and underneath the bunkers surrounding the airfield. This first group established communications with ARCENT headquarters using an Emerson Marconi satellite telephone. The satellite telephone also let them talk directly to CENTCOM headquarters and to General Mallory back in the Army Operations Center in the Pentagon.

General Frix searched for a suitable location for his headquarters. The extensive damage at the airport prompted him to move the forward command post to the Subhan Industrial Complex, a large warehouse compound used by the Ministry of Education to store books and supplies. The heavy equipment needed to support the task force began moving in. Hours after offensive operations were suspended, the Kuwait Task Force's forward command post and "LUCKY TAC" were fully operational at the Subhan complex—now designated Camp Freedom. The rest of Task Force Freedom arrived over the next two days.[54]

When the ground war began, the Combined Civil Affairs Task Force had been alerted to go into Kuwait City as soon as the city was reasonably secure. At midnight on 27 February, General Frix directed General Mooney to have the entire task force at the Kuwaiti airport within 24 hours. A convoy with the 431st and 432d Civil Affairs companies and the main body of the 352d left Camp #1 at 2:30 P.M. on 28 February. Seven members of the Kuwait Task Force who worked in the critical areas of food, water, medical supplies, transportation, telecommunications, sanita-



A destroyed Iraqi tank sits in the Al-Magwa oil field; below, *a typical bunker constructed by Iraqi soldiers throughout the city, particularly on highway overpasses, to impede coalition forces.*



tion, and power joined the convoy. The convoy included 76 flatbed trucks loaded with emergency food, water, and medical supplies that the Kuwait Task Force had helped the Kuwaiti government purchase.[55]

As the convoy crawled northward toward Kuwait, troops encountered a "black fog" of smoke from the oil fires so dense that drivers had to use their headlights in the middle of the afternoon. The soldiers soon found their faces and clothing coated with a dark, oily film. Driving up the coastal road, the soldiers witnessed firsthand the chilling destruction of the ground war. As they passed through the town of Khafji, despite the smoke-darkened sky, they saw signs of the recent battle—the shattered windows and bullet-riddled buildings.

Inside Kuwait, the convoy passed the small bunkers that Iraqis had erected to guard the roads and bridges. Wrecked vehicles littered the highway. Oil fires glowed in the distance. Soldiers later reported that the fires reminded them of Dante's description of the journey into the "ninth circle of hell." Around 2:00 A.M. on 1 March, after an arduous 12-hour journey, the convoy entered the suburbs of Kuwait City and pulled into the Subhan complex. After a few hours of sleep, the ordnance experts examined the building for booby traps. The soldiers would eventually carve one of the warehouses into small cubicles that served as their living space.[56]

Representatives of other agencies and organizations also arrived that first night—to include an ARCENT telecommunications team and a Navy preventative medicine team. The first damage assessment survey team left the Subhan complex at 10:30 A.M. on 1 March, only eight hours after the 352d arrived. By that afternoon, British medical, ordnance, and engineering teams had arrived, as well as U.S. soldiers from the medical command and the engineer command. Distribution of food, water, and medical supplies began the next day.[57]

Meanwhile, Colonel Locurcio sent four search parties into Kuwait to locate the key power plants and determine their status. He also sent Maj. James Brooks, a self-reliant Army engineer, to Kuwait to locate the Army engineers, serve as a liaison with Task Force Freedom, and oversee damage assessments by the 416th Engineer Command. Brooks left Dhahran on 27 February with elements of the 416th Engineer Command and met up with elements of the 352d Civil Affairs Command, some British engineers, and an Air Force engineer at Jubail. The next morning, he moved forward in the darkness, through Khafji and into Kuwait where he joined elements of Task Force Freedom at the Subhan complex.

Brooks joined two Corps civilians, Ken Grey and Jim Cobb, whom Locurcio had sent ahead to find a place where his staff could set up operations. Brooks drove through the city to survey the damage. Then, using a tactical telephone at Task Force Freedom, he reported back to the

Corps staff in Dhahran that although vandalism and fire damage was extensive, the structural damage was less than anticipated.[58]

At 10:30 A.M. on Monday, 4 March, just three days after the cease-fire, 37 members of the Kuwait Emergency Recovery Office, mostly civilians, left for Kuwait City with 66 Kuwaiti volunteers. No one at ARCENT had been able or willing to provide Locurcio's staff with the necessary identification cards and convoy clearances, so they designed their own using the Kuwait Emergency Recovery Office symbol and Arabic writing, and fabricated them using Harvard Graphics, a laminating machine, and a camera. The convoy changed up to the last minute as elements were added and subtracted. It included approximately 60 newly purchased four-wheel-drive vehicles, several late model sedans, two tour buses, and seven flatbed trucks. The convoy was an unusual mix of American soldiers and civilians, Kuwaitis, and Syrian truck drivers. It included Kuwaiti ministry representatives and an advance electrical power team from Blount International.

Many of the Kuwaitis had never seen a convoy before and were unfamiliar with the concept. It took Locurcio's logistics officer, Maj. Larry Jinkins, nearly an hour to get everyone out of the hotel and into their vehicles. Finally, the vehicles were lined up and began to pull out.

Although Corps officials tried to have a professional, well-organized convoy, it became what Locurcio described as "a 115-vehicle circus parade full of buses, trucks, and civilian vehicles." The trucks, which moved very slowly, soon fell behind. The odd-looking convoy crawled through Khafji and on toward the Kuwaiti border. Shortly before reaching the border, a Kuwaiti contingent left the convoy abruptly and pulled into a gas station for prayer call and last-minute shopping. Locurcio stopped the entire convoy and regrouped.

At the border, the convoy encountered a long line of vehicles waiting to pass though the Saudi and Kuwaiti checkpoints. The convoy vehicles had clearance numbers posted and passed through without difficulty. Jinkins waited at the border crossing for the seven rather rough-looking Syrian truck drivers to make sure that the Saudi guards let them through.

Once inside Kuwait, all traffic had to use the southbound lane of the highway for the first 15 to 20 kilometers because the Iraqis had ripped up the northbound lane. The convoy, now stretching out over 24 kilometers, crept past the charred hulks of military and civilian vehicles and other military equipment. The convoy stopped at a rest area about 10 kilometers from the city. The Kuwaiti volunteers could no longer contain their excitement about returning home and reuniting with their families and friends. Recognizing this, Locurcio released them from the convoy to locate their loved ones and directed them to rejoin the group early the next morning. The Kuwaitis sped off into the night.

While at the rest area, Locurcio established radio contact with his advance party. Cobb and Grey informed him that the Kuwait Plaza Hotel had the best facilities in the city and the only elevators that worked and provided directions through the city to a designated parking lot. Locurcio reorganized the convoy with the remaining vehicles.

As the convoy neared Kuwait City, one of the trucks hit a bomb crater so the trucks fell further behind. A small team from the convoy waited for Jinkins and the trucks at an intersection in Kuwait City to warn them about the various checkpoints that were manned by nervous Kuwaiti resistance fighters. Jinkins and others decided to have all the vehicles turn on their flashing lights. Nearly 60 vehicles, driving bumper to bumper with blinkers flashing, moved through the checkpoints.

As the weary Corps members entered Kuwait City after their strenuous 10-hour journey, they discovered the remnants of a living nightmare. Thousands of burnt-out Iraqi tanks and abandoned vehicles littered the streets. Everywhere were the physical reminders of the Iraqi occupation. The city was totally dark except for the glow from the oil fires in the distance. The streets were deserted. The Corps civilians easily traveled the final distance into the business district, despite the darkness. They pulled into the parking lot and walked two blocks to the hotel.

The Corps members discovered that some of the Kuwaitis had headed directly to the hotel after leaving the convoy and checked in. The lower floors were uninhabitable and many of the remaining rooms were already taken, so the Corps members had to double up. They also found that the elevators were not operating after all. They had to climb 18 flights of stairs to their rooms.

The Kuwait Emergency Recovery Office established its base of operations on the 16th floor. Dr. Shaheen and his Kuwait Emergency Recovery Program later set up operations directly above them. Locurcio's staff was cramped for space but, after they connected one of the generators they had brought, they had electricity. They initially had no running water and relied on bottled water for drinking and bathing. Locurcio's staff also augmented the hotel's food supply and repaired its air conditioning system. A second group of Corps members arrived on 12 March, bringing the total in Kuwait to 86.[59] These first Corps members were apparently unfazed by the physical hazards and discomforts. They arrived with a spirit of adventure and a deep commitment to the mission, jokingly dubbing themselves "KERO heroes."

ARCENT and CENTCOM officials in the theater had begun planning relatively late for the immediate post-liberation period. Army leaders created the Combined Civil Affairs Task Force and Task Force Freedom on



Iraqi soldiers placed artillery throughout the downtown area; below, *before fleeing, Iraqi soldiers turned their tank guns on the major hotels in downtown Kuwait City.*



short notice in response to immediate requirements. Neither ARCENT nor CENTCOM had envisioned playing a significant role in the recovery effort, and they had not effectively coordinated with the civil affairs reservists who were developing plans back in the States. Yet, through the determined efforts of civil affairs planners and operators, Army Corps of Engineers soldiers and civilians, and others, the United States and its partners had hundreds of troops and dozens of truckloads of supplies on site ready to provide emergency assistance to Kuwait's residents within 48 hours of the end of the ground war. The abrupt end to the 100-hour ground war meant that the Iraqis did not have time to carry out all the destruction they had planned. Thus, Task Force Freedom's mission to provide emergency services would not be as great as anticipated.

Chapter 3

Emergency Response Phase Task Force Freedom

Task Force Freedom's primary mission was to provide the legitimate government of Kuwait with military and civilian assistance and to plan and implement a program to restore as quickly as possible the functions and services of that government after the Iraqi forces withdrew. The *New York Times* highlighted the varied nature of this assistance, reporting: "It is the American Army that has turned the electricity back on here, gotten the water running, cleared the highways of shrapnel and wrecked cars, hooked up those telephones that worked, dredged the main port of Shuaiba and unloaded the ships, brought the drinking water and food, fixed the police cars, and fed the animals in the zoo."[1] Task Force Freedom procured and distributed large quantities of medical supplies, food, and water until the Kuwaitis could mobilize their own resources.

Upon their arrival, Ambassador Gnehm and U.S. military leaders quickly discovered that Kuwait City was in better shape than anticipated. The once gleaming city had been damaged, but not destroyed. Closer inspection revealed that the Iraqis had prepared to fight house-to-house. They had stockpiled huge amounts of weapons and ammunition, placed mines throughout the city and especially along the beaches, erected barriers, and bricked up windows to make firing ports. The major road system consisted of a series of east–west ring roads around the city and north–south radial roads leading to the center. Damage to these roads reflected a pattern of attempting to stop coalition forces from entering the heart of Kuwait City.

In contrast to post-World War II Germany, little structural damage existed. However, hundreds of schools and other public buildings had been looted and vandalized, heaped with debris, and ravaged by fire. Iraqi soldiers had burned encyclopedias to heat their tea. Some of the hardest hit structures included the Seif Palace, the Bayan Palace com-





Above, *Iraqi soldiers fortified the beaches in Kuwait with bunkers;* right, *KERO damage assessment team inspects the Seif Palace, March 1991.*

plex, the National Assembly building, Kuwait International Airport, and the four-lane highway from Dhahran.

Since its construction in 1903, the elegant Seif Palace, sitting on the waterfront from which it takes its name, had been the center of power, where the Crown Prince and many of the ministers had their offices. It was the equivalent of the White House and executive offices in the United States. Iraqi soldiers had burned the building and then fired tank rounds that dropped the floor slabs 3 to 4 inches. The fire exposed traditional construction techniques, revealing that the floors were made from reeds woven together and matted with mud. Initially it was unclear whether the historic building could be repaired.[2]

Kuwait's residents had been spared severe shortages of food and water. They had managed to store some water in rounded rooftop tanks and hoard enough food to last until the city's food distribution system operated again. They had also stockpiled medical supplies. No serious medical crisis, such as cholera or malaria, existed. Yet Kuwait's residents had no running water, electricity, or functioning sanitation system.[3]

In the first 48 hours after the liberation of the city, the U.S. Army delivered 18 truckloads of medical supplies to two hospitals and sent out four teams to assess existing medical, food, sanitation, and water supplies. Convoys began delivering food to two designated distribution centers. Soldiers placed seven large generators at hospitals and other sites to provide power. The psychological operations radio transmissions provided public service announcements. The situation looked so promising that one civil affairs officer optimistically reported, "There is no real emergency phase to restoration."[4]

Task Force Freedom Elements

Task Force Freedom consisted of engineer, signal corps, military police, explosive ordnance disposal, logistics support, medical, aviation, and civil affairs elements. Army engineer missions were to help assess the damage, identify the engineer effort required to repair the roads in Kuwait, supply the construction materials needed to provide interim emergency services, coordinate with the Kuwait Task Force and the Kuwait Emergency Recovery Office, and perform emergency repairs to vital Kuwaiti facilities.[5]

Shortly past midnight on 1 March, a Chinook helicopter carrying the first two soldiers from the 416th Engineer Command (Forward) lifted off from King Khalid Military City bound for Kuwait City. Landing at Kuwait International Airport, the soldiers found that the terminal building,



Task Force Freedom headquarters in Kuwait

hotel, maintenance facilities, and aprons had been vandalized, though the airfield itself was not badly damaged. Moving through the city, they discovered that the bridges, roadways, and public buildings were, for the most part, intact. Based on the initial assessment of these engineers, General Schardein canceled a planned firefighting detachment and added a reinforced vertical construction platoon with electrical, plumbing, and carpentry capability.

Over the next two days, others from the engineer command drove north from King Khalid Military City and settled into a Ministry of Education building a few miles north of Camp Freedom.[6] By the end of the first week, the engineer command reached 31 members, most from the 864th Engineer Battalion (Combat Heavy), the 43d Engineer Battalion (Combat Heavy), a team from the 535th Engineer Detachment (Prime Power), and the 259th Engineer Company (Combat Support).

Two vertical platoons from the 864th Engineer Battalion (Combat Heavy) conducted damage surveys; performed electrical, plumbing, and carpentry missions at various sites; and provided initial emergency plumbing and water service to the U.S. Embassy in Kuwait and several hospitals in the city. A particularly challenging mission involved using



Checkpoint Charlie in southern Iraq, staffed by C Company, 5th Battalion, 5th Cavalry, 3d Armored Division

two miles of petroleum distribution pipeline to connect the fuel pump house of one of the desalinization/electrical power plants at Doha to the boilers of another, basically combining elements of two heavily damaged plants to make one operational plant.[7]

A team from the 43d Engineer Battalion (Combat Heavy) followed the maneuver units into Kuwait to repair roads damaged or destroyed by retreating Iraqis. One of the battalion's earthmoving platoons repaired the main roads between Saudi Arabia and Kuwait, filling bomb craters and clearing burnt-out vehicles, while Company B cleared debris from Kuwait International Airport and other sites.

The 535th Engineer Detachment provided power for the headquarters building and the medical building at Camp Freedom. The team did not bring in its own power generation equipment, but it repaired dozens of existing generators at hospitals, fire stations, police stations, and bakeries. The main problem was a shortage of batteries because Iraqi soldiers had stolen the batteries from most cars and generators in the city. Engineers provided electrical generators to illuminate the airport runways and installed 16 generators to provide security lighting in tense areas of the city.[8] Although the Army engineers had the equipment,

training, and expertise to provide even greater assistance, Army leaders limited their role, possibly to redeploy soldiers who had supported Operations DESERT SHIELD and DESERT STORM quickly and to limit the presence of American soldiers in Kuwait.

Another task force element, the 44th Signal Battalion of the 11th Signal Brigade, extended the echelons above corps tactical command and control network for the task force. These soldiers extended this network through UHF and satellite transmission systems, tactical voice and record switching, and telephone installation. Within days, they installed more than a hundred telephones and successfully connected Camp Freedom to the theaterwide communications network.[9]

The task force also included military police and explosive ordnance disposal specialists. In the first week of March, the 720th Military Police Battalion and its subordinate units escorted convoys carrying food and supplies through the city and provided security for visiting dignitaries. They patrolled the main roads and joint checkpoints and secured the airfield.[10]

The Iraqis had rigged various facilities for demolition. The 1st Explosive Ordnance Disposal Group cleared ammunition and mines from city buildings, giving residents a renewed sense of security. It cleared the ports and billeting areas used by the U.S. military and helped Army engineers demolish Iraqi bunkers. In the first 10 days, the unit destroyed 3,500 pounds of captured ammunition. It operated an explosive ordnance disposal center incorporating resources from the U.S. Air Force, Army, and Navy, plus the French and British armies. The ordnance disposal experts coordinated with the 352d Civil Affairs Command and contractors who cleared power line rights of way. However, clearing the extensive minefields in the countryside was beyond the unit's capabilities.[11]

A "jump cell" from the 22d Support Command deployed to the Kuwaiti airport on 1 March 1991 as part of Task Force Freedom. The command used forward area support coordination offices, ranging from three people to a company-sized element, as points of contact for all logistics and service support. The command provided logistics support not only to the task force but also to the U.S. and allied embassies. It negotiated and contracted for approximately two hundred civilians to clean Camp Freedom and provide sanitation services; helped local businesses resume operations; and provided temporary shower, dining, and sleeping facilities for convoys and allied troops moving through Kuwait City. The 301st Area Support Group arrived in Kuwait City on 3 March and established its headquarters at the port of Al Shuaiba, several miles southeast of the city.

The logistics support requirements gradually shifted from bringing forward materiel and equipment to distributing and maintaining those items. Supplies and services flowed without interruption, and the command provided food, water, showers, and laundry for 3,000 people. It also provided generators, forklifts, transportation assets, water bladders, and an emergency hospital. Soldiers removed all pork products from the military's prepackaged "meals ready to eat" for distribution to Kuwait's Islamic residents and provided modified versions of the prepackaged meals for young children.[12] Soldiers from the ARCENT Medical Command (Forward) served on damage assessment teams, implemented a livestock feeding program, instituted a program to treat enemy prisoners of war, examined the city's reservoirs, inspected the soldiers' food, and provided them with health care.[13]

Special operations forces with Task Force Freedom served as advisors to the Kuwaiti soldiers who took over police stations and manned roadblocks. They soon expanded their role. With the help of Kuwaiti resistance fighters who had remained in the city during the occupation, the special operations forces cleared booby traps and minefields. Kuwaiti resistance fighters guided special forces teams to key Iraqi headquarters buildings and torture sites where they collected five truckloads of Iraqi documents. Many of these documents indicated possible violations of the Geneva Convention.[14] Another small but important element of Task Force Freedom, the 2d Aviation Brigade, flew hundreds of missions, transporting hundreds of soldiers and tons of supplies.

At the core of Task Force Freedom was its largest element, General Mooney's Combined Civil Affairs Task Force. As previously determined, the 431st Civil Affairs Company assumed responsibility for the downtown and western areas of the city; the 432d for the eastern area. Each company had detailed maps of its assigned sectors showing the locations of designated food and water distribution points and hospitals. Throughout March, the civil affairs companies coordinated the delivery of food and water, performed damage assessments, worked with hospitals and clinics, and even cared for injured zoo animals. The 96th Civil Affairs Battalion (Airborne) monitored food and water distribution sites and patrolled the city. These civil affairs troops drafted a plan for Kuwait's Army to remove tons of Iraqi munitions and monitored this effort.[15]

The Kuwait Task Force had deployed to Kuwait City with the other task force elements on 1 March. Their Kuwaiti counterparts remained behind in Dhahran two weeks longer for security reasons. When these Kuwaitis finally arrived, their individual ministries quickly claimed them. They found that they had to surrender their power to returning Kuwaitis

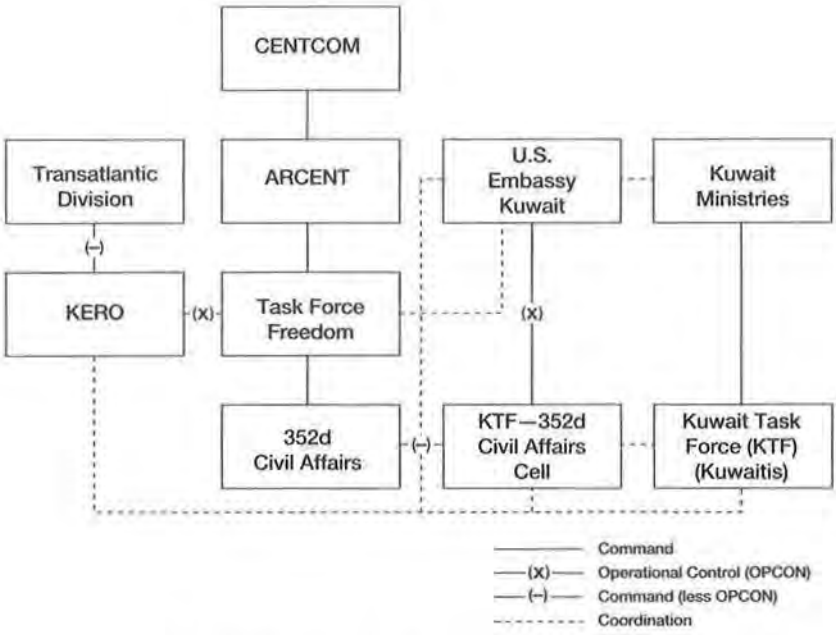


Chart 3–U.S. Central Command (CENTCOM)

who had greater social status or political stature. Although the Kuwait Task Force was never relieved from its fundamental planning mission, the 352d Civil Affairs Command often pulled members to prepare briefings, perform damage assessments, or deliver emergency relief. *(Chart 3)*

Colonel Elliott became concerned that the Kuwait Task Force's mission was being disrupted and worried that it might be absorbed into the broader civil affairs mission. He wanted to move his unit from Camp Freedom on the outskirts of the city to the downtown area where, he believed, it could better maintain its integrity, have more freedom to continue planning, and coordinate more closely with the various ministries. He emphasized the importance of maintaining strong ties with the Kuwaiti representatives as they reestablished their ministries. Elliott sent Colonel Walz to find a suitable hotel. General Frix initially opposed the move, primarily because of concern about providing adequate security for the reservists, but General Mooney convinced him that the task force members needed to locate near their Kuwaiti partners.

Not all task force members agreed that relocation was as critical as Elliott maintained. Its fundamental planning mission, they insist, was



Power cable repair south of Kuwait City

never in jeopardy, and, in fact, after moving into a downtown hotel, task force members found themselves often traveling back and forth to Camp Freedom to do their work.[16]

Elliott, however, was correct in that the relationship each member had developed with his Kuwaiti counterpart became the solidifying factor driving the program forward. For example, the health experts on the task force knew the Ministry of Health officials well and toured medical facilities with them. During the first weeks, problems were often resolved through the cooperative relationships forged between the task force members and the Kuwaitis.

Gnehm saw the Kuwait Task Force as operating, in large part, under his supervision and maintained the close relationship that he had established in the States. He remained keenly interested in and supportive of the task force's activities.[17]

Task Force Freedom Missions

Based on General Frix's priorities and the results of preliminary damage assessments, soldiers quickly repaired essential facilities and func-

tions such as food distribution centers, hospitals, electricity, water, and transportation corridors (sea, land, and air) to meet the immediate health, safety, and security needs of the Kuwaiti people. They left the repair of less critical facilities for later.

Task Force Freedom's first priority was to assess damage in the areas of food, water, electric power, communication lines, public buildings, transportation, telecommunications, disease/vector control, police protection and security, and medical facilities and supplies. The task force created damage assessment survey teams to determine how long it would take to get facilities and services functioning again. The teams evaluated essential facilities to determine the extent of the damage and whether or not emergency repairs would restore minimal operations. The teams prepared formal reports and recommended and coordinated short-term remedial action.

The Combined Civil Affairs Task Force quickly established a standard civil–military operations center to coordinate the various assessment teams and other support elements. On arrival day, 1 March, the operations center dispatched three damage assessment survey teams; four days later, it dispatched 72 teams, each with four to eight members. Over the next six weeks, team members conducted over 1,400 damage surveys. Many teams included representatives from other services or other nations. For example, a British preventative medicine team surveyed two of the hospitals, a Navy team surveyed another two, and an ARCENT Medical Command team surveyed the rest.[18]

Civil affairs troops completed the last of the planned high-priority assessments on 8 March, eight days into the mission. These damage assessments, however, were preliminary inspections and did not provide all the detail the Corps' Kuwait Emergency Recovery Office required to let contracts for the repairs.

Also on 8 March, the civil affairs damage assessment teams began conducting joint surveys with Kuwait Emergency Recovery Office teams and continued to transfer engineer requirements to that office. After the Combined Civil Affairs Task Force turned its assessment over to the Kuwait Emergency Recovery Office, that office conducted its own inspection and made its recommendations to the appropriate minister. Civil affairs soldiers had established cooperative relationships with certain ministries, such as electricity and water, that would make the Corps' survey work easier. The civil affairs teams smoothed the transfer of the damage survey work to the Corps, not only by conducting joint facilities inspections, but also by conducting a workshop and providing their damage reports and database to Locurcio's emergency operations chief, Wynne Fuller, on 8 March.

The involvement of Army engineers, civil affairs troops, and Corps members in damage assessments created some duplication of effort. At times, there was poor coordination within the civil affairs community itself. As a result, civil affairs damage assessment teams visited some sites five or six times. In perhaps the most extreme example of failure to coordinate, one food cooperative was inspected 27 times.[19]



Electrical contractors remove a spacer from damaged power cables.

Infrastructure

Beyond the damage surveys, restoration activities occurred primarily in the five categories into which the Kuwait Task Force had originally divided its teams: infrastructure, commerce, public security and safety, public services, and human services. Task Force Freedom focused its attention on repairing Kuwait's infrastructure, particularly its electrical grid. Ground and aerial observations of Kuwait and early reports from the damage survey teams indicated that restoring electric power was the most critical element for the success of the total civil–military mission. No utilities and critical infrastructure could function without electricity. The large desalinization plants needed power to produce fresh water; normal food distribution through supermarkets and shops required lighting and refrigeration.

Restoring power had a profound psychological, as well as physical, impact on the well-being of the Kuwaiti people. Smoke from oil fires had transformed day into night and fed the despair that gripped the city. The lack of electricity and consequent darkness and the sound of gunfire at night contributed to the perception of danger.

For months, Kuwait's residents had lived with Iraqi terror. Lighted streets symbolized an end to that terror and provided the sense of security residents needed to start rebuilding their lives and their country. For Bader Al-Qabandi and probably many other Kuwaiti residents, the restoration of electricity was the most tangible and gratify-

ing sign of recovery. Al-Qabandi described the city as a "ghost town." The perpetual darkness, he explained, had left residents feeling lonely and frightened.

To a great extent, restoring electrical power signaled the return to normal life and became a measure of how successfully the government responded to the needs of its people. Task force member Col. Jack Lichtenstein agreed that restoring electric service would significantly boost public confidence in the government of Kuwait. "I believe that the restoration of municipal water and electric services is the key to returning Kuwait City to normalcy," he reported.[20]

The civil affairs infrastructure team directed the shipment and placement of Army and contractor generators at critical intersections and facilities, helped locate sources of temporary power for key facilities, and supervised installation. The Kuwaiti government had awarded a $19.5 million contract to Caterpillar, Inc., to provide roughly 250 generators ranging in size from 8 to 1,275 kilowatts and a team to install them. The first Caterpillar generators arrived without their operators, so the 416th Engineer Command provided 40 additional 5–10 kilowatt generators from its own stock.

Working with the Ministry of Electricity, the U.S. Army mapped out the power grid. Engineers from the 416th Engineer Command and the 535th Engineer Detachment (Prime Power) strategically placed generators next to panel boxes to light city streets. Once the generators were in place, Army leaders encouraged the Kuwaitis to maintain and refuel them.

Damage to the electrical power infrastructure was much worse than anticipated. Electricity had flowed through the city until the first day the of the ground war, but task force members now found power lines down and power plants needing major repairs. The main obstacle to delivering power to the city was the damage to transmission lines and distribution centers. Transmission cables between two plants and the communities they served were out in 47 places over a distance of 22 kilometers— the result of deliberate sabotage by retreating Iraqis. The Iraqis had cut the transmission cables, sometimes removing entire five-foot sections, and had destroyed over 40 distribution towers.

Kuwait had four very large power plants: Doha (east and west plants) north of Kuwait City; Shuwaikh near the downtown area; Shuaiba (north and south plants) at the port of Shuaiba; and Al-Zour near the Saudi Arabian border. All except Al-Zour were badly damaged. Shuaiba and Doha sustained moderate to heavy damage to boilers, turbines, cooling pumps, transformers, and control rooms. Doha also suffered heavy damage to its fuel storage and pumping facilities.

The antiquated Shuwaikh plant, though heavily damaged, had been out of service before the invasion and was not scheduled to be repaired. Soldiers from the 416th and the 352d worked 24 hours a day at the Doha and Shuaiba power plants. Army engineers convinced the Kuwaitis to focus their resources and effort on Doha because its transmission lines were in better shape and most of the substations leading from Doha had escaped damage.[21]

In addition to electrical power, the city needed enough potable water to restore a reasonable quality of life and maintain viable health standards. The water system, with its fresh and brackish (nonpotable water pumped from below ground) water components, had no production capability, and the reservoirs were badly depleted. The depleted reserves, low water pressure, and broken pipes left most sections of the city without water. Plant operators blended the brackish water drawn from wells in the central region of the country with potable, distilled water to provide flavor. The brackish water system, however, could not function because of damage to the pumping stations and associated distribution lines. Also, deadly mines and munitions littered the water well fields. The loss of these brackish wells caused shortages in the drinking water supply and left no water for irrigation, an essential element in the arid desert environment.

After the Navy Preventative Medicine Detachment determined that the water left in the reservoirs was safe for consumption, Mooney directed operators to open the main valves to feed water into northern Kuwait. But water still had to be trucked into southern Kuwait. The 22d Support Command transported the water, and civil affairs troops distributed it at predesignated sites.[22]

The Kuwaitis had a very efficient system that combined power production and water desalinization. They pumped crude oil directly out of the ground into oil-fired boilers creating super-heated steam to run the turbines. After the steam degraded partially, they used it to generate water, roughly 250 million gallons a day. Three desalinization plants, collocated with the Doha, Shuaiba, and Al-Zour power plants, normally provided the distilled water for Kuwait. But without electricity, these plants could not resupply the reservoirs. Also, the pumping stations and distribution lines had been damaged or destroyed. The water shortage prompted the Kuwaiti government to curtail house service to four days a week.

Based on their initial planning estimate that 1 million people in Kuwait City would require 40 million gallons of water a day, the Kuwait Emergency Recovery Program staff, before leaving Washington, had hired three tanker ships to transport water to the city. Two of these ships provided roughly 16 million gallons to the reservoir system. They had

also contracted for the delivery of more than 3 million gallons of bulk water from Turkey. The Turkish contractor brought over 500 water tanker trucks into Kuwait City. Finally, the Kuwaitis had purchased bottled water for delivery to Kuwait. In the first few days after liberation, 31 flatbed trucks carrying bottled water arrived in the city.[23]

The Civil Affairs Task Force oversaw the delivery and distribution of the water, a job sometimes complicated by violence. During the second week of March, a Saudi contractor was reportedly shot and killed while delivering water in Hawalli, a Palestinian neighborhood. Two other drivers and their vehicles were unaccounted for. The task force also received reports that Kuwaiti police and military personnel forced truck drivers to make special water deliveries to the homes of certain officials.

The water shortage soon eased. By late April, Kuwait's power plants were producing 82 million gallons of fresh, desalinated water a day.[24]

Repairing the sewage collection and disposal system was also a high priority for Task Force Freedom. The sanitary system, one of the oldest components of Kuwait's infrastructure, had been serviced by three major treatment plants—Ardiya, Jahra, and Rikka. An extended period of disuse of the sanitary system during the occupation caused major blockages, stagnation, and mechanical failures. Moreover, the Iraqis had looted and destroyed all the water treatment offices, laboratories, and workshops and stolen all the portable equipment. The Rikka plant was totally inoperable. Both the Ardiya and the Jahra treatment plants required major maintenance before operations could resume. Not only were the mechanical systems damaged, the collection and distribution lines had numerous breaks. As a result of war damage, millions of gallons of raw sewage bypassed the treatment facilities each day and poured directly into the Gulf of Arabia. Repair of the sewage system would continue long past the emergency phase.

Repairing the ports, roads, and airport was critical to executing the recovery effort and restoring the country's economic life. Shuwaikh port, Kuwait's largest, in the northern part of the city, consisted of four harbors with berths for small craft and container/breakbulk operations, as well as drydock and shipyard facilities. The port suffered damage to its cargo-handling facilities, buildings, fenders, and cranes, while sunken ships clogged the channel. Shuaiba port, south of the city, consisted of three harbors with 20 berths and container/breakbulk operations. It also suffered damaged to buildings, pavements, and cranes, though its shipping channels were clear. Although neither port had a central backup power system, the piers remained structurally sound so ships with their own cargo-handling capability could use the ports.



Facilities at Shuwaikh port were badly damaged.

An unimpaired flow of air traffic was also critical. Located 15 miles from the downtown area, Kuwait International Airport served over 3,500 people on more than 20 flights per day before the Iraqi occupation. It was a major center of commerce and primary gateway for passenger traffic. The airport, site of a major battle between the 1st Marine Division and Iraqi forces, had suffered extensive structural, mechanical, and electrical damage. Battle damage and Iraqi sabotage left the two major runways inoperable. The charred hulk of a British 747 sat prominently on the runway. The ground control tower had been destroyed. Artillery fire had left one terminal so badly damaged that it had to be demolished. The second terminal, though also badly damaged, remained structurally sound. Other damage ranged from severe vandalism throughout the airport complex to crater damage from cluster bombs, numerous barriers (abandoned vehicles and demolished commercial aircraft), and destruction of runway lighting and instrument landing systems.[25]

The Iraqi occupation and the ground and air wars had left all major roads leading into Kuwait badly damaged. Coalition bombing had cratered Al-Abdaly Road, the main route running north into Iraq. Damage to the roads caused by obstacle preparation was significant at

places along the Saudi border where Iraqis had concentrated their defense. Eleven miles of the northbound Nuwaisib Road, a six-lane expressway connecting Saudi Arabia and Kuwait City, had been completely destroyed. Iraqi soldiers had ripped up 12.4 miles of the southbound lane to impede traffic. Six tank barrier trenches (2.5 meters wide and 10 meters deep), flanked by minefields, cut through the lanes in both directions. Al-Salmi Road, leading southwest to Saudi Arabia, was also badly damaged.

Mines and bombs had carved craters in the major roads within Kuwait City. At major intersections Iraqi soldiers had erected barriers and guard houses that obstructed traffic. They had set up crude masonry bunkers on major overpasses to prevent coalition partners from moving into the center of the city.[26]

Commerce

The civil affairs commerce team helped Kuwaiti officials purchase and deliver emergency supplies and helped them contract for over $500 million of emergency supplies including electrical generators. Largely as a result of the team's activities, 68,000 tons of emergency food, water, and medical supplies were shipped into Kuwait in the first three weeks of March. The team also helped the Kuwaitis rebuild their labor force, bring in commercial vendors who had been stuck at the border, and reestablish the banking and currency system.[27]

Public Security and Safety

Task Force Freedom also promoted public security and safety. Sprinkled throughout the city were checkpoints manned first by Kuwaiti resistance, then by Kuwaiti soldiers, and finally by Kuwaiti police. Military police from the task force manned the various checkpoints alongside Kuwaiti soldiers and police to smooth this last transition.

Civil affairs personnel helped the Kuwaiti police repair their vehicles, communications systems, and buildings. Ten automotive mechanics from an Army Reserve maintenance company and two from the Tennessee Army National Guard cannibalized parts from nearly 500 wrecked police cars to piece together 50 vehicles. They gathered all the abandoned police cars at one place and performed "automotive triage."[28]

Two members of the 308th Civil Affairs Group, S. Sgt. Robert Haglund and 1st Lt. Michael Wanta, both police officers from Green Bay, Wisconsin, were dispatched to the police academy. They grappled with the problem of a huge number of guns left behind by Iraqis in a city that had one of the world's lowest crime rates. The Kuwaiti police,

who had never carried guns before, worried about possible violence as they took control of the city from Kuwait's Army. Haglund and Wanta trained them in weapons use and taught basic SWAT team tactics. They also developed a police manual for translation into Arabic. Civil affairs soldiers helped build the police force up to 6,100 and reopen the police stations. On 25 March 1991, the Ministry of Interior took over the operation of all police stations in the city, and Kuwaiti soldiers returned to their barracks.[29]

Public Services

The civil affairs public service team worked with Kuwait's Ministry of Information to establish a media support center and reestablish government radio and television stations. Soldiers installed Motorola radios in police vehicles and distributed hundreds of portable radios in Kuwait's neighborhoods. Task Force Freedom's radio broadcasts and leaflets provided residents with vital information about food distribution, medical care, and other public service announcements. The task force ultimately provided two truckloads of telecommunications equipment.[30]

During the occupation, the Kuwaitis had burned trash once a week, but this response was inadequate. Officials worried that the mounting trash could create serious health problems. Civil affairs personnel encouraged the Kuwaitis to award a contract for trash collection. After weeks of delay, the Kuwaiti government signed a $750,000 contract with Waste Management, Inc., to remove garbage, debris, and junked vehicles from Kuwait City. Waste Management, Inc., had already moved into Kuwait in hopes of receiving a lucrative contract and was picking up garbage, tearing down Iraqi "pill-box" fortifications, and filling foxholes. Kuwaiti officials eventually signed a 12-month, $13.8 million contract with that firm. When task force members later discovered that trash removal was not being conducted equitably in all neighborhoods, they complained to the Minister of Health. Civil affairs personnel also gave the Kuwaitis the supplies and training needed to control insects and rodents.[31]

Civil affairs soldiers even arranged the printing and distribution of new postage stamps and encouraged the Ministry of Justice to reestablish the court system quickly.

Human Services

The civil affairs human services team struggled to ensure that the food supply was adequate and distributed equitably. Immediately after the liberation, the 22d Support Command brought in food that the Kuwaiti government had purchased. Transporting food by truck from the staging areas in Saudi Arabia was difficult. Early on, the push pack-

ages that Mooney's command had put together proved to be critical. In the first three days, dozens of truckloads of food arrived and were turned over to the Kuwaiti authorities for distribution. The truck drivers and food distributors were reservists and guardsmen who worked in shipping and receiving in civilian life.

Sadly, food distribution fell victim to partisan politics. The Kuwaiti government ultimately owned most of the available food supplies, and the ministers who had recently returned wanted to participate in the distribution. Emergency food relief thus became a Kuwaiti operation with civil affairs personnel acting as advisors.

At a meeting between civil affairs and Kuwaiti representatives on 3 March, the Kuwaitis revealed that their government was divided on the most politically acceptable way to distribute food. The easiest method would have been to use the existing neighborhood cooperatives. However, during the occupation, these cooperatives had been run by members of the Kuwaiti resistance, and the returning ministers preferred to take credit for food purchases by establishing separate distribution centers. Officials debated for 10 days, during which time little food was distributed. The government ultimately used the existing cooperatives. After the cooperatives had been fully stocked, the remaining food went into a central warehouse from which the cooperatives could be resupplied.[32]

Kuwaiti politics affected not only the location of food distribution sites, but also the equity of food distribution. Many foreign nationals—such as Palestinians, Filipinos, Sri Lankans, and Iraqis—lived in Kuwait at the time of the invasion. Some Kuwaiti officials were anxious that the government's resources not be used to benefit the foreign nationals, particularly Palestinians, whom they perceived as Iraqi collaborators. Initially, some long-time Iraqi and Palestinian residents were denied food at the distribution sites in certain neighborhoods such as El–Achmady, Hawalli, and Salymia. In the first weeks, at some distribution sites, the Kuwaitis received more food and water than the Palestinian residents or other foreign nationals.[33]

Civil affairs personnel who preferred a more equitable distribution of food and water became frustrated. They investigated reported inconsistencies in the operation of the cooperatives and worked with the Ministry of Commerce to improve food distribution. They monitored the distribution of food, water, and cooking gas in neighborhoods with many foreign nationals and reported that the discrimination in food and water deliveries caused increased tension in those neighborhoods. Ambassador Gnehm, characteristically outspoken, charged that the cooperatives operated under confusing, overly bureaucratic restrictions that resulted in unfair food distribution. He insisted that all residents be

treated equally. With his support, Task Force Freedom recommended to Kuwaiti officials that they adopt more uniform and equitable procedures.

By late March, Kuwaiti officials had resolved many of the distribution problems, and tensions eased. By early April, vendors were selling fresh chickens, fruits, vegetables, sugar, and other commodities on the street (though at twice the preinvasion prices), and more products reached the shelves of food stores around the city each day.[34]

Civil affairs officers and enlisted personnel also documented human rights abuses. They made hundreds of visits to Hawalli and many other Palestinian neighborhoods to interview residents and gather information. Looking for emerging patterns, they carefully recorded the extent and types of abuses, the geographic location, and the perpetrators. Civil affairs personnel visited some neighborhoods unannounced in the middle of the night.[35]

Based on discussions with Palestinians and other sources of information, task force members estimated that 400 to 500 Palestinians were arrested and roughly 40 to 50 were executed by the Kuwaiti resistance or died while being tortured. Although the figures were alarming, task force member Maj. Andrew Natsios observed, they could have been much higher, given the fact that Kuwait City had 250,000 Palestinian residents.[36] The efforts of the civil affairs soldiers and others from Task Force Freedom reduced the number of violent incidents, particularly during the first critical days following the cease-fire. There were no large-scale systematic human rights abuses.

Task Force Freedom quickly organized medical teams to assess Kuwait's health care systems. They concluded that the Kuwaiti health care systems were capable of providing emergency services to the residents. There were enough medical supplies for three to six months. Iraqi soldiers had completely looted some of the specialty hospitals for cancer treatment, kidney transplant, and maternity care. Although the soldiers had stolen most of the equipment and supplies from the city's medical facilities, the buildings remained structurally sound. The Iraqis had allowed the general hospitals to function because they needed them. These hospitals had emergency generators for power but no water for cooling or any other purpose.

The ARCENT medical command helped resolve the problem of evacuating Iraqi prisoners of war from the civilian hospitals. The 105th Medical Detachment provided outpatient clinics, three medical evacuation helicopters, and six ambulances for troops and conducted a daily medical evacuation flight between Kuwait City and King Khalid Military City.[37]

In the first weeks, soldiers delivered dozens of truckloads of donated medical supplies to hospitals and a central medical supply point and



A soldier from Camp Freedom feeds an injured elephant.

steered them to the locations where the need was greatest. Medical personnel received an unexpected bonus when civil affairs soldiers working with VII Corps units in southern Iraq made an important discovery. First Lt. William Burke of the 418th Civil Affairs Company, a police officer in civilian life, had led a small team into abandoned bunkers near Safwan, Iraq. The team had stumbled onto an underground field hospital, only recently vacated by the Republican Guard, complete with beds and equipment for about sixty patients. They found several bunkers loaded with all types of medical supplies—crutches, X-ray machines, wheelchairs, and literally tons of bandages. Having spent 12 years in Saudi Arabia as a child, Burke was able to read the Arabic markings on the equipment and supply containers. He realized that most of the supplies and equipment had been looted from Kuwaiti hospitals. Over the next four days, he and his team made over 20 round trips trucking the supplies to the Ministry of Health building in Kuwait City.[38]

The human services team also coordinated the activities of the U.S. Agency for International Development, the International Committee of the Red Cross, and other relief organizations, as well as the activities of civil affairs volunteers. For example, on 1 March 1991, U.S. soldiers discovered 300 severely handicapped and retarded patients at a social hospital, starving and cold, helpless in their barred cribs, crying and lying in the dark in their own waste. Anthills dotted the floor of the filthy room. Over the following weeks, a dozen volunteers from the 432d Civil Affairs Company diligently scrubbed floors, washed windows, fixed generators, bathed and spoon-fed the patients, changed their sheets, and pushed their wheelchairs.[39]

Civil affairs personnel assisted both people and animals. During the occupation, large dairy herds had been brought from farms into the city and hidden in backyards and garages. After over a week without food and water, the animals were dying. A U.S. Army veterinarian warned

Mooney that hundreds more would soon die without water. To save them, Mooney temporarily diverted the water that soldiers at Camp Freedom had planned to use for long overdue showers. Col. Phil Alm, chief of food services assessment, organized a program to feed and water the animals. During the first two days of the program, he personally brought water trucks to the herds. Soldiers delivered 30,000 gallons of water a day to more than 1,000 cows and expanded their feeding program to include zoo animals.[40]

Task Force Freedom Command, Control, and Coordination

Senior Task Force Freedom officials developed a close, cooperative working relationship that enabled the task force to function effectively. General Frix handled the day-to-day administration of the task force and dealt with Ambassador Gnehm, General Yeosock, and the maneuver commanders. General Guest focused on logistics support, and General Mooney oversaw civil affairs. Frix, Guest, and Mooney were in constant communication. They shared their office space, their housing, and often their meals. They held daily staff meetings to discuss priorities and often tried to resolve the pressing issues of the day over dinner. Each evening, Mooney provided Frix with a simple account of current civil affairs activities and highlighted the civil affairs issues requiring Frix's attention. Mooney described the relationship between his command and the task force as "superb." His command, he later recalled, quickly established credibility within Task Force Freedom and was left to perform its mission with little interference.[41]

The close working relationship that Frix and his staff established with the U.S. Embassy also contributed to the success of the recovery operation. Both Frix and Mooney developed cordial, cooperative relationships with Ambassador Gnehm. Frix had received explicit instructions to cooperate and coordinate with the U.S. Embassy but not to take direction from the Ambassador. Frix became an integral part of the Ambassador's "country team," but took his direction from General Yeosock at ARCENT headquarters. Mooney and Gnehm met frequently, even daily during one period, traveled together to meetings with the Crown Prince, and forged a bond of mutual respect. To enhance the coordination, Mooney kept civil affairs representatives on Gnehm's staff.

Ambassador Gnehm understood and enthusiastically supported Task Force Freedom's mission; in turn, the task force assisted the embassy. For example, civil affairs troops repaired the embassy's roof, purged its water tanks, repaired its plumbing, and ran communication

wires. The cooperative spirit among team members, Gnehm noted, ultimately made the operation succeed. He praised the U.S. military in Kuwait for being "highly responsive" and bringing to bear resources not available elsewhere. A few military officials from CENTCOM and the Army Staff, however, expressed concern that the Army's relationship with the Ambassador was becoming too close.[42]

Coordination between Task Force Freedom and CENTCOM proved more challenging. The CENTCOM J–5 staff complained that they did not receive the task force's daily reports directly. The reports went to the Army Staff in the Pentagon, but CENTCOM did not receive its copy until 24 hours later, through the U.S. Embassy. These reports provided the J–5's only communication link with Kuwait. When the Joint Staff called Colonel Blount on the CENTCOM J–5 staff for information, Blount had to call Mooney's task force directly or rely on the written reports received through the embassy. Blount rarely spoke to the embassy by telephone.[43]

Task Force Freedom/Kuwaiti Relations

The relationship between the task force and the Kuwaiti government, though generally good, had occasional strains resulting from cultural differences. Barbara Leaf, a Kuwait specialist with the State Department's Bureau of Near East and South Asian Affairs, aptly observed that the Kuwaitis, though a gentle, sociable people, did not often make decisions quickly or work with the same sense of urgency as U.S. officials. Moreover, they had suffered a great trauma, which affected their ability to respond to and resolve problems, particularly during the first six weeks.[44] General Frix occasionally became frustrated by the lack of direction from Kuwaiti officials. He sometimes found their practices to be slow and inefficient and conceded that his troops were not well prepared to deal with the Arab culture.[45]

The civil affairs troops, experienced in disaster relief, brought an understanding of emergency response that the Kuwaitis lacked. Without their help, the Kuwaitis would have had greater difficulty coping with the situation, and the government's critics might have raised questions about its effectiveness and legitimacy.[46]

The more relaxed work ethic of the Kuwaitis, who had relied heavily on a labor pool of foreign nationals before the war, sometimes disappointed and frustrated Army officials. Mooney conceded that he had difficulty getting the Kuwaitis to administer the water distribution, food supply, and other systems that his soldiers had established. For example, Mooney visited a telecommunications site that was out of service. He

found that all the system needed was a new battery and gas in the generator, but no one had refueled the generator. Gnehm and Mooney repeatedly urged the Crown Prince and other Kuwaitis to assume more responsibility for maintaining the systems that were in place. The Kuwaitis had traditionally hired foreign nationals to manage these systems but now were reluctant to use those workers. The government wanted to control the number of foreign nationals who lived and worked in the country, but it also needed these people to operate elements of the infrastructure.[47]

Task Force Freedom Closeout

Planning for the closeout of Task Force Freedom began soon after its creation. In early March, General Yeosock and his senior staff briefed General Schwarzkopf on the support that the Army was provided in Kuwait. They also discussed when and how to transfer responsibility for the effort to other Department of Defense agencies.

The damage assessment teams had completed their final reports, and emergency services in the areas of food, water, medical supplies, and transportation were complete. ARCENT proposed that Task Force Freedom be disestablished as soon as Iraq signed the cease-fire agreement and a Department of Defense representative could assume the mission. General Schwarzkopf directed that the task force remain in place until ARCENT forces left Kuwait. At the same time, he authorized ARCENT to phase out task force elements that were no longer needed.[48]

On 15 March, Secretary of the Army Michael P. W. Stone and General Kelly met in Kuwait with General Mooney, General Frix, Colonel Locurcio, and Ambassador Gnehm. Secretary Stone, apparently anxious to move the operation to its conclusion, asked Kelly and Frix to indicate the conditions that would have to be met before the theater commander transferred authority through the Secretary of Defense to the Secretary of the Army.[49]

As critical supplies were distributed and more essential services restored in Kuwait, military leaders found that they could reduce the number of soldiers involved. They could release the tactical civil affairs companies to ARCENT for redeployment or other missions. The ARCENT operations staff drafted a plan to reduce the task force and pull out nonessential personnel.

At General Yeosock's direction, the 96th Civil Affairs Battalion (–) was released to ARCENT on 30 March and returned to Saudi Arabia for redeployment. ARCENT released the 431st Civil Affairs Company to the XVIII Airborne Corps for redeployment on 31 March and the

432d to the VII Corps on 6 April. General Yeosock ordered the 22d Support Command to reduce its operations to the minimum level required to support the remaining task force units by 6 April. By that time, ARCENT planned to reduce the task force from over 2,000 to 1,470 people.[50]

After receiving a very positive report from General Frix's representative on 8 April, General Schwarzkopf recommended to Secretary of Defense Cheney that he declare 30 April as the official end of the emergency phase of the Kuwait operation and shift the executive agency from the theater commander to the Secretary of the Army. The Secretary of Defense adopted the recommendation.[51]

Its mission complete, Task Force Freedom was formally disestablished on 30 April. By that time, there had been significant improvements in the country's infrastructure. The task force had sought to provide sufficient electrical power to support food and water distribution, medical services, and minimum essential communications requirements for public information—an estimated 3,200 megawatts. Now, 91 percent of Kuwait City was serviced by central station power and 9 percent by portable generators. Electrical production (2,100 megawatts) outstripped demand (1,020 megawatts) by 2 to 1. The city had more than enough water. The goal had been to produce 120 million gallons a day, and Doha, Al-Zour, and Shuaiba now produced 82 million gallons a day.

Corps contractors had nearly completed emergency repairs to the major highway connecting Saudi Arabia and Kuwait and had begun repairing other roads and bridges. The Shuaiba port had reopened. Kuwait International Airport, where civilian and military aircraft flowed freely, returned to Kuwaiti control on 30 April. All bunkers, abandoned combat vehicles, and impediments had been cleared from the highways. The last "derelict" tank in Kuwait City had been removed on 15 March, a key event in the return to normalcy. Telephone service had been restored to Kuwait City's downtown commercial center.

Kuwaiti ministries had assumed responsibility for public security. Kuwait established mobile units (military or other law enforcement) to patrol and secure points of departure and the border, as well as key food and water distribution points. The police force numbered 6,100 with 250 police cars and 16 police stations in operation. Of the existing 15 fire stations, 10 had reopened. All six general hospitals were open, but not all of the specialty hospitals. Most of the needed medical supplies were in stock. The public health system operated effectively with solid waste removal and treatment systems in place.

Critical information could be disseminated over two FM radio and two television stations. About 90 percent of the city had local telephone

service, and 35 percent of the prewar international telephone line capability had been restored. Public bus service had begun on 18 April. Final distribution of essential food items had been completed on 15 April. Commercial facilities and cooperatives operated smoothly.[52]

Frix's staff submitted its final status report on 1 May, marking the official end of the task force. The closeout of Task Force Freedom also marked the end of the restoration of emergency services in Kuwait and the beginning of Department of Defense recovery activities.[53]

Despite the remarkable improvements in the city, by May few of the Kuwaitis who had sat out the occupation in exile in neighboring countries or in London and Paris had returned. Roughly 150,000 Kuwaitis and 170,000 Palestinians (out of Kuwait's prewar population of 2.2 million) had fled the country. Most of the Sri Lankans, Indians, and other nationalities who formed the bulk of Kuwait's labor force were gone. Despite urging from the Kuwaiti government, only 5 percent of the country's laborers had returned to their jobs. The population of the country was roughly half what it had been before the invasion. Some hesitated to return to the city until it had been fully restored. The power plants produced so much electricity that residents were encouraged to leave their lights on day and night to keep the turbines running smoothly, but the electrical distribution system had yet to be rebuilt. Without schools and air conditioning for the hot months approaching, most of the exiles were expected to stay away awhile longer.[54]

General Yeosock's decision to use ARCENT (Forward) headquarters as the core for operations in Kuwait proved to be a good one. It effectively represented ARCENT and CENTCOM in the area, besides functioning as Task Force Freedom. The task force coordinated the Army's civil and military operations. It held daily meetings with the Kuwaiti military, all coordinated with the U.S. Embassy. Task Force Freedom was a versatile, flexible organization capable of responding to the broad range of needs in Kuwait. The task force continually reshaped itself to meet the mission. It could grow or shrink by as many as 300 people a day depending on its missions. Frix brought forward the resources and capabilities such as engineering that he needed at a given time. The task force could effectively execute a number of missions simultaneously. The organization allowed civil affairs troops to concentrate on uniquely civil affairs missions, while another element handled the logistics support missions. The task force could help set up the cease-fire talks at Safwan, Iraq, or assist displaced persons, while leaving its civil affairs element free to restore the city.[55]

The Combined Civil Affairs Task Force was also uniquely suited to the Kuwait mission. The civilian expertise of the civil affairs soldiers was

invaluable. Mooney confidently observed that the 352d demonstrated to the Active Army that civil affairs was an "untapped resource."[56] Secretary Cheney later congratulated the civil affairs command for its key role in restoring basic services in Kuwait. "Your outstanding performance," he wrote, "proved that a vital link exists between military service in our country and the civilian sector."[57]

The Kuwait operation also highlighted the contributions of the Army Reserves. More than 80 percent of the soldiers in the operation came from the Reserve components. These soldiers, who in civilian life were doctors, lawyers, city planners, bankers, and even a veterinarian, brought to the operation unique experience and skills that did not exist in the Active Army.

Twenty-seven civil affairs reservists who had served in Panama avoided problems they had experienced during Operation JUST CAUSE. For that operation, Army officials had patched together a civil affairs structure. They requested individual volunteers, rather than activating entire units, so these volunteers had to spend time becoming familiar with each other. For the Kuwait operation, by contrast, Army officials activated entire units. Mooney noted, "I think we did it [the mission] in a far quicker fashion than people suspected we would do it. I tend to believe that our planning and the relationship that we established with Kuwait was part of that process."[58]

The experience left General Frix with a favorable impression of civil–military operations in the Reserve components. It was, he concluded, "a great example of the total Army in action." The Reserve components, particularly civil affairs, Frix noted, was "ideally suited" for operations such as the Kuwait recovery. The general, who had little previous experience with civil affairs, was apparently so impressed with the civil affairs soldiers that he asked to be their senior rater so he could sign their performance evaluations and recommend them for awards.[59]

Although the civil affairs soldiers performed their tasks extremely well, they would have been even more effective if they had been included in the early planning. Mooney later complained that his command and the Kuwait Task Force planned their operations in a vacuum. They did not know how CENTCOM was shaping the war plan and were not familiar with CENTCOM's timetable. "I think we would have done a little better job, made some improvements," Mooney conceded, "if we would have known what the war fighters were thinking."[60]

The civil affairs units and the other elements of Task Force Freedom contributed significantly to the nation-building process. Army leaders remained keenly aware of the need to make Kuwait self-sufficient as quickly as possible. The task force provided administrative support and

logistics capabilities, but the Kuwaiti government purchased most of the food, water, and other assets. In its after action report, the Combined Civil Affairs Task Force noted, "the Command always saw its mission as that of working itself out of its job, by advising the Kuwaitis on how to do something rather than simply doing that something itself."[61] Mooney and others feared that if U.S. troops stayed very long, the Kuwaitis would become dependent on them.

Equally important was the sense of good will that these soldiers left behind. Many of them experienced firsthand the warmth and gratitude of Kuwait's residents. For example, when soldiers brought their water trucks into local communities, residents poured out to greet them and brought them tea. Children asked them for autographs. "What registered," explained one Army captain, "was the experience of being with the people—seeing the kids smiling."[62]

The soldiers advised the Kuwaiti government about receiving contract proposals, awarding contracts, and delivering services necessary to support the postwar population. Under this contracting program, which totaled over $550 million, the Kuwaitis procured 746 vehicles for police, sanitation, public transportation, and other government ministries.

Task Force Freedom provided 12,500 metric tons of food, 12.8 million liters of water, 2.8 million liters of fuel, 25 truckloads of compressed gas, 64 generators, 200 batteries, 1,250 tons of medical supplies, and 2 truckloads of telecommunications equipment. The Combined Civil Affairs Task Force coordinated 35 supply convoys (over 1,700 vehicles) and 48 aircraft missions to deliver firefighting and other essential equipment. "Nowhere in modern history," observed General Frix, "has any field army made the rapid transition from an aggressive ground offensive to an active restoration effort in the manner that ARCENT/Third Army did in the wake of DESERT STORM." Colonel Elliott perhaps best summed up the task force's work when he observed that through its efforts not a single Kuwaiti died from lack of water, food, or medical care.[63]

As Task Force Freedom executed the emergency response phase, another Army element, the Kuwait Emergency Recovery Office, did the same.

Emergency Response Phase
The Pentagon

As the Army Corps of Engineers and Task Force Freedom personnel in Kuwait executed the emergency response, Pentagon officials continued their efforts. Discussions among senior officials at the Defense Department, State Department, and White House about the scope and administration of the projected recovery effort resulted in a more definitive policy statement on 1 March, immediately following the liberation. Secretary of Defense Cheney informed the chairman of the Joint Chiefs of Staff, General Colin Powell, and the three service secretaries that U.S. defense agencies would provide recovery assistance to Kuwait in two phases. During the initial "emergency phase" the theater commander, General Schwarzkopf, would have operational control over all Department of Defense elements in Southwest Asia that were involved in planning or executing Kuwait reconstruction. Further, such assistance would be done only with the approval of "the President's senior representative to Kuwait," Ambassador Gnehm. The initial emergency work would remain a CENTCOM responsibility. The emergency phase, Secretary Cheney indicated, would focus on restoring emergency life support services.

It would be followed by a second phase called "reconstruction," the date of which he would determine later. During the reconstruction phase, the Secretary of the Army would serve as the executive agent for all Department of Defense assistance to Kuwait reconstruction. It was understood that the Army would have the largest role in reconstruction. The Secretary of the Army's authority would encompass all elements and offices previously controlled by the theater commander and would be exercised through a Department of Defense representative from the Army assigned directly to Kuwait.[1]

---

[1]Secretary Richard Cheney, Memorandum for Secretaries of the Military Departments, Chairman of the Joint Chiefs of Staff, Under Secretary of Defense for Policy, 1 Mar 1991, Subj: Organization of the Department of Defense for Assistance in the Reconstruction of Kuwait, Kuwait Reconstruction: General, ASA(ILE) Files.

Army leaders debated whether the Assistant Secretary of the Army for Civil Works or the Assistant Secretary of the Army for Installations, Logistics and Environment should have primary responsibility for the recovery effort. They determined that although the work involved reconstruction of civil infrastructure, which normally came under the Assistant Secretary for Civil Works, it would be done in a military environment. Therefore, the Assistant Secretary for Installations, Logistics and Environment, Susan Livingstone, who had responsibility for the Army's military construction, should have the lead. The Secretary of the Army had already given Livingstone's office responsibility for overseeing all Army actions associated with emergency and reconstruction assistance to Kuwait, in coordination with the Assistant Secretary for Civil Works and the Army General Counsel.[2]

On 14 March, Assistant Secretary Livingstone created the Kuwait Reconstruction Task Force (KRTF) within the Army operations staff to act as focal point for all Kuwait recovery issues and information passing to or through the Army Staff and the Army Secretariat. The task force monitored the recovery effort and regularly reported directly to Livingstone's office. More specifically, its primary responsibility was to maintain daily communication between the Corps' Kuwait Emergency Recovery Office and Livingstone's staff. The task force coordinated important recovery issues and prepared detailed briefings for the Army Chief of Staff.

Livingstone also chaired an oversight group called the "KRTF General Officer Steering Committee," with senior leaders representing the Assistant Secretary of the Army for Civil Works; the Assistant Secretary of the Army for Financial Management; the Army Corps of Engineers; the General Counsel and the Auditor General; and Army Staff members involved with operations, logistics, plans, congressional liaison, public information, research and development, and legal services. The committee functioned as a forum for sharing information, not as a decisionmaking body. It enabled Livingstone to develop a unified Army position on key issues. The committee met monthly; representatives from the same offices met more informally as a "Council of Colonels."

The Kuwait Reconstruction Task Force and the steering committee gave the Kuwait mission heightened visibility within the Army Staff. They

---

[2]Susan Livingstone, interv by author, Washington, D.C., 18 Jun 1992, pp. 2–3; Kelly, interv by author, 7 Sep 1991, p. 13; John W. Shannon, Under Secretary of the Army, Memorandum for Principal Officials of HQDA, 24 Jan 1991, Kuwait Reconstruction: Command and Control, Office of History Files.

also provided a mechanism for staff coordination and for identifying and resolving problems.[3]

Involving the Army Staff and specifically Assistant Secretary Livingstone was important for several reasons. The effort to reconstruct Kuwait was politically sensitive. Army leaders and others were concerned about the flood of media reports predicting billions of dollars worth of construction work in Kuwait. They hoped that Assistant Secretary Livingstone could help lower unrealistic expectations. Members of Congress asked her to attend public meetings to publicize the fact that the Defense Department had a relatively small role in contracting for Kuwait reconstruction work.[4] This effort, however, had only limited success because the widely publicized, exaggerated media reports continued. Hundreds of anxious contractors and individuals flooded Corps offices in Washington and Winchester with calls seeking work. New telephone lines installed to handle the calls were quickly clogged. Another reason for Livingstone's involvement was that some Army officials believed the Army Corps of Engineers operated too independently and was trying to carve out a large, long-term role for itself in Kuwait. They did not want to see a repeat of the massive Saudi construction program of the 1980s. Army officials wanted to exert greater control over the Corps, especially since the Army did not yet have a well-defined role. They wanted to focus on the immediate requirements in Kuwait and minimize any discussion of follow-on roles for Army agencies, including the Corps.

From Livingstone's perspective, civil affairs soldiers and Corps personnel in Kuwait initially had a "tremendous degree of power with very little oversight," in part because the theater commander was hundreds of miles away in Riyadh, Saudi Arabia. She charged that the Corps had issued public statements about its involvement in Kuwait before they had been approved in the Pentagon. It was her responsibility, she explained, to ensure that public statements made by Army agencies accurately reflected U.S. government policy.[5]

The Army Staff had, in fact, directed the Corps to coordinate media announcements with its public affairs office, and the Corps made a determined effort to comply. But the coordination process often became complicated and frustrating. At one point, Pentagon officials directed the

---

[3]Kuwait Reconstruction Task Force (KRTF) History (draft), n.d., Kuwait Reconstruction: KRTF History, Office of History Files; Lt. Col. Joseph Alexander, interv by author, Washington, D.C., 27 Apr 1992, pp. 6, 13.

[4]Livingstone interv, p. 28.

[5]Ibid., pp. 5–7, 16, 19.

Corps to refer reporters to a State Department official, but the State Department official referred the reporters back to the Corps. On another occasion, Army officials vacillated, first approving and then disapproving a Corps public statement.[6]

After his initial meeting with Locurcio, Gnehm had written a blistering memo reminding the Corps that its role was limited to technical support such as repairing buildings, roads, and utilities. The memo made its way back to the Pentagon and seemed to confirm fears about the Corps' involvement. Army officials recognized that the Ambassador had the lead in foreign affairs. It would have been "unseemly," Livingstone explained, for Army officials to tell the Kuwaiti government what it could do or what the U.S. government could or would do. Rather, Army officials had to wait for the State Department and the Kuwaiti government to develop a policy. Livingstone and the other officials wanted to ensure that the Corps' activities were coordinated with Gnehm and fit within the framework of official U.S. policy.[7]

Assistant Secretary Livingstone recognized that the Defense Department planned to assist the Kuwaitis only until they could get back on their feet. Its role would be that of a support organization whose actions were defined by national command authorities.[8]

Livingstone also believed part of her job involved insulating the Corps from U.S. businesses looking for work and from congressional queries. She indicated that she wanted to free the Corps from the politics of the situation so it could focus on the actual recovery operations. She and her staff reviewed acquisition and contracting strategies, evaluated small business opportunities and policy, and ensured that those policies were coordinated with the Assistant Secretary of the Army for Research, Development, and Acquisition. She served as the link between the Army Staff, U.S. businesses, and Congress to ensure that the proper authorities and funding were in place. Reconstruction also required much coordination with other federal agencies, especially with the Commerce and State departments. Livingstone also coordinated with the Kuwaiti Embassy. She provided Ambassador Al-Sabah with information about the situation in his country and discussed with him matters related to U.S. business concerns.[9]

In his 1 March memo, Secretary Cheney also provided for a Secretary of Defense representative to the reconstruction effort, per-

---

[6]Memo, Joan F. Kibler to author, 24 Feb 1997.
[7]Livingstone interv, pp. 8, 21–23.
[8]Ibid., p. 27.
[9]Ibid., pp. 8, 13.

haps partly out of concern that he was not adequately represented in Kuwait. Special assistant to the Secretary of Defense David S. Addington drafted a charter for a Secretary of Defense representative to put the recovery operation under one person and take some of the burden off the theater commander. Generals Powell and Schwarzkopf approved the charter. But Addington failed to coordinate with the State Department, which did not receive the charter until after Secretary Cheney signed it. Ambassador Gnehm was understandably upset that he had not been consulted.[10]

Secretary of the Army Stone debated whether to fill the newly created position with a political appointee, retired civilian, or active duty officer. He ultimately decided to appoint a general officer, preferably an engineer because the mission involved construction. The political environment required high-level, general officer leadership. At Secretary Stone's request, Hatch submitted the names of both a two-star and a one-star general: Maj. Gen. Patrick J. Kelly, Director of Civil Works, and Brig. Gen. Eugene Witherspoon, commander of the Middle East/Africa Projects Office. The Secretary selected Kelly, in part because of his experience building air bases in Israel and responding to natural disasters. Certainly, a strong case can be made that the scope of the project and the critical interactions with high-level Kuwaiti, State Department, and Defense Department officials dictated the need for a general officer. Whether the mission required a general with two stars can be debated. Addington, who had worked with Kelly a few years earlier on the cleanup of the *Exxon Valdez* oil spill in Alaska, approved the selection.[11] Secretary Cheney formally designated General Kelly as his representative on 7 March.[12]

Secretary Stone later outlined General Kelly's duties and responsibilities. During the emergency phase, Kelly would coordinate reconstruction assistance planning, through the Joint Staff, with the CENTCOM commander or his designated representative to ensure a smooth transition from the emergency to the reconstruction phase. He would also identify and request staffing requirements for one year, identify and request all Department of Defense assets required to execute reconstruction activities, and coordinate with the U.S. Ambassador and other federal agencies.

---

[10]Maj. Gen. Patrick J. Kelly, interv by Lt. Col. Douglas Coffey, Kuwait City, n.d., p. 5; Locher interv, p. 31.

[11]Maj. Gen. Patrick J. Kelly, interv by author, Kuwait City, 7 Apr 1991, pp. 1–3; Kelly, interv by Coffey, pp. 7–10.

[12]Memo, Cheney for the Secretary of the Army, 7 Mar 1991, Kuwait Reconstruction: Command and Control, Office of History Files.

When the reconstruction phase began, Stone continued, Kelly would assume control of the planning and execution of the Defense Department's assistance to the Kuwaiti government. He would also oversee the Corps and civil affairs elements in Kuwait and other elements directed by the Secretary of Defense. He would coordinate with the U.S. Ambassador and the CENTCOM commander. He would submit a biweekly report on Defense Department assistance through Livingstone to the Secretary of the Army, pass taskings on to the Kuwait Reconstruction Task Force in the Pentagon for action, and pass policy questions through the task force to Livingstone for resolution.[13]

Soon after his appointment, Kelly visited the State Department, the Office of the Secretary of Defense, and members of the Army Staff. He traveled to Kuwait with the Secretary of the Army the second week of March. They met briefly with Ambassador Gnehm, who made it clear that he was unhappy that he had not been consulted about Kelly's position. However, he favored having one person in charge to coordinate all Defense Department activities. At the end of the meeting, Gnehm asked who his point of contact for security assistance would be. Normally CENTCOM's Director of Logistics handled security assistance. Secretary Stone promised to study the matter.

Secretary Stone returned to the States, but General Kelly stayed on for two weeks to gather more information. When Kelly visited Riyadh, General Schwarzkopf indicated that he opposed giving Kelly responsibility for security assistance. Kelly, he observed, would have enough to do. After the meeting, Schwarzkopf issued a statement that Kelly would be the overall coordinator but would not be in charge of security assistance. Security assistance would ultimately be handled by a reestablished U.S. Liaison Office, Kuwait (USLOK).[14]

Recognizing that Kelly would be the senior military officer in Kuwait, Schwarzkopf appointed him the U.S. Defense representative and U.S. Central Command representative for military coordination matters.[15] Kelly considered this action particularly significant because that responsibility was not part of his original charter. Before leaving the Middle East, General Kelly also visited Lt. Gen. William G. Pagonis, the dynamic commander of the ARCENT Support Command. General Yeosock had directed this talented logistician to assist Kelly and his organization. Specifically, Kelly asked Pagonis for support in the areas of

---

[13]Memo, Secretary Stone for SECDEFREP, 16 Apr 1991, Reading File 1, DRAO Files.

[14]Kelly, interv by Coffey, pp. 13–14, 17–18.

[15]Msg, USCINCCENT to American Embassy, Kuwait, 21 Mar 1991, Kuwait Reconstruction: Miscellaneous Messages, #6, OACE Reference Files.

medical care, military police, explosive ordnance disposal, and air transportation, and found him "extremely supportive."[16]

During his trip, Kelly had concluded that he would need at least 50 people, but wanted to minimize overhead expenses. He knew he did not need engineering and contracting in his organization because the Kuwait Emergency Recovery Office had that expertise. But he did need budget specialists, auditors, and a lawyer to prevent fraud and abuse. Because Kelly would be operating in a military environment, he wanted his staff to include soldiers as well as civilians.[17]

The designation of a Secretary of Defense representative further strained the already tense relationship between the Corps and the Army Staff. Corps leaders had a very different perspective than the Pentagon had. Hatch insisted that the Corps keep Pentagon officials informed of its early interactions with the Kuwaitis, but they failed to pay adequate attention. Pentagon officials, he observed, showed little interest until mid-January when the Corps signed the foreign military sales agreement with the Kuwaitis. At that point, the Department of Defense and the Army Secretariat decided to become more involved. Rather than use existing authorities and procedures, Hatch explained, Pentagon officials concluded that they needed a Department of Defense representative in charge. Yet they had not developed plans for this. To compensate for their own lack of attention, he added, Pentagon officials charged that the Corps had been doing its planning surreptitiously. They insisted that they had to exert more control over the Corps. Although Hatch received repeated requests for information from media representatives, at one point Pentagon officials prohibited him from having any direct contact with the media. Soon after, Corps and Pentagon officials worked out a compromise that permitted Corps officials in Kuwait to talk to reporters there, while Corps officials in Washington remained silent. Later, an elaborate clearance procedure for information released to the media was instituted at Hatch's urging, with approval from Livingstone's office.[18]

Locurcio's perspective was the same. Not until the war began winding down, he observed, did officials begin to see the extent of the Department of Defense involvement in postwar Kuwait. They created Kelly's organization, Locurcio remarked, because they feared that, if left to its own devices, the Corps would continue operating in Kuwait indefinitely.[19]

---

[16]Kelly, interv by Coffey, p. 19.

[17]Kelly, interv by author, 7 Apr 1991, pp. 3–5; Kelly, interview by author, 7 Sep 1991, pp. 2–3.

[18]Lt. Gen. Henry J. Hatch, interv by author, Washington, D.C., 15 Feb 1991, pp. 51–53.

[19]Locurcio, interv by author, 7 April 1991, pp. 14–15.

General Hatch later contended that Pentagon officials created Kelly's organization to exercise greater control over the Corps because they believed the Corps was operating too independently. He did not believe such a high-level organization was necessary. The Corps, he explained, had taken on more expensive and sensitive emergency operations in the States with authority delegated through the Defense Department.[20] The strains between the Corps and the Army Staff and between the Kuwait Emergency Recovery Office and the Defense Reconstruction Assistance Office continued throughout the operation.

[20]Hatch interv, pp. 44, 45.

Chapter 4

Emergency Response Phase Kuwait Emergency Recovery Office Activities

The members of the Corps' Kuwait Emergency Recovery Office arrived in Kuwait City shortly after Task Force Freedom. They immediately began conducting damage assessments and implementing their emergency contracting strategy. At the same time, they put in place a flexible, responsive organization to oversee the emergency repairs. During the 90-day emergency phase, the Corps, like Task Force Freedom, focused on restoring essential services to the Kuwaiti people. The Kuwait Emergency Recovery Office and its contractors would successfully bring much of Kuwait's crippled infrastructure back to life.

Coordination and Communication

For the Corps members, the first few weeks in Kuwait were confusing, frustrating, and challenging. They had coordinated their early planning with the Kuwaiti representatives who were in Washington. At that time, these officials did not have a full understanding of the situation in their homeland thousands of miles away. As a result, when Locurcio and his staff arrived in Kuwait, they found that Kuwaiti officials who had remained there during the occupation had taken different actions than those for which the Corps had planned and committed funds. For example, at the request of the Kuwait Emergency Recovery Program, arriving Corps members mobilized a contractor to restore electrical transmission lines only to find that ministry officials in Kuwait had let their own contract.

Coordination with the ministries was supposed to be done through Dr. Shaheen's Kuwait Emergency Recovery Program. Each ministry had



KERO holds its first press briefing, March 1991.

a representative with that organization who determined the requirements and established priorities. Locurcio's staff sometimes had to push the ministries to get lists of priorities. Locurcio did not believe the ministries fully understood the function and purpose of his organization. He found that they tended to view the Corps as a contractor rather than a partner and would not give his staff access to all the information needed for planning. Occasionally, the Kuwaitis appointed inspectors to review the Corps' management of the contractors. This caused some duplication of the Corps' effort and interfered with the progress of the work.

The Kuwaitis rarely integrated outsiders in their planning and were not accustomed to a participatory process. Also, because of their depleted staffs and damaged equipment and facilities, the ministries functioned at only 20 to 30 percent effectiveness. Locurcio and his staff ultimately took it upon themselves to develop some of the priorities and broad plans needed to coordinate repairs such as project lists and various planning systems maps for electricity. They then obtained approval of these plans from ministry representatives.

The Kuwaitis' failure to coordinate effectively with the Corps was particularly striking in the area of damage assessment. Locurcio had assumed

the Kuwaitis would rely on the Corps for all damage assessment and limit their role to policymaking. But occasionally the Kuwaitis created their own damage assessment teams, and ministries began operating their own recovery systems. The Corps and the ministries sometimes discovered that they had conducted damage surveys at the same facilities.

Initially, Corps members had difficulty getting access to planning and decisionmaking by senior ministry officials, so they worked through their subordinates. The situation improved as Corps members gradually learned more about ministry operations and the Kuwaitis developed greater confidence in Locurcio and his staff.[1]

Securing an adequate communications capability also proved difficult. Initially, the Corps relied on the Kuwaiti government's promise to provide communications capability, but nearly a month passed before the necessary equipment materialized. Communications capability during those first weeks was limited. Locurcio could not telephone either the U.S. Embassy in Kuwait or his higher headquarters in Winchester.

Locurcio's staff also had difficulty communicating with other Corps personnel in Dhahran. They could not telephone them until the Dhahran office sent a tactical satellite telephone to Kuwait, but even these communications were unreliable because sometimes the signals could not penetrate the thick clouds of oil and smoke.

Corps members were equipped with Motorola radios, repeaters, and small generators to power the repeaters. The single sideband radios were one of the few available forms of communication in Kuwait City. Locurcio relied on hand-held radios to communicate with his damage assessment teams and other field personnel.

In late March, American Telephone and Telegraph (AT&T) set up a 36-foot earth station satellite dish in Kuwait. Locurcio arranged to use the facsimile transmission capability to send daily reports to the Transatlantic Division. He later purchased from AT&T five dedicated telephone lines, which the Kuwaitis funded. As a result, communications and coordination with the Transatlantic Division and with the Army Staff in Washington improved dramatically. Some of the misconceptions about the Corps' intentions diminished. By late March, the office's communications were, Maj. Lawrence Jinkins concluded, "as good or better than anybody else's in town at the time."[2]

Corps members and contractors found themselves in an unhealthy and dangerous environment. Not only was the air quality poor due to smoke from the oil fires and the political environment unstable, but vast quantities of unexploded munitions lay everywhere—on the streets, around key infrastructure, and stockpiled in schools, ministry buildings, police stations, and other sites throughout the city. Coalition forces had

dropped large quantities of cluster bombs around work sites; some bombs had sunk into the soft sandy ground without detonating.

Corps members and contractors constantly worked around the unexploded ordnance. Many of the facilities they entered had been rigged for demolition, but because of the rapid execution of the ground war, Iraqi soldiers had not had time to detonate the explosives. Working in such an environment was dangerous and sometimes fatal. One contractor was killed when he left the road and stepped on a mine. A truck driver for Blount lost his right arm when a cluster bomb exploded as he brushed sand away from a flat tire. A subcontractor for Blount fell to his death while working on a tower, possibly after receiving an electrical shock. Overall, there were surprisingly few accidents given the amount of unexploded ordnance littering the desert.

Driving in Kuwait became very dangerous due to damaged roads, inoperative or missing traffic signals, and, later, after residents returned, heavy traffic. Despite the Corps' emphasis on safety, one member, Allen Kimbrell, was accidentally struck by a tractor-trailer as he left his work site and later died from his injuries.[3]

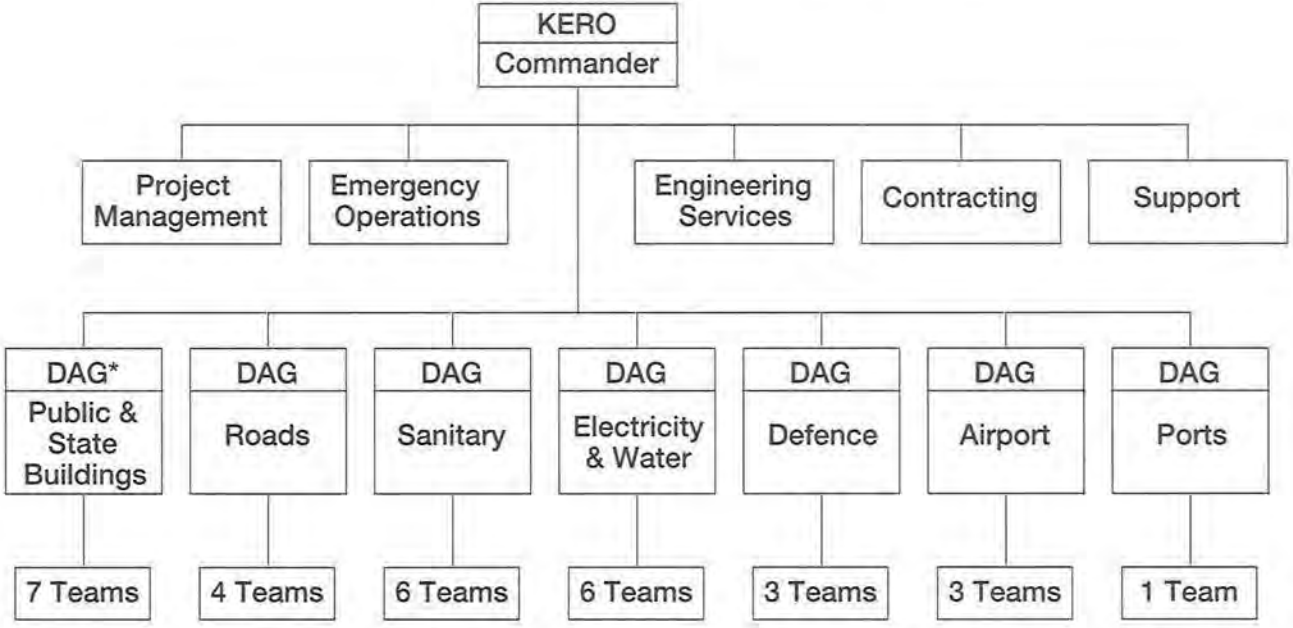
Organizational Structure

Planners had little time to organize, staff, and train the initial Corps organization. The office would be staffed by volunteers from the various Corps districts and divisions who rotated in and out of Kuwait on a three-month cycle. Locurcio decided to use the Corps' traditional organization for a small district office, which included offices for project management, emergency operations, engineering services, contracting, and support. He wanted a familiar structure where new personnel could orient themselves quickly.

Since planners envisioned that the Kuwait Emergency Recovery Office would have a damage recovery mission, they set up an emergency management structure similar to those used in responding to natural disasters. *(Chart 4)* The organization was made up predominantly of structural engineers who could conduct damage surveys and provide detailed estimates for repairs, rather than contract management and quality assurance specialists.

Locurcio established field offices called damage assessment groups and an emergency management division to provide direction. There was a damage assessment group for each functional area—such as buildings, roads, and sanitation—that the Kuwait Emergency Recovery Program members had identified. The groups assessed damage to ports, the airport,

Chart 4–Kuwait Emergency Recovery Office, Emergency Response Phase



*DAG=Damage Assessment Group



A Corps member outside the Seif Palace

fresh and waste water treatment systems, power production facilities, roads, public buildings, and defense installations. Each group was aligned with a specific ministry: public and state buildings, roads, sanitary, electricity and water, defense, airport, and ports.

The damage assessment groups were subdivided into damage assessment teams. For example, the public buildings damage assessment group was responsible for seven geographic areas, so it had seven teams. The roads damage assessment group divided the country into four areas, so it had four teams. The ports damage assessment group required only one team. Each team consisted of a U.S. engineer, a Kuwaiti engineer, and a contractor representative. Having all three on the team expedited the process of developing a scope of work, negotiating an appropriate price, and issuing a notice to proceed.

Locurcio wanted his organization to be flexible enough that he could shift personnel among the various damage assessment groups as the workload shifted. Later, as the operation progressed, the damage assessment groups converted into resident offices staffed with engineers experienced in contract administration.

In addition to damage assessment groups and teams, the Corps' organization included support elements such as logistics and resource management that were similar to those found in a small district office. It could perform a limited design function, project management, resource management, and contracting. One of the greatest advantages was that the organization could effectively carry the work through the entire construction process, after the damage assessment groups were fully converted to resident engineer offices.[4]

A final key element of the organization was its Kuwaiti volunteers. Corps members held a week-long series of workshops and partnering exercises in Dhahran to familiarize the Kuwaitis with their American counterparts, instruct them in project management, and foster teamwork.[5]



A Kuwaiti volunteer outside the Amiri Hospital

Locurcio used the damage assessment group and team structure for the first 45 days to develop a complete assessment of the damage, while other staff members mobilized contractors. During this period, the teams developed and prioritized over 1,000 individual "work orders," which included detailed scopes of work and cost estimates. Meanwhile, emergency repair teams removed debris and rubble.

During the subsequent recovery phase, the emergency management division with its damage assessment groups shifted to a more traditional project management structure with four resident offices to oversee contractors in the field. This structure ensured that the Corps members could administer their contracts and complete the projects according to Corps and Department of the Army quality standards. The four resident offices were not linked to a specific site such as an Army air base as traditional Corps operations were. Rather they were organized by function—buildings, transportation, utilities, and defense—and reported directly to Locurcio. The emergence of the resident offices marked a shift in emphasis from damage assessment to construction. *(Chart 5)*

At this point, primary responsibility for the operation transferred from the emergency management division to the project management division. The project managers served as the primary link with individ-

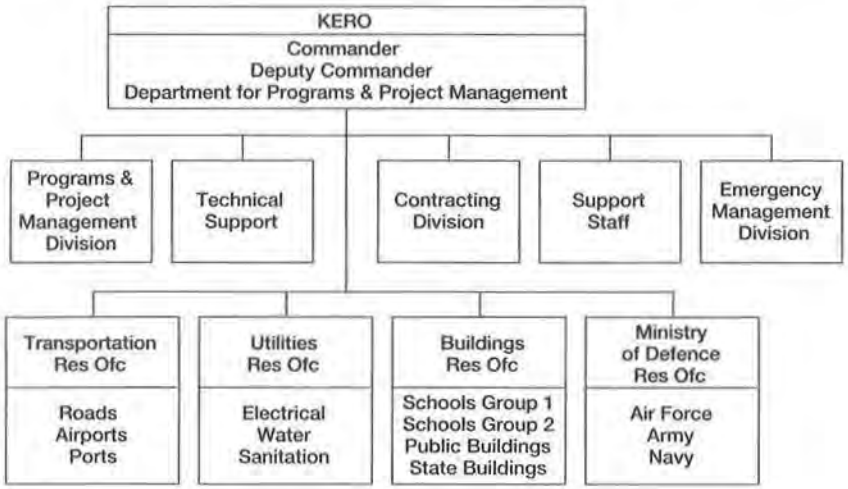


Chart 5–Kuwait Emergency Recovery Office, Recovery Phase

ual Kuwaiti ministries. Each project manager handled the full range of projects associated with a particular ministry across all functional areas.

The project managers were assigned to each ministry sector to coordinate with the appropriate Kuwaiti officials responsible for that sector. They developed a program to administer all projects for that sector, from conception to completion when the Kuwait Emergency Recovery Office turned the project over to the ministry. The project managers established priorities, developed budgets, and determined project features and quality standards. They also monitored and reported progress through the design, contracting, and construction phases and supervised turnover of the project to the Kuwaitis.

This was the first time that an entire Corps operation was rooted in the relatively new concept of project management. In the late 1980s, the Corps had taken steps to improve its procedures for planning, designing, constructing, and managing its civil works projects. The Corps had traditionally used a "stovepipe approach" in which planning documents pass back and forth among the engineering, planning, and construction divisions. In 1988, at the urging of the Assistant Secretary of the Army for Civil Works, Robert Page, the Corps adopted a new methodology called project management that involved coordinating engineering, construction, contracting, and other offices. A project management team, rather than an individual, remained responsible for a project from its inception to its completion. In this instance, the project management

system provided a single contact for each ministry and complete "cradle to grave" management of that ministry's entire program.

The transition from emergency management to project management and from damage assessment groups to resident offices created a few problems as Corps members sorted out their new roles and responsibilities. Some friction resulted when project managers found that even though they were responsible for particular engineering programs and were supposed to be the focal point for information, they still had to turn to the emergency management branch and the damage assessment groups for information.

The transition to project management began in late March, earlier than anticipated, and perhaps before the Corps was fully prepared. The first Corps members had been brought in for 90 days, but the transition to project management occurred only 45 days into the operation because the damage assessments were complete and construction was underway. The Kuwait Emergency Recovery Office did not bring in contracting specialists early enough and had few experienced quality assurance specialists on site. When firms began submitting contract proposals, Locurcio found that he did not have enough contracting personnel to administer those contracts. Planners had assumed that the engineers conducting the damage surveys would also perform the quality assurance for the contracts, but these engineers were still tied up with surveys. Moreover, they were primarily design engineers who had not been trained for quality assurance.

Locurcio conceded that the Corps did not have all the necessary people in place for the shift to project management. He needed civil engineers who specialized in contract administration, not design engineers, to staff the resident engineer offices. The Corps quickly recruited and deployed additional contract administration specialists.

As the role of the project management division expanded, the role of the emergency management division decreased. Eventually, the emergency management division was dismantled and the emergency management function was placed within the project management division. The organization ultimately included a project management division, an engineering division, a contracting division, and a support division but no construction division since the resident offices reported directly to the commander.[6] In the first three weeks, the Corps' office in Kuwait grew to include 14 military officers, 112 Corps civilians, over 60 Kuwaiti engineers, and nearly 1,000 contract workers.[7]

The Kuwaiti volunteers made significant contributions. They were well educated, some with degrees from universities in the United States, well qualified, and fluent in English. They had access to important information and documents that the Corps required and helped Corps members locate



A Corps contractor and Kuwaiti volunteer discuss road repair.

desperately needed plans and specifications for government and public buildings. More important, they were familiar with existing systems and the engineering philosophy behind those systems. The volunteers saved Corps personnel many hours and much frustration by steering them to the key decisionmakers in the various ministries. The Kuwaiti volunteers were, Bader Al-Qabandi observed, initially frustrated by what they perceived to be the slowness of Corps procedures, but they soon came to understand that the Corps was moving as quickly as it could, considering the need to control over 1,000 projects and several hundred million dollars. A bond of mutual respect and friendship developed between Kuwaiti and American engineers. The Corps personnel formed a particularly close bond with Bader Al-Qabandi and Fatima Al-Sabah. Al-Sabah held a degree in architecture from Catholic University in Washington, D.C., which perhaps accounted for some of her western assertiveness, and had served in the Ministry of Public Works for nine years.

The Kuwaiti volunteers, in turn, benefitted greatly from the experience of their U.S. counterparts. The female engineers who worked with the Corps received valuable field experience normally not available to them. Locurcio viewed training local nationals as part of the overall U.S. effort to promote stability in the Middle East.[8] Commenting on this spe-

cial relationship, Dr. Shaheen noted, "From the time we left Dammam to return to Kuwait, I have watched the Corps people as they do their work—not just as the responsible thing to do, but they were pushed by their own beliefs. Everyone (Corps and Kuwaiti) worked together anytime day or night. Our relationship has been very successful."[9]

Locurcio commanded an organization made up of Corps civilians and soldiers from throughout the United States who had never worked together and were accustomed to different ways of doing business. He administered a new life cycle project management organization with an unusual variety of contracting mechanisms. The organization of the Kuwait Emergency Recovery Office provided enough flexibility for the transition from damage assessment to construction and from emergency response to recovery. The concept of life cycle project management, implemented for the first time on a large scale, proved effective. Some project managers were involved in the entire process from surveying damage through the completion of the projects.

By contrast, the rotation of key leaders, such as deputies, division chiefs, resident engineers, the chief of project management, the resource manager, and the property book manager, every three months was very disruptive. When a senior official rotated out, the organization lost a degree of continuity and accountability for his or her decisions.

In addition to the disruptions caused by the 90-day tour of duty, Locurcio had difficulty recruiting enough contracting specialists and electrical engineers. Sometimes supervisors refused to release them from their home offices because of their critical expertise. The early Corps organization also lacked auditors who could help minimize costs and establish an adequate paper trail.[10]

Despite some organizational weaknesses, Corps members and their Kuwaiti partners worked diligently to fill the gaps and accomplished a great deal in a very short time. They maintained a high level of professionalism and commitment and were justifiably proud of their accomplishments. Julius "Bo" Bounds, Locurcio's director of contracting, recalled the satisfaction of having children ask for his autograph or families stopping in the road to thank him. Ben Wood, Locurcio's deputy, later observed, "I learned that within the Corps there's a tremendous...capability I never knew existed.... It makes me proud to be a part of it."[11]

Command and Control

Corps headquarters provided the Kuwait Emergency Recovery Office with personnel, logistics support, and technical direction through the

South Atlantic Division and the Transatlantic Division. The South Atlantic Division had provided such support to Corps personnel during Operations DESERT SHIELD and DESERT STORM and had served as the higher headquarters to the Middle East/Africa Projects Office until late February 1991 when that office became the Transatlantic Division. Corps headquarters maintained command but had less operational control.

During the recovery planning stage, the Ambassador gave direction through the Kuwait Task Force on the type and extent of the mission that the Kuwait Emergency Recovery Office would undertake. However, as the operation developed, the Kuwait Emergency Recovery Office and the 352d Civil Affairs Command worked as parallel organizations, each reporting directly to the Ambassador and receiving taskings and priorities from him. Those taskings and priorities had to be within the parameters of the original foreign military sales case authority. For the first month, Locurcio and other representatives gathered daily in the Ambassador's kitchen at 7:00 A.M. to eat C–rations. At 7:30 A.M. they moved into the dining room where they sat around the dining room table as they briefed the Ambassador. Armed with this current information, the Ambassador would then leave for his daily meeting with Dr. Shaheen, some of the Kuwaiti ministers, and the Emir.[12]

When ARCENT created Task Force Freedom, the Kuwait Emergency Recovery Office's relationship to the task force was unclear, especially since the office operated on Kuwaiti funds. Locurcio was instructed to place his organization under the operational control of Task Force Freedom until responsibility for the Kuwait recovery transferred from the theater commander, General Schwarzkopf, to the Ambassador. The formal cease-fire agreement ending the war, and consequently this transition, took longer than anticipated. The Iraqis did not accept the United Nation's terms for a permanent cease-fire until 7 April. After some discussion, General Frix instructed Locurcio to take operational direction from the Ambassador but to coordinate all actions and report regularly to Task Force Freedom. Locurcio or his representative attended Frix's daily staff meetings. Without a close relationship with Task Force Freedom, Locurcio's group might have stayed out of Kuwait until authority passed to the Ambassador, when the Kuwait Emergency Recovery Office would have come under the "official" control of the Ambassador. The confusing transition period stretched out for over a month.

Although Locurcio and his staff technically were not part of Task Force Freedom, they were placed under the operational control of General Frix. Three times a week, Locurcio provided Frix with detailed status reports and occasional supplements. These reports circulated through CENTCOM headquarters to the Army Staff. Meanwhile,

Locurcio maintained his direct link with the Ambassador, attending daily staff meetings, receiving taskings, and providing updates. Locurcio later observed that he reported to "everybody" on a daily basis—to the Ambassador, to Task Force Freedom, and to the Transatlantic Division. His patience and management skills were surely tested by the delicate reporting structure. Yet he apparently was able to satisfy all the demands for information.[13]

Damage Assessment

As with Task Force Freedom, the Corps' first task after setting up operations in Kuwait was to assess the damage. To ensure that the assessments were well documented, Locurcio's staff developed report forms much like the ones the Corps normally used in responding to natural disasters in the States. The damage assessment teams consisted of one or two Corps employees (usually one was a military officer who could provide security and explosive ordnance disposal assistance), one or two Kuwaiti engineers, and a contractor representative. The assessment would determine the feasibility of making expeditious repairs. The plan was for team members to agree on the scope of work while visiting the site and write the damage survey report so repairs could begin within days.[14]

Some problems quickly developed. Because of delays mobilizing contractors, some teams initially had no contractor representative. Also, the lists of structures and facilities requiring surveys that Kuwaiti representatives in Dammam had given the Corps were incomplete. To further complicate matters, Kuwaiti priorities changed after the Corps members arrived in Kuwait. Finally, some duplication occurred in the assessment process. The 416th Engineer Command and civil affairs troops performed some damage assessments and shared their survey information with the Corps, but Locurcio's teams had to go back to the same structures to conduct the more detailed assessments needed for scopes of work and cost estimates. Occasionally, representatives from all three Army elements showed up at meetings with the Kuwaitis and peppered them with questions about infrastructure.[15]

Corps members performed over a thousand damage surveys. Their reports included the scopes of work and the government estimates for the projects. After the damage assessment groups reviewed the reports and approved the estimates, Dr. Shaheen approved the projects and authorized construction. Thus, emergency work orders became task orders that the Corps issued to its contractors. If a facility could not be easily repaired, the

damage assessment team noted this on its survey report and filed the report with the damage assessment group for future action.

Before the task orders were issued, representatives from the various ministries had the opportunity to review the reports. The ministries provided continuous input into the Corps' priorities and commitment of funds. Dr. Shaheen ensured that the expenditure was within the priorities that the Kuwaiti government had established for the Corps. The contracting officer then issued a notice to proceed to the contractor. Locurcio's resource manager ensured that the Corps did not overobligate funds and provided accountability in the process.[16]

Corps Contracting Strategy

As the Kuwait Emergency Recovery Office assessed damage and mobilized its contractors, it drew on a contracting strategy that it had developed in the United States before deploying. A key element of that strategy was to ensure that U.S. firms received preference.

Before the August invasion, Kuwait had not been inclined to give U.S. firms access to its markets. Germany and Japan had been the dominant trading partners. Moreover, for most business opportunities, Kuwait required that the foreign contractor form a joint venture contract with a Kuwaiti firm.

After the invasion, the situation changed dramatically. Kuwaiti officials pledged to award the contracts proportionately to firms from the countries that had sent troops to help liberate Kuwait. The United States would have the largest share of work, followed by Britain, France, and Saudi Arabia. Countries that did not send troops to join the coalition forces and quibbled about their financial contributions, such as Germany and Japan, found themselves effectively cut out.

Early estimates projected that reconstruction in Kuwait (a country the size of New Jersey) would total $100 billion over the following five years. Media reports predicted that the reconstruction of Kuwait would be "one of the biggest and most rapid construction programs in history," and firms began scrambling for contracts.

By late February, 70 percent of the nearly 200 contracts that the Kuwaiti government had awarded to restore basic services and repair oil wells had gone to U.S. firms; contracts worth more than $800 million according to Kuwaiti officials. Caterpillar, Inc., for example, sold the Kuwaitis hundreds of diesel powered electric generator sets. Motorola, Inc., supplied thousands of portable telephones. AT&T installed a satellite station in Kuwait City for emergency long-distance service. General

Motors Corporation, Ford Motor Company, and Chrysler Corporation provided vehicles.[17]

Some Americans believed that U.S. contractors should receive the bulk of the reconstruction work as a reward for the U.S. role in successfully liberating Kuwait. As early as 3 January 1991, Representative Helen Delich Bentley had introduced a resolution calling on the President to instruct the State Department to inform Kuwaiti officials that their contracts for the reconstruction work should reflect the troop commitment of the coalition forces. "Because of the United States unequivocal support for Kuwait," she explained, "I strongly believe it appropriate that U.S. industries, including U.S. dredging firms, be afforded the first opportunity to participate in all reconstruction efforts when they ultimately are initiated." More specifically, Representative Bentley urged Secretary Stone to help ensure that American companies received a large portion of the work restoring navigation and reopening harbors in Kuwait. Assistant Secretary Livingstone assured Representative Bentley that the Army was "making every effort to give interested American firms appropriate consideration" for potential Kuwait recovery work.[18]

American firms of all types and sizes deluged government agencies, industry organizations, and private placement firms with inquiries about opportunities in Kuwait. The Department of Commerce established a Gulf Reconstruction Center to coordinate efforts to help American businesses obtain contracts. Commerce Secretary Robert A. Mosbacher, Ambassador Al-Sabah, and General Hatch formally opened the center. The center's 16-line telephone bank started getting inquiries the day the ground war started and was soon receiving 2,000 calls a day from large contractors, small companies, and individuals seeking work.[19]

Prospective contractors and eager job seekers flooded Corps offices with calls. The Transatlantic Division had to install 20 additional telephone lines, which were quickly jammed. Corps headquarters in Washington also set up special telephone lines to handle hundreds of calls from job seekers. Meanwhile, by mid-March the Kuwaiti representatives in Washington received 2,000 pieces of mail a day from individuals, firms, and industry associations seeking work.[20]

As the letters and calls poured in, the Corps and the Kuwaitis struggled to resolve the sensitive issue of giving preference to U.S. contractors. The Federal Acquisition Regulations prohibited the Corps from limiting contractor participation unless the Kuwaiti government so requested. General Ray asked Ambassador Gnehm to encourage Kuwaiti officials to give preference to U.S. firms.

Meanwhile, Locurcio and Dr. Shaheen held lengthy discussions on the issue. For example, how would they define U.S. preference? Did it mean

51 percent of construction went to U.S. firms or 99 percent? Ultimately, they agreed that U.S. preference meant that if all the bidders had roughly the same technical merits, the contract should go to the U.S. firm.

In a 21 February memo, Dr. Shaheen authorized the Corps to give maximum preference to U.S. firms in awarding contracts for Kuwait reconstruction. A few days later, Dr. Shaheen explained to Locurcio that the Kuwaiti government wanted the Corps to give preference to U.S. firms in awarding the emergency recovery contracts provided they could respond and perform within the required time frames. In fact, he had no objection if all of the contracts went to U.S. firms as long as they could perform the work expeditiously.[21]

Another key element of the contracting strategy was to limit the Corps' contracting effort to design and construction during the emergency response phase. The Corps' Kuwait office would decline any work that involved services or maintenance operations. At a 16 February meeting with Dr. Shaheen, Locurcio had explained that under the current foreign military sales case, the Corps could only accept taskings for design and construction work for the repair and recovery of Kuwait's infrastructure. Gnehm had insisted on this stipulation so the Corps would not become overwhelmed with providing services, which would detract from its primary mission and area of expertise—construction. Services such as purchasing furniture, collecting garbage, operating warehouses and depots, maintaining buildings and equipment, and operating facilities or equipment were considered beyond the intended scope of the Corps' foreign military sales case. Locurcio informed Dr. Shaheen that the Kuwaiti government should contract directly for these things.[22]

The Corps' initial contracting strategy for repairing Kuwait's infrastructure and restoring emergency services was based on two key assumptions: that there would be enough time to solicit bids from potential contractors and that there would be no well-defined scope of work. Therefore, they decided to use competitive, indefinite delivery type contracts (IDTC), with work issued to contractors through a series of delivery orders. Contracts would list the estimated types and quantities of various of labor, equipment, and supplies. The Corps would compete these contracts among potential vendors who had been prequalified on the basis of low unit prices for a typical scope of work.

The Corps used a "prequalification" process for all interested contractors, a process outlined in the Department of Defense's Federal Acquisition Regulations, to obtain a list of those firms that exhibited the best capabilities and skills for the mission in Kuwait. Prequalifying the contractors let the Corps screen out firms that probably could not suc-

cessfully complete a project in Kuwait, sparing those firms the large expense of preparing a proposal.

When the first members of the Kuwait Emergency Recovery Office went to Dhahran in early February, contracting specialists in Winchester believed they would have over 60 days to award contracts for emergency work in Kuwait. In mid-February, they initiated the normal steps for awarding competitive contracts by publishing three notices in the *Commerce Business Daily*, the normal government vehicle for informing industry of available contracts. The notices invited firms or joint ventures that wanted to prequalify for future contracts to submit what were called expressions of interest. The announcements, one for construction contracts, one for architect–engineering contracts, and one for supplies and services, were to be open for 30 days.

The announcements described the general scope and approximate cost of the contracts as well as the evaluation factors to be used in the prequalification process. Firms were asked to complete and submit a specific form by the closing date of the *Commerce Business Daily* announcement. The announcement sparked the interest of thousands of design, construction, and supply firms around the world. Contracting specialists in Winchester quickly excluded hundreds of firms that had no experience working overseas and rated the remaining 186 firms. The Corps planned to use the responses in conjunction with the bidders list that the Middle East/Africa Projects Office had established to develop its prequalified list.

Each firm's submittal was evaluated independently by three engineering and construction specialists. Contracting specialists at the Middle East/Africa Projects Office averaged the three scores and gave the averaged ratings to a prequalification board along with the firm's original submittal. The board, made up of representatives from various directorates and a lawyer, first heard a presentation on the location, scope, schedule, and cost of a potential project and then established minimum scores for specific rated factors. The board then examined each firm to determine if it met the established criteria for prequalification and sent requests for proposals to the firms that met the minimum criteria.[23]

On 17 February, while the announcements were still on the street, Ambassador Gnehm arrived at the Kuwait Emergency Recovery Office headquarters in Dhahran to inform Locurcio and his staff that they had only 10 to 14 days to award all the contracts for the emergency work. The Corps would have to compress its original 60-day contracting process into less than two weeks, he explained, because the ground war was likely to begin sooner and be much shorter than originally thought. It also appeared that the Corps members and other noncombatants

would be allowed into Kuwait City within days, rather than weeks, of the liberation. Gnehm emphasized that the United States would need to secure the peace in the region after it won the war by restoring Kuwait's infrastructure as rapidly as possible.

The compressed schedule forced contracting specialists in Winchester to ignore the responses to the *Commerce Business Daily* announcement. Locurcio's staff could not wait for them to receive and assemble the responses and transmit them to Saudi Arabia. They needed to accelerate the award of contracts to the contractors in whom the Corps had a high degree of confidence and who could mobilize quickly.

Locurcio and his contracting specialists decided to use a list of construction contractors that the Corps had compiled for Operations DESERT SHIELD and DESERT STORM, plus a list of qualified companies that Kuwaiti officials and engineers requested. They would rely on firms already operating in Saudi Arabia who had the required resources, capability, credit, experience, tenacity, and integrity. The Corps asked these firms to report on both their past experience and their current capabilities (since many firms had moved their assets out of Saudi Arabia to safer areas).

Because of the compressed schedule, Corps leadership concluded that they would have to use noncompetitive letter contracts instead of competitive, indefinite delivery type contracts. These letter contracts became the foundation for the Corps' contracting strategy. Locurcio's contracting specialists requested authority to award up to eight letter contracts, citing Section 2304(c)(2), Title 10, United States Code, "Unusual and Compelling Urgency," as the basis for limiting competition. While the request for Section 2304 authority worked its way up to Corps headquarters, the Kuwait Emergency Recovery Office proceeded with its prequalification process. On 18 February, the staff sent facsimile letters to over 100 major international construction firms that had either been prequalified for work for Operation DESERT SHIELD or that the Corps knew from experience to be qualified. They gave interested firms 72 hours to respond. Although Locurcio's staff sent the letter to only 100 firms, it received more than 300 replies. Much to their surprise, staff members even received proposals from bicycle companies and umbrella companies, as well as proposals for beach and playground equipment, because some agencies passed the letter on to other firms regardless of their expertise. Only 85 of the responses, less than a third, came from what Locurcio and his staff considered to be qualified general construction firms.[24]

On 22 February, a combined Kuwaiti–Kuwait Emergency Recovery Office prequalification and selection board evaluated the proposals of each of the 85 firms and determined that 36 met the board's minimum

qualifications for building, paving, sanitation, and marine survey and dredging operations in Kuwait. Another nine firms were qualified to perform electrical work. The Kuwait office then gave each of these prequalified firms just 48 hours to submit by facsimile more detailed data on their technical capabilities, specific mobilization plans, subcontracts, equipment, and general costs pursuant to a broad-based scope of work.

Locurcio and his staff received the additional information from the contractors by 28 February, the day the ground war ended. Using that new information, they ranked the contractors on the basis of their estimated costs and ability to meet the emergency needs in Kuwait.

Although Corps officials had not yet received the required waiver for "other than full and open competition," they decided to proceed with noncompetitive letter contracts. Of the funds provided in the initial $46.35 million foreign military sales case, the Corps had $22.5 million available to spread among eight contracts. Part of the money had been used to pay for a $5.7 million contract awarded to Raytheon Services Co. of Burlington, Massachusetts, back in January, to provide a temporary air traffic control tower and lighting system for Kuwait International Airport. This contract was intended as an emergency measure if the original tower could not be repaired. Much of the remaining money had been set aside to cover the cost of mobilizing and deploying Corps members.[25]

On 2 March, Locurcio's senior staff and Kuwaiti officials held a final prequalification meeting to determine which contractors would receive letter contracts in the following areas: expedient building repairs in Sectors C, E, and G of Kuwait City; expedient building repairs in Sectors B, D, and F; expedient building repairs in Sector A; expedient survey and clearing of the Shuaiba port; road and runway repair throughout Kuwait; expedient electrical repair throughout Kuwait; expedient water and sanitary systems repairs throughout Kuwait; and expedient repairs to the Bayan Palace complex.

Kuwaiti officials oversaw the contract award process through their representatives on the prequalification and selection board. The board, chaired by Locurcio, included three U.S. and two Kuwaiti representatives, giving the Corps the final say.

The Kuwaitis wanted to divide the work among the coalition partners, and as chairman of the selection board, Locurcio came under pressure to make sure that some of the initial contracts went to contractors from other coalition countries. The two Kuwaiti representatives who sat on the board lobbied to award contracts to two Saudi Arabian firms. The board ultimately selected three American firms, two Saudi Arabian firms, one Kuwaiti firm, and one British firm.

On 3 March, just one day before the Kuwait Emergency Recovery Office moved into Kuwait, it awarded eight unpriced letter contracts totaling $22.5 million, using Section 2304 as justification. Brown and Root International based in Houston, Texas, received a $3 million contract to repair public buildings in Sectors C, E, and G. Blount Construction International of Montgomery, Alabama, received a $3 million contract to do expedient electrical repairs and a $3 million contract to make temporary repairs to public buildings in Sectors B, D, and F. American Dredging Company of Camden, New Jersey, received a $400,000 contract for expedient survey work at the Shuaiba port. Khudair Group, a Saudi firm, signed a $1 million contract for repairs to the Bayan Palace complex, while another Saudi firm, Al-Harbi Trading & Contracting Co., Ltd., signed a $4.5 million contract for expedient road and runway repairs. Mohammed A. Kharafi, a Kuwaiti firm, received a $5 million contract for emergency repairs to public buildings in Sector A, while Shand Construction Ltd., a British firm, received a $2.6 million contract to repair Kuwait's sanitary and water systems. Corps officials then asked each contractor to develop a mobilization plan specifically tailored to the scope of work and to place their best estimated price on the total mobilization plan.[26]

The decision to use the "compelling urgency" justification would have a profound effect later on. It created an environment that was ripe for future audits. If a contract was advertised for fewer than 30 days, Congress considered it less than "full and open competition," no matter how many firms were contacted. Contracts over $500,000 that had no evidence of competition required a formal audit by the Defense Contract Audit Agency, so that agency would have some oversight responsibility for the life of the contract.

The Kuwait Emergency Recovery Office did not have a large enough pool of contractors in Saudi Arabia to provide the required price and technical competition. Also, since Locurcio's contracting specialists did not know the extent of the damage in Kuwait, they could not develop a scope of work that adequately reflected conditions there. By contrast, during Operations DESERT SHIELD and DESERT STORM, Corps contracting specialists knew that troops wanted certain supplies or projects and had a chance to discuss the requirements with the users in advance. Thus, they were able to develop a scope of work that accurately reflected the needs of the customer. In Kuwait, they could only develop a very general scope of work such as "repair buildings in Sector A."[27]

Corps representatives met with Commerce Department officials several times in mid-March to explain their contracting strategies and activities. They assured the Commerce Department that if they identi-

fied additional requirements for engineering and design assistance beyond the 90-day emergency period, they would use the previously issued *Commerce Business Daily* announcements to select firms. If they identified additional requirements for construction contractors beyond the 90-day emergency period, they would issue a new announcement for each project.[28]

Despite the Corps' assurances, the basic acquisition strategy did not change significantly after the initial contract awards. Although Corps officials always planned to increase the number of contractors in Kuwait by going back to the original *Commerce Business Daily* list, during the emergency response phase they found that the scope of the additional contract work was too small to justify the cost of mobilizing additional contractors. Also during those first months, given the urgency of the work, they never felt that they had enough time to go back to the list. Corps officials concluded that the most responsive thing to do was simply to modify the original contracts. The original scopes of work for each contract were extremely broad because Locurcio and his staff had no good information about the actual conditions in Kuwait. Also, a competitive business environment would not be truly reestablished in Kuwait until long after its liberation. Thus, even if the Corps had wanted to solicit competitive bids for new emergency response work, there were no viable contractors on site except the ones that originally accompanied Corps members into Kuwait.[29] The broad scopes of work allowed the Corps to award additional work to the same contractors through unpriced change orders or contract modifications.

Contracting Activities

Electricity

The focus of the U.S. effort during the emergency response phase was on Kuwait's essential services and structures. The key to this effort was restoring electrical power. Therefore, this became the Corps' highest priority. Before the invasion, Kuwait's three operating power plants had over 7,000 megawatts of installed electrical generation capacity, even though the peak prewar electrical generation requirement was only 4,500 megawatts. Using an elaborate grid system, Kuwaiti officials had been able to route the power supply in any direction from one corner of the country to another.

The chief of Locurcio's electricity damage assessment group, Kesh Vadlamani, and his staff found that the redundancy in the city's electrical system made the repair effort easier. It let the Corps and its contractors



Jim Wong, U.S. Army Corps of Engineers, and Suhalla Marafi, a Kuwaiti engineer, inspect electrical damage at Ali Al-Salem.

cannibalize one plant for the sake of another or completely bypass a particular plant and use its distribution system to supply power to an electrical function elsewhere in the grid. Corps members could move a transformer from one damaged electrical substation to another and make the second substation functional. In several instances, they bypassed a particular substation altogether, converting it to a switching station, and accomplished the power transformation at a nearby substation.[30] *(Figure 1)*

Damage to overhead power lines was much greater than anticipated, and contractors had difficulty getting to repair sites because of large quantities of unexploded ordnance on the ground. Although Corps personnel had been warned about the hazards of booby traps and land mines, they were not prepared for the vast amount of ordnance that they encountered. Coalition forces had dropped a large quantity of cluster bombs around the high tension power lines and other work sites. Iraqi forces had thought they would be safe from air attacks under these lines, but coalition planes bombed and strafed them, causing heavy damage.

A large percentage of the bombs lodged without detonating in the soft, sandy desert terrain. Cluster bombs injured and killed a number of contractor personnel who inadvertently disturbed those sensitive muni-

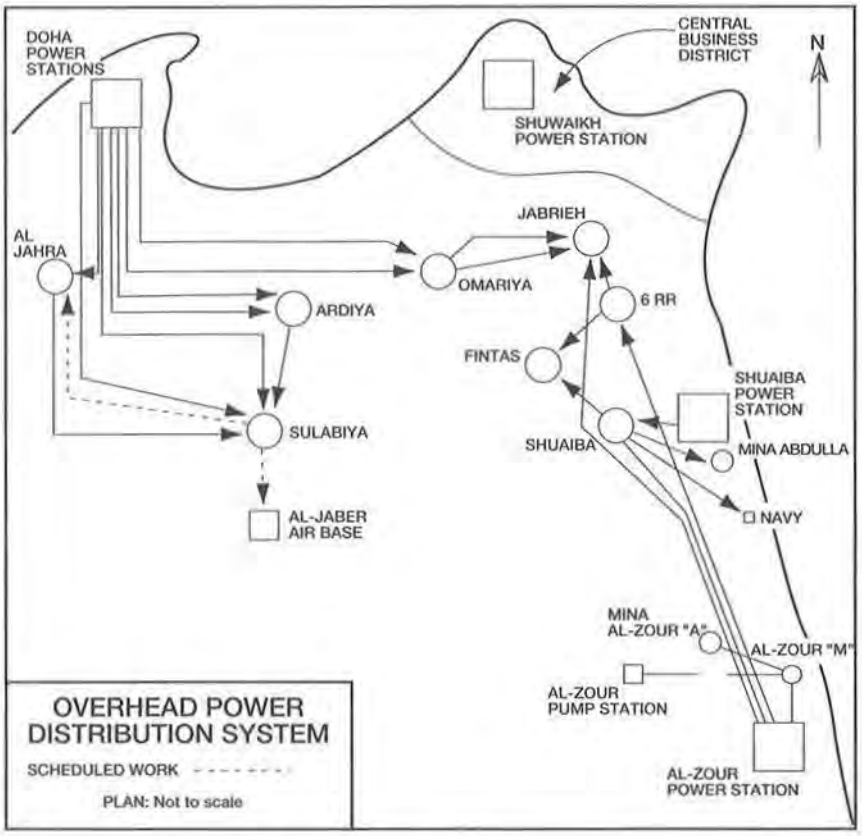


Figure 1–Overhead Power Distribution System

tions while working or moving under power lines. For example, two linemen were injured when a bomb exploded while they were coiling up damaged cable.[31]

The initial survey of damage to the transmission lines had been done with binoculars from the nearest roads, some distance away. When workers began actually walking mile after mile under the lines and inspecting them more closely, they found the damage greater than originally thought. The cables had been frayed or completely severed by bullets. Fortunately, most of the poles suspending the lines were intact, as were most of the towers. Replacing these custom-made towers would have taken months.

Of the roughly 4,000 substations in Kuwait, more than 235 were severely damaged. The Kuwait Emergency Recovery Office and its con-



Kuwaiti volunteer Eman Al-Qurba and Corps Capt. Bob Irby assess damage to power lines.

tractors identified 29 key substations requiring immediate repair. They repaired them using parts cannibalized from other substations. By the end of 1991, the Corps and its contractors had repaired roughly 10,000 kilometers of transmission lines and the most critical substations.[32]

The Kuwait Emergency Recovery Office and its contractors also immediately began making emergency repairs to the least damaged power plants. The heroic acts of Kuwaiti officials during the occupation simplified the repair efforts. The director of the Al-Zour plant remained on site throughout the occupation and endured repeated beatings by the Iraqi soldiers to save this 2,400-megawatt plant from destruction.

The bravery of the director and chief engineer at the Doha East and West plants also saved that 2,400-megawatt facility. Doha West had a master control center where the plant's eight turbine/generator units were coordinated and balanced. The Kuwaiti officials were shrewd. They convinced the Iraqis that the control room was the key element in the operations of the plant so the Iraqis would focus their destruction on the control room and spare other more critical parts of the plant that would be more difficult to repair. They also secretly replaced canisters of hydrogen with oxygen to keep the Iraqis from destroying the hydrogen



Ambassador Gnehm,* left, *with Kuwaiti officials at a press conference at the Doha power plant

required to operate the generators. This switch also reduced the risk of an explosion.

With these precautions, the plants remained operational until the very end. A large clock on the wall in the control room at Doha West remained frozen at 4:30 A.M. on 23 February, the exact moment when the Iraqis detonated explosives that turned the master control panel into a useless heap of mangled metal and wire. The Iraqis also damaged two turbines and a master pump house at the Doha East plant. However, all eight turbines at Doha West remained intact and essentially undamaged.

The power plant's staff managed to salvage a few control switches and other parts and later turned them over to engineers from British Electricity International, the London-based firm that had operated the facility before the war under a 12-year contract with the Ministry of Electricity and Water. Working 18-hour days, the British engineers painstakingly sorted through thousands of wires from the original control panel to isolate key control strands. They carefully threaded these key wires into a small, crude-looking box—a handmade control panel that would let operators manually synchronize the power generating

units. Normally, the eight generators were synchronized in the control panel before the power could come on line. Only two of the eight could be synchronized with the box, but that would provide enough power for Kuwait's population.

While the British and Kuwaiti teams struggled to repair the generator controls, the Kuwait Emergency Recovery Office's electrical team worked around-the-clock to repair the transmission lines and substations required to distribute the power once the generators came back on. The Ministry of Electricity conducted nightly meetings at its headquarters to coordinate these activities and prioritize the numerous requests for electrical service. At a meeting on 24 March, the Minister of Electricity gave the order to throw the power switch connecting the generators to the power grid. The order was transmitted by radio to the Doha power plant.

When the engineers at Doha turned on the synchronizer for the first time, the dials on the control panel jumped up and down at different speeds, indicating that the generators were out of sync. Suddenly, as if on cue, the needles on each dial shifted into the same position, 3,000 revolutions per minute. Expressions of relief and joy crept across the faces of many of the 20 or so anxious spectators. Others wiped tears from their eyes. With the repair of the panel and previous repairs to transmission lines, the plant sent the first power to the city. At precisely 8:20 P.M. Locurcio and the others back at the Ministry of Electricity headquarters peered out the ninth-floor window to watch the waves of lights illuminate the city—a very emotional moment for many.[33]

The Corps of Engineers and its contractor had helped restore the electrical power just 20 days after they signed the initial contract for the repairs. By late March, they had restored enough capacity to produce over 150 megawatts. Residents began once again to leave their homes and move about freely after dark. Work continued on the rest of the electrical grid system. To many, restoration of electrical power marked the end of the "emergency" phase of the recovery operations.[34]

Transportation

The Corps' immediate goal was to clear debris and make emergency repairs to major roads and highways south of Kuwait City to expedite the flow of supplies from Saudi Arabia. *(Figure 2)* Setting priorities for clearing vehicles and bunkers from the highways was difficult because initially it was not obvious which roads needed to be cleared first. Corps contractors rebuilt 12 kilometers of the Nuwaisib Road from subgrade to a surface course of asphalt within 45 days. The road was open to returning citizens on 11 May 1991. Similar work was

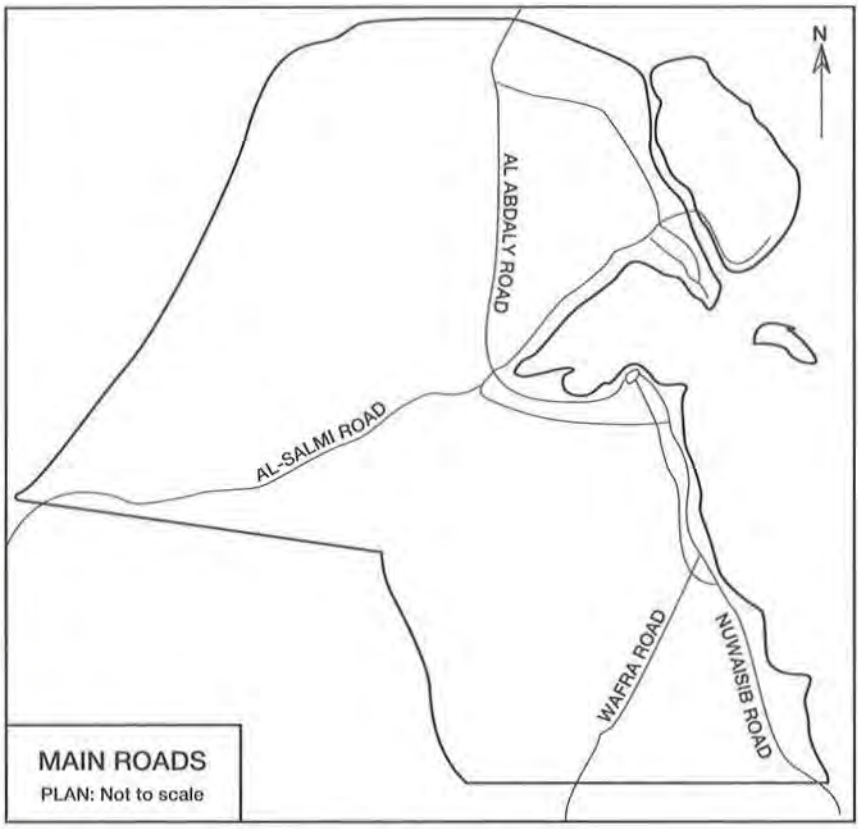


Figure 2–Main Roads

also completed on 30 kilometers of Al-Salmi Road, which led southwest to Saudi Arabia.

On Al-Abdaly Road, a main route leading north from Kuwait City to Basrah in Iraq, Corps contractors removed 166 vehicles, repaired over 170 craters, and removed roughly 600 bunkers that were blocking travel routes. In Al-Abdaly Road's Mutla Pass, known as the "Valley of Death," where Iraqi soldiers had tried to flee the coalition air assault, debris removal was particularly challenging because of the huge volume of unexploded ordnance and hundreds of damaged trucks, cars, and buses looted from the Kuwaitis.

Paving these roads required some ingenuity. Corps contractors had to haul asphalt over 322 kilometers from Saudi Arabia. Despite the challenges, by late November 1991, contractors had repaired over 90 percent



Iraqis used this road, heading north out of Kuwait toward Al-Abdaly, as an escape route; below, *road repair south of Kuwait City.*





Contractors repair roads in Kuwait.

of the bomb craters on Kuwait's major roadways and had removed roughly 2,800 wrecked vehicles, 600 Jersey barriers, and 200 Iraqi defensive bunkers from over 200 kilometers of roadway.

The Kuwaitis decided to handle repairs to the ports with their own contractors, except for restoring a ferry terminal and clearing the channel at Shuaiba. A Corps contractor, American Dredging, used side scan sonar to locate sunken vessels in the channel. Much to the Corps' dismay, either the contractor or its consultant misinterpreted the survey results and overlooked a tugboat, 38 meters long, at the bottom of the channel, wedged under the north pier—a major threat to marine traffic. The port authority discovered the tug when it tried to berth a ship in the same slot. Fortunately, the ship was not damaged.[35] The U.S. Navy agreed to clear all the mines from the channel to create a safe shipping lane.

The Kuwait Emergency Recovery Office was also responsible for emergency repairs at Kuwait International Airport, the main port of entry for Kuwait's citizens and businesses. Its operations were essential to the recovery. The airport's two main terminals had sustained major artillery damage and arson. With help from a civil affairs officer with experience in civil airport operations, the office implemented a repair strategy aimed at restoring electricity so the airport's radar and commu-

nication systems could function. Corps contractors removed over 1,200 obstacles from the runways and taxiways; 36 major structures and facilities required damage assessment and repair.

Before the liberation, the Corps had contracted with Raytheon to fabricate and test an emergency airport control tower in the United States and then ship it to Kuwait. Delivering the 14-story control tower, broken down into shipping containers no taller than 16 feet, proved particularly challenging. The containers were too large for 747s, so the company had to contract for military C–5 aircraft.

When Corps personnel discovered that the airport was not as badly damaged as anticipated, they revised Raytheon's work order. The control tower was given to the Kuwait Air Force and installed at Ali Al-Salem Air Base, 30 miles northwest of Kuwait City. The change in venue made the task of erecting the tower more difficult and added $600,000 to Raytheon's $5.7 million contract. Locurcio's staff oversaw the emergency repairs to the central tower and reception area in the main terminal so passenger traffic could resume. Emergency repairs proceeded so smoothly that on 1 May the Kuwaiti government reopened the air lanes during daylight hours.[36]

Water/Sanitation

In addition to the transportation infrastructure, Kuwait's water and sanitation systems required immediate repair. The Kuwaitis had given the Corps a preliminary list of the water mains they knew were broken during the occupation so the Kuwait Emergency Recovery Office could begin planning for the repairs. *(Figure 3)*

The sanitary and water damage assessment group headed by Mary Weber, a young environmental engineer from Corps headquarters, coordinated closely with Kuwait's Ministry of Electricity and Water for water system repairs and the Ministry of Public Works for sanitary system issues. Upon arrival, Weber and her staff quickly had to familiarize themselves with two entire systems. The Iraqis had stolen or destroyed all of the drawings for the systems, so the group had to rely on Kuwaiti volunteers familiar with the systems. For example, the chief of Kuwait's sanitary system contributed his expertise. With the help of the volunteers, Weber's group pieced together information from various sources and then repaired the damaged pipes. In some instances breaks in the water mains were detected by observation from helicopters. Major breaks often produced noticeable wet areas in the desert. The Kuwait Emergency Recovery Office then sent repair crews to those sites.

The situation Weber found did not always correspond to her expectations. For example, wartime media reports had claimed that the Iraqis

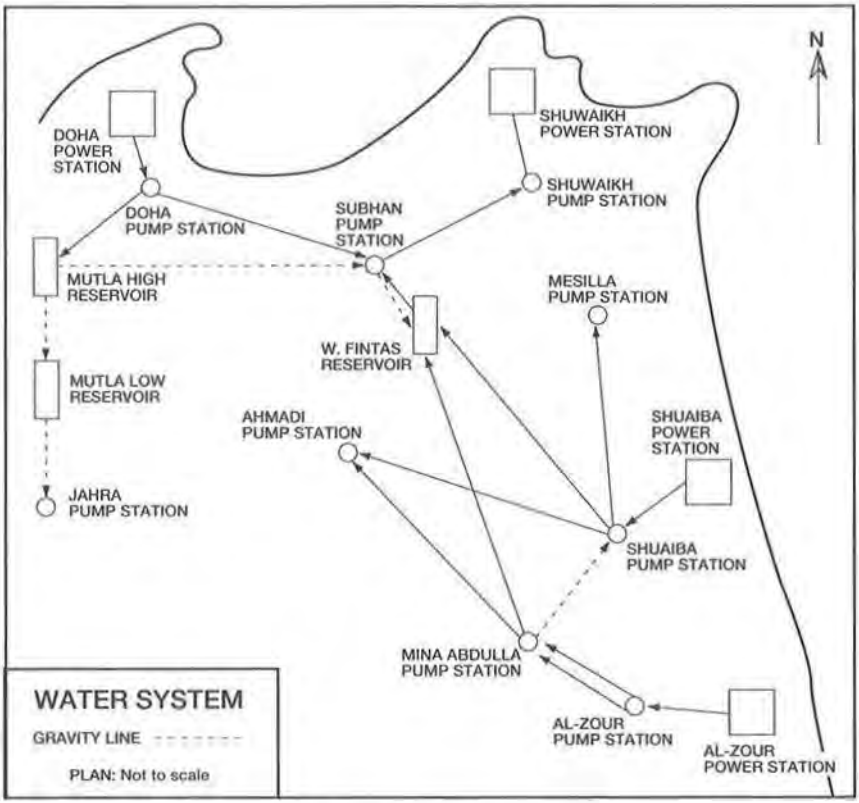


Figure 3–Water System

had stolen all the manhole covers in the city. Upon her arrival, Weber quickly discovered that the reports were false and canceled the order for over 1,200 manhole covers.

Two of Kuwait's main water pumping stations were flooded. Corps contractors pumped the water out of one station, dried the pump motors, and put the station back in operation. As with the power plants, the Iraqis had destroyed the electronic control systems, so the pumping stations had to be operated manually. Kuwait had 2 billion gallons of storage capacity in water towers and reservoirs. Fortunately most of this storage system escaped damage.

Six emergency crews from the Corps office repaired major pipeline breaks throughout the city. Shand had the contract to repair the water system. With over 40 breaks to be repaired, water rationing continued in the early days. Fortunately, as with the electrical system, the water sys-

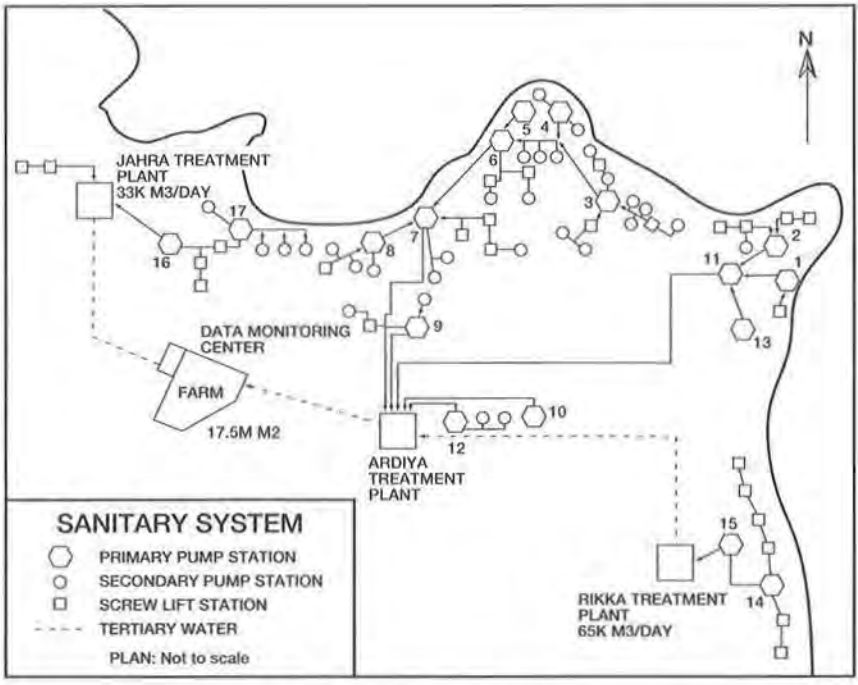


Figure 4–Sanitary System

tem had much redundancy. The Kuwaitis could send water anywhere in the city through many different pumping stations by simply opening and closing a series of valves. This made the restoration easier because the Kuwaiti government and the damage assessment group could direct the water through one line at a time rather than having to rebuild all the pumping stations before distributing any water, which would have taken more than six months. They could establish priorities and funnel the water to the most heavily populated areas first.[37]

After officials began pumping water through the network on 20 April, the damage assessment teams identified additional leaks. By early May, they had completed 26 assessments totaling $1 million, repaired six major breaks in the Al-Zour to Mina Abdulla pipeline, and converted three brackish water lines to fresh water lines to double the flow to the West Finatees reservoir, which provided most of the water to the residential and main business districts. Daily water service resumed in early June 1991, and on 31 July the Ministry of Electricity and Water assumed responsibility for all water production, storage, and distribution.[38]

Kuwait's sanitation system consisted of 4,700 kilometers of gravity sewers, 160 kilometers of pressurized water mains, 17 major and 57 secondary pumping stations, and 146 odor control stations. *(Figure 4)* Kuwait had three very modern treatment plants. When the Iraqis invaded, the Kuwaitis began systematically shutting down the entire system. They knew the Iraqis would not be able to operate the system, and without constant supervision and maintenance the whole system would have been destroyed.

Shutting down the system proved to be a smart decision. By doing so, the Kuwaitis ultimately saved themselves some expensive repairs. But after sitting idle for seven months, the electrical and mechanical systems required major repair. While the system was shut down, raw sewage poured directly into the Gulf, bypassing all pumping stations and treatment plants.

Also, the Iraqis had extensively vandalized the treatment plants and destroyed their electrical panels. At the Rikka treatment plant, for example, Iraqi troops had ripped all fixtures from the bathrooms and used the rooms for cooking, eating, and sleeping. They stole all the laboratory equipment and air conditioners and left large piles of trash. The facilities had to be cleared and cleaned before the teams could even begin assessing the damage.

The pumps and control valves in the sanitary system could not operate without electricity. Corps members could not test the system until the 112 pumping stations had power. They used some mobile generators to test individual pumps, but they could not check the whole system unless they brought in a generator for each station.[39]

The Corps' role in repairing the sanitation system was limited. It prepared 24 damage survey reports on 77 sanitary facilities as well as a comprehensive assessment of the sanitary system. The Kuwait Emergency Recovery Office provided government officials with technical support and helped them purchase equipment. After that, its contractor, Shand, repaired six major pipeline breaks. Repair of each break in the huge, ductile iron pipe, 1,200 millimeters in diameter, took the contractor three days. The remaining repairs were turned over to the Ministry of Public Works.

The Kuwaiti government ultimately awarded a two-year contract to Operations Management International Corporation from Kingwood, Texas, to repair and maintain the entire sanitary system, including repair of the treatment plants, pumping stations, and sewer lines.[40] Before the invasion, there had been about thirty pipe flushing crews who regularly vacuumed out the sewers. By the end of the occupation, the sewer system could have easily kept 100 crews busy. The backup was so severe

that raw sewage popped the manhole covers and poured across the lawns of Kuwait's residents.

The sanitary and water damage assessment group had only one crew initially. Early each morning the crew chief received his assignment for the day and went to the specified location. When residents heard that he was operating in the area, they brought him drinks and candy bars and encouraged him to bring his crew to their neighborhood next. Each day, at the end of his 12-hour shift, the crew chief returned to the office with a large supply of treats, much to his supervisor's surprise.

The repair work sometimes brought danger rather than rewards. When one crew removed a manhole cover to clean the debris, the startled workers discovered a group of Iraqi soldiers hiding below. After some initial resistance, the soldiers were arrested. Although Operations Management International implemented safety precautions, three of its workers became trapped below a grating while repairing a sewer line. The workers were overcome by hydrogen sulfide and drowned in the sewage.[41]

Government and Public Buildings

The Corps' mission also included emergency repair of public and government or state buildings. Almost all of the buildings had been looted and vandalized, and some had sustained minor fire damage. Often they were littered with unexploded ordnance and stockpiled Iraqi munitions.

The emergency restoration of government and public buildings became the largest effort of the Kuwait Emergency Recovery Office and its contractors. Initially, Kuwaiti officials had identified more than 700 damaged public buildings and established priorities for their repair. The Kuwait Emergency Recovery Office hired three contractors for building repair (Brown and Root, Kharafi, and Blount) and divided the city into Sectors A through G. The repairs would stretch well beyond the initial 90-day emergency period.

Public service support buildings damaged during the Iraqi occupation included hospitals; food distribution centers; fire and security, communication, and transportation facilities; and schools. Damaged state buildings included the Bayan Conference Center, the National Assembly building, and most ministry headquarters.

With the Seif Palace badly damaged, Kuwaiti officials decided to use the vacant Bayan Conference Center as a temporary residence for the rulers and seat of government. The sprawling Bayan center, with its meeting rooms and dining area, had originally been built to hold the Islamic Conference in 1987. Later, the Emir had relocated to the Bayan Conference Center, and it was renamed the Bayan Palace. The term "palace" in Kuwait is used to describe any residence of a member of the



Damage to the conference center at the Bayan Palace

royal family or the administrative offices for the Emir and the Crown Prince. The Bayan "palace" was really a complex of government offices.

It consisted of six clusters of three-building office and residential complexes. Each cluster bore the name of one of the islands off Kuwait's coast and contained a number of separate suites—one for each head of state who came to the Islamic Conference. Bayan also included a security command building, an energy plant, and a conference center with a large auditorium. Thus, the Bayan center was ideally suited for government operations.

However, during the occupation, Iraqi soldiers had vandalized and looted the office and residential buildings in the complex and then sprayed the exteriors with artillery fire. They had set fire to the giant auditorium, nearly destroying it.

The Kuwaiti government gave the Corps $1.5 million for repairs. Specifically, the Corps' task was to convert a building in the Bubiyan cluster into offices and administrative areas for the Crown Prince and the Emir. The Kuwaitis also asked the Corps to fix up the rest of the building as a temporary residence for the rulers. Until these buildings were repaired, the Emir and the Crown Prince had to stay at a wealthy Kuwaiti businessman's home, which had no facilities for conducting government

business. The Corps awarded a fixed-price contract to Khudair to repair all three buildings in the Bubiyan cluster. In the first two weeks, Khudair converted two wings into office space, allowing government offices to begin operations. Nearly 400 workers installed fixtures, doors, and furniture salvaged from the most severely damaged buildings. They carefully cleaned and repaired the impressive Italian marble floors and Moroccan tiles and patched and rehung the delicate silk brocade on the walls.

The renovation attracted much media attention and sparked sharp criticism, especially when Corps members were observed installing gold-plated bathroom fixtures and doorknobs. The opulence of the restored palace was presented in sharp contrast to the hardship of most Kuwaiti citizens three weeks after the liberation. Responding to media criticism, Corps officials insisted that they were putting no more emphasis on the palace than on their other missions in Kuwait. The marble and wood-paneled offices and apartments being renovated, they added, had actually been constructed long before the invasion and were appropriate for a head of state and his cabinet. Moreover, the work was part of a larger emergency repair effort. The Corps made basic repairs and had nothing to do with "gold-plated fixtures," except those salvaged from other buildings.[42] There had been a similar uproar in 1977 when the Corps had purchased furniture, china, and silver for the Saudi Naval Expansion Program. Although no U.S. funds were spent, there was heavy criticism in the media and in the U.S. House of Representatives. Many of the luxurious furnishings that the Saudis bought were intended for special occasions and celebrations.[43]

The Corps and its contractor finished renovating the Bubiyan complex and the energy plant in just 30 days. They later began repairing the Warbah complex and the security building for an additional $2 million.

The National Assembly or Parliament building, a facility equivalent to the U.S. Capitol, had been completely gutted by fire and artillery and tank rounds. The large assembly hall suffered the greatest damage. The Corps and its contractor, Kharafi, performed the reconstruction work. Transatlantic Division awarded a contract for the reconstruction work to Kharafi on 4 July 1991 with an original completion date of 29 April 1992.

Corps contractors also repaired the heavily damaged Ministry of Planning headquarters. Projects critical to the return of law and order included the Police Special Forces Camp, the Police Academy, and the National Guard complex. Repairs to each of these facilities involved extensive architectural and electrical work and the installation of new mechanical systems.

The Kuwait Emergency Recovery Office also undertook a program to remove debris, clean structures, and install new mechanical systems in roughly 8 hospitals and 49 medical clinics. By early May, the Kuwait

office had completed nearly 200 damage assessments and conducted emergency repairs to 22 government facilities.[44]

Finally, the Kuwait Emergency Recovery Office was responsible for damage assessment and expedient repair to Defense and National Guard facilities including six major staff–headquarters office complexes, one hospital, two air bases, three brigade-size camps, one air defense camp, one engineering department office building, one supply and storage camp, one navy base, two National Guard training camps, a National Guard headquarters building, and several Kuwaiti Coast Guard facilities. By early May it had completed damage surveys on Ras Al-Qalayah Navy Base, Ali Al-Salem Air Base, Ahmed Al-Jaber Air Base, three brigade camps, and 40 other facilities.[45]

Problems for Contractors

Corps contractors encountered serious problems. Initially, they had difficulty mobilizing because the Kuwaiti and Saudi Arabian governments changed the procedures for crossing their common border. In late January 1991, U.S. officials informed the Kuwaitis that access for contractors was a critical issue but failed to address any specific measures. When the Corps' Kuwait office awarded the emergency repair contracts on 3 March 1991, it gave each contractor a paper that listed a point of contact with the Kuwaiti government and explained the procedure for mobilizing their workers and equipment in Kuwait.

Under this procedure, contractors provided a list of names and copies of work permits directly to a representative from Kuwait's Ministry of Interior, Abdul Aziz Al Kulaz, at the Oberoi Hotel in Dammam. Kuwaiti officials approved the list by attaching a signature document. Upon receipt of the approved list, the contractor took the signature document to the Al Gosaibi Hotel in Khobar to obtain another Kuwaiti official's signature. Next, the contractor had to obtain a signature from a Saudi official in Dammam, but this official was available for only a few hours each day. After securing all three signatures, the contractor presented the document to the border officials in Khafji to secure passage into Kuwait.

Throughout March, government officials repeatedly modified the procedures, further hampering the contractors' efforts to mobilize. On 9 March, a Brown and Root representative complained that officials had changed the procedures and the signature document so contractors had to redo all the paperwork. A few days later, officials again revised the procedures to require additional copies of documents with original pho-

tographs. This caused more delay. Lacking specific instructions, one contractor complained, "the process remains unsure." Corps officials warned that imprecise procedures for moving contractors and their equipment from Saudi Arabia to Kuwait would delay mobilizing contractors and might result in claims from the contractors. Yet, within 15 days, contractors overcame security problems at the Saudi border and mobilized roughly 900 workers in Kuwait.[46]

To complicate matters, businesses operating out of Saudi Arabia could not get multiple entry visas, which would allow them to travel in and out of Kuwait freely as they did business. This was a special problem because of limited housing and transportation in Kuwait. Most hotels were uninhabitable. Supervisors, who no doubt were accustomed to more comfortable accommodations, sometimes ended up sleeping on the floor in power stations. Blount later transformed several abandoned buildings into a work camp and mess hall where the company's nearly 400-person team could eat, sleep, and rest.[47]

Contractors also had difficulty getting their machinery and equipment into Kuwait. Sea access was limited because the Iraqis had mined Kuwait's ports. Commercial airlift was impossible because initially air traffic was limited to military and tactical requirements. The only feasible access was by land through Saudi Arabia, but all ground traffic in and out of Kuwait traveled on the same north-south, two-lane road. Convoys of heavy equipment loaded on trailers moved slowly. In addition, for 8.5 kilometers north of the Saudi border, all traffic was restricted to the west lane and had to snake around torn up sections of the road. Traffic bottlenecks at the Saudi–Kuwaiti border slowed the shipment of building materials. Once in Kuwait City, contractor convoys encountered huge traffic jams because the traffic lights did not work. The obstacles to moving equipment had a particularly great impact on the ability of the Corps' electrical repair contractor to restore critical overhead electrical lines and towers.

Corps contractors and other U.S. businesses operating in Kuwait faced other significant challenges as well. Communications with U.S. headquarters or with suppliers in the Middle East during the first three weeks was nearly nonexistent. There was no electrical power except that provided by portable generators and no operable local telephone system. In early March, AT&T set up an earth station satellite and established 120 lines for free public use at the request of the Ministry of Public Service, but the waiting lines were long. This was not suitable for business communication, so contractors had to rely on cellular telephones in vehicles and individual satellite telephones. Blount purchased a car equipped with a cellular telephone, but supervisors had to drive within

30 miles of the Saudi border to communicate with their office in the States or their local suppliers. Contractors had no mail service.[48]

Despite the thousands of hours that companies and individuals spent pursuing business opportunities in Kuwait, most found information to be scarce and job opportunities limited. The Kuwaitis channeled most work through the U.S. Army Corps of Engineers or through a handful of large corporations that had long-standing ties in the Gulf. Even companies experienced in doing business in Kuwait found that they could easily spend large sums of money to develop proposals and end up without contracts.[49] The Kuwaitis might require companies to expend some effort with no guarantee of reimbursement.[50]

Funding Authorities

As the Corps began emergency response work, it relied on its initial foreign military sales funding authority under the terms of a 19 February 1991 memorandum of understanding between the U.S. and Kuwaiti governments. On 21 February, after determining that the original $46.35 million foreign military sales agreement would be inadequate to complete the emergency recovery effort, Kuwaiti officials requested permission to send an additional $53.65 million to the Department of Defense for use by the Corps under an expanded foreign military sales case. They added Kuwait's Ministry of Defence to the list of ministries receiving support.

The Army General Counsel, however, determined that although the Corps had initially used foreign military sales funds to expedite the initial recovery work, at this point, Section 607A of the Foreign Assistance Act of 1961 (Public Law 87–195, as amended) was a more appropriate funding mechanism because the work requested was for civil reconstruction not military security. By 25 February, Kuwaiti officials had already asked the Corps to expand its letter contracts by $53.65 million.[51]

General Hatch argued that the current foreign military sales agreement did not provide enough funding to restore the country's electrical distribution system, and without electricity the rest of the recovery program would be "severely crippled." If the Corps did not rapidly restore the electrical power grid and other essential infrastructure, Hatch warned, "we shall appear to have visibly failed in our mission, with attendant embarrassment of the U.S. Government." Funding for the foreign military sales case was nearly exhausted, he added, and unless the U.S. government agreed to the Kuwaiti request for additional assistance through Section 607A, the Corps would have no legal authority to perform additional work.[52]

The 607A procedures required that the United States and Kuwait first negotiate a letter of exchange specifying the scope and nature of the work and the financial reimbursement procedures. The important letter of exchange would serve as the implementing agreement for Section 607A. Defense officials developed a detailed 10-page legal document for coordination with the State Department. Recognizing that the $46.35 million was nearly gone and work would soon come to a halt, General Kelly asked David Addington in the Pentagon to help expedite the approval. When Addington read the draft agreement, however, he decided to change the wording, much to Kelly's dismay. The revised agreement would have to go through the whole review and approval process again. The State Department objected to some of the new language. Despite the urgent need for a completed agreement so operations could continue in Kuwait, the two agencies haggled over the wording for three weeks before approving the document.

During negotiations with Colonel Locurcio, Dr. Shaheen requested changes in some of the wording. Specifically, Dr. Shaheen objected to the clause giving preference to U.S. contractors. Rather, he wanted Kuwaiti firms to have preference. Locurcio, however, recognizing that Congress and the Department of Defense would never agree to this, held firm.

Dr. Shaheen also objected to the clause stipulating the use of U.S. law for all contracts. He preferred to use Kuwaiti laws and procedures. Locurcio explained to him that the Corps had to abide by U.S. law and contracting procedures. Locurcio added that he could not write a Kuwaiti contract because he did not have enough expertise in their legal system. The two men ultimately agreed that if the Kuwaiti government asked the Corps to prepare and award a contract, the Corps would use U.S. law. If Kuwaiti officials prepared and awarded a contract with the Corps' assistance, they could use Kuwaiti laws and procedures and would serve as the contracting officer. Finally, Dr. Shaheen wanted his government to have the authority to select the contractors. Locurcio convinced him that if the Kuwaiti government wanted the United States to be its contracting officer and use U.S. law and contracting procedures, the Corps would have to make the selection.[53]

On 4 April, General Kelly and Colonel Locurcio discussed the draft letter of exchange with Dr. Shaheen. Over the next 24 hours, they negotiated to get Kuwaiti acceptance of the Defense Department and State Department revisions. The draft allowed Kuwait to let its own contracts in addition to those being performed under the letter of exchange. The negotiators now added a sentence specifying that contracts let by the Kuwaiti government would be governed by Kuwaiti law. Any contracts let by the United States would be governed by U.S. law.

The draft letter of exchange required the Defense Department to report to the Kuwaiti government on the "resulting costs" of the supplies and equipment it procured for its administrative functions. Negotiators now replaced the words "resulting costs" with "estimated costs" to give the Defense Department greater flexibility in reporting its administrative expenses.

General Kelly and Dr. Shaheen signed the final agreement on 5 April. The agreement served as the vehicle for all civil restoration assistance provided by the Defense Department, including damage surveys and assessments; design and construction services; equipment, supplies, and materials procurement; ordering procedures; finance arrangements and financial management; and contracting and procurement. Under the agreement, the contracting procedures would adhere to U.S. laws and follow standard Federal Acquisition Regulation procedures with which most firms had some familiarity.[54] The agreement helped mark the move from the emergency response phase to the recovery phase.

The Corps' flexible organization in Kuwait and its emergency contracting strategy both proved to be well suited to the pressing requirements in Kuwait. The Corps and its contractors restored parts of Kuwait's infrastructure in record time. Within the first 30 days, they restored power to Kuwait City, opened the airport to international traffic, and made the major roads functional. Soon after that, they brought the water system into operation.

Slowly Kuwait's ministries began to let their own contracts directly. The Ministry of Electricity and Water gradually assumed responsibility for major repairs and rebuilding of electrical substations. The Ministry of Public Works assumed responsibility for final repairs to the Bayan Conference Center, the telecommunications tower, and Kuwait University. The ministry also awarded its own contract for the interior design to refurbish the National Assembly building. The Ministry of Higher Education named Jones Group Incorporated from Charlotte, North Carolina, as the construction manager on a $120 million project to restore technical training schools and facilities for the Public Authority of Applied Education and Training. The project involved renovation and some new construction of over 100 buildings on 17 campuses, plus some administrative offices.[55] Although some of the Corps' emergency repair work extended into the summer months, through the dedication and hard work of Task Force Freedom and the Kuwait Emergency Recovery Office, the designated 90-day emergency response phase effectively came to a close on 30 April 1991.

Support to Explosive Ordnance Disposal

After the liberation, the U.S. Army provided valuable support to explosive ordnance disposal. Kuwait was littered with mines, bombs, and bullets, creating major obstacles for farmers and city dwellers. Throughout the city, tons of Iraqi ammunition, hand grenades, rocket-propelled grenades, tank rounds, and mortar shells sat in boxes or lay open along streets and highways. Scattered throughout the countryside were tens of thousands of baseball-shaped cluster bombs dropped by allied forces. An estimated 5 million mines sat on top of the ground, three or four feet apart, for as far as one could see. Over time, blowing sand would conceal some of the mines, creating an even greater threat.[1]

The effort to remove the mines and munitions was one of the most extensive ever undertaken. It began soon after the liberation of Kuwait when French, Canadian, British, and American divers headed by the U.S. Navy swam Kuwait's two harbors looking for mines. They cleared the loading docks and channels so vessels could safely deliver their cargo.

The U.S. Army conducted only limited mine-clearing operations, only those actions necessary to support current U.S. military actions and protect the troops. Army officials maintained that the host nation was responsible for the extensive long-term clearance operations. Army explosive ordnance disposal (EOD) units redeployed when the war ended, and ordnance specialists with Task Force Freedom left when the task force closed out. By contrast, a French explosive ordnance disposal company launched a highly visible effort to clear a popular beach recreation area as a favor to the Kuwaiti government. The British Royal Ordnance Corps cleared the coast where the French left off and performed limited clearance elsewhere in the city. Bangladeshi troops, whose equipment and tech-

[1] John Arundel, "The Battle to Make Kuwait Safe," *Washington Post*, 20 May 1991, Washington Business Section, p. 14.



Unexploded ordnance could be found throughout the desert in Kuwait.

niques were primitive by comparison, went door-to-door working west to east clearing the city.[2]

Kuwaiti officials indicated they would award their own contracts to clear the ordnance within Kuwait's borders. They decided to carve the country into six large sectors and divide the work among coalition forces, specifically Britain, Egypt, Bangladesh, Pakistan, the United States, and France. The countries approached the problem differently. Egypt, Bangladesh, and Pakistan used their engineer troops to clear ordnance. Britain used a British contractor who hired British soldiers to clear its sector. The United States and France planned to use contractors.

The arrangements for ordnance disposal greatly affected the operations of the Kuwait Emergency Recovery Office. The staff and its contractors could not enter buildings to conduct damage assessments or make repairs until munitions and mines were cleared. Initially, a five-person Army explosive ordnance disposal team cleared the areas where the Corps' damage survey teams would be working. The Corps office had no contractor to perform this work. Kuwaiti officials feared that a Corps contractor would fail to coordinate closely with the contractor that they had hired

[2] Maj. Kirk M. Bergner, interv by author, Kuwait City, 12 Sep 1991, pp. 2–3, 11–12, 15; Lt. Col. Gordon Quesenberry, Information Paper, 9 Apr 1991, Kuwait Reconstruction: Miscellaneous Messages, #7, OACE Reference Files; memo, Bergner to Col. Jesse Gatlin, 13 Oct 1991, Operations-EOD, General Correspondence: DRAO Files.



French marines remove mines from a Kuwait City beach; below, *French marines clear beach obstacles in Kuwait City, March 1991.*



to remove ordnance in the sector where the Corps was working. If a Corps contractor and one of the Kuwaiti government's contractors were removing ordnance in the same area, the officials feared they would have difficulty evaluating their contractor's performance. This situation could also pose a safety risk. The best way to meet the needs of Locurcio's staff seemed to be to use the Kuwaiti government's contractors who were responsible for specific geographic sectors.

The Defense Reconstruction Assistance Office decided to request that the Kuwaiti government insert a contract clause requiring each contractor to coordinate with the Kuwait Emergency Recovery Office and respond quickly to clearance requests within their specific sectors. When delays in signing the explosive ordnance disposal contracts began to hamper the Corps' emergency work, Kelly directed the Kuwait Emergency Recovery Office to award small contracts to clear specific areas where its personnel and contractors were working.[3] Removing ordnance from the areas where the Corps and its contractors worked continued to be very challenging.

A separate issue involved the United States' handling of ordnance removal in its geographic sector. General Kelly and Maj. Gen. Abdul Aziz Al-Sayegh, director of supply in the Ministry of Defence, who was responsible for ordnance clearing operations in Kuwait, met on 25 May to discuss ordnance removal in the U.S. sector, which included southwest Kuwait (minus the oil fields), Ali Al-Salem Air Base, Ahmed Al-Jaber Air Base, and the Texaco oil fields (joint Saudi–Kuwaiti oil fields on the border). Even though the United States traditionally uses soldiers to clear mines, in this instance officials decided to use contractors. The soldiers who specialized in mine clearing had already redeployed.

General Al-Sayegh indicated that the U.S. firm selected for ordnance clearing would have 18 months to complete operations, with a 3-month grace period. After that time, the Kuwaiti government would assess a penalty of $75,000 per day. Many firms bid for the contract for the U.S. sector.

In July, the Kuwaiti government awarded a $134 million contract to Conventional Munitions Systems of Tampa, Florida, to clear the 1,200-square-mile U.S. sector. The contractor cleared a third of the sector within a year. During 1992, it dismantled and filled 65,000 Iraqi defensive earthworks, cleared almost 200,000 mines, and removed nearly 10,000 tons of unexploded ordnance.

---

[3]Bergner interv, pp.6–9; memo, Bergner for DRAO Director of Plans & Operations, Subj: Unexploded Ordnance, 8 May 1991, FMS MOD: DRAO Files; Lt. Col. Albert F Kaminsky, interv by author, Kuwait City, 12 Sep 1991, p. 9.

By October 1991, the British and Egyptians were the furthest along in clearing their sectors. Contracts for the French and Pakistani areas had not yet been let. Limited clearance had been done along selected sites at the 6th Brigade Camp, where U.S. forces were located.[4]

Ordnance removal inflicted a heavy price, both in dollars and in human lives. Over 100 people died in the cleanup operations, including two U.S. Army explosive ordnance disposal specialists. Despite the massive effort, operators found it impossible to detect all of the mines strewn in the sand. The mines and small bombs would continue to threaten the safety and well-being of Kuwait's residents, particularly the children.

[4]Lt. Col. Albert E. Kaminsky, Memorandum For Record, 25 May 1991, Operations-EOD, General Correspondence: DRAO Files; "Kuwaiti Cleanup," *Military Engineer*, Jan–Feb 1993, v. 85, no. 554, p. 17; memo, Bergner to Gatlin, 13 Oct 1991.

Chapter 5

Recovery Phase: The Defense Reconstruction Assistance Office and Kuwait Emergency Recovery Office

At Secretary Cheney's direction, the Defense Department's Kuwait effort moved from the emergency response phase to the recovery phase on 30 April. Authority for that effort transferred from the theater commander to the Secretary of the Army, the executive agent for the Secretary of Defense. Responsibility for the recovery shifted from Task Force Freedom to the Defense Reconstruction Assistance Office headed by the Secretary of Defense's representative, Maj. Gen. Patrick J. Kelly. Over the next eight months, the Kuwait Emergency Recovery Office and the Defense Reconstruction Assistance Office successfully completed the repair of Kuwait's civil infrastructure.

The Defense Reconstruction Assistance Office, a 48-person organization crafted by General Kelly, was almost equally split between soldiers and civilians. Kelly personally interviewed and selected nearly all civilians on his staff to ensure that they could function well as part of a team. To ensure continuity, he required a 6- to 12-month commitment from his staff rather than the 90-day commitment that the Corps required. Much like a standard military organization, the office included branches for personnel, security and intelligence, plans and operations, logistics, and resource management to oversee and coordinate the Kuwait Emergency Recovery Office's program and contracts. Kelly also absorbed the Kuwait Emergency Recovery Office's public affairs function and the remaining civil affairs effort.

Kelly had to satisfy Defense Department, State Department, and Kuwaiti requirements to account for all expenditures. His experience with the Israeli air base work convinced him to have auditors on his

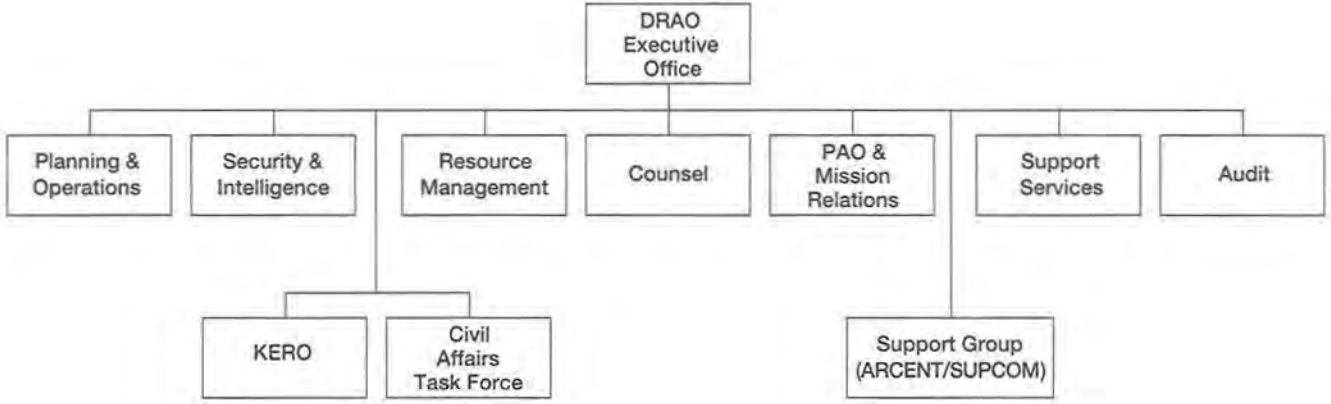


Colonel Locurcio with General Kelly, August 1991

team to ensure that the Army's execution of its contracts was above reproach. Assistant Secretary Livingstone concurred. She encouraged him to bring in representatives from the U.S. Army Audit Agency from the beginning to help develop the overall management plan and ultimately audit the activities. Livingstone did not want to find the Army performing work without sufficient Kuwaiti deposits on hand or without the appropriate controls in place.[1] Integrating the auditors from the beginning helped Kelly avoid confusion and criticism later on.

The Defense Reconstruction Assistance Office assumed responsibility for the Army civil affairs mission in Kuwait and retained a small civil affairs element with 19 soldiers from the 352d Civil Affairs Command to provide expertise in public services, public assistance, and commerce. (*Chart 6*) Initially, Kelly relied on Task Force Freedom for logistics and administrative support. Later, when the task force withdrew, Locurcio's office provided that support. As Kelly's staff grew, Locurcio's staff had to double the existing office space, office equipment, food service, apartments, and furniture to accommodate them. Kelly's staff moved into apartments in the Arab Fund building where most of the Corps personnel then lived.

Chart 6–Defense Reconstruction Assistance Office



By 7 May, the number of people assigned to the Defense Reconstruction Assistance Office reached 272, including Kelly's immediate staff, Kuwait Emergency Recovery Office personnel, civil affairs soldiers, an explosive ordnance disposal detachment, and military police personnel. The Corps of Engineers' element alone included 15 military, 114 civilians, and 68 Kuwaiti civilian volunteers.[2]

Kelly's stated goals were to centralize policies, budgeting, and procurement strategies at his headquarters, while leaving the actual execution to Locurcio's staff; to establish and maintain strong financial controls to ensure that the Army complied with U.S. law and policies and the procedures agreed to in the letter of exchange; and to provide for sound management of the 607A Foreign Assistance Act program. He also wanted to ensure that major decisions were coordinated with and approved by the appropriate Kuwaiti officials and help Kuwaiti ministries resume their management responsibilities as quickly as possible.

Secretary Stone had directed Kelly to evaluate the possibility of a long-term role for the Corps in Kuwait. Kelly's initial visit to Kuwait had convinced him that the damage was less extensive than Pentagon officials had anticipated. He found extensive damage from vandalism but, he concluded, not enough to qualify as "a disaster." Kelly reported to Secretary Stone that the repair work would take only 6 to 12 months and that he would work himself out of a job as quickly as possible. Kelly did not believe the U.S. Army should have a long-term role in repairing Kuwait's civil infrastructure. He recommended that the Corps complete the emergency repairs as quickly as possible and not involve itself in the long-term reconstruction phase, except for work supporting the Ministry of Defence. Secretary Stone concurred.[3]

Command, Control, and Communications

General Kelly requested succinct guidelines to define both his role and his relationship to the U.S. Ambassador. In response, Secretary Stone provided a "letter of instruction" outlining Kelly's specific responsibilities and relationships with the theater commander, Ambassador Gnehm, the Army Secretariat, the Army Staff, and the parent headquarters of the units and personnel attached to the Defense Reconstruction Assistance Office. The instructions gave Kelly an independent mission and command in the field under the oversight of Assistant Secretary Livingstone.[4] Kelly was to coordinate directly with Ambassador Gnehm and the CENTCOM commander.

The scope and uniqueness of the Kuwait recovery operation sparked intense media interest. Stone directed Livingstone to establish a procedure to keep senior Army and Defense Department officials well informed and ensure that Kelly's organization complied with Army guidance. Livingstone, a forceful personality, required that Kelly and his staff provide what she described as a "fairly minute" level of detail. Livingstone wanted to maintain a single line of authority between Kelly's office and the Secretary of the Army. Kelly reported to the Secretary of the Army through Livingstone.

Initially, communication with the Defense Reconstruction Assistance Office was difficult because few telephone lines worked in Kuwait, but with the restoration of more normal communication services, Kelly and Livingstone spoke daily. Kelly often sought guidance from Livingstone and faxed draft memorandums for her review. "We kept a fairly tight oversight control on the process," Livingstone explained. She conceded that she and other Army officials placed many regulations on Kelly that were technically not required to "insure that our process...would never be questioned, [and was] totally full of integrity."[5] Although Kelly appreciated being able to go directly to Livingstone or to General Mallory for quick decisions, he sometimes found the level of detail they required to be excessive.[6]

Kelly's relationship with Locurcio's office was more complex and perhaps more sensitive. The Corps headquarters in Washington commanded the Kuwait Emergency Recovery Office through its Transatlantic Division. Kelly, however, had operational control over that office and served as its link to Assistant Secretary Livingstone. The Transatlantic Division provided administrative and contracting support to the Kuwait office. It often communicated with that office directly, without going through Livingstone. Although Kelly clearly controlled the Defense Department's reconstruction effort, the division retained some autonomy. For example, the Kuwait Emergency Recovery Office and the Transatlantic Division handled all of Kelly's contracting because he had no warrant—the authority to sign contracts on behalf of the U.S. government. Also, the Transatlantic Division provided the funding mechanism and performed the official accounting and financial services for the Defense Reconstruction Assistance Office.[7]

Kelly explained to the Army Staff that he provided all programmatic guidance and direction to the recovery effort and insisted that the Corps office remain under his operational control to ensure that his guidance was converted into project execution. "In other words," he continued, "I have program responsibility while KERO [the Kuwait Emergency Recovery Office] has the responsibility for project execution." Kelly conceded that

the command channel for the Kuwait Emergency Recovery Office flowed through the Transatlantic Division to Corps headquarters but insisted that he had a unique authority and position. From his perspective, he was the person ultimately responsible for the success of the reconstruction mission—to include Kuwait Emergency Recovery Office activities.[8]

Kelly and his staff assumed a larger role than some Corps officials had anticipated. Locurcio had thought that the Defense Reconstruction Assistance Office would function as a command and control and policy headquarters but leave the day-to-day planning and execution to his staff and the Transatlantic Division. Kelly, however, was a trained engineer officer with a broad range of experience in Corps districts, divisions, and headquarters. He was very familiar with the Corps' procedures and felt comfortable delving into the decisions and actions of the Kuwait Emergency Recovery Office. He soon involved himself in that office's programming and budgeting, even though the Transatlantic Division had previously performed these functions. He did this, he explained, because those activities involved coordination with the U.S. Embassy, the Kuwaiti government, and Pentagon officials. He also wanted to free Locurcio from the burden of coordinating with the embassy and the Kuwaitis so he could concentrate on execution.[9] This rationale had merit. Unlike most district engineers, Locurcio was deeply absorbed in the day-to-day management of a single project—the Kuwait recovery. Kelly successfully freed him from some of the coordinating, reporting, media interactions, and other requirements to focus more on project execution. Yet, at times, friction developed between the two organizations as Kelly and his staff executed their oversight role.

Financial Management/607A Process

The Defense Reconstruction Assistance Office assumed a major financial management role. It controlled its own overhead money and had approval authority over the Kuwait Emergency Recovery Office's expenses. The Kuwaiti funds deposited in the U.S. Treasury were allocated, in turn, to the Department of Defense, the Army Corps of Engineers, and the Transatlantic Division for Locurcio's organization to execute in accordance with the previously approved program. The Transatlantic Division provided the overall accounting support for the entire Section 607A Kuwait reconstruction assistance program. Although Kelly's staff monitored its own operating expenses as well as Kuwait Emergency Recovery Office costs, Locurcio's staff kept track of the actual costs of the projects.[10]

One of Kelly's major responsibilities was financial management of the program to repair the civil infrastructure under Section 607A of the Foreign Assistance Act. The financial management system was shaped, in large part, by the fact that the 607A program required that the United States provide Kuwaiti officials with a detailed account of how it had spent their money. The letter of exchange, the implementing agreement for the 607A program, required the Kuwaiti government to fund all Defense Department assistance in advance, to include operating costs and contractual obligations. Because of the size and scope of the program and the high level of accountability required, Pentagon officials soon found that existing procedures for accounting and reimbursement were inadequate.

As with the Israeli air base work, an effective information management system was critical. During that operation, the construction contracts required information systems that tracked the progress of the work and expenditures. The Corps initially relied on existing contractor systems until they proved inadequate. It lacked realistic and usable management data.[11]

Developing an effective financial management process for the work in Kuwait presented challenges. The Defense Department had never managed such a large 607A program. The Corps was the only Defense agency that had previous experience with a 607A program, and the project that the Corps had executed under this program was small (under $100,000). The large, complex Kuwaiti program required a financial management process that satisfied both U.S. and Kuwaiti requirements for fiscal accountability.[12] *(Chart 7)*

Before deploying, Kelly had met with representatives from the Office of the Assistant Secretary of the Army for Financial Management and the Army Audit Agency. The Assistant Secretary's staff agreed to develop proper fiscal procedures. One experienced staff member, Russell C. Plaisance, continued to provide Kelly with financial policy guidance and eventually became his chief of resource management.

The staff considered various Army systems for tracking 607A expenditures, including the Army Standard Finance System, but none encompassed project accounting, the most important aspect of the Defense Reconstruction Assistance Office's effort. At the recommendation of the Assistant Secretary, that office turned to the Corps for finance and accounting support. It adopted the Corps of Engineers Management Information System (COEMIS), a project-oriented accounting system that the Corps had developed for its civil and military construction programs, to track the obligation and expenditures of 607A funds. Although the system met U.S. reporting requirements, it did not provide all the information that the Kuwaitis needed. Kelly's and Locurcio's staffs had to

develop a manual process to maintain additional information that the customer required.[13]

Initially, the Kuwait Emergency Recovery Office had manually maintained its financial records, but it became increasingly difficult to provide timely and accurate fund balances using this method. In August 1991, Kelly directed his auditors to help Locurcio's staff develop an automated funds control system. Within weeks, the two offices had developed a computer program to track obligations and expenditures, along with a users manual. The Kuwait Emergency Recovery Office Funds Control System provided an automated way to periodically reconcile miscellaneous commitment documents, obligations, and disbursements with the official accounting records—the Corps of Engineers Management Information System.[14]

Army Audit Agency officials favored the use of project cost accounting for Defense Reconstruction Assistance Office activities. Project cost accounting, the auditors insisted, was the appropriate way to allocate all direct and indirect costs to specific projects to provide full disclosure of the total costs. This mechanism would enable Kelly to provide project cost estimates to the Kuwaitis and budget effectively for the direct and indirect costs of each project. Direct costs included payments to contractors or in-house costs of providing services and materials. Indirect costs included the costs of administering and awarding contracts, movement of personnel in and out of Kuwait and their support, and program oversight.

Project cost accounting would also let Kelly's staff quickly identify problems and potential or actual cost overruns and better account to both governments for their expenditures. His staff would be able to produce accurate reports on the status of their programs. At Kelly's request, the Army auditors reviewed the Corps' cost accounting process and concluded that the Corps had sufficient internal controls to ensure that costs were charged to the proper projects.[15]

At the heart of the financial management system was the need to monitor the process for approving and funding projects under the 607A program. Plaisance and the Transatlantic Division staff established procedures for transferring funds from the Kuwaiti government to the U.S. Treasury in accordance with the letter of exchange.

The letter of exchange required the United States to operate on a quarterly budget and give the Kuwaitis a 90-day obligation plan at least 15 days in advance. The initial Kuwaiti deposits into the U.S. Treasury had to equal the Defense Department's estimated costs and financial obligations during the first 90 days. U.S. regulations required that the Corps have the money in hand before signing a contract. It could not obligate the U.S. government beyond the funds available. Moreover,

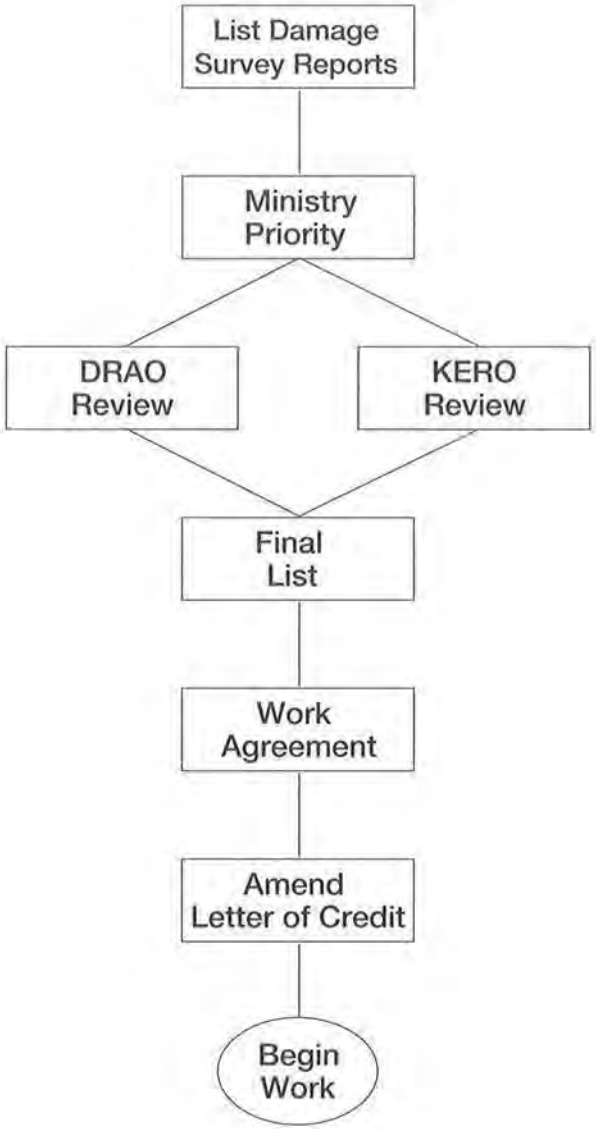


Chart 7–607A Work Flow

Army officials refused to go into a 90-day program unless it was fully funded and they had access to the money. Subsequent deposits to the U.S. Treasury had to equal the Defense Department's anticipated costs and financial obligations during each successive 90-day period. Defense officials would withdraw funds as necessary to fund the authorized civil restoration activities.[16]

Locurcio's staff developed a database with the status and budget of each project. It prepared a weekly report, and Locurcio met with Dr. Shaheen each Thursday. Dr. Shaheen presented the package to the council of ministers each Friday. The staff met with the committee (Ministers of Finance and Public Works, Dr. Shaheen, Bader Al-Qabandi, and Fatima Al-Sabah who represented the royal family). Under the 607A process Locurcio's staff developed and prioritized lists of projects for each ministry using damage survey reports. Staff members then discussed these priorities with the ministries and consolidated those final lists of projects into a work agreement—a formal agreement between the Kuwait and U.S. governments that the U.S. government would perform certain work at an estimated cost.[17]

After Ambassador Gnehm approved the draft work agreement, the Defense Reconstruction Assistance Office and Kuwaiti officials gave it final form. A policy committee headed by Dr. Shaheen with representatives from the Ministries of Public Works, Electricity and Water, and Finance approved the budget for the work agreement. The Kuwait Investment Office in London then made the money available through a letter of credit established at the Chemical Bank of New York. The Kuwaiti government transferred the funds electronically from the letter of credit to a newly established account in the U.S. Treasury called the Kuwaiti Civil Reconstruction Trust Fund. From there the money was transferred to the Department of Defense and through the Corps of Engineers to the Transatlantic Division. To avoid an unnecessary cash drain on the Kuwaitis, Kelly's staff divided the first 90-day program into three parts and planned to draw out the money in 30-day increments.

Using information that Locurcio's staff had provided and program guidance from Kelly, the Transatlantic Division then prepared the work directives. These directives provided the internal allocation of the Kuwaiti funds to support the Corps' costs and contract actions.

There were three separately funded work agreements under 607A. In April, Locurcio and Bader Al-Qabandi, representing the Kuwait Emergency Recovery Program, visited each minister to find out what work he needed. Locurcio used this information to develop a scope for the next quarter. Meanwhile, his staff consolidated the damage survey reports and coordinated with the Kuwaitis on priorities. Together with

Dr. Shaheen, they outlined a $30 million, 30-day budget for April that became the first work agreement. On 26 April, the Kuwaiti government transferred the initial $30 million via the letter of credit into the Treasury account. By that time, the Corps had committed almost all of the funds from the original $46.35 million foreign military sales case. The funding shortage was so severe that, for a brief time, the Corps had to stop giving its contractors work. When the Kuwaitis transmitted the first $30 million installment, the money was quickly spent.[18]

In May, Locurcio again met with representatives from each ministry to determine their requirements. He obtained from each a short list of priority projects that could be used as the basis for the next 607A funding request. He took the resulting list to Kelly and Shaheen and then to the Ambassador for approval. Using the list, they developed a budget for May and June, the second work agreement. On 13 May 1991, Dr. Shaheen approved the revised obligation plan for May and June, which required an additional $141.8 million. The Assistant Secretary of the Army for Financial Management, Douglas A. Brook, asked the Kuwaiti government to deposit that amount immediately so Kelly's and Locurcio's operations would not be disrupted. The letter of credit was subsequently increased by $141.8 million.[19]

To complicate matters, the Kuwait Emergency Recovery Program had only been created for 90 days and its functions officially ended on 26 May. The members returned to their ministries. During June and July, the United States would have to transition from working with the Kuwait Emergency Recovery Program to dealing directly with the individual Kuwaiti ministries. During the Kuwait Emergency Recovery Program's short tenure, both project authorization and funding authority had been consolidated with the program's chairman, Dr. Shaheen. Project authorization authority would remain with Kuwait's new Minister for Public Works, Abdulla Al-Qatami, but funding authority transferred to the Ministry of Finance.

In late June, Dr. Shaheen prepared to take up a new position as Minister of Municipalities. He informed the Crown Prince that he would be turning over his responsibilities as the director of the Kuwait Emergency Recovery Program to Al-Qatami. The Crown Prince, however, recognized that the current system was operating smoothly and responsively, and his ministers were pleased with it. The Crown Prince did not want to upset the program by changing leadership. He directed Dr. Shaheen to continue as the Kuwaiti government's point of contact for the Army's reconstruction effort. Kelly and Locurcio continued to meet with Dr. Shaheen each week, give him progress reports, and sometimes negotiate additional work agreements.[20]

Dr. Shaheen convinced the Minister of Finance not to change the existing funding procedures and processes. At Dr. Shaheen's request, in June Locurcio's staff drafted the basic work agreements for the next two quarters, July–September and October–December. During a meeting on 15 June, Dr. Shaheen, Kelly, and Locurcio finalized the cost estimate for the remainder of the 607A program for inclusion in Kuwait's 1992 budget. Dr. Shaheen indicated that he wanted all the funds for the 607A program obligated by 31 December 1991, including the cost of eventually closing the Defense Reconstruction Assistance Office. Kelly and Locurcio were to include enough funds in these obligation plans to cover any costs incurred after that date. Kuwaiti officials wanted to budget for the entire six-month period from July to December because they were in the midst of finalizing their budget for the 1992 fiscal year, which would begin on 1 July, and they wanted to integrate the budget for the recovery operations into the national budget.

Rather than develop another 90-day program, Kelly and Locurcio devised a six-month program ending 31 December 1991, with the understanding that the actual work would extend to April 1992. The Minister of Finance approved the $212 million budget that the Kuwait Emergency Recovery Office proposed. Kelly and Locurcio now knew the scope of work for the rest of the calendar year. On 26 July, the Kuwaiti government deposited $150.1 million for July–September plus $62.75 million for October–December program obligation and the Defense Reconstruction Assistance Office's close-out costs.[21]

Contracting Strategy

The Defense Reconstruction Assistance Office also assumed a major role in shaping the basic contracting strategy for the civil infrastructure work. Locurcio's staff, however, continued to develop the specific approaches for individual projects. In developing these strategies, the staff considered several factors: opportunities for employing small businesses, potential for U.S. firms, possibilities for increasing competition, and schedule and technical constraints. Kelly reviewed these strategies, modified them as necessary, and submitted them to Assistant Secretary Livingstone. Only after both Kelly and Livingstone had approved the strategies could the Corps begin the work.

In evaluating the contracting and acquisition plans, Livingstone and her staff considered Congress' desire to provide opportunities for U.S. businesses, particularly small businesses. They also kept in mind the goal of developing joint ventures between U.S. and Kuwaiti businesses

"that would ensure a longer lasting business relationship, well past the era of reconstruction."[22]

One key element of the contracting strategy for civil infrastructure repair was using original contracts where possible, rather than awarding new ones, because of the urgency of the work. No one could accurately estimate the extent of the damage, so modifying the original contracts seemed to be the only quick way to meet the requirements. During the summer of 1991, the Corps assigned additional work to the original contractors through unpriced contract modifications. For example, it modified the original $2 million contract with Blount until it reached approximately $100 million. The initial foreign military sales contracts, in effect, became 607A contracts.

As the urgency diminished, the Transatlantic Division and the Kuwait Emergency Recovery Office awarded several contracts on a limited competitive basis. It screened firms that had responded to the February *Commerce Business Daily* announcements to create a list of prequalified firms. Then Locurcio's staff asked those firms to submit proposals. It had more time to solicit and evaluate those proposals. For example, the Corps awarded contracts on a competitive basis to prequalified firms for repairs to the 707 and 747 hangars and the flight crew training center at Kuwait International Airport, repair of the Failaka Island Ferry Terminal, and channel dredging.[23]

The Corps, however, handled most new work by simply modifying existing contracts. By 20 November 1991, contract modifications brought the total amount obligated on those contracts to $211 million. Although the use of unpriced contract modifications allowed work to begin immediately, it also increased the need for effective internal controls. The Federal Acquisition Regulations required more administrative controls over undefinitized contracts than over competitive contracts. During the ensuing months, auditors spent many hours ensuring that proper controls were in place.

Another key element of the Defense Department's contracting strategy was to limit the duration of the contracts. The Pentagon's and General Kelly's goal had always been to assist the Kuwaiti government for a few months and then leave. Pentagon officials worried that, in time, the Kuwaitis would come to resent the presence of the U.S. military.

As the government ministries resumed normal operations, Army leaders recognized that the Kuwaiti government was ready to minimize foreign involvement in its internal affairs and manage its own contracts. Livingstone made it clear that the Defense Department would not be involved in long-term contracts to repair Kuwait's civil infrastructure. As one member of her staff explained, "We did not want to have DRAO

[Defense Reconstruction Assistance Office] or any U.S. Army organization perceived to be staying beyond that absolute minimum time required to reestablish civilian control in Kuwait."[24]

Livingstone and Kelly refused to let the Corps accept any civil work that extended beyond December 1991. By that time, Kelly predicted, most ministries would be fully operational with enough staff to handle the remaining recovery work, except for repairs at the National Assembly building, Kuwait International Airport, and Ministry of Planning headquarters.[25]

The Army continued giving preference to U.S. firms and worked to increase the involvement of small and small disadvantaged American businesses. The issue of using small and small disadvantaged businesses had nothing to do with the actual needs of the recovery program; it was rooted in politics. Media reports had fed expectations of lucrative contracts for American firms. As U.S. small businesses struggled to get a piece of the anticipated multibillion dollar rebuilding of Kuwait, they became increasingly frustrated. Small businesses could not travel to Kuwait initially because the airport was closed to civil air traffic. They could not get through to Kuwaiti representatives by telephone or often did not know whom to contact. Moreover, they often lacked the experience and resources to mobilize and operate efficiently overseas. Kuwaiti officials, in turn, were overwhelmed with the volume of requests for information about contracts. The senior vice president of one small Atlanta firm, Joseph Middleton, articulated the frustration of many small businesses when he complained, "We're out in left field, we're on the sidelines and the game is moving on."[26]

So great were the obstacles that unless the U.S. government paved the way, small businesses would not be able to participate in the Kuwait work. Small businesses turned to Congress and the Army for assistance. Congress pressured the Army and the Department of Commerce to do more to help U.S. businesses, particularly small and small disadvantaged businesses. In response, Livingstone directed Kelly to devise innovative ways to do this such as establishing small business subcontracting goals or setting aside specific work for small firms. Some of these mechanisms, however, were of questionable legality. Also, most small firms lacked the capability to mobilize quickly and handle the work.[27]

The House Appropriations Committee directed the Secretary of the Army to make every effort to use—and encourage the Kuwaiti government to use—small and small disadvantaged businesses in any contracts or subcontracts awarded for the reconstruction of Kuwait's infrastructure. Committee members noted that, at a minimum, the Army should provide such businesses with fair and equal access to information about

any contracts or subcontracts that might be awarded and include them on the list of prequalified companies that the Corps provided to the Kuwaiti government.[28]

In early March, Principal Deputy Assistant Secretary of the Army for Installations, Housing, and Environment Michael W. Owen testified before the House Subcommittee on Exports, Tax Policy, and Special Problems and the Senate Committee on Small Business about the Army's efforts to promote small business interests. Owen explained that the emergency nature of the initial assistance funded by foreign military sales, the limited solicitation period because of the rapid collapse of Iraqi forces, and the difficulties of transporting supplies, equipment, and personnel to Southwest Asia had made incorporating small businesses more difficult. But, he assured the committees, the 607A program would provide more opportunities for such businesses.[29]

Many in Congress were particularly alarmed by the small number of minority-owned businesses involved in the reconstruction of Kuwait, especially when minorities accounted for a significant part of the U.S. forces in the Persian Gulf War. Representative Mervyn M. Dymally (California), for example, asked the Secretary of the Army for specific information about involving minority-owned businesses. Representative Charles B. Rangel (New York) had heard that American firms had $500 million in contracts for the reconstruction of Kuwait but none had gone to minority-owned firms. He asked Secretary Cheney to ensure that minority participation in the Persian Gulf was "not limited to their performance on the battlefield." Kelly, too, linked minority participation in the war to involvement in postwar reconstruction. Minorities made up 17 percent of the U.S. armed forces, he insisted, and the same proportion of U.S. minority-owned businesses should have the opportunity to enjoy the fruits of victory.[30]

Section 606 of the Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991 (PL 102–25), enacted on 6 April 1991, stated that it was the "sense of Congress" that the Corps award contracts first to U.S. firms who used small and minority-owned businesses and were committed to employing U.S. workers, then to other U.S. firms, and finally to other coalition force members. It further stated that U.S. firms receiving contracts should employ U.S. citizens, give preference to veterans, and award subcontracts to small and minority-owned firms as much as possible.

The legislation required the Army to provide Congress with a detailed report on the involvement of small and small disadvantaged businesses. The report would indicate the number of prime contracts and subcontracts awarded to firms by country and by the total dollar

value, the number and percentage of contracts awarded to small businesses and to small disadvantaged businesses compared to the total number of contracts awarded to U.S. firms, and the number of subcontracts awarded to small businesses and to small disadvantaged businesses under each prime contract awarded to a U.S. firm.[31]

Meanwhile, Army leaders pressured General Hatch to encourage awards to small businesses as prime contractors. Because of the high-level interest in small business involvement, Deputy Assistant Secretary of the Army for Procurement George Dausman wrote, "it is incumbent on us to record the effectiveness of our efforts."[32] Meanwhile, Army officials reminded Congress that the Corps had awarded only nine contracts totaling $28.2 million. Although no small or small disadvantaged U.S. businesses had received these contracts, they insisted that the Army was "aggressively encouraging" their participation.[33]

In line with this policy, the Corps modified the original letter contracts to include clauses encouraging the award of subcontracts to small and small disadvantaged business. When negotiating for supplemental agreements, change orders to existing contracts, or future contracts, the Corps would incorporate two clauses.[34] One clause required contractors to agree to encourage small and small disadvantaged business participation. The other required each contractor to submit a plan for subcontracting with small and small disadvantaged businesses.

Since the original contracts did not require the use of small business subcontracts, the Corps could only encourage its contractors to do so. Large contractors, however, had difficulty subcontracting to small firms because few operated in the Middle East. Moreover, some large firms lacked familiarity with the small business requirements.[35]

Under Secretary of the Army John Shannon made the involvement of small and small disadvantaged businesses a high priority. After a visit to the Transatlantic Division on 7 May, however, Shannon's special assistant William Takakoshi concluded that there was probably little opportunity to increase small and small disadvantaged business opportunities with the original eight contractors.[36]

Livingstone, too, recognized that the emergency phase provided few opportunities for small and small disadvantaged businesses, but she wanted to maximize those opportunities. She asked the director of the Office for Small and Disadvantaged Business Utilization for advice on how to increase small and small disadvantaged business participation. Meanwhile, she directed Kelly to expand competition in the long-term strategy for recovery projects. "We must take this opportunity to start demonstrating our commitment to utilize small and small disadvantaged businesses in the restoration of Kuwait," she insisted.[37]

First, the Army had to determine the legality of expanding opportunities for small businesses. The Transatlantic Division's lawyers could find no statutory or regulatory requirement to implement any small and small disadvantaged business programs in contracts awarded overseas. Section 19(b) of the Federal Acquisition Regulations, "Small and Small Disadvantaged Business Concerns," specifically stated that small business and small disadvantaged business requirements applied only inside the United States, its territories and possessions, Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia. Therefore, the regulations did not apply to recovery contracts for Kuwait.

In June, Kelly and Locurcio sent Livingstone their proposals for involving small businesses. One option for future contracts was to have the prospective contractors provide a small business plan that could be used as a selection criterion. Kelly suggested that Livingstone and her staff seek an exception to the Federal Acquisition Regulations allowing them to evaluate the small and small disadvantaged business plans of prospective contractors. Second, he recommended that the Corps develop a list of qualified small businesses that the U.S. Embassy could use to promote small business involvement in Kuwait. Finally, he recommended that the Army set aside certain work for small and small disadvantaged businesses.[38]

At the time, the Army was limited to encouraging prime contractors already under contract to hire small businesses as subcontractors. For example, the Kuwaiti firm restoring the National Assembly building, Kharafi, hired an American small business firm, American Catastrophics Environmental Services, for smoke damage restoration. Livingstone found the results of such negotiations "less than satisfactory."[39]

Army leaders now determined that they had the authority to make a contractor's plan for using small businesses a criterion in the formal evaluation process. The Army Judge Advocate concluded that while this action was "unusual," nothing in the Federal Acquisition Regulations or relevant statutes prohibited it. He concluded that including small and small disadvantaged business subcontracting plans as an evaluation factor did not require a formal deviation from the Federal Acquisition Regulations. However, he cautioned, an evaluation plan that puts an "unreasonable amount of weight" on small business subcontracting "could be challenged in a protest as arbitrary."[40] In other words, the proposal was permissible if the Army did not give the factor too much weight.

The Defense Reconstruction Assistance Office instituted a new procurement process by which the Corps would evaluate contract proposals on the basis of the contractor's small disadvantaged business plan as well as price and past performance. Next to price, the contractor's plan

for using small and small disadvantaged businesses would be the second or third most important factor. This process paid immediate dividends. For example, Morrison Shand Construction, Ltd. planned to subcontract nearly $2 million (25 percent) of its $7.8 million contract for the restoration of aircraft hangars and other facilities at Kuwait International Airport to small disadvantaged businesses.[41]

In addition to requiring small business plans from prospective contractors, Army officials discussed setting aside specific work for small businesses. Army lawyers found this issue to be complex and controversial. Thomas A. Duckenfield III with the Army General Counsel observed that no statute prohibited the Army from implementing small business set-asides for Kuwait reconstruction projects. However, Section 19(b) of the Federal Acquisition Regulations specifically stated that the rules applied only in the United States and certain U.S. territories and possessions. Therefore, Duckenfield recommended that the Army obtain a deviation from that provision before implementing small business set-asides. The deviation would protect the Army if a contractor protested that the Army violated its own regulations. Duckenfield recommended that the Army use subcontracting plans to promote small disadvantaged business participation instead of establishing set-asides. Otherwise, he warned, large corporations excluded from contracts would probably challenge the legality of the Army's set-aside plan.[42] James King, also with the Army General Counsel, warned that establishing such a program "raises uncomfortable constitutional questions that we would prefer not to address at this time."[43]

In mid-July, the Transatlantic Division reported that it planned to encourage its original contractors to use small businesses by requiring them to submit a small business subcontract plan. The division commander, General Witherspoon, established a goal that, effective 20 July 1991, 5 percent of the contract value of all future foreign military sales [as opposed to contracts under Section 607A] contract awards and modifications go to small and small disadvantaged businesses. The division staff would include the small business source selection criteria and subcontract clauses discussed above in the foreign military sales solicitations and review their foreign military sales program to set aside work for small businesses. The division had already set aside an indefinite delivery architect–engineer contract for design work (estimated at $245,000), explosive ordnance removal work at Ali Al-Salem Air Base and Ahmed Al-Jaber Air Base (estimated at $1 million to $2 million for each base), and work at a fire station at Kuwait International Airport (estimated at $600,000).[44]

Shortly after Witherspoon announced his plan, on 26 July, Livingstone directed that 5 percent of the value of *all* contracts and mod-

ifications for Kuwait reconstruction be set aside for small businesses. Corps officials pleaded with Livingstone to drop her 5 percent goal and let them establish their own internal goal. "We will make every effort to attain our goal," one Corps official explained, "but the imposition of a goal by the ASA [Assistant Secretary of the Army] could paint us into a corner from which it may be difficult to move."[45]

In August, Kelly asked Corps headquarters for a list of small and small disadvantaged businesses that could perform specific work in Kuwait. He apparently planned to provide this list to Locurcio's staff as a resource for future contract actions. The list would also go to current and future prime contractors to use as a source list of subcontractors and to Kuwaiti officials to give to their prime and small contractors for possible subcontracts and joint ventures. The Transatlantic Division sent a database containing the required information to both Kelly's and Locurcio's staffs. At Kelly's request, the Corps used the database to identify small disadvantaged businesses and compiled information evaluating the performance of firms that had Army contracts.

Corps leaders and members of the Army Staff, however, expressed concern about Kelly's request for a list of small disadvantaged businesses who had been "proven performers" for specific types of work. Livingstone warned Kelly to handle the information with care and not use it to exclude any firm from consideration for a contract. Providing a list of small disadvantaged businesses for specific contract actions could be construed as creating a set-aside for such businesses, and the Army General Counsel had already cautioned against such set-asides. Army leaders had testified before Congress that firms responding to the *Commerce Business Daily* announcements would be given equal consideration. As one senior Corps official noted, the Army could not risk the appearance that it was using information about past performance to restrict competition.[46]

Small Kuwaiti firms clamored for work much like their American counterparts. Kelly suggested to Dr. Shaheen that they set aside work for small American and Kuwaiti firms. At Kelly's urging, Dr. Shaheen drafted a letter directing the Defense Reconstruction Assistance Office to establish a program that would result in the award of contracts to U.S. small disadvantaged businesses that had entered into joint ventures with Kuwaiti firms. "Competition," Dr. Shaheen explained, "will be limited to U.S. small disadvantaged businesses that you determine can satisfactorily perform in Kuwait, preferably firms already present in Kuwait." Kuwaiti participation, he added, should total 50 percent of the value of these contracts.[47]

General Kelly and Dr. Shaheen developed a program to set aside work for American small disadvantaged businesses that had formed part-

nerships (joint ventures) with small Kuwaiti firms. The Defense Reconstruction Assistance Office and Kuwait Emergency Recovery Office provided the U.S. firms with lists of small Kuwaiti firms so they could find partners and bid on the contracts competitively.[48]

As part of the small and small disadvantaged business outreach program, on 24 October 1991, the Corps awarded a $731,704 contract to MME Contractors International of McLean, Virginia, and Abdullah Al Naser General Trading of Kuwait City to repair and restore two fire stations at Kuwait International Airport. Two days later, the Corps awarded a $565,000 contract to American Techno Trade, Inc., of New York City and Fadden General Trading of Kuwait City to repair the main Coast Guard Station. It awarded a $780,000 contract on 20 November 1991 to yet another small disadvantaged firm, BEC Construction/joint venture, to repair and restore seven fire stations in Kuwait City. By September, out of the $180,517,620 total for contracts, small businesses accounted for $6,879,351 (3.81 percent) and small disadvantaged businesses accounted for $1,898,100 (1.05 percent).[49]

In October 1991, Livingstone reported more optimistically that the small business program in Kuwait had become "an upbeat program which is producing positive results." The 5 percent goal and the use of small business utilization plans as a major evaluation factor, she claimed, were paying "immediate dividends." Of the $208 million in contracts awarded under the Foreign Assistance Act and foreign military sales case, $9.3 million (4.4 percent) had gone to small businesses, with $2.0 million to small disadvantaged businesses. Not reflected in any figures, but nonetheless important, she added, was the considerable time the Army had spent helping small businesses. It had provided the Commerce Department, prime contractors, and Kuwaiti government with names and addresses of small and small disadvantaged businesses that were interested in working in Kuwait; participated in over 75 small business seminars to provide information on business opportunities and methods in Kuwait; and met with many firms to discuss business opportunities in Kuwait.[50]

By mid-April 1992, the Corps awarded $24 million (6.85 percent of the value of all its contracts) to small and small disadvantaged U.S. businesses, primarily through subcontracts awarded by its prime contractors. Awards to small disadvantaged businesses totaled over $11 million (3.13 percent of the value of all contracts).[51]

Kuwaiti officials never fully understood the intense political pressure to use small businesses. The Kuwaitis generally opposed giving preference to small American businesses, which they believed would increase their costs. Critics charged that at times Congress seemed more anxious

to satisfy American business interests than the Kuwaiti government—the Army's customer. Locurcio maintained that the small business policy was very shortsighted. The main goal of the United States should have been to demonstrate to Kuwait that it was a responsive partner, he insisted, not to push its own objectives. Locurcio believed that if the United States was responsive to the needs and concerns of the Kuwaitis, the result would be long-term American business ties. The appropriate role for small businesses in an overseas environment, he argued, was not as prime contractors but as subcontractors under large firms that could intercede to prevent problems with personnel, equipment, or other aspects of the operation.[52] To place such tremendous emphasis on small businesses, most of whom could not get into Kuwait, contact Kuwaiti officials, or put together the resources to mobilize in Kuwait, made little sense, except from a political standpoint. If the damage in Kuwait had been more severe, government officials would probably have had less time to focus on the small business issue.

Contracting for Civil Infrastructure Repair

The reconstruction phase included additional repairs to the electrical and water supply systems, government and public buildings, and transportation networks. As the various ministries resumed operations, the requirements for additional work increased. To handle the mounting construction requirements, the Corps expanded the size of its Kuwait office. By mid-August it included 178 Corps employees and Kuwaiti volunteers. Civil infrastructure work under the 607A program peaked in July and August with the repair of the schools, one of the great successes of the reconstruction phase.

The schools in Kuwait, which had been closed nearly a year, were the main focus of civil infrastructure repair during the summer of 1991. During the seven-month occupation, Iraqi soldiers had used the schools as barracks, maintenance facilities, hospitals, and ammunition storage areas. Most of the damage was the result of vandalism, malicious fires, and looting. The Iraqis had broken thousands of windows, kicked in doors, and stolen air conditioners and fans. Graffiti covered classroom walls. At one school, every room had been firebombed. At another, the soldiers had used the gymnasium as a motor pool and burned student records as fuel for cooking.

Kuwait's Ministry of Education asked the Corps to contract for emergency repairs to more than 300 of its 500 schools. Locurcio negotiated with school officials and agreed to complete repairs on 152 schools by

opening day, 24 August. Because of the time constraints, Kelly and Locurcio decided to use 607A authority to issue work orders under the existing contracts and, where necessary, modify these contracts to accomplish the school repairs. Livingstone concurred. Corps contractors Brown and Root and Kharafi conducted the surveys and performed most of the repairs with the help of local subcontractors. Blount also performed work.[53]

The scope of the damage and the tight schedule made the repair work particularly challenging. The contractors never had enough workers. At one point, one of the contractors had to hire an additional 1,200 workers. To complicate matters, the Ministry of Education repeatedly changed the list of schools to be renovated until two weeks before the scheduled opening. Also, local residents sometimes deposited ammunition from other sites at the schools at night because they knew the Corps' contractors would remove it. The Ministry of Electricity and Water never provided the electrical panels and personnel to hook up the wires as promised. A week before the schools were to open, there were still no panels or workers, so the Kuwait Emergency Recovery Office directed each of its contractors to provide them. Finally, since the liberation, some soldiers from Kuwait's Army and other coalition forces had been using the schools as barracks. Kelly's staff had to move Egyptian forces out of several schools to begin repairs. The issue became so thorny that the Egyptian Ambassador had to intervene.[54]

Working feverishly, the contractors repaired 145 schools in just over two months and in time for opening day. Nearly 1,800 contract workers spent roughly 500,000 hours removing trash, debris, ammunition, and vehicles; repairing or replacing thousands of windows, doors, air conditioners, fans, plumbing and electrical fixtures, and lights; repairing and replacing water systems; painting walls; repairing brick fences; and removing bunkers and thousands of rounds of ammunition. Repair costs reached $35 million.

On the first day of school, 465 schools opened with 254,000 students. The occasion was marked by a nationally televised ribbon-cutting ceremony. The reopening was an important indicator of a return to normalcy in Kuwait. The Minister of Education, Dr. Suliman Al-Bader, expressed his gratitude to the United States and the Corps. "Without their help," he observed, "it would not have been possible." Ministry of Education officials were so impressed with the results that they assigned 14 more schools. Kelly later observed that his staff and the Kuwait Emergency Recovery Office had performed "an absolutely impossible task." The Kuwait Emergency Recovery Office, he said, did a "magnificent" job managing the



Al-Ferdous Girls Middle School; below, *Al-Asmah Girls High School.*





Damage to the executive office waiting area in the Parliament building, August 1991; below, *the same area a year later, after renovations were complete.*





Kuwait International Airport Terminal 2 with the damaged control tower in the background, 5 August 1991; below, *a year later the terminal was bustling with travelers from around the world.*



effort. Secretary Stone proudly reported to Secretary Cheney that the government of Kuwait was pleased with the work.[55]

As the school repairs neared completion, Kelly and Locurcio shifted their emphasis to the remaining work at the National Assembly building, the Ministry of Planning headquarters, and Kuwait International Airport. The damage assessment and emergency repairs at the 400,000-square-foot National Assembly building were already underway at an anticipated cost of roughly $24 million. The Emir had decreed that elections for the National Assembly would be held in October 1992, and the building had to be fully restored by April 1992.

Originally, the Corps planned to use one of its existing contractors to clean and repair the building. However, Kuwait's Council of Ministers, who viewed the building as a symbol of Kuwaiti sovereignty, insisted that a Kuwaiti firm do the work. Specifically, Dr. Shaheen asked Kelly to use Kharafi to reconstruct the building, and Livingstone acquiesced. In mid-July, the Corps awarded a $19.5 million contract to Kharafi for structural repairs. Also, at the direction of the Kuwaiti government, the Corps awarded a $2.5 million interior design contract to Hellmuth, Obata, and Kassabaum, a U.S. architect–engineer firm.[56]

Repair of the Ministry of Planning headquarters proved challenging as well. The prime contractor, Kharafi, resisted hiring a subcontractor that specialized in smoke damage restoration. Only after some cajoling from Locurcio did Kharafi do so. By late May 1991, 90 percent of the first phase of repairs (to the basement and ground floors) was complete. The second phase involved minor repairs to the second and third floors on the north wing. The third phase was to finish removing fire damaged portions of the second and third floors of the south wing.[57]

The Kuwait Emergency Recovery Office and its contractors also continued repairs at Kuwait International Airport. They completed work on two runways and the apron area in July. By late August, the Corps had repaired nearly all of the terminal's passenger gates. The Kuwaiti government also requested help restoring the airport's catering and cargo facilities. It hoped to occupy the catering facility on 31 July and the cargo terminal on 31 October. On 12 September 1991, at the request of the Kuwaitis, the Transatlantic Division awarded a $7.8 million contract to Morrison Shand to clear, repair, and rehabilitate the two hangars and a flight crew training center at the airport.[58]

Kelly reported in early November that the airport remained a "primary project." The repairs to the two hangars and the training center were only 5 percent complete. Workers had discovered asbestos in one hangar, requiring the contractor to prepare an abatement and removal plan. Other parts of the project were further along. Repair of the 60-

meter control tower was 99 percent completed, and the catering building was 50 percent complete. Terminal two was operational. The airport reopened in May 1991 and resumed 24-hour operations on 3 August 1991, a year after the Iraqi invasion. By December, contractors had finished repairing the reception area, all gates at the international terminal, bomb craters on runways, and the instrument landing system.[59]

During the summer, the Corps and its contractors continued repairing the other parts of Kuwait's water supply and transportation infrastructures. The Corps focused its effort on pumping stations and leaks in the pressurized feeder lines. The three plants produced over 100 million gallons of water a day, more than enough to meet the current demand. The Corps contracted with Daniel, Mann, Johnson, and Mendenhall of Los Angeles to develop plans for repairing the bridges. Two of the company's engineers and an engineer from the Corps' Waterways Experiment Station in Vicksburg, Mississippi, surveyed damage to the bridges, and the contractor completed the designs for the repairs by early November.[60]

The Corps and its contractors ultimately restored more than 1,000 public buildings. In November 1991, the capacity to produce 3,760 megawatts of electricity far exceeded the demand of 1,670 megawatts. Electrical power had been restored to 99 percent of Kuwait City at a total cost of $53.6 million. By December, three desalinization plants were in operation and water was continuously available in every sector of Kuwait City. The reservoirs were full. Operations had resumed at two plants in the sanitary sewer system, and an assessment of the entire sanitary system had been completed. All major pump and lift stations were operational, and the Ministry of Electricity and Water handled most repairs. The ministry had assumed total responsibility for water distribution, production, and storage capabilities on 31 July. Some 200 kilometers of roads had been repaired and 3,700 bunkers, barriers, and vehicles had been removed. Bridge repair work, however, continued.[61]

By year's end, repairs to Kuwait's civil infrastructure were nearly complete, except for the National Assembly building. Virtually all of Kuwait's civil infrastructure had been rebuilt in only eight months. As that work declined, the workload supporting Kuwait's Ministry of Defence increased. Damage to Kuwait's military infrastructure was much more extensive, and the repairs would take longer.

Fighting Kuwait's Oil Fires

The U.S. Army supported what was by all accounts the largest oil firefighting campaign in history. Overall responsibility for firefighting operations rested with the Kuwaiti government and its Ministry of Oil. Kuwaiti leaders decided early on that the Kuwait Oil Company would manage and direct all firefighting operations.

Before the Iraqi invasion, Kuwait had roughly 1,300 producing wells in its primary oil fields. Approximately 75 of these were high-pressure wells in the important Burgan field that produced 20,000 to 50,000 barrels of oil a day. Kuwait had a production quota of 1.5 million barrels per day, set by the Organization of Petroleum Exporting Countries (OPEC), though it could produce much more.

As Iraqi soldiers withdrew from Kuwait, they blew up over 600 oil wells, resulting in the loss of an estimated 5 to 6 million barrels per day. Roughly 520, or 85 percent, of the wells burned at temperatures as high as 2,000 degrees Fahrenheit. The rest gushed thousands of barrels of crude oil into large dark, lifeless "lakes," up to six feet deep. Onlookers hundreds of feet away could feel the intense heat and hear the roar of the burning wells, similar to the sound of a jet engine. Thick smoke shrouded the fields. To further complicate matters, unexploded ordnance and Iraqi mines littered the oil fields. The country's three refineries—Shuaiba, Mina Abdulla, and Mina al Ahmadi—were also damaged.[1]

The Kuwait Oil Company directed the early planning for the firefight in Washington. The Kuwaitis requested U.S. Army civil affairs support in the planning effort. Kuwait Task Force members helped the Kuwaitis gather information about the oil well fires, plan logistics support, and develop an emergency plan of action. The Kuwait Oil Company hired

[1] Lt. Col. Christopher Werle, Information Paper, Subj: Status of Kuwait Oil Field Cleanup, 16 Jun 1991, Kuwait Reconstruction: Oil Fires, Office of History Files; Matthew L. Wald, "Surge of Water Due to Well Fires to Cut Future Kuwaiti Oil Output," *New York Times*, 9 Apr 1991, p. A13; Lt. John A. Miller, "After the Storm, the Effects Linger On," *The Military Engineer*, v. 84, no. 547, Jan–Feb, 1992; "Slow Progress Frustrates All Involved As Oil Wells Burn at $1,000 a Second," *New York Times*, 22 Apr 1991, p. A8.



The damage to the oil wells created large pools of oil in the desert.

O'Brien, Goins and Simpson as the executive agent to coordinate the firefighting activities. It signed contracts with Red Adair Company, Boots and Coots, and Wild Well Control, Inc., all skilled Texas-based world-renowned firms, and with Safety Boss of Calgary, a well-qualified Canadian company. The Kuwait Oil Company also eventually hired Bechtel to reconstruct the oil infrastructure and to provide food, housing, and other support to the firefighters, but Bechtel had no direct role in putting out the fires.[2]

It took the Kuwaitis four months to award the first firefighting contract, and they hired firefighters before hiring a contractor to support them. A severe shortage of heavy equipment such as bulldozers, backhoes, and trucks hampered the firefighting effort. Because of theft or Iraqi destruction, virtually everything needed to support operations had to be imported. The challenges of feeding, housing, and equipping a work force that would eventually grow into the thousands were staggering.[3]

---

[2]Memo (draft), Under Secretary of the Army John W. Shannon for Deputy Secretary of Defense, Kuwait Reconstruction: Oil Fires, ASA(ILE) Files; memo, Maj. Marc K. Collins for Asst. Director of Military Programs, 17 Apr 1991, Kuwait Reconstruction: Oil Fires, ASA(ILE) Files.

[3]Werle, Information Paper, 16 Jun 1991.

Firefighters arrived to survey the damage, assess their personnel requirements, and determine where they could stage their equipment. The first experts from Red Adair, Boots and Coots, and other companies arrived in Kuwait City on 4 March and toured the burning oil fields by helicopter. They estimated that extinguishing the fires and repairing the wells could take two years.

Initially, the contractors could not bring in workers because they had no way to feed or house them. The companies also had trouble getting the necessary equipment. The Kuwaitis were initially reluctant to invest the tens of millions of dollars needed for equipment, even though the fires consumed roughly $100 million worth of oil each day.[4]

Members of the Kuwait Task Force provided the immediate logistics and communications support to the firefighting teams. They also provided ground and air transportation to assess damage in the burning fields. Civil affairs troops coordinated the use of C–5A aircraft to bring in the heavy firefighting equipment from Texas and provide firefighters with food, water, lodging, and helicopter and truck transportation. This gave the Kuwaiti government enough time to bring Bechtel on-site to take over the support operations. The Kuwait Task Force also provided explosive ordnance disposal support and training and coordinated engineer support until Kuwaiti equipment arrived.[5] Army explosive ordnance disposal specialists steered the firefighters safely through unexploded ordnance to the wellheads and checked the wellheads for explosives.

Kuwait Task Force members Maj. Tom Wilson, a procurement specialist with Hunt Oil in civilian life, and Lt. Col. Phil Huber focused on oil fire issues. The task force members coordinated between the firefighters and Ambassador Gnehm. They also coordinated between contractors looking for work and Bechtel or the Kuwait Oil Company.

Because of the shortage of equipment and firefighters, the work got off to a painfully slow start. Initially, the Kuwait Oil Company used nine teams representing the four firefighting companies. Firefighting equipment began arriving in Kuwait on military aircraft throughout March, and on 7 April a Boots and Coots team used liquid nitrogen and water to extinguish the first oil well fire. Fighting the wellhead infernos was dangerous and difficult. The firefighters worked in intense heat, amid blowing sand and smoke, and their brightly colored jumpsuits quickly became coated with an oily mist.

---

[4]KRTF History, p. 12.

[5]Matthew Wald, "Kuwait Will Hire More Firefighters," *New York Times*, 14 Apr 1991; Wald, "Slow Progress Frustrates All Involved," ibid., 22 Apr 1991, p. A8.



Oil well firefighter soaked with oil

In April, Kuwait's oil minister, Dr. Rashid Al-Amiri, announced that the national oil company would bring in firefighting teams from several different companies, breaking the American and Canadian monopoly. With only 25 well fires extinguished, he wanted to quicken the pace. The Kuwaiti government later brought in teams from three additional U.S. companies, as well as British, German, French, Russian, Chinese, and Iranian firms. Ultimately, however, the original American and Canadian firms put out most of the oil fires. Meanwhile, firms and individuals from around the world continued to inundate U.S. and Kuwaiti officials with proposals for extinguishing the fires.[6]

The slow pace of the firefight worried U.S. officials. In April, the Office of the Principal Deputy Under Secretary of Defense for Strategy and Plans hosted a meeting for representatives of the Army, Navy, Air Force, and Department of Energy to address this issue. The Deputy Assistant Secretary of Energy for Export Assistance, George Helland, warned that the administration would come under attack if it did not act quickly to put out the oil fires. Participants decided to forward all proposals for extinguishing the oil fires to the Under Secretary of Energy who would screen them before forwarding them to David Tarbell, the Director of International Economic and Energy Affairs, in the Office of the Principal Deputy Under Secretary of Defense for Strategy and Plans. The participants, however, made no attempt to define the problem. They failed to develop any specific format or guidance for drafting proposals and failed to develop any initiatives to get support from high levels in the Pentagon or the Bush administration. These were important oversights.[7]

---

[6] Col. Arthur Walz, Information Paper, Subj: "Petroleum Restoration Activities," 8 Apr 1991, Reading File I: DRAO Files; Kelly comments on draft manuscript, 19 Aug 1997.

[7] 352d CA Command Sitrep, n.d., Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3; Harbell interv, p. 44; Huber interv, pp. 46–49; *New York Times*, 8 Apr 1991, p. A6; Wald, "Kuwait Will Hire More Firefighters"; Wald, "Slow Progress Frustrates All Involved."



Oil well firefighters cap an oil well.

After the close-out of Task Force Freedom, the Army continued to support the firefighting effort through the Defense Reconstruction Assistance Office. Neither the Kuwaiti government nor any of the commercial firms could quickly bring in needed supplies and heavy equipment. As a result, with little legal or funding authority, the Military Airlift Command found itself flying the cargo on U.S. Air Force C–5A transports. The Defense Reconstruction Assistance Office later helped broker over $13 million in transportation expenses between the Military Airlift Command and the Kuwaiti government. Other Defense Department agencies provided support through satellite imagery photographs, airfield repair, and environmental surveys.[8]

General Kelly's staff monitored the work, gathered information, and kept Ambassador Gnehm informed. Gnehm had no environmental specialists on his staff, so he relied on Kelly's environmental officer, Lt. Col.

[8]Memo, Lt. Col. Wilson to Col. Keener, 15 Apr 1991, Subj: DOD Meeting on High-Tech Oil Firefighting, 12 Apr 1991, Kuwait Reconstruction: Oil Fires, ASA(ILE) Files.

Christopher Werle, to advise him and coordinate environmental issues. Where appropriate, Kelly's staff helped coordinate the delivery of heavy equipment on C-5A transports, the tracking of oil fires and spillage with Landsat imagery, and the stabilization of work sites with airfield matting. Werle, who performed much of the day-to-day coordination with the firefighting organizations, developed a particularly good rapport with the firefighters and their support crews. Kelly and his staff considered all activities related to the environment and the oil well fires to be "embassy business" and took no action without the Ambassador's approval.[9]

The Army also provided combat engineer vehicles (CEVs). These vehicles are tanks with turret-mounted demolition guns and hydraulically operated debris blades. They give engineers in forward combat areas a versatile means of clearing rubble and filling tank ditches. Over 80 Kuwaiti oil fires were encircled by huge, hardened mounds of coke—solids produced when the unburned oil mixed with sand—which had to be removed before the firefighters could work. Firefighters used dynamite and backhoes to remove the searing mounds, but the process was hazardous and slow. Werle developed a plan to use existing combat engineer vehicles to fire rounds of high explosive plastic (HEP) at mounds to break them up so the firefighters could remove the debris. This plan, he argued, would speed the capping effort and save the Kuwaiti government $300,000 per well. Moreover, it would provide unique training for the combat engineer vehicle crews and positive Army public relations. The Kuwait Oil Company covered the costs of using the combat engineer vehicle crews and equipment.

On 31 July, the Kuwaiti government and Bechtel conducted a very successful experiment firing the large-caliber gun on a combat engineer vehicle to remove mounds from wellheads. Rounds from the vehicle shattered four out of five of the coke mound targets. Soldiers cleared two wells using this method.

Soon after the initial experiment, however, the focus of the firefighting effort shifted to Burgan, Kuwait's densest oil field. Officials concluded that using the combat engineer vehicles there would be too dangerous because the wells were so close together.[10]

---

[9] Werle, Information Paper, 16 Jun 1991, Kuwait Reconstruction: Oil Fires, Office of History Files; Werle, Information Paper, 22 May 1991, Kuwait Reconstruction: Miscellaneous Messages, #8, OACE Reference Files; Ltr, Col. Jesse C. Gatlin III to Larry and Carl, 28 Sep 1991, Miscellaneous, Personnel: DRAO Files.

[10] Lt. Col. Wilson, DAMO-ODP, SIGACT, 7 Aug 1991, Kuwait Reconstruction: Oil Fires, Subj: Use of Combat Engineer Vehicles (CEV) to fight Kuwait oil fires, ASA(ILE) Files; memo, Michael W. Owen for Secretary of the Army, 16 Aug 1991, Kuwait Reconstruction: Oil Fires, ASA(ILE) Files.

As the oil fires continued to burn, the U.S. Army and other agencies became increasingly concerned about the short- and long-term health risks of the smoke and other emissions. In March 1991, an interagency team headed by the Environmental Protection Agency collected samples at several sites in Kuwait, Saudi Arabia, and elsewhere in the Middle East. They attempted to ascertain the presence of potentially harmful air pollutants, specifically carbon monoxide, sulfur dioxide, and hydrogen sulfide and particulates—tiny particles that lodge in the lungs. The team found each of these gases but not in concentrations that exceeded current standards. The Environmental Protection Agency subsequently concluded that no imminent health risk existed.

Some experts questioned the validity of the agency's study because it included only the samples the team could collect within 20 minutes, rather than samples collected over 18 to 24 hours. The team found an abnormally high level of particulates. "Soldiers may become concerned because they find soot in their nostrils," they conceded, but the smoke was "only an irritant and a nuisance." For the long term, though, scientists needed to know more about the composition of the smoke to determine the potential health hazard. Meanwhile, at the request of the Deputy Assistant Secretary of Defense for Environment, a special health risk assessment team from the Army Environmental Hygiene Agency conducted a 60-day study. The agency coordinated its effort with the Environmental Protection Agency's interagency assessment team to exchange information and prevent duplication of effort.[11]

At the request of President Bush, the administrator of the Environmental Protection Agency, William K. Reilly, traveled to Kuwait in June to assess environmental damage from the Iraqi invasion. "The horrors endured by the people of Kuwait and the unprecedented level of intentional environmental destruction," Reilly reported, "reminds us all that there is still evil in the world." He praised the "environmental sensitivity" of the soldiers he met. "One of the untold stories," he added, "is the dazzling performance of the Army Corps, which essentially jump-started the infrastructure of a country." The military, he informed Cheney, had greatly assisted the scientists working in Saudi Arabia and Kuwait, and those responsible for sewage treatment and pollution control. Upon his return, Reilly reported that the environmental damage was not as great as predicted. He cited the interagency team's finding that the levels of sulfur and

[11] Werle, Information Paper, Subj: "Environmental Impacts of Desert Storm on Kuwait," 17 Jun 1991, Kuwait Reconstruction, Office of History Files; Werle, Information Paper, 22 May 1991.

heavy metals in the air were not abnormally high. Environmental groups, however, questioned those findings.[12]

On 2 June 1991, Kuwait resumed oil production in an offshore field, averaging 130,000 barrels a day. Later that month, it began producing 30,000 barrels a day onshore. On 25 July, Kuwait announced that for the first time since the Iraqi invasion, it would resume exporting crude oil, though only on a small scale. Half of the oil fires had been extinguished. Firefighters were snuffing out more than six well fires a day. By November 1991, all of Kuwait's oil wells had been capped. On 6 November, a ceremonial capping in the Burgan field of the final oil well was attended by the Emir. The Kuwaitis, delighted to see the end of this tragic and costly episode, celebrated the event as a national holiday.

Kuwait lost over 1 billion barrels of oil (or 1 percent of its sole natural resource) as a result of the Gulf War, but its huge reserves escaped lasting damage. The country still retained 10 percent of the world's crude oil reserves.[13] With assistance from the U.S. Army and the dedicated, skilled private contractors, the Kuwaiti government had extinguished the oil fires and recapped the wells in record time.

---

[12]Memo, William K. Reilly to Secretary Richard B. Cheney, 3 Jul 1991, Kuwait Reconstruction: General, ASA(ILE) Files; *New York Times*, 11 Jun 1991; "Fires in Kuwait Not a Threat to Global Climate, Federal Study Finds," *Washington Post*, 25 Jun 1991.

[13]"Oil Production in Kuwait," *New York Times*, 21 Jun 1991, p. D16; Youssef E. Ibrahim, "Kuwait Set to Resume Oil Exports," *New York Times*, 26 Jul 1991, p. D1; "Kuwait Today," *Washington Post*, 27 Feb 1996, Advertising Supplement, p. B5.

Chapter 6

Supporting Kuwait's Ministry of Defence

As the emergency repairs to Kuwait's civil infrastructure neared completion, the U.S. military shifted its focus to restoring the country's military facilities. Generally, Kuwait's military facilities had been damaged more heavily than its civil infrastructure. The Iraqi occupation and the war had nearly leveled the defense facilities in Kuwait. The military infrastructure, particularly Air Force and Navy facilities, had been heavily damaged by the Iraqi soldiers who occupied them and by coalition "smart bombs" intended to deny the Iraqi military the use of these facilities. While the Kuwait Ministry of Defence's administrative offices and the facilities that housed Kuwait's Land Forces (Kuwait's Army) remained, for the most part, structurally sound, the Iraqis had looted and severely vandalized them.

Moreover, there was a growing realization that Kuwait had to be prepared to defend itself in the future. Iraq remained a potential security threat. Although the U.S. military had decided to limit its involvement in Kuwait's civil infrastructure to emergency repairs, it was willing to promote more permanent repairs to the defense infrastructure. Most of the defense facilities did not lend themselves to emergency repairs. The damage was far too severe to accommodate a quick fix. Corps leaders recognized that the civil reconstruction work was short-lived but that the long-term work would be in the foreign military sales arena and managed by the Transatlantic Division.

Initial Damage Assessments

The Kuwait Emergency Recovery Office had identified 19 major defense installations in Kuwait. Under the authority of the initial $46.35 million foreign military sales case, Corps personnel surveyed the damage



Aerial view of the damage to Ahmed Al-Jaber Air Base

at each one. The heavy destruction made this a huge job. Five teams under the direction of Tommy E. Reynolds, a civil engineer from Nashville who headed the Kuwait Emergency Recovery Office's Ministry of Defence damage assessment group, evaluated the 19 sites. Team members first conducted a general assessment to determine if a particular facility was repairable and then determined the extent of the damage.

Corps engineers and their Kuwaiti partners ultimately inspected more than 700 buildings and facilities at three brigade camps, two air bases, one navy base, and the National Guard and the Ministry of Defence headquarters. The engineer teams often conducted their inspections amid explosives, live ammunition, and unexploded bombs.

The Corps completed the damage assessments in June and presented the Ministry of Defence with the final report, including rough schedules for repairing 135 key facilities. The individual damage surveys provided detailed cost estimates for materials, labor, and services to help Kuwaiti officials decide whether to repair or rebuild a particular facility. The reports provided information about the level of effort required to restore the sites to their prewar conditions and resume minimum operations. After reviewing the survey results, Corps officials concluded that the total repair costs could reach $1 billion. Reynolds estimated that the



A destroyed aircraft hangar at Al-Jaber Air Base

cost of renovating some of the defense facilities would amount to 90 percent of the cost of constructing new facilities.[1]

Faced with such a staggering price tag, the Ministry of Defence identified three installations—Ali Al-Salem Air Base, Ahmed Al-Jaber Air Base, and Ras Al-Qalayah Navy Base—as immediate priorities. The air bases, constructed by Yugoslavians in the mid-1970s, consisted of 3,000-meter runways, concrete aircraft shelters, maintenance hangars, and other structures. Ras Al-Qalayah Navy Base on Kuwait's southern coast housed Kuwait's Navy. It contained a port, sophisticated ship-lift and dry-dock facilities, and maintenance and administrative buildings.[2]

Coalition forces had heavily bombed the two air bases during the war to drive out Iraqi forces, reducing most of the facilities to rubble. Often the mangled metal "skins" of buildings could be found up to half a mile away, even though the structural frames remained intact. The bombing had destroyed nearly all of the 50 hardened aircraft shelters, despite their 15-foot-thick earthen and reinforced concrete shells. Coalition cluster bombs had cratered the taxiways, and the Iraqis had run a ripper across the runways every 200 feet to make them unusable. Barracks, administrative facilities, and medical facilities, though structurally intact, had been heavily vandalized by Iraqi troops.[3]

Kuwaiti officials indicated that the air bases would have to be repaired by August so they could bring back aircraft currently housed in neighboring countries and accommodate the F–18 aircraft that they had purchased from the United States. The first phase of work at the air bases would focus on making emergency repairs to allow minimal operations at each facility. Specifically, it would involve clearing and cleaning the facilities, repairing runways and taxiways, and building temporary shelters for the airplanes.

The lack of utilities and communications, the presence of unexploded ordnance, and the poor condition of the buildings still standing made the air bases virtually uninhabitable. An estimated $1 million would be needed initially at Ali Al-Salem Air Base to have a contractor sweep for live ordnance, clear debris, and repair parts of the electrical distribution system. The focus of the emergency repairs would be to make the airfield operational; provide limited maintenance facilities; repair existing aircraft shelters and provide additional ones; repair selected buildings for medical services, barracks, and mess; and repair one hangar, the utility systems, and the fuel distribution system.

Ras Al-Qalayah Navy Base had sustained only moderate damage. Yet it too was uninhabitable because utility services and communications had been destroyed. Although most buildings remained structurally sound, they had been heavily damaged by explosives and vandalized by the Iraqis. Kuwait's Navy wanted to reoccupy that base as soon as possible and relocate its remaining boats there. The estimated cost for emergency repairs to the utility systems, administrative offices spaces, barracks, and mess facilities was $1 million.[4]

At General Kelly's direction, the Corps had set aside roughly $5 million from the original foreign military sales case for what it called "pre-emergency repairs" to defense facilities such as restoring electrical power. Locurcio now suggested that $3 million from the case be used to fund the initial emergency work at Ras Al-Qalayah Navy Base, Ali Al-Salem Air Base, and Ahmed Al-Jaber Air Base.[5]

Locurcio argued that the original foreign military sales case provided enough authority for the United States to provide design and construction services to restore Ministry of Defence facilities. He explained in his 4 January 1991 letter to General Ray that Dr. Shaheen had requested assistance for the National Guard rather than the Ministry of Defence, but he had also asked the Corps to propose a draft agreement for discussion. The scope of the letter, Locurcio argued, was "not intended to be final." The foreign military sales case contained the phrase "assistance provided shall include but not be limited to the following." It also cited "other taskings as may be required" as part of the scope of work. Since no one knew the

scope of reconstruction efforts at the time this case was prepared, officials intentionally made these items broad to allow for additional emergency work such as repairs to Ministry of Defence facilities.

At their 16 February meeting, Locurcio added, Dr. Shaheen had specifically directed the Corps to include that ministry's work as part of the original foreign military sales case. He had also emphasized that for the reconstruction activities, the United States could combine the National Guard and Ministry of Defence work. Dr. Shaheen had intended to accomplish this work under the foreign military sales case or an amendment to the case.[6]

Soon after, Kelly informed Livingstone that his office and the Kuwait Emergency Recovery Office intended to conduct roughly $3 million worth of design and construction services for emergency restoration of the defense facilities under the original foreign military sales case. The work that Kuwait had requested included restoring minimal operations to the Ministry of Defence headquarters and providing the Kuwait Air Force with emergency facilities at Kuwait International Airport.

Although U.S. regulations prohibited using funds under Section 607A of the Foreign Assistance Act for such work, Kelly argued, the existing foreign military sales case was clearly written with the intent to provide for such contingencies. The $46.35 million foreign military sales case, he added, had been written broadly enough to provide for additional reconstruction efforts. Livingstone agreed with Kelly and authorized the Corps to execute contracts under the foreign military sales case.[7]

Using the money set aside from the existing foreign military sales case, Corps contractors removed debris; made temporary repairs to walls, roofs, windows, and doors; reinstalled pilfered mechanical systems; and made architectural repairs. By 1 June 1991, four military infrastructure projects were under way or planned using the existing foreign military sales case. Locurcio's staff administered an emergency repair program of an estimated $4.7 million. This included emergency repairs on five hangars at Kuwait International Airport for use by Kuwait's Air Force at an estimated cost of $800,000. When completed, these hangars were the only facility that Kuwait's Air Force had for its operations until emergency repairs were completed at Ali Al-Salem Air Base.

The second project was $1.5 million to remove debris and repair walls, floors, and ceilings at the Ministry of Defence headquarters so the minister and his staff could return to their permanent offices. Third, the Ministry of Defence requested $1.4 million to restore utility services and repair critical facilities at Ras Al-Qalayah Navy Base. Finally, there was $1 million in emergency work at Ali Al-Salem Air Base to include debris cleanup and repairs to the electrical distribution system.[8]

By late June, the Corps and its contractors had completed 50 percent of the emergency repairs at four of the five hangars at Kuwait International Airport and had completed 65 percent of the emergency repairs at the Ministry of Defence headquarters. Work would soon begin at Ras Al-Qalayah Navy Base, and the Kuwait Emergency Recovery Office would soon award the contract for emergency repairs at Ali Al-Salem Air Base. As a result, in the first week in July, Kuwait's Air Force was able to relocate 18 Mirage and 14 A–4 Skyhawk planes from Dhahran to Kuwait International Airport.[9]

Planning Foreign Military Sales Cases for Defense Facilities

In April 1991, Kuwait's Under Secretary of Defence, Faisal Ali Al-Dawoud, approached U.S. officials about rebuilding his country's damaged military facilities. As a result of a series of meetings with Corps representatives, Ministry of Defence officials asked the Corps to draft one or more foreign military sales agreements to help reconstruct their defense installations. Al-Dawoud asked that the agreements include initial repair activities as well as planning, designing, and constructing new and existing facilities at all installations designated by the ministry. Al-Dawoud emphasized that, based on the damage assessments then underway, initially the Kuwaiti government would need help reconstructing Ali Al-Salem Air Base, Ahmed Al-Jaber Air Base, Ras Al-Qalayah Navy Base, and associated facilities.[10]

Corps personnel in Kuwait and back in Winchester hurriedly prepared a new foreign military sales case that included damage survey reports, emergency restoration, and planning and engineering. The case encompassed the Ministry of Defence headquarters restoration, 6th Brigade Camp, 15th Brigade Camp, 35th Brigade Camp, 80th Brigade Camp, Ali Al-Salem Air Base, Ahmed Al-Jaber Air Base, Ras Al-Qalayah Navy Base, the air defense camp, and other sites. Kelly proposed to Al-Dawoud that the Corps manage the entire program.

Rather than process a separate foreign military sales case for each installation, Kelly's staff and Corps officials decided to adopt a two-phased approach separating emergency repairs from long-term reconstruction. In mid-May, David L. Chambers on Kelly's staff informed Defense Security Assistance Agency officials about the new strategy. The Defense Security Assistance Agency; the Assistant Secretary of the Army for Installations, Logistics and Environment; and the Army General Counsel agreed to a two-phased approach.

The relatively small foreign military sales case for phase I included planning, design, and emergency repairs at military installations in

Kuwait. Phase II, which could cost more than $600 million, covered any more permanent follow-on construction that the Kuwaiti government wanted. It required congressional notification, which included a 20-day advance notice for review by congressional staff and an additional 30-day period for Congress to act.[11]

The Defense Reconstruction Assistance Office and the Kuwait Emergency Recovery Office proposed two foreign military sales cases—one for $131.8 million in emergency work, substantially below the $200 million ceiling that would trigger congressional review, and another for $600 million for long-term repairs. The draft $131.8 million foreign military sales case went through the Transatlantic Division to Corps headquarters where General Ray signed it. Back in Kuwait, however, Kelly began to sense that Ministry of Defence officials were reluctant to approve the case. He requested that General Ray hold it at Corps headquarters until the problems could be resolved.

Kelly did not want the foreign military sales case to go forward until he was sure that all the parties involved had agreed to it. Kuwaiti officials were still debating how to handle the defense work. They were reluctant to give the Corps all the work. Political considerations dictated that the Kuwaitis divide the work among Britain, France, Turkey, and the other coalition countries that had assisted Kuwait. Yet they also realized that their first line of defense was the air bases, and they wanted these bases built to U.S. standards.[12]

After meeting with Al-Dawoud on 19 May, Kelly concluded that the Kuwaiti government was ready to proceed with a foreign military sales case for phase I. The next day, he submitted the draft $131.8 million foreign military sales case to Livingstone for approval.[13]

On 21 May, General Kelly and his staff presented the two-phased plan to the Assistant Under Secretary of Defense for Military Engineering Projects, Sheikh Sabah Al Nasser. Kelly emphasized the need to ensure that the air base facilities could accommodate all U.S. weapons systems. This would make future combined operations much easier.[14]

On 26 May, Kelly met again with Al-Dawoud and Sheikh Sabah Al Nasser to determine when their government planned to fund phase I of the military reconstruction program and to discuss any remaining questions about the proposed foreign military sales case. Al-Dawoud observed that the Minister of Defence, Sheikh Ali Al-Sabah Al-Salem Al-Sabah, was currently reviewing the agreement and anticipated no major problems. He also noted that the Minister of Defence had made Sheikh Sabah Al Nasser the principal point of contact for all issues and decisions concerning the foreign military sales cases. He would coordinate all comments from the military services and provide the necessary information.

The participants established priorities for the work. Al-Dawoud stressed that work on the two air bases and the navy base had to begin immediately. Work at the other installations could begin later. He reiterated that Ali Al-Salem Air Base had to be able to receive Kuwaiti military aircraft by fall 1991 and Ahmed Al-Jaber Air Base had to be ready for the first F–18 aircraft by late January 1992. Ras Al-Qalayah Navy Base had to be ready by fall 1991 to move Kuwaiti naval vessels to their permanent base.[15]

The next day Robert Kiesling, a Navy captain on Kelly's staff, met with the Director of Technical Affairs for Kuwait's Air Force, Brig. Gen. Gahzi Abdul Razzak, and his staff to discuss the reconstruction of Air Force facilities. Air Force Col. Saber Al-Suwaidan provided a new list of priorities for Ali Al-Salem Air Base. He wanted the Corps to rebuild at least one large maintenance hangar at Ahmed Al-Jaber Air Base, which would have to be ready by January 1992, though he realized that not all the facilities would be completed by then. General Razzak asked the Corps to make refueling facilities a priority.[16]

On 10 June, Kiesling and Colonel Al-Suwaidan met again to discuss the status of reconstruction projects for the two air bases and Kuwait International Airport. Suwaidan indicated that Sheikh Sabah Al Nasser had given the Air Force broad authority to work with the U.S. Army Corps of Engineers on plans to reconstruct its facilities. Sheikh Sabah Al Nasser also wanted the director of Military Engineering Projects (the engineering agency in the Kuwaiti military, much like the U.S. Army Corps of Engineers) to be more involved in the reconstruction process. Suwaidan acknowledged the need to have all of Kuwait's Air Force facilities capable of handling any U.S. military aircraft including the large C–5s.[17]

A week later, Kelly and his staff again met with Al-Dawoud, Sheikh Sabah Al Nasser, Chief Engineer Fahad Al-Jaleel, and Ahmed Al-Fahad. Initially, the Kuwaiti representatives could not agree among themselves on the information presented. During the meeting, they decided to reduce the $800 million scope of the proposed foreign military sales work so they could give other coalition countries a large share of the reconstruction effort. Yet they also realized that the air base work required sophisticated technology and that their airfields had to be built to U.S. standards to accommodate U.S. aircraft.

Ministry officials requested that the U.S. Army limit its role to the emergency repairs, planning and design, and permanent construction at the two air bases. They intended to administer the reconstruction of the other military installations themselves. They had already set aside the work at Ras Al-Qalayah Navy Base for British firms. The Kuwait Emergency Recovery Office rewrote the proposed foreign military sales case to reflect Kuwait's decision to limit the United States' role to the two air bases.

The foreign military sales case now proposed would cost an estimated $50 million to $100 million. A separate foreign military sales case for permanent reconstruction at the air bases, which would follow after the scope was determined, would potentially cost from $250 million to $350 million. U.S. officials were dissatisfied with this plan. Kelly, who continued to push for a more extensive agreement, argued that U.S. personnel were already in Kuwait incurring costs, and it would be more effective to continue to use their services.[18] "We were frankly disappointed that we did not get all the Ministry of Defence reconstruction effort totally (about $800 million)," Kelly conceded.[19] Despite Kelly's protests, the Kuwaitis remained firm in their decision.

During a series of meetings in late June, representatives from the Defense Reconstruction Assistance Office, Ministry of Defence, and Kuwait's Air Force finalized the scope of requirements for rebuilding the two air bases. They reduced the scope of work for the phase I emergency restoration and the planning and design for the long-term reconstruction from $131.8 million to $105 million.[20] When Kelly's and Locurcio's staffs presented their plan for reconstructing the two air bases at a meeting on 4 July, Sheikh Sabah Al Nasser and other ministry representatives agreed on the general scope and terms of the proposed $105 million foreign military sales case, but they disagreed on the issue of contractor eligibility. The Kuwaitis insisted that contractors from all the coalition countries be allowed to compete for the work and that all contractors who were selected be required to form a joint venture with a Kuwaiti firm. However, since both bases had to accommodate U.S. military aircraft, Kelly insisted that the architect–engineer contractor be limited to U.S. firms or U.S.–Kuwaiti joint venture firms and that construction contractors be limited to U.S. firms, U.S.–Kuwaiti joint ventures, or U.S.–Kuwaiti–coalition partner joint ventures. Moreover, the U.S. firm would be the senior partner in each joint venture.

With Livingstone's approval, Kelly included the following wording in the proposed phase I foreign military sales agreement: "Construction contract awards pursuant to this agreement will be limited to U.S. Firms, U.S.–Kuwaiti Joint Ventures, or U.S.–Kuwaiti–Coalition Partner Joint Ventures. In the case of the Joint Ventures, the U.S. firm will be the senior managing partner." He also added the statement "A–E [architect–engineer] contract awards pursuant to this agreement will be limited to U.S. Firms or U.S.–Kuwaiti Joint Ventures with the U.S. firm being the senior managing partner."[21]

Khaled Al-Oraifan from Military Engineering Projects and David Chambers met to finalize the details of the revised foreign military sales case. They concluded their meetings on 13 July, with an agreement on a

draft set of notes that Kelly and Sheikh Sabah Al Nasser would discuss on 15 July. At the same time, discussions continued on the scope of work. Military Engineering Projects representatives formally fixed the total amount of the phase I foreign military sales case at $105 million.[22]

At the meeting with Kelly on 15 July, Sheikh Sabah Al Nasser agreed to the final $105 million scope of work. Kelly added a statement to the proposed foreign military sales case indicating that this figure represented the Corps' best estimate of the cost of the emergency repairs to the two air bases that the Ministry of Defence had requested. The estimate also included the cost of planning future work at these air bases.

Sheikh Sabah Al Nasser insisted that Kuwaiti firms be included in all projects. He and Kelly agreed to limit all the phase I construction contracts to U.S.–Kuwaiti joint venture firms or U.S.–Kuwaiti–coalition partner joint venture firms, with the U.S. firm in the joint venture as the senior managing partner.

After the meeting, the Defense Reconstruction Assistance Office transmitted the proposed revisions to the foreign military sales case to the Transatlantic Division. General Ray accepted the offer on 18 July 1991 on behalf of the Corps, and the Defense Security Assistance Agency countersigned the offer on 26 July. It was delivered to the Kuwaitis two days later.[23] Kelly reported that the agreement on the phase I foreign military sales case marked "a significant milestone in establishing a long-term Department of Defense construction program in Kuwait."[24]

Soon after, representatives from the Defense Reconstruction Assistance Office and Kuwait Emergency Recovery Office met with Ahmed Al-Fahad to discuss the process for selecting an architect-engineer firm under the new foreign military sales case. The Corps was under pressure to divide the extensive architect-engineer work at the air bases between two or three U.S. firms. Kuwaiti officials, however, insisted that the Corps use the same architect-engineer firm for all the planning and design work at both air bases. They believed that using a single contractor would be more cost effective.[25]

For the phase I construction contracts, the Corps proposed using a different contractor at each base. Each contract would amount to $30 million to $50 million. The Corps would thus open up work for a new contractor and complete the work faster.

Due to the urgency of the request, Kelly planned to limit competition to firms that had responded to the February 1991 *Commerce Business Daily* announcement and had been prequalified by the Transatlantic Division. Though Kelly emphasized urgency, in order to create opportunities for new U.S. contractors Corps contractors already working in Kuwait would not be allowed to compete for work at Al-Salem Air Base.

For the phase I planning and engineering work, Kelly proposed using a single architect-engineer firm, a U.S.–Kuwaiti joint venture, selected from the February 1991 prequalified list. Additionally, the architect-engineer firm would develop the scope and cost estimates that the Corps needed to prepare a foreign military sales case for the phase II permanent reconstruction. Then the firm would develop both a concept design with a detailed scope of work for Ministry of Defence approval and the final designs for each air base. Kelly proposed using the normal architect-engineer selection process with a letter contract to start the planning effort and a firm fixed-price contract for the subsequent design work.[26] A firm fixed-price contract assured that the contractor was reimbursed for legitimate expenses incurred during construction and received a guaranteed fee above those costs.

Assistant Secretary Livingstone, however, was reluctant to limit competition to the prequalified firms. Using the February 1991 prequalification list instead of soliciting new contractors was required, Kelly argued, because of the urgency of the situation. Until the two air bases became operational, he insisted, Kuwait's ability to defend itself would be severely limited. He added that enough construction contractors had responded to the original solicitation to ensure adequate competition. Over 1,300 architect-engineer firms and over 1,000 construction contractors had responded to the February 1991 *Commerce Business Daily* announcement. The Corps planned to use the resulting prequalification list to select one architect-engineer firm for the initial and the final design work at both air bases. This was the normal process for selecting an architect-engineer firm. The Corps would negotiate a firm fixed-price contract for the remaining work. Officials later observed that using the February prequalification list might have saved as much as two months in the contracting process.[27]

Livingstone approved Kelly's contracting strategy but remained concerned about providing adequate opportunities for small and small disadvantaged businesses. She adopted a list of Kelly's recommendations, directing him to take several steps in executing the contracting strategy for the proposed phase I foreign military sales case and any future cases; channel at least 5 percent of the contract value of the foreign military sales contract awards and modifications to small and small disadvantaged businesses; add provisions to the contracts with prime contractors that emphasized the critical nature of subcontracting with small and small disadvantaged businesses; develop and employ a set of source selection evaluation factors that reflected a commitment to subcontracting with small and small disadvantaged businesses; and encourage prime contractors to subcontract with small and small disadvantaged business. She also wanted Kelly to set aside certain work for such businesses, if possible.

The small business issue remained complicated. Congress and the Pentagon were pressuring the Corps to use small businesses. Yet the Corps had a responsibility to protect the interests of its Kuwaiti customer and ensure that high-quality air bases were constructed quickly and economically. As confirmed by the Corps' civil reconstruction effort, doing business overseas was difficult, especially for small firms inexperienced in establishing sources of supplies, labor, and equipment. Large businesses, which had greater assets, generally could mobilize and complete projects faster and often more economically than small businesses. Corps officials opposed any small business requirements that would slow the completion of the projects. They did, however, agree to require contractors to have small business plans outlining how they intended to incorporate small businesses.[28]

Foreign Military Sales Case for Phase I Air Base Work

The Kuwaiti government delayed approving the foreign military sales case for the phase I air base work until early August because of internal funding problems. On 6 August 1991, Al-Dawoud signed the $105 million foreign military sales case in which the U.S. Department of Defense agreed to make emergency repairs at Ali Al-Salem Air Base and Ahmed Al-Jaber Air Base and to prepare initial design and a master plan for the phase II permanent reconstruction at those facilities.[29] The Security Assistance Accounting Center processed the initial payment of $15.8 million from the Kuwaitis. The Corps received authority to obligate the money on 14 August.[30]

The differences between Kuwaiti and American goals and business procedures soon became apparent. Before signing the foreign military sales case on 6 August, Kuwaiti officials had a choice—either use U.S. selection procedures or select a contractor themselves and have the Corps negotiate with that firm. In signing the foreign military sales case, they agreed to use U.S. contracting procedures for the architect–engineer contract. Kuwaiti officials would have some input in the selection process, but the United States would make the final determination. Despite this provision, some Kuwaiti officials later tried to modify the selection process to which they had agreed. The Minister of Defence indicated that he wanted to review and approve all contractor selections. Ministry officials wanted the Corps to go through all the steps in its selection process but allow them to make the final determination. Corps officials explained that if they agreed to this, all the effort they had put into the selection process would be wasted.



An Iraqi T–55 tank inside the remains of an aircraft hangar at Al-Jaber Air Base; below, *Building 9 at Al-Jaber Air Base.*



Under the foreign military sales case, Kuwaiti officials could participate in each step of the selection process, but they did not control the selection. For example, they could participate in the Corps' technical evaluation board, but they could not determine which firm was the most qualified. If the Kuwaitis wanted the contract to go to a specific contractor, they had to provide for this in the foreign military sales case before the selection process began. If the Corps allowed the Kuwaitis to select the contractor at this point, especially a poor contractor, it would be heavily criticized. The Corps had a reputation for implementing a fair and honest selection process, Captain Kiesling observed, and its procedures were "above reproach." Yet Kuwaiti officials were distressed to find that even though they were paying for the work, they would not have the authority to make the final selection.[31]

Defense Reconstruction Assistance Office, Kuwait Emergency Recovery Office, and ministry representatives spent many hours trying to resolve the thorny issue of contractor selection. At a meeting on 11 August, Ahmed Al-Fahad continued to insist that the Minister of Defence reserved the right to approve all contract awards and would not be bound to the prequalified firm that the United States had selected.

Kelly reminded Al-Fahad that the minister's representatives had participated in a selection board meeting on 22 July 1991 at which the board developed the list of construction firms that had been prequalified to receive requests for proposals. At that time, those representatives had not objected to either the prequalification criteria or the short list of firms that the board selected. Kelly observed that the Corps had issued requests for proposals to the prequalified firms on 9 August 1991, so the decision about the prequalified lists had already been made. The U.S. government had to use contracting procedures that ensured fair and open competition. Any change or reversal of its contracting process at this late date, he added, could embarrass the U.S. government. At this point, the Kuwaitis relented.

The approval of the $105 million foreign military sales case marked the return to normal U.S. contracting procedures for the Kuwaiti effort. The urgency had diminished. The Corps could now describe the scope of work more accurately than it had done with the civil infrastructure work. The Kuwaitis were now able to take into account other factors such as their desire to distribute the work among various coalition countries. Also, for the first time, their costs would exceed their revenue, so they had to borrow money for their projects and carefully prioritize those projects. At the same time, the new agreement gave the United States the opportunity to involve other U.S. firms.[32]

The scope of the agreement included damage survey work along with a rough estimate of the cost to repair or replace facilities. It also pro-

vided for emergency repairs designed to restore facilities to provide minimal operational and living standards. Finally, the agreement included master planning to determine the scope and price of the phase II long-term reconstruction work.

The Corps narrowed the initial list of prospective architect-engineer contractors to 16. All these firms had excellent reputations, had built airfields, and had worked in the Middle East. A selection board at the Transatlantic Division narrowed the list of 16 firms to 6 and ranked them. Stanley Consultants, Inc., of Muscatine, Iowa, received the highest rating. Though a small firm, Stanley had successfully worked on water supply and waste water treatment facilities in Egypt, Yemen, and Saudi Arabia and had performed design work for the Transatlantic Division on air bases in Oman.

The Corps awarded an architect-engineer letter contract to Stanley and its joint venture partner, Associated Kuwait Office, on 17 August. Under this $8.75 million arrangement, the firm would perform site survey, master planning, and design services. On 21 August, the Corps directed Stanley to prepare a rough scope of work for the phase II long-term reconstruction. A planning team with contractor and Transatlantic Division personnel arrived in Kuwait on 28 August. It surveyed 150 to 200 buildings at each air base.

Stanley conducted a preliminary review to develop a master plan, which listed all the buildings in different facilities that the Kuwait Air Force needed or would need in the future. The contractor had sent out a questionnaire to Kuwait Air Force officials to determine the service's needs.[33] Stanley was scheduled to present the phase II master plan and list of facilities to the Defense Recovery Assistance Office, the Kuwait Emergency Recovery Office, and the Ministry of Defence in early November. The approved plan would be the basis for determining the schedule and scope of phase II work.

Meanwhile, the emergency reconstruction projects for the ministry continued on schedule. Work on the Ministry of Defence headquarters met the 15 August beneficial occupancy date (when the work was 99 percent complete). The debris had been cleared from Ali Al-Salem Air Base. The temporary air traffic control tower at that base was 99 percent completed. Emergency repairs at Ras Al-Qalayah Navy Base were 98 percent complete, although work continued on the chilled water piping system.[34]

Foreign Military Sales Case for Phase II Air Base Work

In late August, Pentagon officials formally notified Congress of their plans to execute a $315 million foreign military sales case for the

phase II long-term reconstruction of Kuwait. Congress raised no objections.[35] However, by October the prospect of having the Corps manage the long-term reconstruction of the two air bases was becoming less likely. Kelly glumly reported that the entire foreign military sales construction program was "at risk." There were two thorny issues. First, the Minister of Defence insisted on making the final selection of the contractor for the long-term reconstruction despite the written agreement that contract awards would be in accordance with U.S. laws and procedures. Second, his ministry had recently indicated that it would scale back the role of the Corps and its contractors in the phase II air base reconstruction to less than $30 million. Neither Kelly nor Corps leaders believed involvement at this reduced level would be worthwhile.

Ambassador Gnehm and General Kelly held firm on the issues of source selection and maintaining the original level of Corps involvement. Kelly was prepared to limit U.S. involvement to the $105 million phase I work and forego the phase II work if necessary. Yet he reported to the Secretary of the Army that he did not believe the situation was "irretrievable." Gnehm continued to maintain that the Corps had a valid role in helping Kuwait rebuild its defenses and supported Kelly wholeheartedly.[36] The situation improved after a meeting on 28 October in which Gnehm, Kelly, and the Minister of Defence discussed the impasse over the procedures for selecting construction contractors. The Kuwaitis reluctantly agreed that U.S. regulations would govern the contractor selection process for the phase II air base work.

Both sides agreed on a procedure that would allow the Ministry of Defence to provide a list of acceptable Kuwaiti joint venture firms for each air base. The pre-approved Kuwaiti firms could form a consortium. The U.S. contractors who bid on the work would have to enter into a joint venture with a consortium of Kuwaiti firms. The renewed spirit of cooperation apparently spread quickly through the ministry. Kelly reported that after his meeting with the minister, the working level meetings between the Corps and the ministry's engineering staff had suddenly become "both productive and congenial."[37]

Kelly informed Livingstone that the Ministry of Defence planned to provide only one Kuwaiti firm or consortium of smaller firms to form joint ventures with competing U.S. firms for each air base. Such an approach, he conceded, "makes sense from their perspective." Kuwaiti officials wanted to spread the work among the Kuwaiti firms that had survived the Iraqi occupation to help restore the country's weakened construction industry. They also wanted to ensure the selection of Kuwaiti firms with good reputations.

This approach, however, had drawbacks for the United States. Finding qualified Kuwaiti firms to perform the work could be difficult. As a result of the Iraqi occupation, many Kuwaiti construction firms no longer existed or existed only on paper because their equipment had been damaged, destroyed, or moved out of the country. With only a single Kuwaiti source for a joint venture, few U.S. firms would be willing to compete for the work, and the decreased competition would drive up the cost of the work. Also, if the joint venture partnership did not work well together, some U.S. firms might later file claims against the U.S. government.[38]

Moreover, as the single source, the Kuwaiti firm or consortium would have to negotiate with each American firm seeking the contract. Livingstone worried that this situation could lead to graft and kickbacks. Instead, she favored a compromise that would set aside a certain amount of the air base work to be contracted by the Kuwaiti government.[39]

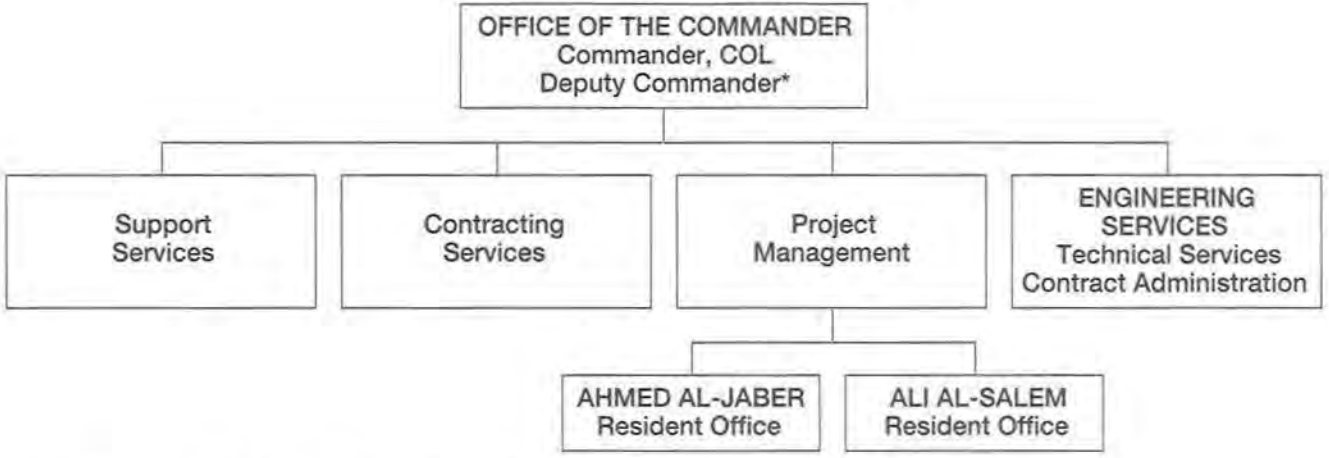
The United States agreed to split the phase I air base work so the Ministry of Defence could award its own contract for 30 percent of the value of the construction effort at each air base. The Department of Defense would award the contract or contracts for the remaining 70 percent. Dividing the work would result in the U.S. contractor doing most of the temporary new construction, with the Kuwaiti contractor doing the repair work. The defense ministry, however, requested that the United States manage all air base contracts, including the Kuwaiti contracts.

In addition, the Ministry of Defence requested that a different American contractor be awarded work at each air base. This would preclude a single contractor doing the work at both air bases. U.S. officials agreed to continue to follow the approved strategy of prohibiting contractors already working in Kuwait, such as Brown and Root and Blount International, from working at both air bases to allow other U.S. companies to compete.

For phase II work, ministry officials also requested that the Department of Defense award a U.S. contract to perform, as a minimum, all F–18 related construction, to include new facilities, aircraft shelters, and utility restoration. The ministry would hire Kuwaiti firms to do the remaining work. Details of the phase II arrangements were tied to the approval of the master plan, which ministry officials were reviewing, and the approval of the phase II foreign military sales case. Kelly optimistically reported that he now had a process that would satisfy both parties.[40]

Meanwhile, in December, Corps leaders decided to establish the Kuwait Program Office to execute the air base reconstruction. (*Chart 8*) Col. David E. Peixotto, who had replaced Locurcio in November, would command this small office. Peixotto, with masters degrees in civil engi-

Chart 8–Kuwait Program Office



*Deputy Commander dual hatted as Chief, Project Management

neering and business administration from Stanford and Long Island University, had served as a military assistant to the Secretary of the Army for Civil Works before taking command of the Louisville District. Because of the uncertainty about the phase II work, Peixotto decided to continue bringing in Corps members on temporary duty rather than as a permanent change of station. The only exceptions would be a few senior personnel such as the chiefs of contracting, programs, and logistics and the resident engineers. The Kuwait Program Office, with roughly 40 people, included a contract administration organization, a program/project management organization with a resident engineer at each air base, an attorney, a design manager, and a small support organization with logistics and information management. Peixotto reported directly to the Transatlantic Division commander. The division provided financial and technical support. Peixotto attended Ambassador Gnehm's country team meetings, advised him, and kept him informed, but the Ambassador was not in Peixotto's chain of command.[41]

At a 19 December 1991 meeting with Colonel Peixotto, Ahmed Al-Fahad informed Corps representatives that the ministry wanted to continue giving 70 percent of the work to U.S. firms and 30 percent to Kuwaiti firms for phase II under the proposed $315 million foreign military sales case. This meeting effectively ended discussions about a joint venture approach for phase II.[42]

With Livingstone's approval then, the U.S. government and the Ministry of Defence agreed to split the contract value of the work at each air base between U.S. and Kuwaiti firms. The Kuwaitis would primarily perform repair work, while the United States tackled new construction. Corps officials maintained that this strategy was a sound alternative to the joint venture approach. It satisfied the requirement that 30 percent of the contract value be spent for Kuwaiti materials and services and allowed the Kuwaiti government to award contracts using its own procedures. This approach also relieved American bidders from the requirement to negotiate joint venture arrangements and simplified the process for evaluating proposals and awarding the U.S. contracts.

As the details of phase II contracting were refined, an amendment to the phase I foreign military sales case, which would reduce its value from $105 million to $80.74 million, circulated at the Pentagon.[43]

Construction Contracts for Phase I

In January 1992, the Corps awarded two construction contracts for phase I, representing most of the new facilities. Combined, those two

contracts constituted roughly 70 percent of the value of the phase I work. On behalf of the Ministry of Defence, on 16 January, the Transatlantic Division awarded a $24.1 million contract to a joint venture of Morrison–Knudson, an Idaho-based firm with worldwide operations, and Mohammed A. Kharafi, a large Kuwaiti firm, to repair Ahmed Al-Jaber Air Base and build new temporary facilities to support F–18 aircraft. The contract amount later increased to $32 million, primarily because of additional work requested by the ministry. Facilities included three F–18 maintenance hangars with 12 maintenance shops, three open aircraft shelters, two closed aircraft shelters, and a concrete apron measuring 500 by 356 meters (the length of five football fields strung end to end).

Morrison–Knudson and Kharafi also restored the utilities that had been knocked out by coalition bombing. The joint venture firm rehabilitated the sewage and water pumping stations, an underground communications center, an avionics building, and a guard house.

At peak operations, the contractors had on site two batch plants that produced roughly 180 cubic meters of concrete every hour—a load of fresh concrete every 11 minutes. On the apron were two open aircraft shelters capable of housing 40 F–18s and two closed aircraft shelters capable of accommodating 20 F–18s each.

The Corps awarded an $18.5 million contract for emergency construction at Ali Al-Salem Air Base to the joint venture firm George A. Fuller and American International Contractor Incorporated of Arlington, Virginia (Fuller/AICI). The value of this contract later rose to $25 million. The firm built 12 new buildings to include warehouses for aircraft and repair parts, helicopter maintenance hangars, administrative offices, substations, and a water pump plant.

Fuller/AICI restored commercial power at Ali Al-Salem Air Base on 13 January, but not without some anxious moments. When officials turned the switch to bring the power on, they saw rising plumes of smoke in the distance. Much to their relief, the smoke came from the other side of the base where Bangladeshi soldiers had exploded ordnance at the same moment.

In addition to emergency repairs to restore facilities to a minimal level of operations, the foreign military sales agreement provided for a damage survey of facilities at the air bases. It also provided for planning and engineering work to determine the requirements for long-term construction and the development of designs for permanent facilities needed to support current and future operations. Corps personnel helped Kuwait's Air Force identify its requirements and stay within its budget. Jim Ruyak, resident engineer for Ali Al-Salem Air Base, later conceded that coordinating with both the Corps' customer (Military Engineering



Repair work at Al-Jaber Air Base

Projects) and the user (Kuwait's Air Force) was not always easy. The Corps had faced similar frustrations coordinating with the U.S. and the Israeli Air Forces when it constructed the air bases in the Negev.

Two months after the Corps awarded the two major phase I construction contracts, the Kuwaiti government awarded its own construction contracts. On 1 April 1992, the Kuwaiti government awarded a $10.5 million contract to Al-Fulaij United Group to rehabilitate 39 buildings at Ali Al-Salem Air Base and construct a new petroleum, oils and lubricants (POL) warehouse, helicopter maintenance hangar, and microwave tower.

Kuwaiti officials also awarded a $12.1 million contract to Ahmadiah Trading and Contracting Company to build new facilities at Ahmed Al-Jaber Air Base such as warehouses, administration buildings, a Hawk (British aircraft) maintenance hangar, and other maintenance buildings. Ahmadiah was also rehabilitating 32 buildings and roads, as well as street lighting in the main base area.

The Corps administered both contracts for the Kuwaiti government through an international contracting format known as Federation Internationale Des Ingenieurs–Conseils (FIDIC), advanced by the International Federation of Consulting Engineers. An FIDIC contract was between the employer and the contractor. A third party, in this case

the Army Corps of Engineers, was the "engineer" who acted as a neutral party to resolve any disputes between the employer, in this case the Kuwaitis, and the contractor. The engineer was similar to a contracting officer, except a contracting officer was party to the contract and responsible for paying the contractor.

Other contracts awarded under the air base program included a $5.3 million contract to an American and Saudi Arabian joint venture firm, Groves and Tamimi, for airfield lighting at both air bases. Finally, Engineering Services Company installed a safety barrier system at both bases under a $1.7 million contract.[44]

Problems With Phase I Contracts

The phase I work soon encountered serious problems. Corps and Kuwaiti representatives had not had enough time to develop an effective management plan and clearly define their respective roles and responsibilities. Therefore, representatives from Military Engineering Projects and the Kuwait Air Force were assigned to each air base to work on a daily basis with Corps resident engineers and their staffs. Corps project managers were assigned to the Kuwait Program Office. The parties involved met each week for coordination. Colonel Peixotto met regularly with Fahad Al-Jaleel. In addition to coordination meetings among senior leaders, Corps representatives met regularly with their counterparts in Military Engineering Projects and the Kuwait Air Force. This intensive coordination helped the two governments get the projects through some difficult periods. Initially, Corps personnel were not sure who spoke for the Kuwaiti government on specific project requirements—the Kuwait Air Force or Military Engineering Projects. Military Engineering Projects officials indicated that they were the only ones with the authority to give directions to the Corps and that they had to approve all Kuwait Air Force requests.

Delays were caused by unforseen conditions at the work sites such as the lack of electricity, the overall poor condition of the utility systems, and unexploded ordnance. The large amounts of ordnance on the ground had made it difficult for the Corps and its contractors to assess damage accurately. The poor site conditions increased the contractor's cost, forcing Corps officials to modify the contract.

To further complicate matters, the Kuwait Air Force requested many changes that drastically modified the original scope of work after the contractors had already begun their work. The initial concept for phase I was to do only the emergency repairs necessary to make the air bases

minimally operational. However, the Kuwait Air Force determined that it needed permanent repairs and greater operational capability. The Corps and the Kuwaitis had reached agreement on the facilities and budget in July 1991, but the Corps did not award the contracts until January 1992, nearly a year after the liberation. During that time, the preferences of Kuwait Air Force officials shifted from temporary emergency repairs to a more permanent solution that would better meet their operational needs. They wanted the contractors to perform more work than had originally been scheduled. The Ministry of Defence's definition of emergency facilities apparently differed from the United States' concept. Yet the Kuwaiti government had neither approved the changes nor provided enough additional funds to cover the changes.[45] Spiraling costs due to changes requested by the host nation was a familiar theme. During the Saudi construction program in the 1980s, Saudi officials requested numerous change orders, particularly at the Ministry of Defense and Aviation Complex and at the Khamis Mushayt Cantonment, that increased costs significantly.[46]

As with its earlier Saudi and Israeli air base work, the Corps now faced the challenge of an expanding scope of work. The changes in scope and siting that the Kuwait Air Force requested forced the Corps to direct its contractors to stop work temporarily. In June 1992, the Corps suspended contractor work on 13 facilities at Ahmed Al-Jaber Air Base and 5 facilities at Ali Al-Salem Air Base. The Corps wanted to keep the contractors from doing unnecessary work while it renegotiated the actual requirements, schedule, and costs with the Ministry of Defence and the Kuwait Air Force. After intense negotiations, which culminated in a meeting between Ambassador Gnehm and the Minister of Defence, the parties agreed to a revised scope of work. In August 1992, the Kuwaiti government provided an additional $14 million to cover the expanded scope of work, increasing the total amount of the phase I foreign military sales case to $95 million, only $10 million less than the original estimate.[47]

The contractor at Ahmed Al-Jaber Air Base was slow to mobilize and slow to submit the safety plan and design/build plan required in the contract. As a result, the work schedule slipped 45 to 60 days. The contractor claimed that the site had not been cleared of unexploded ordnance. In addition, the Ministry of Electricity refused to repair the 11-kilovolt high voltage system. By late June, the contractor had completed only 26 percent of the work and was 60 days behind schedule.

The contractor at Ali Al-Salem Air Base had also fallen 60 days behind schedule with only 24 percent of the work completed. He was slow to mobilize because of problems securing visas and base access passes for his

workers. The contractor attributed the delay to the unforeseen rocky conditions in the worker camp area and the stop work orders.

With all the delays and expanded scope, emergency construction at the air bases took 12 months instead of the anticipated 6. The Corps notified Kuwait Air Force officials of the revised schedule. The Air Force could start occupying facilities in late August 1991, they reported, but the last facility would not be completed and turned over until late November 1991. Kuwait Air Force officials, though disappointed, accepted the revised schedule.[48]

In October 1991, Military Engineering Projects and the Department of Defense agreed that the Corps would provide phase II planning and engineering, construction, and construction management services for the two air bases. In November, the Corps presented its master plan for the long-term reconstruction of the air bases to the Kuwait Air Force. The Corps presented a $315 million foreign military sales case for phase II long-term reconstruction to the Ministry of Defence and Military Engineering Projects.[49]

Political pressures had forced the Kuwaitis to give the Corps the phase I work. Military Engineering Projects officials preferred to handle the work themselves and did not believe they needed the Corps' assistance. The defense work differed from the civil reconstruction where the need for the Corps' assistance was obvious. The reluctance of the Kuwaitis to give the United States the defense work created problems. The agreement that Kelly had signed with the Kuwaitis provided for an acceptable level of authority and responsibility, but the Kuwaitis later rejected that agreement. This was a continuing challenge for Peixotto. The Kuwaitis wanted to retain the decisionmaking authority for all matters, but they also wanted the Corps to assume all the responsibility for accomplishing the work on time and within budget. Colonel Peixotto observed, however, that Corps officials did not allow the work to stop while awaiting consensus decisions. Occasionally, they made the decisions necessary to keep the work on schedule. The Corps believed it had the authority as contracting officer and the engineer (for the contracts awarded by the Kuwaitis) to make the necessary decisions. Yet the issue remained a source of friction between the Kuwaitis and the Corps. For phase II, the Kuwaitis offered the Corps the mission without giving it adequate authority to execute that mission.[50]

At a meeting in Kuwait in August, Secretary Stone urged the Minister of Defence to continue with phase II as planned. Upon his return, Stone wrote to the Sheikh, "It is most distressing to me that the Government of Kuwait is considering ending the Corps' involvement in the air base reconstruction. I write this letter to you to stress our wish to remain



Colonel Peixotto,* far left, *and Ambassador Gnehm,* center, *tour Al-Jaber Air Base.

involved in military reconstruction and our confidence that we can agree on terms of mutual advantage."[51] In September, Gnehm and Peixotto met with the Minister of Defence to discuss possible Corps involvement in phase II. The Ambassador reaffirmed Stone's position that the limited role offered by the Ministry of Defence was unacceptable and reiterated the importance of the phase II work to both governments.[52]

Despite repeated urgings from Ambassador Gnehm and Secretary Stone throughout the summer of 1992, Kuwaiti officials ultimately decided to handle the contracting for the extensive permanent reconstruction of the air bases themselves. They never signed the foreign military sales case for phase II. The struggle in the defense work had strained the relationship between the U.S. military and the Ministry of Defence. The differences between American and Kuwaiti business philosophies, which had become increasingly apparent by the summer of 1992, created more problems with the defense work than with the civil reconstruction. The Corps' business philosophy of "fair and reasonable" pay for work ran counter to the Middle Eastern philosophy of keeping contractor costs as low as possible and not paying the contractor for changes that the user made.

The underlying problem, however, was the Ministry of Defence's reluctance to surrender any authority or control to the United States. With the civil work, Kuwait had specifically asked the Corps for assistance and had given that agency the necessary contractual and financial authority. The situation with the defense work was different. U.S. military officials, including the Corps, were disappointed that they would not have the permanent reconstruction work, especially given their concern about assuring that the facilities could accommodate U.S. military aircraft supporting the Kuwaitis. Six years later, the phase II work had not yet been performed, and the Kuwait Air Force continued to operate the two bases using the temporary facilities that the Corps and its contractors had built.

Support to U.S. Troops

By early May 1991, the U.S. Army was ready to withdraw the 1st Brigade, 3d Armored Division, from southern Iraq. The soldiers needed a secure environment where they could prepare for redeployment. Military leaders gave the Kuwait Emergency Recovery Office just 24 hours to find suitable facilities for the brigade. The Kuwait Emergency Recovery Office and Defense Reconstruction Assistance Office staffs searched for a complex large enough to accommodate a brigade, remote enough to provide security, and that also included a training area.

U.S. forces could not use Kuwaiti military installations because they had been too heavily damaged, so Kelly and Locurcio focused on schools, warehouses, and other facilities. After inspecting several warehouses and discussing the matter with government officials, Corps personnel recommended the Doha Village Complex, approximately 15 miles west of Kuwait City. The strategically located complex, part of which was currently occupied by British soldiers, offered 16 large warehouses with 1.4 million square feet of space and several paved areas for equipment. Lt. Col. Albert F. Kaminsky from Kelly's staff recommended several sites, including Doha, to Kelly.

Before the Iraqi invasion, the Kuwaitis had used the warehouses at Doha for commercial storage. During the occupation, Iraqi soldiers had looted and vandalized the buildings, leaving behind over 500,000 cubic yards of debris. Moreover, the warehouses, which had not been designed for military housing, lacked basic life support systems. Corps members examining the facilities noted the need to expand the electric, water, air conditioning, shower, and sewerage facilities to make troops comfortable in summer.

Meanwhile, during a visit with the Crown Prince in early May, Secretary Cheney agreed that the United States would maintain Task Force Victory—a brigade-size force of roughly 5,000 soldiers—in Kuwait for up to 60 days until the Kuwaiti government could provide its own security. Cheney insisted that these troops be housed in "comfortable" facilities. The Crown Prince concurred and also agreed that his

government would pay all the costs associated with maintaining these forces from mid-June through September 1991.[1]

When the project first arose on 7 May, the 1st Brigade was scheduled to move into Doha within two weeks, followed by the 11th Armored Cavalry Regiment on 15 June. The Ministry of Defence, however, had no contracting mechanism in place that would meet these time constraints. The 22d Support Command, which was responsible for housing the troops, did not have the necessary contracting expertise. At the direction of General Pagonis, Kelly directed the Kuwait Emergency Recovery Office to award and administer contracts to renovate the facilities at Doha.

U.S. officials, however, could not readily identify funding for such contracts. The support command considered using money provided under Section 607A of the Foreign Assistance Act, but such funds could only be used for civil purposes. No preexisting foreign military sales agreement could cover the Doha work. The approval process for a new foreign military sales case could take 30 days or more. The support command sought approval from the Secretary of the Army to use Operations and Maintenance, Army (OMA) funds and have the Kuwaiti government reimburse the U.S. government later through a foreign military sales case. Corps members questioned whether such funds were appropriate for this type of project.

On 17 May, Kelly's staff formally requested $20 million in operations and maintenance funds to repair facilities at Doha along with the 6th Brigade Camp (an installation northwest of Kuwait City) and a nearby firing range. The Army Staff approved this request on 20 May. The approval had been delayed at the Army Staff level for three days while the Army General Counsel grappled with the question of how to reimburse Army operations and maintenance funds from a foreign military sales agreement.[2]

U.S. combat forces housed at Doha needed a training site to maintain their combat readiness. After a review of all available facilities, Kuwait Army's 6th Brigade Camp was selected. The camp had been heavily damaged during the war, and many of its buildings had collapsed. It would require extensive repairs before it could properly house and support an Army mechanized battalion, a large direct support element, and a small

---

[1] Kaminsky interv, pp. 4–5; memo, Kelly for Assistant Under Secretary of Defense for Military Projects and Engineering Support, 3 Jul 1991, Kuwait Reconstruction, Troop Support: DRAO Files.

[2] Msg, Cdr 22d SUPCOM to DAMO–AOC, 031730Z May 1991, DRAO Files; 21 May 1991, Kuwait Reconstruction: Operation Positive Force, Doha Warehouse Information, OACE Reference Files.

training staff. The 22d Support Command asked the Corps to award and administer the necessary contracts.

The buildings at the camp had to be cleaned and repaired so the Army could house and feed the battalion for 6 to 12 months. This task included removing debris; installing windows and doors; supplying electrical power connection from generator sets; and providing latrines, shower stalls, and washstands. The Corps asked several of its contractors (Brown and Root, Kharafi, and Khudair) if they could mobilize the number of workers required for this project without affecting their current workload. Khudair was the only contractor that could respond immediately.[3]

On 23 May, the Corps awarded an urgent letter contract to Khudair, not to exceed $6.9 million, for emergency repairs to billeting areas at the 6th Brigade Camp and for essential life support. The contractor began work the following day. At the same time, the Corps awarded an urgent letter contract to Kharafi, not to exceed $12 million, to install essential life support systems at Doha. The contract work included air conditioning, electrical wiring, and lighting.[4]

While the contractors mobilized, engineer troops helped prepare the facilities. Soldiers from the 864th Engineer Battalion constructed a chapel; PX facility; telephone center; and morale, welfare, and recreation (MWR) facility at Doha, along with seven 64 x 122-foot tents. The unit's electricians brought in power for telephones and outlets to improve the quality of life for the soldiers. Later the engineers constructed a 1,200-foot security fence, seven guard towers, and a tank range.[5]

Iraqi soldiers had stolen many of the lights and electrical fixtures, and severed many electrical lines. The Corps had its contractor, Kharafi, on site within 24 hours. Kharafi began debris removal literally overnight, and restored electricity within two days. Extensive bombing also had caused two breaks in major water lines. With the help of the 23d Engineer Brigade and Shand Construction, water was running within three days.

The next challenge was to install within 30 days badly needed air conditioners in all the warehouses. During his initial visit, General Kelly had

---

[3]Information Paper, "6th Brigade Area Repair," 28 May 1991, Kuwait Reconstruction: U.S. Presence, DRAO Files; DRAO Information Paper, Subj: Army Base Camp, 15 May 1991, Kuwait Reconstruction: Operation Positive Force, OACE Reference Files.

[4]Memo, Kelly for Assistant Under Secretary of Defense for Military Projects and Engineering Support, 3 Jul 1991, Kuwait Reconstruction: Troop Support, DRAO Files; memo, Jesse M. Ross to Mohammed A. Kharafi, 23 May 1991, Kuwait Reconstruction: Operation Positive Force, Doha Warehouse, OACE Reference Files.

[5]Griffin, "Pacemakers in Southwest Asia," p. 15.



Air conditioning units at Doha Blackhorse Base

discovered firsthand just how hot and uncomfortable the warehouses could be without air conditioning. The Kuwait Emergency Recovery Office gave Kharafi a notice to proceed on 29 May and directed the firm to provide air conditioning in all the warehouses at Doha by 30 June before the onset of the most oppressive summer heat—the Iraqis had stolen every air conditioner in Kuwait. This meant installing over 200 12-ton units that would provide each soldier 100 square feet of air conditioned sleeping space. The contract also included installing 3,000 electrical outlets, providing temporary generator power and perimeter security lighting, and replacing field latrines and wooden showers with permanent, prefabricated units.

Kharafi began purchasing units throughout Europe and Southwest Asia while the Army Directorate of Engineering and Housing for Doha and Corps members helped the contractor develop a phased plan for installing them. Warehouses were quickly transformed from spartan storage areas into military barracks as the 11th Armored Cavalry Regiment arrived at Doha. At peak, Kharafi had 500 workers on site 14 to 16 hours a day, 7 days a week. The warehouses were fully air conditioned by 28 June.[6]

---

[6]Mary Allingham, "KERO moves fast to help soldiers in Saudi," *Engineer Update*, v. 15, no. 8, Aug 1991, p. 3; Mary Allingham and Ron Ruffennach, "KERO helps troops find comforts of home," *Transatlantic News*, v. 6, no. 6, Jun–Jul 1991, pp. 6–7; Maj. Gen. Patrick Kelly, telephone conversation with author, 19 Aug 1997.



Soldiers relaxing at the 6th Brigade Army Base at Doha

Funding the renovations at Doha presented special problems. Work at the 6th Brigade Camp and the live firing range was classified as "repair." Converting the Doha warehouse complex to a cantonment area, however, required both new construction and repair work. New construction included providing water, sewer, and electrical systems; latrine and shower facilities; security and lighting; air conditioning for sleeping areas; and morale, welfare, and recreation facilities. Repair work consisted of clearing debris and repairing or replacing doors, windows, electrical equipment, and fire suppression systems.

When Army officials reviewed the 23 May contract, they concluded that most of the specified work at Doha was actually new construction. Therefore, the use of Army operations and maintenance funds was not appropriate. To avoid potential legal problems, they concluded, the Army needed construction authorization and $20.5 million to replace the operations and maintenance funds that had already been obligated.

Officials from the Corps; the Office of the Assistant Secretary of the Army for Installations, Logistics and Environment; the Office of Management and Budget; and the Office of the Secretary of Defense decided to use emergency construction authority provided in Section

2808, Title 10, U.S. Code, and use uncommitted Military Construction, Army (MCA) funds already appropriated from the Defense Cooperation Account—a special account in the U.S. Treasury that had been established by the March 1991 Persian Gulf War Supplemental Appropriation Bill to reimburse the Defense Department with contributions from foreign nations. Later, they would ask the Kuwaiti government to deposit more money in the Defense Cooperation Account since it had agreed to pay for these facilities.[7]

Section 2808 gave the Secretary of Defense the authority to expend unobligated military construction funds immediately after notifying Congress, but only after the President had declared a national emergency. President Bush had issued an executive order on 24 November 1990, declaring a national emergency and invoking emergency construction (2808) authority.

On 12 June, the Secretary of the Army formally requested emergency authorization of a $20.5 million construction project to upgrade warehouse facilities at Doha under the provisions of Section 2808. The Kuwaiti government had agreed to deposit additional funds in the Defense Cooperation Account to reimburse the funds that had been withdrawn to upgrade the facilities for U.S. troops. The Secretary of Defense approved the request. On 20 July, Deputy Secretary of Defense Donald J. Atwood made the mandatory notification to the chairmen of the Senate and House Armed Services and the Senate and House Appropriations committees.[8]

Funding was not the only controversial issue. Pentagon officials questioned why U.S. contractors were not performing the repairs at Doha and questioned the urgency of the work. Kelly responded that the two prime American contractors who had been solicited were already committed to other projects. Considering the magnitude of the work that would be required to make troop living conditions "comfortable," as Secretary Cheney had directed, Kelly continued, time was critical. With the rapidly approaching summer season, living condi-

---

[7]Army Information Paper, 31 May 1991, Kuwait Reconstruction: Facilities for U.S. Forces (Doha), Office of History Files; msg, DAMO–ODO–AOC to Cdr 22d SUPCOM, 010250Z Jun 1991, ibid.

[8]Executive Order 12734, 24 Nov 1990; memo, Secretary M. P. W. Stone for the Secretary of Defense, 12 Jun 1991, Kuwait Reconstruction: Troop Support, DRAO Files; memo, Donald Atwood to Rep. Jamie L. Witten, 20 Jul 1991, Kuwait Reconstruction: Operation Positive Force, OACE Reference Files; DAEN–ZCM, Executive Summary, 9 Aug 1991, OACE Reference Files, Kuwait Reconstruction: Operation Positive Force, Doha Warehouse Information. Corps headquarters sent the $20.5 million to the Transatlantic Division, but the division never used the money because the Kuwaiti government paid the contractors directly.

tions inside the unventilated metal structures would become unbearable. Temperature could rise to over 130 degrees Fahrenheit.

Moreover, repairs to the Doha sanitation system would require more money than currently authorized. The original requirement for supporting 5,000 troops at Doha included an enlarged sanitation system, but because of the cost of air conditioning, there were only enough funds for temporary latrine and shower facilities. As troops continued to use the temporary facilities that drained into the existing storm sewer system, it became clear that the sanitation system, designed for a few hundred people at most, would be inadequate. Kelly warned that the sanitary situation could become a significant health hazard. The only satisfactory solution was to reinstate the original design of an enlarged sanitation system with drainage to a collection lagoon, at a cost of $5 million to be added to the cost of air conditioning and funded from the $20 million 2808 authority.[9]

By early July, work at the 6th Brigade area and the initial improvements at the Doha complex were nearly complete. Kelly asked the Kuwaiti government to take over the two contracts and pay the contractors directly for their work. He also asked the Ministry of Defence to award two additional contracts needed to support U.S. forces: one for showers, latrines, a sewer system, and additional air conditioning at Doha and another for general maintenance of the warehouse complex. Kelly's staff began negotiating with the Kuwaiti government to transfer the existing contracts and have the Kuwaiti government pay directly for the Doha work.[10]

Meanwhile, the Doha renovations faced a tragic setback. At 11 A.M. on 11 July, an explosion ripped through the ammunition storage area at Doha, raining shrapnel and engulfing nearby vehicles in flames. The powerful explosion rattled windows in Kuwait City, miles away. The chain-reaction blasts, which continued for nearly an hour, apparently had begun with an electrical fire on a self-propelled howitzer carrying 155-mm. shells. Fifty U.S. and six British soldiers were injured, and the recently renovated "Blackhorse" base, as the Doha complex was called, was badly damaged. Firefighters responded within minutes, but it took four hours to contain the blaze. Injuries ranged from minor cuts to serious shrapnel wounds. Corps personnel, who rushed to the site to help, directed traffic, helped compile lists of the wounded, and donated blood.

---

[9]Memo, Kelly for ASA(ILE), Subj: Kuwait Doha Project, 26 Jun 1991, Kuwait Reconstruction: U.S. Presence, DRAO Files.

[10]Memo, Kelly for Asst Under Secretary of Defense for Military Projects and Engineering Support, 3 Jul 1991, Troop Support, DRAO Files; memo, Col. Leon R. Yourtee III for Larry Kelly, 24 Jul 1991, Kuwait Reconstruction: Doha, ASA(ILE) Files.

Locurcio's staff began performing damage assessments the next morning. The investigators found 1,400 shattered windows, downed temporary partition walls and duct work, sprung sliding doors, perforated roofs, and minor electrical damage. By noon on 12 July, they had completed their surveys, reporting over $1.7 million in structural damage. By late afternoon, they had developed and presented a comprehensive emergency repair plan to the brigade commander. Later that evening, Locurcio's staff issued a contract to Kharafi to clean up the site and make emergency repairs to 16 buildings damaged by the blast. The contractor began work at 7 A.M. the next morning.[11]

In late July, the Defense Reconstruction Assistance Office asked the Ministry of Defence to have a U.S. firm that specialized in explosive ordnance disposal clear the Doha accident site, and a U.S. Army explosive ordnance disposal specialist prepared the contract specifications. Because of the ministry's slowness in letting ordnance disposal contracts and the need to begin the cleanup as soon as possible, Kelly proposed that the United States award and administer the contract using U.S. funds. The Kuwaiti government could then reimburse the U.S. government from the $15 million it would soon be depositing in the Defense Cooperation Account. The Minister of Defence, however, had not yet approved this proposal. The 22d Support Command had set aside $1.5 million for this effort, but Kelly needed approval from the Pentagon before he could proceed with U.S. funds and a U.S. contractor.[12]

By late July, Kharafi had completed its contract work at Doha, and Khudair had finished its work at the 6th Brigade Camp. Kelly asked the Kuwaiti government to pay the final contract costs agreed to by the contractors—$11.78 million for the Kharafi contract and $4.74 million for the Khudair contract. The Ministry of Defence agreed to pay roughly $20 million for repairs and upgrades to facilities at the 6th Brigade Camp and Doha and deposit $15 million in the Defense Cooperation Account to cover food, water, and other supplies and services for maintaining U.S. troops through 15 September 1991.[13]

---

[11]"Scores Hurt in Explosion at U.S. Base in Kuwait," *Washington Post*, 12 Jul 1991, p. A25; James N. Parker, "KERO assists during and after the explosion," *Engineer Update*, v. 15, no. 8, Aug 1991, p. 1; James N. Parker, "Doha explosion required cooperation, sacrifice," *Transatlantic News*, v. 6, no. 6, Jun–Jul 1991, p. 7; Livingstone, Memorandum For Record, Subj: "Saudi Arabia/Kuwait Trip Report," 23 Jul 1991, Kuwait Reconstruction: Trip Report, Office of History Files.

[12]DRAO, Fact Sheet, 26 Aug 1991, Kuwait Reconstruction, Miscellaneous Projects: DRAO Files.

[13]Memo, Kelly to Sheikh Sabah Al Nasser, Assistant Under Secretary for Military Projects and Engineering Support, 1 Aug 1991, Kuwait Reconstruction: Troop Support, DRAO Files; memo, Kelly to Faisal Ali Al-Dawoud, 7 Aug 1991, ibid.



General Hatch at Blackhorse Base, 2 August 1991

Because the Kuwaiti government paid the contract costs as agreed, Kelly and the Corps never had to use the emergency construction authority provided in Section 2808 or spend any Army funds. In early September, the Kuwaiti government deposited $15 million in the Defense Cooperation Account and paid the contractors over $16 million. The U.S. contracts were terminated, and the Army operations and maintenance funds were deobligated.[14]

Over the ensuing years, the Doha complex, later called simply "Camp Doha," became increasingly valuable as a site where the United States could stage troops and equipment ready to react quickly to any future threat to Kuwait. The complex housed a forward deployed element of ARCENT in Kuwait and was considered a major base of operations for U.S. forces in the Middle East. It was used several times a year for U.S. military training exercises.

At ARCENT's request, in February 1995, the Transatlantic Division awarded a $20 million contract to American International Contractors, Inc., of Dallas, Texas, to renovate the complex, specifi-

[14]Memo, Col. Ian T. Patterson for James DeWire, 5 Sep 1991, Kuwait Reconstruction: Doha, Fisher Files.

cally to convert 17 warehouses to maintenance facilities, vehicle and supply storage, and troop billeting. The contractor also provided 171 duplex trailer units for housing, 5 laundry units, 5 television day rooms, and a modular kitchen unit. The renovations were completed in 1997.[15]

[15] "Renovation work begins at Camp Doha," *Transatlantic News*, v. 10, no. 3, Mar–Apr 1995, p. 1; "Camp Doha construction wrapping up," ibid., v. 12, no. 2, Feb–Mar 1997, p. 6; "Camp Doha renovations nearing completion," ibid., pp. 6–7.

Aftermath

As Kelly labored to put the final foreign military sales case for the air bases back on track, the civil reconstruction work neared completion. By 1 November, the cost of the Kuwaiti program had reached more than $395 million—$349.3 million under the Section 607A civil reconstruction program and $46.3 million under the initial foreign military sales case.[1] The Kuwaiti government made its final cash payment to the U.S. Treasury for the 607A program on 14 November. Dr. Shaheen directed that all contracts in the 607A program be awarded by 31 December.

Kelly had played a key role in opening doors to the Kuwaiti ministers and the Crown Prince and focusing their attention on the civil reconstruction program. With the program now well established, Kelly's direct involvement was no longer needed. Nor was his staff needed any longer to oversee the program.[2]

Yet, because of uncertainties surrounding the military reconstruction program, Kelly remained in Kuwait. Each day Kelly pushed back his plane reservations in hopes of securing a last minute agreement with the Ministry of Defence for the phase II air base work. And each day he was disappointed. Kelly's staff submitted its last formal report on 22 November, and he left Kuwait soon after. As he departed, Kelly praised Colonel Locurcio for "a superb job of commanding the effort through the difficult early postwar days to the present." The last member of the Defense Reconstruction Assistance Office departed in December 1991.[3]

As that office phased out, Col. John Macel from the U.S. Liaison Office, Kuwait, took over Kelly's CENTCOM coordination responsibilities. Simultaneously, the Defense Reconstruction Assistance Office's financial management functions transferred to the Transatlantic Division. The Kuwait Emergency Recovery Office and the newly formed Kuwait Program Office absorbed all of Kelly's administrative and logistics responsibilities.

The close out of the Defense Reconstruction Assistance Office coincided with the termination of the Army's executive authority for the reconstruction of Kuwait. On 1 December 1991, the Secretary of Defense formally terminated the Army's executive agent responsibility and the position of Secretary of Defense representative.

At the same time, oversight responsibility for the reconstruction transferred from the Assistant Secretary of the Army for Installations, Logistics and Environment to the Assistant Secretary of the Army for Civil Works, Nancy P. Dorn. Under Army General Orders #17, the Assistant Secretary for Civil Works was responsible for program direction of the Corps' foreign activities, except those that were exclusively in support of U.S. military forces overseas.[4]

Dorn, a young, well-connected political appointee who had served in both the Reagan and Bush administrations as a special assistant for legislative affairs, had become Assistant Secretary in July 1991. On 1 December, she officially assumed interim responsibilities for the Army's Kuwaiti program. Soon after, Dorn wrote a strong letter to the Chief of Engineers reminding him of her authority. Although the Corps had significant planning, engineering, and construction expertise and valuable capabilities in the international arena, she informed General Hatch, it did not have separate program and funding sources for international work. "Accordingly," she continued, "the Corps must take a cautious, selective approach to its international activities." She insisted that the Corps' international work be consistent with the policies of the Bush administration, be fully coordinated with the State Department and the Defense Department, and have her approval.

The Assistant Secretary emphasized that only she could commit the Corps' resources for international activities. She would sign all agreements with foreign governments, international organizations, and U.S. agencies that involved international work. The Corps, Dorn observed, should focus on managing its ongoing work rather than seeking new international work. Echoing the concerns expressed by Pentagon officials earlier in the operation, she added, "The Corps should maintain a low profile internationally, with no marketing or aggressive promotion."[5]

Dorn expressed cautious support for the concept of "nation assistance" or "nation-building." This concept "if properly developed, coordinated, and executed," she observed, "may provide significant benefits to the Army and DOD [Department of Defense], as well as to the recipient nations." She gave the Corps credit for promoting this concept within the Army and the Defense Department but reiterated that the Director of Strategy, Plans, and Policy was the appropriate proponent within the Army Staff for peacetime engagement and Army assistance.[6]

Nancy Dorn's strong statement reflected her extensive authority and involvement. In the 1970s and early 1980s, the Corps had pursued its large civil construction programs in the Middle East with minimal oversight from the Assistant Secretary of the Army for Civil Works. But Dorn's predecessors, William R. Gianelli (appointed in 1981) and Robert

K. Dawson (appointed in 1985), were both known for their unprecedented "micromanagement" of the Corps. By the time Dawson left in 1987, the Office of the Assistant Secretary of the Army for Civil Works had assumed control over many decisions that had previously rested with the Chief of Engineers.[7]

In the 1980s, the civil works directorate in the Corps' Washington headquarters administered the Work for Others program along with the domestic Support for Others program, in which the Corps performed work for other federal agencies. Through these reimbursable programs, the Corps marketed its expertise to customers who were willing to pay, whether they were federal agencies or other governments funded in part through U.S. foreign aid. As noted, Hatch championed both programs, especially foreign assistance, or "nation-building" as he called it. He saw these programs as the best way for the Corps to survive the uncertain fiscal times ahead.[8]

Reflecting the views of the Reagan and Bush administrations, Dorn questioned Hatch's vision of an expansive Support for Others program and was particularly opposed to aspects of the Work for Others program. She believed the Corps should not be looking for more work to justify a larger staff and a higher budget. Rather, the Corps should limit itself to traditional missions and not try to be an international engineering force. She opposed using the Corps to build civil works projects in foreign countries.[9]

Although in late 1991 responsibility shifted within the Army Secretariat and the Defense Recovery Assistance Office completed its operations, the Corps had not finished repairing the National Assembly building. In November 1991, Corps officials realized that the design work for the building had fallen roughly three months behind schedule due to customer changes and insufficient oversight by the Corps, which was focused on other civil reconstruction efforts.

The Transatlantic Division members met with Hellmuth, Obata, and Kassabaum to review the firm's progress. Hellmuth, Obata, and Kassabaum, though under contract to the Corps, had begun taking directions from Kuwaiti officials. It submitted design proposals that were tens of millions of dollars greater than the funds available. Since the design proposal was unacceptable, the construction contractor could not begin work. The Corps had planned to have the construction contractor begin work in October 1991, but the work did not begin until March 1992. The Corps lost six months of work because the design firm failed to follow the instructions of the contracting officer. Moreover, Peixotto maintained, the quality of the design was poor. The architect–engineer firm had a great concept, he added, but did not always translate that concept into effective construction drawings.[10]

When Peixotto took over in November 1991, he quickly concluded that the project was "out of control." Communication between the Corps, the Kuwaitis, and the contractors needed immediate improvement. There was no clear plan for getting the work done or obtaining a good estimate of the cost. The urgency to complete the project in time for the Kuwaiti national elections had created strains among the parties involved. Also, the 90-day rotations of most Kuwait Program Office staff had made it more difficult for that office to establish and maintain the close coordination it needed with its partners. The four parties involved—the Corps; the Kuwaitis; Kharafi (the construction contractor); and Hellmuth, Obata, and Kassabaum (the designer)—had no common objectives.[11]

Peixotto quickly adopted the practice of partnering, bringing all parties involved together (in this case, senior Kuwaiti, Corps, and contractor representatives) to establish common goals and procedures for resolving problems. He had used this concept successfully as commander of the Albuquerque and Louisville districts.[12]

The Corps hosted its first partnering meeting in Kuwait City on 4 and 5 February 1992 with representatives from the Kuwaiti government; Kharafi; and Hellmuth, Obata, and Kassabaum. Peixotto gleefully reported that the session "made all the difference in the world."[13] At this first meeting, participants identified 13 critical issues and established common goals, objectives, and procedures to improve communications. The partners agreed that if they could not reach a consensus on decisions in a timely manner, the Corps would make the decisions and keep the project on schedule. They decided to place their representatives together in one office at the job site. Each partner signed a one-page partnering agreement committing itself to the common goals. Each agreed to a common objective of having the building ready for occupancy by 29 July, which, at the time, appeared to be nearly impossible.[14]

Peixotto recognized that the Corps and its partners could never meet the July deadline if they continued making changes in the project. He directed that no party could make any changes without his personal approval. He also recognized the need to devote some of his staff to the project for its duration to provide continuity. At his request, selected staff members agreed to extend their 90-day tours until the project was finished.

In early January 1992, the Corps initiated weekly meetings to discuss schedules, design and construction issues, identification and procurement of long lead items, and customer requested changes. Representatives from the Ministry of Public Works; the National Assembly; Kharafi; the Corps; and Hellmuth, Obata, and Kassabaum



Dr. Ibrahim Al-Shaheen, left, *with David Leach, Corps of Engineers Parliament reconstruction manager;* below, *Leach and Fatima Al-Sabah, head of the Architectural Division, Design Department, Ministry of Public Works.*



attended the meetings. As a result, the pace of the project began to advance more quickly.[15]

Despite some improvement, the problems of delays and cost overruns persisted. By February the project was 30 days behind schedule and $6.5 million over budget. The total project budget was $62 million, over half of which ($32 million) was allocated for the design work. But the Corps did not supervise the design contractor closely enough, and the contractor finally submitted a design that would cost $69 million. The Corps directed the architect–engineer contractor to submit a remediation plan within seven days. The design was later modified to $32 million with approximately $5.5 million of options. The budget also had cost overruns for furnishings and electronics. The Transatlantic Division worked with Kuwaiti officials and the design firm to reduce costs and stay within the $62 million budget.[16]

The Transatlantic Division successfully reduced the budget shortfall and mitigated its impact by establishing options to complete the facility within the budget. The division also successfully reduced slippage of the projected schedule.[17]

As noted, the contract, awarded on 4 July 1991, had an original completion date of 29 April 1992. Later, as a result of the partnering sessions, the Corps and Kuwaitis established a revised but still ambitious completion date of 29 July 1992. On 17 February, however, Dr. Shaheen formally asked the Corps to complete the National Assembly Hall by 19 June 1992 so the National Council could hold a special meeting there in late June. Subsequently, Kuwaiti officials requested that the lounge for assembly members and the offices of the Emir and the Crown Prince also be completed by 19 June.

Peixotto's staff met with Kharafi and Kuwaiti representatives to determine how much more it would cost to expedite construction. Even with additional funds, the Corps was not sure it could meet the new deadline. Peixotto informed Dr. Shaheen that the Corps had only a 50 percent chance of completing the work by this deadline but would make every possible effort to do so.

For the Corps to meet the new deadline, the Kuwaitis would have to reallocate $6 million from other 607A activities. The Corps would use this additional money to add extra shifts and equipment, and it would work with its suppliers to improve delivery schedules. All material and furnishings required to meet this completion date would be flown into the country. The airfreighting would be done under a Kuwaiti logistics contract, managed by the Transatlantic Division, and would be paid for with 607A funds. The division began negotiating with vendors to expedite delivery of light fixtures, carpet, furniture, and millwork.[18]



Interior view of the Parliament building; below, *Parliament general assembly hall.*





General Hatch,* left, *visits Corps engineers at the Parliament building.

Dr. Shaheen diverted funds from other projects scheduled under the 607A program to raise the additional $6 million, and secured the Crown Prince's approval to spend the additional money to accelerate the project. With all the necessary approvals now in place, the Corps chartered 747 and DC–10 aircraft to transport the necessary materials and supplies. For example, the Transatlantic Division spent $500,000 of the Kuwaiti funds to fly in marble from Italy for the floors. It spent another $7 million on furniture, carpets, and wall coverings. In addition to the $6 million, Dr. Shaheen provided another $3 million specifically for airfreight.[19]

On 22 February 1992, the Corps directed Kharafi to complete the Assembly Hall by 19 June. Kharafi quickly mobilized additional workers, materials, and equipment to meet the deadline. At peak, the firm had roughly 1,000 workers in the building. The Corps had awarded almost all of the 29 contracts for carpet and furniture by 6 March. It could only meet the June deadline if these vendors delivered the items on time.[20] The Kuwaitis had to purchase interior furnishings worth roughly $8 million to replace those that the Iraqis had looted or burned.

The Transatlantic Division had the major responsibility for procuring and shipping the new furnishings. The division formed a team to do this and conducted a quality assurance program during the purchasing, manufacturing, and delivery process to ensure that all manufacturers met the contract specifications and schedules. Hellmuth, Obata, and Kassabaum began with a list of 250 vendors and narrowed it down. Fatima Al-Sabah, along with other Kuwaiti and Corps representatives, made the final selections. Ultimately, 27 manufacturers received contracts to furnish the massive building. Vendors provided 5,600 sofas, tables, chairs, and mirrors; 1,000 auditorium seats; 20,000 square yards of carpeting; and 17 area rugs. These high-quality items came primarily from the United States, but also from Britain, Malaysia, France, Italy, and Spain.[21]

Coordination and communication continually improved. The Corps staff met with Fatima Al-Sabah and her staff; Kharafi; and Hellmuth, Obata and Kassabaum for two to three hours each day to resolve problems and keep the project on schedule. Decisions were made quickly. Through nothing less than what Peixotto called "a herculean effort" by the Corps and its contractor, the Assembly Hall was finished on 19 June 1992, six weeks ahead of schedule. The rest of the building was completed as scheduled on 29 July 1992, well in advance of the October national elections.[22]

The completion of this $67 million restoration project marked an important milestone for the people of Kuwait and for the Corps. For the Kuwaitis, it marked the transformation of a darkened shell of a building into a gleaming center of government operations. More significant, it marked an important step in the return of Kuwait's legislative process. The restoration of the building also effectively marked the end of the Corps' civil reconstruction program in Kuwait.

Conclusion

Although the Kuwait operation was unique and unlikely to be repeated, some lessons can be learned from the Army's experience. In addition to the specific lessons about operational planning, organizational structure, command and control, contracting strategy and regulations, and funding authorities are the broader, more important lessons about the contributions the U.S. Army can make in assisting other nations. What role is appropriate for the Army in a post-hostilities environment and how can it best prepare for that role?

Events in Kuwait illustrate the need to plan carefully for the period after hostilities end. How the Army handles the postwar period can be as important as the war itself when it comes to promoting the political and social stability and the economic well-being of the host nation.

When the short ground war against Iraq ended abruptly, the United States had no comprehensive, cohesive plan—as it does for responding to natural disasters—that encompassed the various federal agencies and provided a mechanism for those agencies to communicate and coordinate with each other. Outside the State Department and the Defense Department, there was no overall structure or direction for planning, coordinating, and executing the recovery effort. Other federal agencies might have been used more effectively if they had been included in the planning process. The deficiencies in planning and directing the recovery effort might have had a greater impact if the damage had been more extensive.

Neither the Defense Department nor the Army adequately planned for the postwar period. Missions, goals, and political constraints were not clearly defined. U.S. political leaders at times seemed to be pushing their own objectives. This was particularly true in the area of contracting strategy, specifically the strong emphasis on awarding contracts to small and small disadvantaged U.S. businesses. Pentagon officials responded to the challenges of the recovery operations in an ad hoc fashion, creating various organizations to execute the mission as the need arose. Planning in theater, at CENTCOM and ARCENT, was also inadequate. No detailed procedures existed for coordinating civil affairs activities. The civil affairs units arrived in the theater late, with the theater-level

civil affairs headquarters, the 352d Civil Affairs Command, deploying last. As a result, the civil affairs annexes to the theater's operations plans were tardy.

During the long months of Operation DESERT SHIELD, the Army understandably focused its attention on the conflict with Iraq rather than on plans for the aftermath. Task Force Freedom and the Combined Civil Affairs Task Force were provisional organizations quickly crafted to meet the specific circumstances and immediate needs in Kuwait.

The meticulous, detailed tactical planning that contributed to the Army's success in the ground war did not exist for the postwar period. In their after action report for Operations DESERT SHIELD and DESERT STORM, Army officials conceded that although the Army executed its missions successfully, the U.S. government did not have a cohesive plan for the recovery period after the war ended. It had no plan that delineated the responsibilities of all the federal agencies that should be involved or that provided a mechanism for organizations to communicate effectively with each other. "Unambiguous doctrine, approved by our Government and governments of nations which are our allies, to support transition to post-hostility nation support," the report concluded, "is not available to Army planners—or anyone else in the Government."[1]

Events further demonstrated that the post-hostilities plans must provide for adequate logistics support for units entering a disaster area. With power, food, and water supplies disrupted in Kuwait, Task Force Freedom and the Kuwait Emergency Recovery Office had to be fully self-supporting in the first months. In addition, recovery operations require simple, clear organizational structures, good communications, leaders with vision and stamina, and an effective partnership with the host nation. Without such a partnership, the Kuwait operation could have easily gotten off course. Differences over costs and construction standards could have ended the program.

The Kuwait recovery operation also highlighted the need for doctrine concerning nation assistance. Although the U.S. Army had conducted nation assistance activities for many years, there was no doctrine at the time that specifically addressed it.[2] As one civil affairs officer noted, "If we think [of] our focus now as not large global warfare, but low-intensity conflicts or wars of liberation or at least situations where we are restoring a legitimate government, then the focus on restoring services, and the civil infrastructure, schools, so forth, really has to be a major focus for the Army because we're the ones that are going to be on the ground doing it."[3]

The Army, General Hatch insisted, must develop better doctrine and concepts for nation assistance rather than implementing nation assis-

tance on an ad hoc basis.[4] He emphasized the link between nation assistance and national security. The Army, Hatch warned, might have a mission to support and execute the government's national security efforts in ways that had not been given rigorous attention in the past. "We must be ready to 'promote peace' while we also 'deter war,'" he added. In peacetime operations, Hatch observed, the United States could focus on attaining enduring regional stability by addressing the root causes of instability such as poverty, social and economic strife, and environmental degradation.[5]

Hatch and others never lost sight of the fact that the purpose of nation assistance was to help the host nation develop its own capabilities and its own public and private institutions. "You don't do that," he explained, "by going in and just building projects; it is a training, imparting of information, a building of a capability in the country." Thus, integrating host country nationals was a key element of the Corps' concept of nation assistance.[6] By incorporating Kuwaiti engineers into its organization and giving them hands-on experience, the Corps was able to leave behind improved facilities, expanded engineering expertise, and stronger personal relationships.

One of the brightest aspects of the recovery operation was the bond of mutual respect forged between Corps members and Kuwaiti volunteers. "The humanitarian spirit of the participants easily bridged the cultural and professional differences and paved the way for close cooperation and good working relations," Locurcio noted. "What resulted from this cooperation," he added, "was the prospect of a long-term relationship—based on trust and good will—that is probably more important than the operation itself."[7]

Despite some successes in bridging cultural differences, the Army left room for improvement. Colonel Lackey conceded that he had not prepared his soldiers at Task Force Freedom to deal with the Arab culture as well as he could have.[8] Reflecting on his experience in Kuwait, General Frix conceded that the Army needed to improve its understanding of cultural differences when operating outside the United States. He noted that he and his staff quickly faced the challenges of dealing with the Arab culture. The lack of understanding caused strains initially, he noted, until the soldiers and the Kuwaitis "learned to get along with each other."[9]

An important lesson for any nation assistance effort is that U.S. forces must withdraw before the host government loses enthusiasm for their presence. From the beginning, U.S. policymakers recognized the need to hand over responsibility for the recovery to the Kuwaiti government and people as expeditiously as possible. Since their first meeting, Kelly had continually emphasized to Livingstone the need to leave

Kuwait as soon as the work had been completed successfully, a lesson he had learned from the Israeli air base program. Kelly, Livingstone, Hatch, and other officials recognized the importance of knowing when to move from a civil–military operation conducted by U.S. forces to one directed by the host nation.[10]

The Kuwait recovery operations highlighted the concept of the Total Army. The Army's recovery effort succeeded only through combining the diverse strengths of its active duty soldiers, reservists, and civilians. Except for a small active duty battalion, all Army civil affairs capabilities were in the Reserve components. The civil affairs reservists provided experience not generally found in the Active Army. Although traditionally some individuals in the Active Army have had a low opinion of them, the civil affairs reservists in Kuwait did much to overcome such bias. Drawing on a broad range of experience from their civilian jobs, they involved themselves in banking, currency, food distribution, health, water, and sanitation. Individual reservists worked closely with the Kuwaiti ministries to help them reconstruct their management structures. General Kelly praised the civil affairs soldiers for "an absolutely magnificent job." Their work in Kuwait, Secretary Cheney noted, was "exceptional" both for its speed and the depth of expertise.[11]

Equally important were the contributions of hundreds of Army Corps of Engineers members who served in Kuwait—most of whom were civilian volunteers—and their counterparts back in the States. Their engineering, project management, and contracting capabilities were critical to the success of the recovery operation. They completed nearly $330 million worth of construction work in just 16 months, returning key elements of Kuwait's infrastructure to operation in record time.

Locurcio later observed that the Corps' ability to mobilize a group of Corps members in Kuwait and successfully execute such a large, complex mission in a hazardous environment with only one fatality and no other injuries to Corps personnel gave him "a tremendous sense of satisfaction." A Corps contracting specialist, Edward Slana, echoed this sentiment. "There is nothing in the annals of Corps history that even comes close to this kind of mission," he added. Another member of Locurcio's staff, Ben Wood, observed that, despite tremendous challenges, at the end of the operation the Corps would have "done the best that can be done and will have done it faster than people would have thought possible."[12]

After visiting Kelly, Locurcio, and their staffs in the summer of 1991, Assistant Secretary Livingstone reported that she had never been around such a highly motivated group of people. The soldiers and civilians she met said that "they would never have a job that would mean as much to

them."[13] Senator Donald Mitchell, who visited Kuwait in the summer of 1992, called the Corps' work there "an American success story."[14] As the Corps completed its air base work in late 1993, Ambassador Gnehm told Col. Charles S. Cox, the Transatlantic Division commander at that time, "The contribution of the U.S. Army Corps of Engineers to the reconstruction of Kuwait is a source of pride to the entire U.S. mission here. The achievements of your engineers have won high praise from both the government of Kuwait and its people."[15]

The success of the Kuwait recovery operation can be measured in several ways. Was the U.S. Army proud of the quantity and quality of its work? Were the Kuwaitis satisfied with the help they received? Were relations between the Americans and the Kuwaitis stronger than before? Was the Middle East more stable and secure? Livingstone had additional criteria: Did the Army follow its own guidelines and meet its internal controls? Could its work withstand public scrutiny? Was the Army fair in providing opportunity for American businesses? Were the Army's actions consistent with implementing the President's policy?[16]

Using these criteria, the Army measured up well. Army auditors were, for the most part, satisfied with the controls that Army officials had put in place. The results of congressional hearings and General Accounting Office investigations were generally favorable.

The Kuwaiti government and people very much appreciated the efforts of the U.S. Army, particularly the Corps' efforts to repair the civil infrastructure. Except for the strains surrounding the air base work, the Kuwaitis were pleased with the scope and quality of the assistance they received. Without the work of civil affairs soldiers and Corps members, the Army would not have been able to transfer responsibility to the Kuwaiti government as quickly and smoothly as it did. The civil affairs soldiers, and Corps members in particular, not only played a critical role in planning and executing the recovery operations but also left behind an enduring spirit of goodwill. "We may not remember their names," a grateful Dr. Shaheen observed, "but we will never forget what they did here."[17]

By the end of the recovery period, the prewar political status quo and the flow of oil had been restored in Kuwait. The bond between the two nations was strong enough that the Kuwaiti government asked the United States to station a small force there temporarily and agreed to joint military exercises, something that would have been unheard of a year earlier.

In large part through the efforts of the U.S. Army, not a single Kuwaiti died from lack of food, water, or medical care. Within 30 days, primary power in Kuwait was restored and roads were cleared. Within 45 days, the water supplies were replenished. Within 90 days, the air-

port was reopened. The country's civil infrastructure was restored within nine months. The U.S. Army was able to make a rapid transition from offensive ground force to nation assistance. It successfully translated its victory on the battlefield into an environment of political and social stability and economic recovery.

Acronyms

AICI	American International Contractor Incorporated
ARCENT	Army Component, U.S. Central Command
ASA(CW)	Assistant Secretary of the Army for Civil Works
ASA(ILE)	Assistant Secretary of the Army for Installations, Logistics and Environment
ASD(SO/LIC)	Assistant Secretary of Defense for Special Operations and Low Intensity Conflict
AT&T	American Telephone and Telegraph
BDE	Brigade
BN	Battalion
CATF	Civil Affairs Task Force
CCATF	Combined Civil Affairs Task Force
CECW	Corps of Engineers, Civil Works
CENTCOM	U.S. Central Command
CEV	Combat engineer vehicle
COEMIS	Corps of Engineers Management Information System
DAST	Damage Assessment Survey Team
DFARS	Defense Federal Acquisition Regulations
DRAO	Defense Reconstruction Assistance Office
DSAA	Defense Security Assistance Agency
DSDS	DESERT STORM/DESERT SHIELD
EOD	Explosive ordnance disposal
FIDIC	Federation Internationale Des Ingenieurs–Conseils
Fuller/AICI	George A. Fuller and American International Contractor Incorporated
G–2	Army Intelligence staff section
G–3	Army Operations staff section
G–5	Army Plans and Policy staff section

HEP	High explosive plastic
HHC	Headquarters and Headquarters Company
HQUSACE	Headquarters, U.S. Army Corps of Engineers
IDTC	Indefinite delivery type contracts
J–3	Joint Operations staff section
J–5	Joint Plans and Policy staff section
J–33	Joint Current Operations staff section
KERO	Kuwait Emergency Recovery Office
KRTF	Kuwait Reconstruction Task Force
KTF	Kuwait Task Force
MCA	Military Construction, Army
MWR	Morale, welfare, and recreation
NDU	National Defense University
OACE	Office of the Assistant Chief of Engineers
OMA	Operations and Maintenance, Army
OPEC	Organization of Petroleum Exporting Countries
POL	Petroleum, oils and lubricants
SADBU	Small and Disadvantaged Business Utilization
SITREP	Situation report
TFF	Task Force Freedom
TUSA	Third U.S. Army
USAES	U.S. Army Engineer School
USLOK	U.S. Liaison Office, Kuwait

Notes*

Introduction

[1] Gordon R. Sullivan, "Power Projection and the Challenges of Regionalism," *Parameters*, Summer 1993, in *The Collected Works, 1991–1995*, n.p., n.d., p. 189.

[2] Janet A. McDonnell, *Supporting the Troops: The U.S. Army Corps of Engineers in the Persian Gulf War* (Alexandria, Va.: Office of History, U.S. Army Corps of Engineers, 1996), pp. 33–34; see also John T. Greenwood, "Diplomacy Through Construction: The U.S. Army Corps of Engineers in Saudi Arabia," Desert Shield/Desert Storm, U.S. Army Corps of Engineers, Office of History Files (hereafter cited as Office of History Files).

[3] For a detailed account of the Israeli air base project, see Frank N. Schubert, *Building Air Bases in the Negev: The U.S. Army Corps of Engineers in Israel, 1979–1982* (Washington, D.C.: Office of History, Corps of Engineers, and Center of Military History, 1992).

[4] Wayne Urbine, interv by author, Kuwait City, 7 Sep 1991, p. 15.

[5] Samuel P. Huntington, "New Contingencies, Old Roles," *Joint Forces Quarterly*, Autumn 1993, no. 2, p. 39.

Prologue

[1] Ceasar Santucci, interv by author, Kuwait City, 5 Apr 1991, p. 58.

[2] "State of Kuwait," pp. 5–6, Kuwait Reconstruction: Historical Background, Office of History Files; Michael Kramer, "Toward a New Kuwait" *Time*, 24 Dec 1990, p. 30.

[3] For more on the Persian Gulf War, see Frank N. Schubert and Theresa L. Kraus, eds., *The Whirlwind War: The United States Army in Operations DESERT SHIELD and DESERT STORM* (Washington, D.C.: U.S. Army, Center of Military History, 1995); Brig. Gen. Robert H. Scales, Jr., et al., *Certain Victory: The United States Army in the Gulf War* (Washington, D.C.: Office of the Chief of Staff, U.S. Army, 1993); Michael R. Gordon and Gen. Bernard E. Trainor, *The Generals' War: The*

*All records are at the U.S. Army Corps of Engineers Office of History, unless otherwise indicated.

Inside Story of the Conflict in the Gulf (Boston: Little, Brown and Company, 1995).

[4] Houston Townsend, interv by author, Kuwait City, 13 Sep 1991, pp. 10–13; Maj. Gen. Patrick J. Kelly, interv by author, Kuwait City, 7 Sep 1991, p. 44; Edward Slana, interv by author, Kuwait City, 13 Sep 1991, pp. 49–50.

Chapter 1. Planning Emergency Response

[1] Amb. Edward Gnehm, interv by Col. Patrick W. Carlton, 13 Mar 1992, pp. 3–5, Box 3, Papers of Col. Patrick W. Carlton: Civil Affairs in the Gulf War, National Defense University (hereafter cited as Carlton Papers); Barbara Leaf, interv by Col. Patrick W. Carlton, n.d., p. 1, Box 4, Carlton Papers.

[2] Leaf interv, pp. 6–7; Bader Al-Qabandi, interv by author, Kuwait City, 10 Sep 1991, pp. 2–6, 8.

[3] Al-Qabandi interv, pp. 8, 11; Leaf interv, p. 6; "Kuwaitis in Washington Plan Rebuilding of Nation," *New York Times*, 30 Dec 1990; "Kuwaitis Look Beyond Crisis to Nation's Rebuilding," *Washington Post*, 14 Jan 1991, p. A7.

[4] "Gulf Reconstruction Report," v. 1, no. 2, Kuwait Reconstruction, Gulf Reconstruction Report, Office of History Files; Dr. Ibrahim Al-Shaheen, interv by author, Kuwait City, 12 Sep 1991, pp. 1–3; Kramer, "Toward a New Kuwait," p. 28.

[5] Amb. Edward Gnehm, interv by author, Kuwait City, 11 Sep 1991, p. 20; "The Kuwait Task Force," *Civil Affairs in the Gulf War: A Symposium, Proceedings*, 25–27 Oct 1991, Fort Bragg, N.C., p. 263 (hereafter cited as *Civil Affairs Symposium*); John R. Brinkerhoff, "Waging the War and Winning the Peace: Civil Affairs in the War with Iraq," *Civil Affairs Symposium*, p. 176. See Col. Patrick W. Carlton, "The Kuwait Task Force: A Unique Solution to Kuwait's Reconstruction Problems," p. 6, Box 1, Carlton Papers (hereafter cited as "KTF Paper").

[6] Routson volunteered to help the Kuwaitis draft the letter and they accepted. He helped prepare the initial draft though some thought this was inappropriate since ASD(ISA) had sponsored the meeting. Lt. Gen. Kelly apparently was uncomfortable with Routson writing the letter. See KTF Paper, p. 8; Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (hereafter cited as ASD[SO/LIC]) Files, "Readahead for the Civil Affairs Symposium," 25 Oct 1991, *Civil Affairs Symposium*, p. 213; Brinkerhoff, "Waging the War," p. 177.

[7] Memo, Amb. Saud Nasir Al-Sabah to President George Bush, 9 Oct 1990, Kuwait Reconstruction: Kuwait Request for Assistance, Office of

History Files; Col. Randall T. Elliott, interv by Col. Patrick W. Carlton, 6 Dec 1991, pp. 4–5, Box 2, Carlton Papers.

[8]Capt. Peter K. Bolton, interv by Col. Patrick W. Carlton, 8 Jan 1992, p. 12, Carlton Papers. On 15 December, Secretary James Baker formally responded to Sabah's request for assistance from the U.S. government in drawing up a civil restoration plan for Kuwait and indicated that planners from both nations were already working together. Ltr., James Baker to Sheikh Saud Nasir Al-Sabah, 15 Dec 1990, Kuwait Reconstruction: Kuwait Request for Assistance, Office of History Files.

[9]Brinkerhoff, "Waging the War," p. 177.

[10]Carlton, KTF Paper, p. 9; "Terms of Reference—United States Emergency and Reconstruction Assistance to the State of Kuwait" (draft), 13 Nov 1990, pp. 1–2, Kuwait Reconstruction, Office of History Files; Brinkerhoff, "Waging the War," pp. 178–79; ASD(SO/LIC), "Readahead," pp. 213–14.

[11]ASD(SO/LIC) "Readahead," p. 214.

[12]"US–Kuwait Civil Affairs Working Group," Kuwait Reconstruction: Miscellaneous Messages, #5, Office of the Assistant Chief of Engineers (OACE) Reference Files; ibid., Kuwait Reconstruction: Civil Affairs Activities, Assistant Secretary of the Army for Installations, Logistics and Environment (hereafter cited as ASA[ILE]) Files; "Interagency Organization," (attached to Brig. Gen. Montgomery memo, 21 Feb 1991), ibid.

[13]Brinkerhoff, "Waging the War," pp. 178–79; ASD(SO/LIC), "Readahead," p. 214; Carlton, KTF Paper, p. 10; Gnehm, interv by Carlton, p. 9; Elliott, interv by Carlton, p. 15.

[14]Gnehm, interv by Carlton, pp. 9, 13; Leaf interv, p. 3; Gnehm, interv by author, pp. 10, 12.

[15]ASD(SO/LIC), "Readahead," p. 214.

[16]Brinkerhoff, "Waging the War," pp. 8–11. For more on civil affairs in World War II, see Harry L. Coles and Albert K. Weinberg, *U.S. Army in World War II: Civil Affairs: Soldiers Become Governors* (Washington, D.C.: U.S. Army Center of Military History, 1992).

[17]ASD(SO/LIC), "Readahead," p. 214.

[18]Col. Arthur Walz, interv by Thomas Crouch, 3 May 1992, Center of Military History/Center for Low Intensity Conflict, no transcript; Leaf interv, pp. 3–5.

[19]Brinkerhoff, "Waging the War," p. 179; Carlton, "KTF Paper," pp. 10–11; Brig. Gen. Howard Mooney, interv by Thomas Crouch, 25 Mar 1992, Center of Military History/Center for Low Intensity Conflict, no transcript; Leaf interv, pp. 3–5; Anthony Auletta, interv by Col. Patrick W. Carlton, 12 Nov 1991, Box 1, Carlton Papers.

[20]Leaf interv, pp. 3–5; James R. Locher, interv by Dr. Carnes Lord, 18 Mar 1992, p. 17, Box 4, Carlton Papers; Brinkerhoff, "Waging the War," p. 179.

[21]Mooney, interv by Crouch; Brinkerhoff, "Waging the War," pp. 180–81; Brig. Gen. Howard Mooney, "352d CA Command Briefing," presented 17 Dec 1990 at HQUSACE, Kuwait Reconstruction: 352d CA Command Briefing, Office of History Files.

[22]Carlton, "KTF Paper," p. 12; Brinkerhoff, "Waging the War," p. 179; msg, CJCS, Subj: Restoration of Kuwait, 22 Nov 1990, Kuwait Recovery, Office of History Files.

[23]Lt. Col. Quesenberry, notes, n.d., Kuwait Reconstruction: Miscellaneous Messages, #5, OACE Reference Files; Brinkerhoff, "Waging the War," p. 181; Mooney, "352d CA Command Briefing," 17 Dec 1990, presented at HQUSACE.

[24]Elliott, interv by Carlton, p. 15; Mooney, interv by Crouch; Auletta interv, p. 29.

[25]Brinkerhoff, "Waging the War," p. 182; Elliott, interv by Carlton, p. 8; Auletta interv, pp. 20, 34–36; Brig. Gen. Howard Mooney, interv by Col. Patrick W. Carlton, 4 Dec 1991, p. 20, Box 5, Carlton Papers; Carlton, "KTF Paper," p. 17. Brig. Gen. Joseph C. Hurteau indicated that Lt. Gen. Carns was the one who said Mooney could not go on active duty. Brig. Gen. Joseph C. Hurteau, interv by Col. Patrick W. Carlton, 31 Jan 1992, p. 22, Box 2, Carlton Papers. Mooney would later be ordered onto active duty on 25 January 1991 with the rest of the 352d, but not without special pressure from the Joint Staff and the Office of the Secretary of Defense, including a call from Henry Rowen to Secretary of the Army Michael Stone. Brinkerhoff, "Waging the War," p. 183; Mooney, interv by Crouch.

[26]Mooney, interv by Crouch; Maj. John W. Harbell, interv by Thomas W. Crouch, 2 May 1992, CMH, pp. 13–15, 17; Col. Charles H. Sadek, interv by Thomas W. Crouch, 3 May 1992, Center of Military History/Center for Low Intensity Conflict, no transcript; Lt. Col. James Huber, interv by Thomas W. Crouch, 2 May 1992, Center of Military History/Center for Low Intensity Conflict, p. 40.

[27]Brig. Gen. Howard Mooney, interv by Dr. Richard Stewart, 14 Jul 1991, pp. 15–16, Box 5, Carlton Papers.

[28]Auletta interv, p. 44.

[29]Sadek interv; Harbell interv, pp. 61–62.

[30]Auletta interv, p. 29; Walz interv; Harbell interv, pp. 11–12; Mooney interv by Crouch; Mooney comments on draft manuscript.

[31]Mooney interv by Stewart; Brinkerhoff, "Waging the War," p. 183; Mooney interv by Crouch.

[32]Auletta interv, pp. 14, 23–24, 49–51; Carlton, "KTF Paper," p. 12; Elliott, interv by Carlton, pp. 14–15; Arthur Walz comments, 16 Apr 1997.

[33]Walz interv; "The Kuwait Task Force," *Civil Affairs Symposium*, pp. 266–67; Huber interv, p. 36.

[34]Brig. Gen. Howard T. Mooney, interv by author, Kuwait City, 5 Apr 1991, pp. 1–2; "The Kuwait Task Force," p. 265.

[35]Brinkerhoff, "Waging the War," p. 183; Mooney, "352d Civil Affairs Command Briefing, 17 Dec 1990; "The Kuwait Task Force," p. 263.

[36]Carlton, "KTF Paper," p. 17; "The Kuwait Task Force," p. 264; Scales, *Certain Victory*, p. 334; Mooney, interv by Crouch; Harbell interv, p. 20; Mooney comments on draft manuscript.

[37]Harbell interv, pp. 3–4, 11.

[38]Carlton, "KTF Paper," pp. 18–19; "Combined Civil Affairs Task Force Operations Desert Shield/Storm After Action Report," Apr 1991, in *Civil Affairs Symposium*, p. 290 (hereafter cited as "CCATF After Action Report"); Huber interv, pp. 30, 32.

[39]"CCATF After Action Report," p. 291; Col. Randall Elliott, interv by Dr. Richard Stewart, 14 Jul 1991, pp. 17–19, Box 2, Carlton Papers.

[40]Gnehm, interv by author, p. 16; Leaf interv, pp. 10–12; Elliott, interv by Stewart, pp. 11–12; Al-Qabandi interv, pp. 15–16.

[41]Memo, Will Baker to Randall Elliott, n.d., Kuwait Reconstruction: Miscellaneous Messages, #5, OACE Reference Files; Mooney, interv by Crouch.

[42]Elliott, interv by Stewart, p. 12; Maj. Andrew Natsios, "Preventing Human Rights Abuses in Kuwait," p. 1–2, Box 9, Carlton Papers.

[43]Maj. Andrew Natsios, interv by Lt. Col. William McGrew, 2 May 1992, Center of Military History/Center for Low Intensity Conflict; Brinkerhoff, "Waging the War," p. 183; Mooney, interv by Crouch.

[44]Harbell interv, pp. 22–24.

[45]Carlton, "KTF Paper," pp. 15–16, 20–21; Col. Lawrence Blount, interv by Dr. Richard Stewart, 13 Jul 1991, pp. 13, 27, Box 1, Carlton Papers; Col. Lawrence Blount, interv by Col. Patrick W. Carlton, 5 Dec 1991, pp. 20–21, 27, Box 1, Carlton Papers; Mooney, interv by Crouch; Walz interv.

[46]Carlton, "KTF Paper," p. 21; Sadek interv; Blount, interv by Stewart, pp. 13–14, 39.

[47]Col. James T. Kerr, interv by Col. Patrick W. Carlton, 2 Apr 1992, p. 28, Box 4, Carlton Papers; Maj. Gen. John J. Yeosock, interv by Col. Patrick W. Carlton, 18 Mar 1992, pp. 51–52, Box 7, Carlton Papers.

[48]Harbell interv, pp. 25–26.

[49]Carlton, "KTF Paper," p. 5; Leaf interv, pp. 6–10; Maj. Gen. Patrick J. Kelly, telephone conversation with author, 19 Sep 1997.

[50]Huber interv, p. 18; Maj. Gen. James W. Ray, Lt. Col. Michael J. Fisher, and Lt. Col. Stephen Sheppard, "Emergency Recovery Assistance to Kuwait," *The Military Engineer*, v. 83. no. 52, May–Jun 1991, p. 11; Brig. Gen. Ralph V. Locurcio, "Nation Assistance in Kuwait," *Engineer*, Apr 1992, p. 2; Walz interv; Santucci interv, pp. 4–5.

[51]CECW–OE–P, Memorandum For Record, 1 Feb 1991, Kuwait Reconstruction, Oct 1990–Feb 1991, Lt. Col. Michael Fisher Files; Kuwait Reconstruction: Miscellaneous Messages, #5, OACE Reference Files; memo, Lt. Gen. Henry Hatch for Cdr 352d CAC, 7 Jan 1991, Kuwait Reconstruction: Maj. Gen. Ernest Edgar File, Office of History Files.

[52]Ltr, Ibrahim Al-Shaheen to Maj. Gen. William Ray, 4 Jan 1991, Edgar File.

[53]Transatlantic Division, "Discussion Prepared for Representatives of GOK [Government of Kuwait] on Emergency Recovery by USACE," 7 Jan 1991, Kuwait Reconstruction, Office of History Files.

[54]Santucci interv, p. 56; Al-Qabandi interv, pp. 16, 18, 20.

[55]Santucci interv, pp. 48–50, 52.

[56]Ibid., p. 57; Al-Shaheen interv, pp. 10–11.

[57]Msg, DAMO-ODP-AOC to CDRUSASOC, msg 201230Z Nov 1990, Kuwait Reconstruction: 352d Civil Affairs Command, Office of History Files; memo, Lt. Gen. Hatch for Cdr 352d CAC, 7 Jan 1991; memo, Cdr 352d for Steering Committee, 8 Jan 1991, Kuwait Reconstruction: Miscellaneous Messages, #5, OACE Reference Files.

[58]Paul W. Dobie, memo for file, Subj: USACE Emergency Response to Kuwait, 1 Feb 1991, Kuwait Reconstruction Chronology, Office of History; Col. Ralph Locurcio, interv by author, Kuwait City, 7 Apr 1991, pp. 2–3.

[59]HQUSACE, Briefing for Hatch, 22 Jan 1991, Kuwait Reconstruction: Briefings, Office of History Files.

[60]Memo, Hatch for Cdrs, Major Subordinate Commands/Districts, 22 Jan 1991, Kuwait Reconstruction: Personnel, Office of History Files.

[61]Col. Ralph Locurcio, interv by Ron Roffennach, n.d., Kuwait Reconstruction: Locurcio interv and letter, Office of History Files.

[62]Memo, Col. Thomas J. Sheehy for Tony Auletta, 25 Oct 1990, Subj: Engineer Support to Civil Restoration Operations, Kuwait Reconstruction: Fisher Files; Maj. Gen. Patrick Kelly comments in HQUSACE Briefing, 11 Jan 1991; Ltr, Lt. Gen. Hatch to Lt. Gen. Dennis J Reimer, DCSOPS, 25 Jan 1991, Kuwait Reconstruction: Miscellaneous Messages, #5, OACE Reference Files; memo, G. Edward Dickey for the

Chief of Engineers, 15 Feb 1991, Kuwait Reconstruction: Background, Office of History Files.

[63]Msg, Amb. Gnehm to Secretary of State, 121716Z Jan 1991, Kuwait Reconstruction: 352d CAC, Office of History Files; msg, Secretary of State to Amb. Gnehm, 220146Z Jan 1991, ibid. Meanwhile, on 14 January, the CINC requested that the Kuwait Task Force be deployed to the theater and the order followed on 17 January. Lt. Col. Dennis Barlow, "Joint Staff Civil Affairs Actions During Operations Desert Shield and Desert Storm," *Civil Affairs Symposium*, p. 217.

[64]Memo, Arthur H. Hughes, Dep. Assistant Secretary of Defense for Near Eastern and South Asian Affairs, 14 Jan 1991, Kuwait Reconstruction: 352d CAC, Office of History Files.

[65]"The Kuwait Task Force," pp. 267–68; Walz interv; Mooney, interv by Stewart, pp. 22–23; Ed King telephone conversation with author, 5 Feb 1997.

[66]Brinkerhoff, "Waging the War," p. 268; Mooney, interv by Stewart, p. 23.

Chapter 2. Planning in Theater

[1]Elliott, interv by Stewart, p. 16; Elliott, interv by Carlton, pp. 2, 17, 35; Col. Patrick W. Carlton, "The Kuwait Task Force: A Unique Solution to Kuwait's Reconstruction Problems" ("KTF Paper"), p. 22, Box 1, Carlton Papers; Brinkerhoff, "Waging the War," p. 190; Auletta interv, p. 33.

[2]Blount, interv by Carlton, 5 Dec 1991, p. 32.

[3]"CCATF After Action Report," p. 297; Kerr, interv by Carlton, pp. 27, 31.

[4]Yeosock interv, p. 26; Elliott, interv by Carlton, p. 18; Sadek interv. Some speculate that the ARCENT staff was not receptive to civil affairs because they were reservists (Maj. Les M. Caplan, interv by Lt. Col. William A. McGrew, 3 May 1992, Center of Military History/Center for Low Intensity Conflict).

[5]Leaf interv, p. 13; Gnehm, interv by Carlton, pp. 10–11; Yeosock interv, pp. 27–28.

[6]Gnehm, interv by Carlton, pp. 13–15a.

[7]Blount, interv by Carlton, p. 35; Elliott, interv by Carlton, p. 17; Brinkerhoff, "Waging the War," p. 190; Carlton, "KTF Paper," p. 23.

[8]Leaf interv, pp. 14–15.

[9]Blount, interv by Carlton, p. 19; Brinkerhoff, "Waging the War," pp. 184–85; Sadek interv; Mooney, interv by Crouch. Maj. Gen.(P) Pagonis told Col. Elliott that no trucks in Saudi Arabia were available for lease, but the Kuwaitis were part owners of a large trucking firm in Saudi

Arabia. The day after their meeting, 150 trucks were made available to the Kuwait Task Force. U.S. Army Special Operations Command (USASOC), "Army Special Operations in Operations Desert Shield/Desert Storm," p. 133, Kuwait Reconstruction, Office of History Files.

[10]Harbell interv, p. 59.

[11]Ibid., pp. 34–37.

[12]"CCATF After Action Report," pp. 299–300.

[13]Col. Lawrence Blount, "Civil–Military Operations During Operations Desert Shield/Storm From a U.S. CENTCOM Perspective," *Civil Affairs Symposium*, pp. 232–33; Blount, interv by Carlton, p. 14–16; Col. James Kerr, interv by Lt. Col. John Fishel, 20 Dec 1991, pp. 3–4, 9, Box 4, Carlton Papers.

[14]Blount, interv by Stewart, pp. 17–18, 26; Blount, interv by Carlton, p. 28; "CCATF After Action Report," pp. 291–92.

[15]Blount, "Civil–Military Operations," pp. 231–32.

[16]Blount, interv by Carlton, pp. 26–27, 36.

[17]Maj. Gen. Robert S. Frix and Capt. Archie L. Davis III, "Task Force Freedom and the Restoration of Kuwait," *Military Review*, Oct 1992, p. 3; "CCATF After Action Report," pp. 284–85. Col. Kerr complained that the CENTCOM J–5 staff did not relinquish enough operational control to allow ARCENT to perform its executive agent mission effectively. The G–5 was one of the few elements on the ARCENT staff without Saudi counterparts because the J–5 preempted this relationship. Kerr dealt with the J–5 who, in turn, dealt directly with the Saudis (Kerr, interv by Carlton, p. 27; Kerr, interv by Fishel).

[18]Blount, interv by Stewart, p. 26; Blount, interv by Carlton, p. 28; "CCATF After Action Report," pp. 291–93.

[19]Ibid., p. 294.

[20]Msg, COMUS ARCENT Main/AFRD–GE to CINCCENT J–5, 16 Jan 1991, Kuwait Reconstruction: Miscellaneous Messages, #5, OACE Reference Files.

[21]Mooney, interv by Crouch.

[22]Msg, USCINCCENT to SECDEF, 171800Z Jan 1991, Kuwait Reconstruction: Corps of Engineers Activities, ASA(ILE) Files; "CCATF After Action Report," p. 294.

[23]Col. Allen W. Keener, "Civil Affairs Operations in Southwest Asia," *Civil Affairs Symposium*, p. 225; Mooney, interv by Crouch.

[24]Yeosock interv; Kerr, interv by Carlton, p. 38; Kerr, interv by Fishel, pp. 11–12. Mooney interpreted Yeosock's decision as an indication of the fear in ARCENT headquarters that no one was controlling the Kuwait Task Force. See Mooney, interv by Stewart, p. 28.

[25]Frix and Davis, "Task Force Freedom," p. 4; Janet A. McDonnell, "Rebuilding Kuwait," *Military Review*, Jul 1993, p. 52; "CCATF After Action Report," p. 297.

[26]"CCATF After Action Report," pp. 295–97.

[27]Ibid., pp. 297–99; Mooney, interv by author, p. 27.

[28]HQ, 96th CA BN (Airborne), "Memo for Participants in Civil Affairs Symposium, 25–27 Oct 1991," 11 Sep 1991, *Civil Affairs Symposium*, p. 442; Mooney, interv by author, p. 27.

[29]Mooney, interv by author, p. 30.

[30]Maj. Gen. Robert S. Frix, interv by author, Kuwait City, 5 Apr 1991, pp. 2–3; Frix and Davis, "Task Force Freedom," p. 4.

[31]Frix, interv by author, pp. 2–4; Maj. Gen. Robert S. Frix, interv by Lt. Col. John Fishel, 8 Nov 1991, p. 3, Box 2, Carlton Papers.

[32]Kerr, interv by Fishel, p. 10.

[33]Blount, interv by Carlton, pp. 17–18; memo, Lt. Col. Peter J. Skells, G–3, AFRD, for Assistant Chief of Staff, 21 Feb 1991, Third U.S. Army (hereafter cited as TUSA) G–3 Files: Lucky Tac, Miscellaneous Papers and Fragos; Blount, interv by Carlton, pp. 16–17; Blount, interv by Stewart, p. 23; Brinkerhoff, "Waging the War," p. 192.

[34]Blount, interv by Stewart, p. 20; Blount, interv by Carlton, p. 17.

[35]Memorandum For Record, Lt. Col. Peter J. Skells to Task Force Freedom representatives, n.d., Skells, G-3 Operations memo, Box 68, Task Force Freedom Records, TUSA G–3 Tactical Operations Center Logs; Frix, interv by Fishel, p. 8.

[36]Briefing slide, n.d., TFF Records, Box 67/68, TUSA G–3; Frix, interv by Fishel, p. 8; Frix, interv by author, pp. 2–5; McDonnell, "Rebuilding Kuwait," p. 52. The task force also included a Disaster Assistance Response Team from the Office of Foreign Disaster Assistance, part of the U.S. Agency for International Development, and a contract support team from the Intertect Corporation in Dallas, Texas.

[37]John T. Fishel, *Liberation, Occupation and Rescue: War Termination and Desert Storm* (Fort Leavenworth, Kans: U.S. Army Command and General Staff College, 1992), p. viii.

[38]Col. Richard M. Swain, "'Lucky War' Third Army in Desert Storm," 29 Mar 1993, unedited draft, p. 465; Lt. Col. Mark B. Yates, "Coalition Warfare in Desert Storm," *Military Review*, Oct 1992, p. 50; briefing slide, n.d., TFF Records, Box 67/68, TUSA G–3.

[39]Memo, Col. Ralph Locurcio for Col. William Miller, n.d., #25: Kuwait Recovery, Col. William Miller Files.

[40]Locurcio, Memorandum For Record, 7 Feb 1991, Subj: Kuwait Update with Lt. Gen. Hatch, 6 Feb 1991, TAD Incoming Msg File, Desert

Storm, #45; Locurcio, Memorandum For Record, 10 Feb 1991 #25: Kuwait Reconstruction, Miller Files.

[41]Briefing slide, 7 Feb 1991, Kuwait Reconstruction: Briefing Slides, Office of History Files.

[42]Ben Wood, Memorandum For Record, n.d., Message Reading File, Book #4, Desert Storm, South Atlantic Division, Emergency Operations Center Files; Locurcio comments to author, 23 May 1997.

[43]Msg, Amb. Edward Gnehm to Secretary of State, 122057Z Feb 1991, Kuwait Reconstruction: Miscellaneous Messages, #3, OACE Reference Files.

[44]Memo, Lt. Gen. Henry Hatch to Amb. Edward Gnehm, 14 Feb 1991, Kuwait Reconstruction: Background, Office of History Files.

[45]Locurcio, interv by author, 7 Apr 1991, pp. 2–3, 14.

[46]Locurcio, interv by author, 7 Apr 1991, pp. 3, 8; Wynne Fuller, interv by author, 6 Apr 1991, pp. 1, 3–7; Slana interv, p. 32. Wynne Fuller had recently spent three months in the Virgin Islands and a month and a half in Panama after Operation Just Cause, providing support to SOUTHCOM.

[47]Maj. Larry Jinkins, interv by author, Kuwait City, 5 Apr 1991, p. 3; memo, Col. Herndon for Directors/Office Chiefs, 5 Feb 1991, Kuwait Reconstruction: Personnel, Office of History Files.

[48]Locurcio, Memorandum For Record, 7 Feb 1991, Subj: Kuwait Update with Lt. Gen. Hatch, 6 Feb 1991, TAD Incoming Msg File, Desert Storm, #45; Locurcio, interv by author, 7 Apr 1991, pp. 22–24; Col. William A. Miller, Memorandum For Record, 26 Jan 1991, Kuwait Reconstruction: Oct 1990–Feb 1991, Fisher Files. Locurcio indicated that he took his mission priorities not from the Ambassador but from the Kuwaitis because he was spending their money (Col. Ralph V. Locurcio, interv by author, Kuwait City, 8 Sep 1991, p. 2).

[49]Locurcio, "Nation Assistance in Kuwait," p. 8.

[50]Jinkins interv, pp. 9–11, 13; Locurcio, "The Reconstruction of Kuwait Following Desert Storm," *Site World*, World Development Council, 1992, p. 36.

[51]Locurcio, interv by author, 7 Apr 1991, p. 47; Jinkins interv, p. 11.

[52]Yates, "Coalition Warfare," p. 50.

[53]Frix, interv by Fishel, p. 5.

[54]Frix, interv by Fishel, pp. 4–6; Frix and Davis, "Task Force Freedom," p. 3.

[55]Carlton, "KTF Paper," p. 24; Brinkerhoff, "Waging the War," p. 193; Mooney, interv by author, pp. 3–5; "CCATF After Action Report," pp. 299–301; McDonnell, "Rebuilding Kuwait," p. 52.

[56]"From Green Bay to the Persian Gulf: 431st Civil Affairs Company in Operation Desert Storm," *Civil Affairs Symposium*, pp. 555–56; McDonnell, "Rebuilding Kuwait," p.52; Scales, *Certain Victory*, p. 355.

[57]Mooney, interv by author, pp. 3–5; "CCATF After Action Report," pp. 300–301.

[58]Maj. James Brooks, interv by author, Dhahran, Saudi Arabia, 26 Mar 1991, pp. 65, 72–78.

[59]Kuwait Emergency Response Project Executive Summary, #2, 4 Mar 1991, Kuwait Reconstruction, Office of History Files; Ltr, Col. Locurcio, n.d., Locurcio interv and letter, Kuwait Reconstruction, Office of History Files; Brooks interv, p. 83; KERO Executive Summary #9, 11 Mar 1991; James N. Parker, Jr., "Corps Journalist Recounts Trip Into Kuwait City," *Engineer Update*, May 1991, p. 4; Jinkins interv.

Chapter 3. Emergency Response Phase: Task Force Freedom

[1]"US Army Doing the Work in Kuwait," *New York Times*, 5 Apr 1991, p. 10.

[2]Blount, "Civil–Military Operations," p. 233; "CCATF After Action Report," p. 302; Heike Hasenauer, "Corps Rebuilds Kuwait," *Soldiers*, Aug 1991, p. 14; John J. Kosowatz, "Return trip is bittersweet," *Engineering News–Record*, 6 May 1991, p. 42.

[3]Task Force Freedom Briefing, n.d., Kuwait Reconstruction: TFF Briefing, Office of History Files; Frix, interv by author, p. 7; John Whelan, ed., *Kuwait: A MEED Practical Guide* (London: Middle East Economic Digest Limited, 1985), p. 136.

[4]Memorandum For Record, AFRD-GE, 1 Mar 1991, Kuwait Reconstruction: Miscellaneous Messages, #6, OACE Reference Files; Memorandum For Record, AFRD–CE, 2 Mar 1991, Kuwait Reconstruction: Civil Affairs Activities, ASA(ILE) Files.

[5]416th ENCOM Sitrep, 5 Mar 1991: Tactical Operations Center Log (TFF 1–10 Mar 1991), TFF Records, TUSA G–3.

[6]"416th Engineer Command at Kuwait City, Task Force Freedom," n.d., Tactical Operations Center Logs, 1–9, 10–11, 13 Apr 1991, TUSA G–3; memo, 416th ENCOM, TFF, to ARCENT (F) G–3, 10 Mar 1991, Tactical Operations Center Logs, 1–11, 13 Apr 1991, TUSA G–3.

[7]416th ENCOM Sitrep, 5 Mar 1991, Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3; Lt. Col. Robert H. Griffin, "Pacemakers in Southwest Asia," *Engineer Officer Bulletin*, no. 13, Jul 1991, p. 14.

[8]Col. Anthony R. Kropp, "Engineers Build For Victory In Operation Desert Shield," pp. 6–7, Desert Shield/Desert Storm: 411th EN BDE, Office of History Files; memo, 43d En Cmb Bne (Hvy) for 416th ENCOM Commander, 8 Apr 1991, Desert Shield/Desert Storm: USAES

Materials, Office of History Files; 416th ENCOM Sitrep 4 Mar 1991, Tactical Operations Center Log (1–10 Mar 1991), TUSA G–3; Brooks interv, pp. 89–90; 416th ENCOM Sitrep, 13 Mar 1991, Tactical Operations Center Log (TFF 11–17 Mar 1991), TUSA G–3; memo, 416th ENCOM, TFF, to ARCENT (F) G–3, 10 Mar 1991, Tactical Operations Center Log (TFF 1–11, 13 Apr 1991), TUSA G–3.

[9]44th Signal Battalion Sitrep, 4 Mar 1990, Tactical Operations Center Logs (TFF 1–10 Mar 1991), TUSA G–3.

[10]720th MP BN Sitrep, n.d., Tactical Operations Center Log, TUSA G–3.

[11]1st EOD Group (F) Sitrep, 6 Mar 1991, Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3; 1st EOD Group (F) Sitrep, 10 Mar 1991, ibid. (TFF 11–17 Mar 1991); ibid., 13 Mar 1991; ibid., 21 Mar 1991 (TFF 18–24 Mar 1991).

[12]Capt. Bonnie F. Wilson, "Forward–Area Support in Desert Storm," *Army Logistician*, Sep–Oct 1992, pp. 2–4; "CCATF After Action Report," p. 301; 22d SUPCOM Sitrep #2, 6 Mar 1991, Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3; 22d SUPCOM Sitrep #3, 7 Mar 1991, ibid.; Frix and Davis "Task Force Freedom," p. 6; Mooney, interv by Stewart, p. 34.

[13]Memo, Lt. Col. Donald J. Bruss, Subj: Significant Activities, ARCENT Medical Command (Forward), 10 Mar 1991, Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3.

[14]Scales, *Certain Victory*, p. 337.

[15]Mooney, interv by Stewart, p. 35; "From Green Bay to the Persian Gulf: 431st CA Company in Operation Desert Storm," *Civil Affairs Symposium*, p. 528, 558; memo, Lt. Col. James A. Christopherson, 432d CA Co, for CG 352d, Subj: After Action Report, 7 Apr 1991, ibid., p. 531; memo, HQ, 96th CA BN (Airborne), for Participants in CA Symposium, 25–27 Oct 1991, 11 Sep 1991, ibid., p. 443.

[16]"The Kuwait Task Force," *Civil Affairs Symposium*, p. 270; Huber interv, p. 63; "CCATF After Action Report," p. 309; Elliott, interv by Stewart, pp. 3–5; Walz comments, 16 Apr 1997; Ed King telephone conversation with author, 5 Feb 1997.

[17]Gnehm, interv by Carlton, pp. 17–18; Harbell interv, p. 64; 352d CA Command Sitrep, 052000 Mar 1991, Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3.

[18]352d CA Command Sitrep 062000 Mar 1991, ibid.; "CCATF After Action Report," p. 303.

[19]Mooney, interv by author, pp. 6–10; Lt. Col. Noel W. Kohl, 416th ENCOM, "Engineer DAST After Action Report" (draft), 9 Mar 1991, Tactical Operations Center Logs, 1-9 Apr., 10, 11, 13 Apr 1991, TUSA

G–3; memo, Lt. Col. Noel W. Kohl for Maj. Gen. Mulcahy, "DAST After Action Report," 13 Mar 1991, Defense Reconstruction Assistance Office (DRAO) Files: Reading File 1; Elliott, interv by Stewart, p. 6; USASOC, "Army Special Operations," p. 135.

[20]Al-Qabandi interv, pp. 45, 50, 51; Locurcio, interv by author, 7 Apr 1991, p. 41; 352d CA Sitrep 201803Z Mar 1991, Tactical Operations Center Log (TFF 18–24 Mar 1991), TUSA G–3.

[21]"CCATF After Action Report," p. 309; DRAO Completion Report, p. 14–17; Brooks interv, pp. 89–91; Kohl, "Engineer DAST After Action Report" (draft), 9 Mar 1991; memo, Kohl for Maj. Gen. Mulcahy, 13 Mar 1991; Mooney, interv by author, pp. 21–22; Frix and Davis, "Task Force Freedom," p. 6.

[22]DRAO Completion Report, pp. 18–20; Frix and Davis, "Task Force Freedom," p. 8; Mooney, interv by Crouch, 25 Mar 1992.

[23]"CCATF After Action Report," p. 309; memo, AFRD–GE for Col. Kerr, 3 Mar 1991, Kuwait Reconstruction: Miscellaneous Messages, #6, OACE Reference Files.

[24]352d Sitrep #32, 2 Apr 1991, Tactical Operations Center Log (TFF 1–9 Apr 1991), TUSA G–3.

[25]DRAO Completion Report, pp. 21, 24; KERO, Fact Sheet, 7 Jun 1991, Kuwait Reconstruction: Ports, DRAO Files; Kohl, "Engineer DAST After Action Report" (draft), 9 Mar 1991; memo, Kohl for Maj. Gen. Mulcahy, 13 Mar 1991.

[26]DRAO Completion Report, p. 22.

[27]"CCATF After Action Report," pp. 310–11; 352d CA Command Sitrep #24, 25 Mar 1991, Tactical Operations Center Log (TFF 25–31 Mar 1991), TUSA G–3.

[28]"Putting Kuwait Back on its Feet," *Chicago Tribune*, 8 Apr 1991.

[29]Frix and Davis, "Task Force Freedom," pp. 6–8; "Putting Kuwait Back on its Feet," *Chicago Tribune*; "CCATF After Action Report," p. 311.

[30]Ibid., p. 312; 352d CA Command Sitrep 122000 Mar 1991; Frix and Davis, "Task Force Freedom," p. 8.

[31]Mooney, interv by author, pp. 16–18; Craig Forman and Tony Horwitz, "Desert Mirage?" *Wall Street Journal*, 8 Jul 1991.

[32]Memo, AFRD–GE for Col. Kerr, 3 Mar 1991, Kuwait Reconstruction: Miscellaneous Messages, #6, OACE Reference File; Frix and Davis, "Task Force Freedom," p. 8; Kohl, "Engineer DAST After Action Report" (draft), 9 Mar 1991; memo, Kohl for Maj. Gen. Mulcahy, 13 Mar 1991; Walz interv. Mooney favored using the food and water distribution points that the Kuwaitis were accustomed to because communication was poor and it would be difficult to notify them of new locations. Mooney, interv by Stewart, p. 36.

[33]352d CA Command Sitrep #14, 15 Mar 1991; "CCATF After Action Report," pp. 304–05; Harbell interv, pp. 39–40; Elliott, interv by Stewart, p. 16.

[34]352d CA Command Sitrep 092000 Mar 1991; ibid., 122000 Mar 1991, Tactical Operations Center Log (TFF 11–17 Mar 1991), TUSA G–3; 352d CA Command Sitrep 192000 Mar 1991, (TFF 18–24 Mar 1991), TUSA G–3; 352d Sitrep #24, #32, 2 Apr 1991, and #41, 10 Apr 1991, TUSA G–3.

[35]Natsios, "Preventing Human Rights Abuses," pp. 1–2.

[36]Ibid., pp. 2–7; Elliott, interv by Stewart, pp. 14–15.

[37]Memo, ARCENT MEDCOM (F), Subj: Significant Activities, 10 Mar 1991, Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3.

[38]Harbell interv, p. 69; Scales, *Certain Victory*, p. 336.

[39]"CCATF After Action Report," pp. 313–14; "Putting Kuwait Back on its Feet," *Chicago Tribune*; "From Green Bay to the Persian Gulf: The 432d Civil Affairs Company in Operation Desert Storm," *Civil Affairs Symposium*, p. 559.

[40]Memo, ARCENT MEDCOM (F), 10 Mar 1991; Mooney, interv by author, pp. 30–31; "CCATF After Action Report," p. 303.

[41]Mooney, interv by Stewart, pp. 32–33; Maj. Gen. Robert S. Frix, interv by Col. Patrick W. Carlton, 6 Apr 1992, p. 15; Mooney, interv by author, p. 32; Huber interv, pp. 70–71; Mooney, interv by Crouch.

[42]Frix and Davis, "Task Force Freedom," p. 10; Frix, interv by Fishel, p. 6; Gnehm, interv by author, pp. 13, 16; memo, Maj. Gen. Glynn C. Mallory, Jr., 12 Mar 1991, Tactical Operations Center Log (TFF 11–17 Mar 1991), TUSA G–3; Blount, interv by Carlton, pp. 32–33.

[43]Blount, interv by Carlton, p. 33–34; Blount, interv by Stewart, pp. 27–28.

[44]Leaf interv, pp. 20–21.

[45]Frix, interv by Fishel, p. 15.

[46]Elliott, interv by Stewart p. 7.

[47]Mooney, interv by Stewart, pp. 40–42; Frix, interv by Fishel, p. 15.

[48]ARCENT Briefing for CINC, faxed from ARCENT (Main) G–3 on 11 Mar 1991, Tactical Operations Center Log (TFF 11–17 Mar 1991), TUSA G–3.

[49]"Draft Itinerary for Sec Army visit to Kuwait City/Camp Freedom on 15 Mar 1991," Tactical Operations Center Log (TFF 1–10 Mar 1991), TUSA G–3; Maj. Gen. Glynn C. Mallory, Jr., 12 Mar 1991 (TFF 11–17 Mar 1991), TUSA G–3.

[50]Msg, COMUS ARCENT Main/G–3 to Cdr TFF/G–3, 26 Mar 1991, ibid. (TFF 25–31 Mar 1991); 416th ENCOM Sitrep, 24 Mar 1991, ibid.;

memo, HQ 96th CA BN, for participants..., *Civil Affairs Symposium*, p. 443; Brinkerhoff, "Waging the War," p. 193.

[51]Scales, *Certain Victory*, p. 337; Brinkerhoff, "Waging the War," p. 193. On 15 April ARCENT (Forward) headquarters moved from Kuwait City back to Riyadh and Mooney temporarily assumed command of Task Force Freedom.

[52]Msg, Cdr Task Force Freedom to ARCENT G2/3/5, 10 May 1991, Subj: TFF Freedom Sitrep, 1 May 1991, Operations-TFF Sitrep (closeout): DRAO Files; 352d CA Command Sitrep 211803Z Mar 1991, Tactical Operations Center Log (TFF 18–24 Mar 1991), TUSA G–3; 352d CA Command Sitrep 222003Z Mar 1991, ibid.; 352d CA Command Sitrep 232003Z Mar 1991, ibid.; memo, CINCCENT to CJCS, 111200Z Apr 1991, ibid. (TFF 1–13 Apr 1991); TFF Briefing, n.d., Kuwait Reconstruction: TFF Briefing, Office of History Files.

[53]Msg, Cdr Task Force Freedom to ARCENT G2/3/5, 10 May 1991, Subj: TFF Freedom Sitrep, 1 May 1991, Operations-TFF Sitrep (closeout), DRAO Files; msg, Cdr Task Force Freedom to ARCENT G2/3/5, 30 Apr 1991, Subj: Task Force Freedom Sitrep, 30 Apr 1991, ibid.

[54]"Political Infighting Paralyzes Kuwait," *Chicago Tribune*, 22 Apr 1991, p. 4; Hasenauer, "Corps Rebuilds Kuwait," p. 15; *Baltimore Sun*, 19 May 1991.

[55]Frix, interv by Fishel, pp. 8–9.

[56]Mooney, interv by Crouch.

[57]Memo, Cheney to Mooney, 4 Aug 1991, Kuwait Reconstruction: General, ASA(ILE) Files.

[58]Mooney, interv by Stewart, p. 44.

[59]Mooney, interv by author, p. 34; Mooney, interv by Stewart, p. 44; Frix, interv by Carlton, p. 17.

[60]Mooney, interv by author, p. 25.

[61]"CCATF After Action Report," p. 315.

[62]Mooney, interv by Stewart, p. 44; "Putting Kuwait Back on its Feet," *Chicago Tribune*.

[63]DRAO Completion Report, p. 14; Frix and Davis, "Task Force Freedom," pp. 8, 10; Elliott, interv by Stewart, p. 8.

Chapter 4. Emergency Response Phase: Kuwait Emergency Recovery Office Activities

[1]Locurcio, interv by author, 7 April 1991, pp. 15–21; Fuller interv, 6 Apr 1991, p. 21.

[2]Memorandum For Record, Dr. Ibrahim Al-Shaheen/Locurcio, n.d., FMS MOD: DRAO Files; Locurcio, interv by author, 7 Apr 1991, pp.

49–50; Brooks interv, pp. 93, 95; Jinkins interv, pp. 32, 34–35; Locurcio comments on draft manuscript.

[3]Col. Ralph V. Locurcio and Maj. Charles R. Maggio, "The Corps in Kuwait," *Engineer Officer Bulletin*, Jul 1991, no. 13, p. 16; Fuller interv, pp. 38–39; Hasenauer, "Corps Rebuilds Kuwait," p. 16; Judy Schriener, "Kuwaitis rethinking management plans," *Engineering News-Record*, Jul 1/8, 1991, p. 28.

[4]Locurcio, interv by author, 8 Sep 1991, p. 29; Locurcio and Maggio, "The Corps in Kuwait," p.16; Locurcio, interv by author, 7 April 1991, pp. 5–7.

[5]Al-Qabandi interv, pp. 21–22; Locurcio, interv by author, 7 April 1991, p. 9.

[6]Graves, "Water Resources Policy and Issues," pp. 7–8; Locurcio, interv by author, 8 Sep 1991, pp. 34–41; Locurcio, HQUSACE Briefing, 16 Aug 1991, Kuwait Reconstruction, Office of History Files; Slana interv, p. 36; Locurcio, "Nation Assistance in Kuwait," pp. 4–5. Resident offices sometimes shared contractors. In one instance, three resident engineers managed a single contract with Brown and Root. This situation caused confusion and some difficulty in managing funds.

[7]Transatlantic Division briefing slide, 6 Apr 1991.

[8]Locurcio and Maggio, "The Corps in Kuwait," p. 16; Fuller interv, pp. 18–19; Locurcio, interv by author, 8 Sep 1991, pp. 10–12, 23–25; Al-Qabandi interv, pp. 23, 57.

[9]Joan F. Kibler, "Kuwait parliament building complete," *Transatlantic News*, v.7, no. 6, Aug–Sep, 1992, pp.3–7.

[10]Memorandum For Record, 12 Feb 1991, Message Reading File, Book #4, Desert Storm, South Atlantic Division, Emergency Operations Center Files; Locurcio, "Nation Assistance in Kuwait," pp. 4–5; Locurcio, interv by author, 8 Sep 1991, pp. 69; 72. Urbine interv, pp. 13, 38.

[11]Hasenauer, "Corps Rebuilds Kuwait," pp. 15–16.

[12]Memo, Lt. Gen. Henry Hatch for ASA(ILE), 27 Feb 1991, Kuwait Reconstruction: Command and Control, Office of History Files; Locurcio comments, Washington, D.C., 23 May 1997.

[13]Locurcio, interv by author, 7 April 1991, pp. 25–28.

[14]Fuller interv, pp. 23–25.

[15]Slana interv, p. 33; Urbine interv, p. 2; Locurcio, interv by author, 8 Sep 1991, pp. 3–4.

[16]Locurcio, interv by author, 8 Sep 1991, pp. 31–32; Fuller interv, pp.25–29.

[17]*Los Angeles Times*, 28 Feb 1991; "U.S. Firms First in Line to do the Job," *USA Today*, 14 Feb 1991; *Washington Post*, 22 Feb 1991; "U.S. Corporations Win Kuwait Rebuilding Jobs," *New York Times*, 28 Feb

1991. The Governor of Kuwait's Central Bank, Sheikh Salem Al-Sabah, predicted the cost of rebuilding could climb to $500 billion.

[18]Memo, Rep. Helen Delich Bentley to Sec. Michael P. W. Stone, 22 Jan 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; memo, ASA(ILE) to Bentley, 7 Mar 1991, ibid.

[19]Executive Summary, Col. Michael Fellows, n.d., OACE Book, "Kuwait Activities, 25 February—present"; "Contracts Awarded for Kuwait Cleanup," *Washington Post*, 5 Mar 1991.

[20]Memo, Frederick W. Volcansek, 18 Mar 1991, Kuwait Reconstruction: Contractors, Office of History Files.

[21]Memo, Maj. Gen. James W. Ray for Amb. Edward W. Gnehm, 18 Feb 1991, Kuwait Reconstruction: COE Activities, ASA(ILE) Files; memo, Director General of Kuwait Public Works, 21 Feb 1991, Kuwait Reconstruction (not on letterhead), Office of History Files; Locurcio, interv by author, 8 Sep 1991, p. 9; Memorandum For Record, Locurcio, 25 Feb 1991, Kuwait Reconstruction: Contracting, Office of History Files.

[22]Memorandum For Record, Dr. Shaheen/Locurcio, n.d., FMS MOD: DRAO Files.

[23]DFARS, Subpart 236.273; memo, Cecil Hutchinson to Col. William Miller, 22 Jul 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; copy of *Commerce Business Daily* notice in Kuwait Reconstruction: Phase I FMS Case KU–B–HAQ, John Jones Files.

[24]At their 16 February meeting, Locurcio had informed Shaheen that the Corps intended to use full and open competition to award construction contracts, but if the tactical situation moved faster than anticipated, it would use letter contracts and an accelerated contracting procedure. Locurcio and Shaheen agreed that the overriding goal was to have construction contractors ready to meet the needs of the Kuwaiti population as soon as the transition to Kuwaiti government control occurred. Memorandum For Record, Dr. Ibrahim Al-Shaheen/Locurcio, n.d., FMS MOD: DRAO Files; memo, Volcansek for Trade Development Deputy Assistant Secretaries, 25 Mar 1991, Kuwait Reconstruction: Contractors, Office of History Files; Memorandum For Record, Edward M. Slana, 2 Apr 1991, Kuwait Reconstruction, Office of History Files; Slana interv, pp. 8–10; Memorandum For Record, Ben Wood, n.d., Message Reading File, Book #4, Desert Storm, South Atlantic Division, Emergency Operations Center Files; Locurcio, interv by author, 8 Sep 1991, pp. 45–47. The British Department of Trade and Industry complained that 72 hours was not enough time, but the fax machines in Dhahran were jammed with prequalification applications. "U.S., UK Vie Over Rebuilding Postwar Kuwait," *Wall Street Journal*, 21 Feb 1991.

[25]DRAO Completion Report, 20 Nov 1991, p. 9.

[26]Memorandum For Record, Slana, 2 Apr 1991; Slana interv, pp. 14–17.

[27]Slana interv, pp. 10–13.

[28]Memo, Volcansek for Trade Development Deputy Assistant Secretaries, 25 Mar 1991, Kuwait Reconstruction: Contractors, Office of History Files.

[29]Locurcio, interv by author, 8 Sep 1991, pp. 47–48.

[30]Locurcio, interv by Ruffennach, p. 2; Kesh Vadlamani, interv by author, Kuwait City, 8 Apr 1991, p. 5.

[31]Locurcio and Maggio, "The Corps in Kuwait," p. 16.

[32]DRAO Completion Report, p. 18; Locurcio, "The Reconstruction of Kuwait," p. 37; McDonnell, "Rebuilding Kuwait," p. 54; Vadlamani interv, pp. 7, 13.

[33]Vadlamani interv, pp. 8–9, 19–21. Author notes from damage survey tour with Maj. Gen. Kelly, 4 Apr 1991. Locurcio comments on manuscript; John J. Kosowatz, "Brits brought first power," *Engineering News–Record*, 6 May 1991, p. 43.

[34]Brooks interv, pp. 91–92.

[35]DRAO Completion Report, pp. 22–23; Maj. Robert Underwood, interv by author, Kuwait City, 11 Sep 1991, pp. 2–3, 15.

[36]DRAO Completion Report, pp. 23–24.

[37]Mary Weber, interv by author, Kuwait City, 7 Apr 1991, pp. 3, 9, 12–19.

[38]DRAO Completion Report, pp. 20–21; TAD Fact Sheet, 6 May 1991, Subj: Water, in Transatlantic Division Briefing, 7 May 1991.

[39]Weber interv, pp. 4, 7–8.

[40]Memo, Shaheen to Locurcio, Kuwait Reconstruction: Contracting, Office of History Files; DRAO Completion Report, p. 21.

[41]Weber interv, pp. 14–17; Schriener, "Kuwaitis rethinking management plans," pp. 28–29.

[42]Santucci interv, p. 61; TAD "Kuwait Briefing," Jul 1991, Fisher Files; Bob Drogin, "Amid Deprivation, Emir's Palace is Gleaming Again," *Los Angeles Times*, 19 Mar 1991, pp. A1, A11; Ltr, Lt. Col. Michael J. Fisher to Rep. Tom Andrews, 10 Jul 1991, General, Fisher Files; *Kuwait: A MEED Practical Guide*, p. 136.

[43]Robert P. Grathwol and Donita M. Moorhus, "History of the U.S. Army Corps of Engineers Europe Division and its Predecessors," Office of History Files.

[44]TAD Fact Sheet: Subj: Public Buildings, Transatlantic Division Briefing, 7 May 1991.

[45]TAD Fact Sheet, Subj: Defense/National Guard Facilities, 6 May 1991, Transatlantic Division Briefing, 7 May 1991.

[46]Memorandum For Record, David Greenwood, 11 Mar 1991, Kuwait Reconstruction: Contracting, Office of History Files; memo, Julius Bounds for TAD Contracting, 5 Mar 1991, ibid. Locurcio's staff worked with Kuwaiti officials to smooth the way for contractors, to include writing letters of introduction. See Townsend interv, p. 24; Locurcio and Maggio, "Corps in Kuwait," p. 16.

[47]Paul Tarricone, "The Incredible Shrinking Rehab," *Civil Engineering*, Sep 1991, p. 44.

[48]Slana, Memorandum For Record, 2 Apr 1991.

[49]"Kuwait Not Yet Open for Business," *New York Times*, 22 Mar 1991, p. D1; Schriener, "Kuwaitis rethinking management plans," pp. 26–30.

[50]TAD Brief to Dept of Commerce, n.d., Kuwait Reconstruction: Contracting, Fisher Files; "Examples of U.S. Army Corps Role in Reconstruction," Mar 1991, Kuwait Reconstruction: Contracting, Office of History Files.

[51]Memo, Lt. Gen. Henry Hatch for ASA(ILE), 25 Feb 1991, Kuwait Reconstruction: Miscellaneous Messages, #5, OACE Reference Files. The 19 February memorandum of understanding served as an "umbrella" agreement under which individual U.S. government agencies could provide services or commodities to the Kuwaiti government on a reimbursable basis through a single exchange of letters with Kuwaiti government ministries and agencies.

[52]Memo, Hatch for ASA(ILE), 8 Mar 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[53]Locurcio, interv by author, 7 Apr 1991, pp. 35–37; Kelly, interv by author, 7 Sep 1991, pp. 22–23.

[54]Kelly, interv by author, 7 Sep 1991, pp. 24–25. Army lawyers anticipated problems with the provision that contracts let by the Kuwaitis were to be governed by Kuwaiti law. U.S. officials could not be expected to know the requirements of Kuwaiti law. The letter of exchange committed the U.S. to supporting Kuwait in regard to contracts for Kuwait reconstruction, they observed. This might apply even in regard to contracts the Kuwaitis made on their own initiative. U.S. authorities were then supporting contracts governed under Kuwaiti law. Kuwaiti laws might have provisions that were unacceptable to U.S. interests such as a law prohibiting contracts with Israelis. Talking Paper, Col. Burger, DAJA-IA, 11 Apr 1991, Kuwait Reconstruction: Miscellaneous Messages, #7, OACE Reference Files; KERO Executive Summary #32, 4 Apr 1991; ibid., #33, 5 Apr 1991; Locurcio, interv by author, 8 Sep 1991, pp. 11–12.

[55]"Kuwaitis rethinking management plans," p. 28.

Chapter 5. Recovery Phase: The Defense Reconstruction Assistance Office and Kuwait Emergency Recovery Office

[1]Kelly, interv by author, 7 Sep 1991, pp. 4–5; Charles Hess, interv by author, Kuwait City, 9 Sep 1991, pp. 9, 20, 26; Alexander interv, pp. 43–44; James DeWire, interv by author, Washington, D.C., 16 Jun 1992, p. 39; Livingstone interv, p. 28.

[2]Memo, Col. James R. Carlson, for ASA(ILE), 10 May 1991, Subj: Information Memo # 26, Operations/DAMO–ODP: DRAO Files; memo, Secretary Richard Cheney to the Secretary of the Army and the Chairman of the Joint Chiefs of Staff, 15 Apr 1991, Kuwait Reconstruction: Command and Control, Office of History Files; DRAO Sitrep #1, 3 May 1991; Locurcio, interv by author, 8 Sep 1991, pp. 14–17; DRAO Biweekly Report, 15 May 1991, Kuwait Reconstruction: DRAO Biweekly Reports. As a result of the Secretary of Defense's visit, DRAO was tasked to serve as liaison to the Kuwaiti government and assisted ARCENT/22d Support Command in housing U.S. soldiers who remained in Kuwait temporarily. DRAO Biweekly Report, 15 May 1991.

[3]Kelly, interv by author, 7 Apr 1991, pp. 9, 11, 21, 63; Kelly, interv by Coffey, pp. 21–22.

[4]Memo, Secretary Stone for SECDEFREP, 28 May 1991, Subj: Instructions to the SECDEFREP, Operations (Fax Traffic, Apr–May): DRAO Files. Kelly found the original draft Letter of Instruction to be too restrictive and burdensome, so military officials modified it. Kelly, interv by author, 7 Sep 1991, pp. 25–26; Alexander interv, p. 20.

[5]Kelly, interv by author, 7 Apr 1991, p. 15; Livingstone interv, pp. 10, 13, 27.

[6]Kelly, interv by author, 7 Sep 1991, pp. 14–15.

[7]Memo, Lt. Col. Alexander for Livingstone, 8 May 1991, Kuwait Reconstruction: Corps of Engineers Activities, ASA(ILE) Files.

[8]Memo, Kelly for ASA(ILE), 29 May 1991, Kuwait Reconstruction: Command and Control, Office of History Files.

[9]Kelly, interv by author, 7 Sep 1991, pp. 10–11; Kelly, interv by Coffey, pp. 22, 26.

[10]Locurcio, interv by author, 8 Sep 1991, p. 18; Urbine interv, p. 29.

[11]Schubert, *Building Air Bases in the Negev*, pp. 197–98.

[12]DRAO Completion Report, p. 12; Locurcio, interv by author, 8 Sep 1991, p. 67; Russell Plaisance, interv by author, Kuwait City, 11 Sep 1991, pp. 27–28.

[13]Bronel Jerrell, Memorandum For Record, 11 Mar 1991, Resource Management Files, Desert Shield/Desert Storm: Restoration of Kuwait; Plaisance interv, pp. 1–2, 23–24; memo, Douglas A. Brooks for

ASA(ILE), 22 Mar 1991, Kuwait Reconstruction: Miscellaneous Messages, #6, OACE Reference Files; DRAO Completion Report, pp. 12–13.

[14]Note, Kelly to Lt. Gen. Henry J. Hatch, 6 Sep 1991, Budget and Funding, Fisher Files; "Kuwait Emergency Fund Control Systems Users Manual," p. 3, Fisher Files; Kelly, interv by author, 7 Sep 1991, pp. 77–78; memo, Thomas L. Brockman, Jr., for the Chief of Engineers, n.d., Kuwait Reconstruction: Miscellaneous, Jones Files.

[15]Memo, Thomas A. Grant, Director, Acquisition and Force Management Audits, Army Audit Agency, for SECDEFREP, 6 May 1991, Kuwait Reconstruction: Audits, ASA(ILE) Files; memo, Grant for SECDEFREP, 23 Apr 1991, Major Dunford Book, #36: DRAO Files.

[16]Memo, Plaisance to Mohammed Farhatullah, 22 Apr 1991, Kuwait Reconstruction: Memorandum of Understanding, ASA(ILE) Files; memo, Plaisance to Dr. Abdulahadi Al-Awadi, 23 Apr 1991, Kuwait Reconstruction: Funding, ASA(ILE) Files; Plaisance interv, p. 3; DRAO Completion Report, p. 12.

[17]Plaisance interv, pp. 5–6; Urbine interv, p. 6.

[18]Locurcio, interv by Ruffennach, pp. 3–4; Locurcio, Memorandum For Record, Subj: Budget Review and Analysis with Dr. Shaheen on 11 Apr 1991, Col. Gatlin Book: DRAO Files; Urbine interv, pp. 7–8. Throughout March KERO complained of a shortage of funds and warned of the negative impact this shortage would have on the mission. See KERO Executive Summary #27, 29 Mar 1991; ibid., #28, 31 Mar 1991.

[19]SAFM–FOI, Information Paper, 17 May 1991, Kuwait Reconstruction: Funding, ASA(ILE) Files; Kelly, interv by author, 7 Sep 1991, pp. 49–52; Locurcio, Memorandum For Record, 3 May 1991, Subj: Weekly Meeting with Dr. Shaheen, 3 May 1991, Gatlin Book: DRAO Files; DRAO Biweekly Report, 15 May 1991; ibid., 1 Jun 1991.

[20]Kelly, interv by author, 7 Sep 1991, pp. 53–57; Locurcio, Memorandum For Record, 30 May 1991, Subj: transition meeting with Dr. Shaheen and Mr. Qatami, Gatlin Book: DRAO Files; DRAO Biweekly Report, 7 Jul 1991.

[21]Locurcio, "The Reconstruction of Kuwait," pp. 36–37; Plaisance interv, pp. 7–12; Kelly, interv by author, 7 Sep 1991, pp. 58–62; DRAO Biweekly Report, 18 Jun 1991; ibid., 17 Jul 1991; ibid., 1 Aug 1991. The date for beginning Kuwait's new fiscal year subsequently slipped from 1 July to 1 October. The State Department and the Defense Department signed a memorandum of understanding on 29 March 1991 that prohibited the DOD representative from accepting any work from the Kuwaiti government unless the U.S. Ambassador concurred. Deputy Secretary of Defense Donald J. Atwood not only signed the agreement but told the

Acting Secretary of Defense that Ambassador Gnehm and Kelly had already established an "excellent" working relationship. "Memorandum of Understanding Between Departments of State and Defense Regarding Activities of the U.S. Army Corps of Engineers in Kuwait," 29 Mar 1991, Kuwait Reconstruction: Policy, Directives, Guidance, ASA(ILE) Files; memo, D.J. Atwood for Acting Secretary of State, 30 Mar 1991, ibid.

[22] DeWire interv, pp. 15–16.

[23] Memo, Maj. Gen. James W. Ray to ASA(ILE), 30 Apr 1991, Kuwait Reconstruction: Contracting, Office of History Files; Kelly, interv by author, 7 Sep 1991, pp. 47–48; DRAO, *Completion Report*, p. 10. The contract with American Dredging had been closed out.

[24] Memo, L.H. McElroy for commander DRAO/KERO, 8 Jul 1991, Contracting: DRAO Files; Livingstone interv, pp. 24–26; DeWire interv, pp. 17, 19.

[25] Kelly, interv by author, 7 Sep 1991, pp. 67–68; DRAO Completion Report.

[26] "Small U.S. Firms Frozen Out of Kuwait Rebuild Effort," *Wall Street Journal*, 8 Mar 1991, p. B2.

[27] DeWire interv, pp. 26–27, 31–32; Livingstone interv, p. 30.

[28] U.S. Congress, House of Representatives, "Operation Desert Shield/Desert Storm Supplemental Appropriations Bill, 1991," 5 Mar 1991, To accompany H.R. 1282, 102d Cong., 1st sess., Report 102–10, p. 7.

[29] U.S. Congress, House of Representatives, Committee on Small Business, Subcommittee on Exports, Tax Policy, and Special Problems, Hearing, "The Role of U.S. Small Business in Rebuilding Kuwait," 102 Cong., 1st sess., 11 Mar 1991, pp. 11–12; U.S. Congress, Senate, Committee on Small Business, Hearing, "Small Business Opportunities in the Postwar Reconstruction of Kuwait," 102 Cong., 1st sess., 12 Mar 1991, pp. 10–11.

[30] Ltr, Rep. Mervyn Dymally to Secretary M. P. W. Stone, 28 Feb 1991, Kuwait Reconstruction: Miscellaneous Messages, #6, OACE Reference Files; Rep. Charles B. Rangel to Secretary Richard Cheney, 15 Mar 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; Kelly, interv by author, 7 Sep 1991, p. 42.

[31] *Congressional Record*, Section 606, 21 Mar 1991, p. H1981; memo, Hatch for ASA(ILE), 17 Apr 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[32] Memo, George E Dausman for the Chief of Engineers, 22 Mar 1991, Kuwait Reconstruction: SADBU, Fisher Files.

[33] Memo, Secretary M. P. W. Stone for the Secretary of Defense, 18 Apr 1991, Kuwait Reconstruction: Contracting ASA(ILE) Files.

[34]Memo, Maj. Gen. James W. Ray to ASA(ILE), 30 Apr 1991, Kuwait Reconstruction: Contracting, Office of History Files.

[35]Slana interv, pp. 27–28; Townsend interv, p. 6.

[36]Memo, William K. Takakoshi for Secretary Shannon, 8 May 1991, Kuwait Reconstruction: Contractors, Office of History Files.

[37]In a handwritten note, Livingstone suggested a targeted outreach strategy to alert small and small disadvantaged businesses to opportunities and how to pursue them. Memo, Livingstone for Director of the Office of SADBU, 22 May 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; memo, Livingstone for SECDEFREP, 17 May 1991, Kuwait Reconstruction: Contracting ASA(ILE) Files.

[38]Memo, Michael A. Rea for Chief, Office of Counsel, TAD, 7 Mar 1991, Kuwait Reconstruction: Contracting–SADBU, Office of History Files; memo, Kelly to ASA(ILE), 8 Jun 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[39]ASA(ILE) Information Paper, 22 Oct 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; memo, Livingstone for the Secretary of the Army, 21 Oct 1991, ibid; memo, Col. Jesse Gatlin to Lt. Col. Joseph Alexander, 17 Oct 1991, Congressional Correspondence, ASA(ILE) Files.

[40]Memo, Col. Maurice J. O'Brien, DAJA-KLC, to DAMO-ODP-KRTF, 21 Jun 1991, Kuwait Reconstruction: Miscellaneous Messages, #9, OACE Reference Files.

[41]Memo, Gatlin to Alexander; Info Briefing for Ms. Nancy Dorn, ASA(CW), 17 Dec 1991.

[42]Thomas A. Duckenfield III, Assistant to General Counsel, HQDA, to Lt. Col. Ty Hughes, Chief Counsel, DRAO, 26 Jun 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[43]Memo, James A King, Assistant to the Army General Counsel, for Lt. Col. Alexander, 17 Aug 1991, Kuwait Reconstruction, ASA(ILE) Files.

[44]Memo, Brig. Gen. Witherspoon for Al Carton, 22 Jul 1991, Kuwait Reconstruction: Miscellaneous Messages, #9, OACE Reference Files; memo, Hatch for ASA(ILE) 26 Jul 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[45]Memo, Lt. Col. Michael Fisher for Lt. Col. Joe Alexander, 26 Jul 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[46]Memo, Allen M. Carton for ASA(ILE), 21 Aug 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; memo, Livingstone for SECDEFREP, 10 Sep 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[47]Memo, Dr. Ibrahim Al-Shaheen to Kelly, 26 Aug 1991, Jones Files.

[48]Kelly, interv by author, 7 Sep 1991, pp. 37–41.

[49]"UPDATE: SADB Participation...," 5 Sep 1991, SADBU: DRAO Files; DRAO Monthly Report, 1 Nov 1991. In a handwritten note at the bottom of Livingstone's memo, Under Secretary Shannon indicated "Poor show—fair play is not going on here." He suggested bringing the approval of awards to the ASA(ILE). Memo, Livingstone for Under Secretary of the Army, 9 Sep 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[50]ASA(ILE) Information Paper, 22 Oct 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; memo, Livingstone for the Secretary of the Army, 21 Oct 1991, ibid.

[51]DeWire interv, pp. 33–34; "Additional Information Concerning Kuwait," encl. in memo, Nancy P. Dorn to Helen Delich Bentley, 28 Apr 1992, Kuwait Reconstruction: Contracting, Office of History Files.

[52]Slana interv, p. 29; Locurcio, interv by author, 8 Sep 1991, pp. 60–61.

[53]Memo, Kelly for ASA(ILE), 30 Apr 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; memo, Livingstone for SECDEFREP, 1 May 1991, ibid; Mary Allingham, "Kuwait Recovery Efforts Reach Damaged Schools," *Engineer Update*, Jul 1991, p. 13; Urbine interv, pp. 29–30.

[54]Townsend interv, p. 25; Urbine interv, pp. 31–32; Kaminsky interv, p. 11.

[55]Lt. Col. Douglas Coffey, "Kuwaiti Students Enjoy First Day of School," *Transatlantic News*, v. 6, no. 7, Aug–Sep 1991; Kelly, interv by author, 7 Sep 1991, pp. 73–74; memo, Michael P. W. Stone for the Secretary of Defense, 22 Aug 1991, Kuwait Reconstruction: General, ASA(ILE) Files. Contractors could not enter 6 of the 152 schools because of ordnance and the seventh school was one that the Ministry of Education decided not to reopen.

[56]Kelly, interv by author, 7 Sep 1991, pp. 27–28; memo, Livingstone for SECDEFREP, 24 May 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; DRAO Biweekly Report, 17 Jul 1991.

[57]Hess interv, p. 35; KERO, Fact Sheet, 31 May 1991, Infrastructure: DRAO Files.

[58]Memo, Kelly for ASA(ILE), 12 May 1991, Kuwait Reconstruction: Contracting, Office of History Files; memo, Kelly for ASA(ILE), 15 May 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; DRAO Completion Report; Ltr, Brig. Gen. Eugene S. Witherspoon to Family Members, 13 Sep 1991, Jones Files.

[59]DRAO Monthly Report, 1 Nov 1991; "Information Briefing for Ms. Nancy Dorn, ASA(CW)," 17 Dec 1991, Kuwait Reconstruction: TAD Briefings, Office of History Files.

[60]DRAO Biweekly Report, 18 Jun 1991; DRAO Biweekly Report, 7 Jul 1991; DRAO Monthly Report, 1 Sep 1991.

[61]"Information Briefing for Ms. Nancy Dorn, ASA(CW)," 17 Dec 1991.

Chapter 6. Support to Kuwait's Ministry of Defence

[1]Mary Allingham, "Kuwait defense facilities leveled by war," *Transatlantic News*, v. 6, no. 5, May 1991, pp. 8–9; DRAO Completion Report, p.27.

[2]DRAO Completion Report, p. 27.

[3]Joan F. Kibler, "Corps to assist with Kuwait air base restoration," *Transatlantic News*, v. 6, no. 7, Aug–Sep 1991, p. 18; Joan F. Kibler, "Rising from the rubble in Kuwait," *Transatlantic News*, v. 8, no. 2, Feb 1993, p. 4; Col. David E. Peixotto, interv by author, Winchester, Virginia, 19 Aug 1991, pp. 3–4.

[4]Memo, Kelly for ASA(ILE), 3 Jun 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[5]Kelly, interv by author, 7 Sep 1991, p. 74; Tom McReynolds, Memorandum For Record, 12 Apr 1991, Major Dunford Book, #17, DRAO Files.

[6]Memo, Locurcio for Kelly, 19 Apr 1991, Foreign Military Sales/Ministry of Defence, DRAO Files.

[7]Memo, Kelly to Livingstone, 22 Apr 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; memo, Livingstone to Kelly, 25 Apr 1991, ibid.

[8]DRAO Biweekly Report, 1 Jun 1991; DRAO briefing for Lt. Gen. Henry Hatch, 2 Aug 1991, Subj: MOD Ongoing FMS Work; Nancy Dorn briefing, 17 Dec 1991.

[9]DRAO Biweekly Report, 18 Jun 1991; ibid., 7 Jul 1991.

[10]Ltr, Faisal Ali Al-Dawoud to Kelly, 11 May 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[11]Section 36(b)(1) of the Arms Control Export Act required that Congress be notified before initiating a Letter of Offer to sell construction services for over $200 million. Congress had 30 days to accept or reject the proposed foreign military sales case. Moreover, the Defense Security Assistance Agency (DSAA) had agreed to provide Congress with 20 days advance notice before formally submitting a foreign military sales case under Section 36. If Congress had not objected to the proposed sale after 30 days, the DSAA Comptroller would countersign the Letter of Offer. Then the appropriate DOD component could forward the original signed agreement to the prospective purchaser for signature. David L. Chambers, Information Paper, Subj: History of the Phase I FMS

case, 7 Aug 1991, Kuwait Reconstruction: Kuwait FMS Case, Office of History Files; David L. Chambers, 14 May 1991, Memorandum of Briefings for DSAA and ASA(ILE), FMS MOD: DRAO Files.

[12]Kelly, interv by author, 7 Sep 1991, pp. 74–75.

[13]Chambers, Information Paper, 7 Aug 1991; memo, Kelly to Livingstone, 20 May 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files.

[14]Capt. Steven V. Mathews, Memorandum For Record, 22 May 1991, FMS MOD, DRAO Files.

[15]Capt. Robert F. Kiesling, Memorandum For Record, 26 May 1991, FMS MOD, DRAO Files; Chambers, Information Paper, 7 Aug 1991.

[16]Capt. Mathews, Memorandum For Record, 27 May 1991, FMS MOD, DRAO Files.

[17]Capt. Mathews, Memorandum For Record, 11 Jun 1991, FMS MOD, DRAO Files.

[18]Memo, Capt. Kiesling (draft) for Lt. Col. Joseph Alexander, 18 Jun 1991, Kuwait Reconstruction: FMS, ASA(ILE) Files; memo, Kelly to ASA(ILE), 17 Jun 1991, Kuwait Reconstruction: Phase I FMS Case, Jones Files; Chambers, Information Paper, 7 Aug 1991.

[19]DRAO Biweekly Report, 7 Jul 1991.

[20]Ibid.

[21]Memo, Kelly to ASA(ILE), 4 Jul 1991, Kuwait Reconstruction: Miscellaneous Messages, #9, OACE Reference Files; Livingstone to Kelly, ibid.

[22]Chambers, Information Paper, 7 Aug 1991.

[23]Memo, Kelly for Roger Thomas, 15 Jul 1991, FMS MOD, DRAO Files; Chambers, Information Paper, 7 Aug 1991.

[24]DRAO Biweekly Report, 17 Jul 1991.

[25]James W. Cumper and Ahmed Al-Fahad, Memorandum For Record, Subj: Meeting with MOD/MEP, 20 Jul 1991, Kuwait Reconstruction: SADBU, Fisher Files; Peixotto interv, p. 32.

[26]Memo, Kelly to ASA(ILE), 23 Jul 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; Peixotto interv, pp. 33–34; Capt. Robert F. Kiesling, interv by author, Kuwait City, 12 Sep 1991, p. 10.

[27]Memo, Kelly for ASA(ILE), 25 Jul 1991, Kuwait Reconstruction: Contracting, ASA(ILE) Files; Kiesling interv, p. 32.

[28]Memo, Livingstone for SECDEFREP, 26 Jul 1991, Kuwait Reconstruction: Miscellaneous Messages, #9, OACE Reference Files; Peixotto interv, pp. 9–10.

[29]Memo, Kelly for ASA(ILE), 7 Aug 1991, Kuwait Reconstruction: FMS, ASA(ILE) Files.

[30]DRAO Monthly Report, 31 Aug 1991.

[31]Kiesling interv, pp. 15–21; Peixotto interv, p. 17.

[32]Chambers, Memorandum For Record, Subj: FMS Case KU–B–HAQ, 12 Aug 1991, Kuwait Reconstruction, Office of History Files; DeWire interv, pp. 23–25; Peixotto interv, p. 15.

[33]"Stanley goes to Kuwait," *Engineering News–Record*, 9 Sep 1991; Kibler, "Corps to assist with Kuwait air base restoration," p. 18; Peixotto interv, pp. 13–14.

[34]DRAO Monthly Report, 31 Aug 1991.

[35]DRAO Monthly Report, 31 Aug 1991; ibid., 31 Oct 1991.

[36]Memo, Kelly for the Secretary of the Army, 24 Oct 1991, Kuwait Reconstruction: Miscellaneous Messages, #10, OACE Reference Files; "U.S. Corps Wins Air Bases Project," *New Arabia*, 15 Aug 1991.

[37]Memo, Kelly for the Secretary of the Army, 7 Nov 1991, Kuwait Reconstruction: Miscellaneous Messages, #10, OACE Reference Files.

[38]Memo, Kelly to ASA(ILE), 14 Nov 1991, ibid.

[39]Alexander interv, pp. 29–31.

[40]Memo, SECDEFREP for ASA(ILE), 20 Nov 1991, Kuwait Reconstruction: FMS, ASA(ILE) Files.

[41]Peixotto interv, pp. 3, 8–11, 14. Peixotto also commanded the Kuwait Emergency Recovery Office until it closed following the completion of the civil reconstruction program.

[42]"Notes on 70/30 Kuwait Airfield Work for Phonecon with Mrs. Dorn," n.d., Kuwait Reconstruction: Policy Guidance and Authorities, Fisher Files.

[43]Memo, Lt. Col. Alexander for Livingstone, 21 Nov 1991 Kuwait Reconstruction: FMS, ASA(ILE) Files; memo, Maj. Gen. Peter J. Offringa to Lt. Gen. Hatch, 18 Dec 1991, Kuwait Reconstruction: Miscellaneous, Jones Files.

[44]"Contracts awarded for two Kuwait air bases," *Transatlantic News*, v. 7, no. 1, Jan 1992, p. 1; Joan F. Kibler, "Destroyed Kuwaiti air base rebuilt," *Engineer Update*, v. 17, no. 4, Apr 1993, p. 4; memo, John Jones, 21 Jan 1991, Kuwait Reconstruction: Miscellaneous, Jones Files; Kibler, "Rising from the rubble," pp. 5–10; Information Briefing, "Kuwait Emergency Recovery and Kuwait Ministry of Defence programs," 25 Jun 1992, Jones Files.

[45]Kibler, "Rising from the rubble," pp. 5–8; Joan Kibler, "Potential Questions and Answers" (draft), Kuwait Reconstruction: Kuwait Working, Fisher Files.

[46]Grathwol and Moorhus, "Corps of Engineers Europe Division," ch. 8, pp. 44–48, and ch. 10, p. 43.

[47]Lt. Col. Michael Fisher, Executive Summary, n.d., Kuwait Reconstruction: Air Bases, Fisher Files; memo, Brig. Gen. Pat M. Stevens

for ASA(CW), 12 Jun 1992, Kuwait Reconstruction: Information Papers, Jones Files; Ltr, Brig. Gen. Eugene S. Witherspoon to Sabah Al Nasser, n.d., Jones Files.

[48]Kibler, "Rising from the rubble," pp. 4–10; TAD Information Paper, 26 May 1992, Jones Files; Information Briefing: "Kuwait Emergency Recovery and Kuwait Ministry of Defence Programs," 25 Jun 1991, Jones Files; Information Paper, 26 May 1992, Kuwait Reconstruction: Air Bases, Jones Files.

[49]Denise Tatu, "Kuwait issues discussed during workshop," *Transatlantic News*, v. 8, no. 1, Jan 1993; TAD, "Monthly Summary, Kuwait Program," 1 Apr 1991, Jones Files.

[50]Peixotto interv, pp. 2–5; Peixotto comments on draft manuscript.

[51]Secretary M. P. W. Stone to Sheikh Ali Al-Sabah Al-Salem Al-Sabah, 4 Aug 1992, Kuwait Reconstruction: Air Bases, Fisher Files.

[52]Peixotto, Memorandum For Record, 12 Sep 1992, Kuwait Reconstruction: Air Bases, Jones Files.

Aftermath

[1]DRAO Monthly Report, 1 Nov 1991.

[2]Plaisance interv, pp. 21–22.

[3]DRAO Monthly Report, 1 Nov 1991; DRAO Sitrep #29, 22 Nov 1991.

[4]Department of the Army, General Order #17, "Assignment of Functions, Responsibilities, and Duties within the Office, Secretary of the Army," 28 May 1991.

[5]Memo, Nancy P. Dorn for Chief of Engineers, 10 Dec 1991, Subj: Guidance on Corps of Engineers International Activities, Kuwait Reconstruction: Policy Guidance/Authorities, Fisher Files.

[6]Memo, Nancy P. Dorn for Secretary of the Army, 11 Jan 1992, Kuwait Reconstruction: Policy Guidance/Authorities, Fisher Files. On 3 February 1992, the Secretary of Defense through the Secretary of the Army delegated to ASA(CW) oversight responsibility for Army reconstruction in Kuwait. On 2 March ASA(CW) further delegated that responsibility to the Chief of Engineers. The Chief or his designee would serve as SECDEFREP for purposes of the Letter of Exchange with the government of Kuwait and the Letter of Instruction for Financial Management of the Kuwait reconstruction program, dated 28 May 1991. Memo, Secretary M. P. W. Stone for ASA(CW), 3 Feb 1992, DRAO Phasedown/KPO transition, Jones Files; memo, Nancy P. Dorn for Chief of Engineers, 2 Mar 1992, Policy Guidance and Authorities, Fisher Files.

[7]Anna Kasten Nelson, "A History of the Office of the Assistant Secretary of the Army for Civil Works" (draft), pp. 314–15, 363–64, Office of History Files.

[8]Graves, "Water Resource Policy and Issues," pp. 67–68.

[9]Ibid.

[10]Peixotto interv, p. 27.

[11]Kibler, "Kuwait parliament building complete," p. 4; Peixotto interv, p. 20.

[12]Memo, Col. David E. Peixotto to Mohammed Ibrahim Alaskari, 30 Jul 1992, Jones Files; James L. McFaul, "U.S.–Kuwait team form repair partnership," *Engineer Update*, v. 16, no. 4, Apr 1992, p. 1.

[13]Peixotto interv, p. 21.

[14]James L. McFaul, "KERO hosts first partnering session," *Transatlantic News*, v. 7, no. 2, Feb 1992, p. 4; Peixotto interv, p. 23.

[15]Peixotto interv, p. 22; Information Paper, 21 Jan 1992, Subj: National Assembly Building, Contracting, Fisher Files.

[16]Memo, Aly M. Samahy for Director of Military Programs, 4 Feb 1992, General, Fisher Files.

[17]Ibid.

[18]Maj. Gen. Peter J. Offringa for ASA(CW), 21 Feb 1992, Subj: Status of National Assembly Building, Kuwait, National Assembly, Jones Files.

[19]Peixotto interv, pp. 24–26.

[20]Memo, Maj. Gen. Peter J. Offringa for ASA(CW), 10 Mar 1992, Jones Files.

[21]Joan F. Kibler, "Kuwait focus turns to parliament building," *Transatlantic News*, v. 7, no. 3, Mar–Apr 1992, pp. 3–4.

[22]Kibler, "Kuwait parliament building complete," p. 5; memo, Col. David E. Peixotto to Mohammed Ibrahim Alaskari, 30 Jul 1992, Jones Files; *Engineer Update*, Apr 1992; Peixotto interv, p. 28.

Conclusion

[1]HQDA After Action Report—Desert Shield/Desert Storm (working paper), n.d., Kuwait Reconstruction: After Action/Lessons Learned, Office of History Files.

[2]See Maj. Boyd D. Houck, "Nation Assistance: An Evolving (But not new) Concept," *Engineer*, v. 22, Apr 1992, pp. 11–16.

[3]Harbell interv, 2 May 1992, p. 81.

[4]Hatch interv, pp. 41–42.

[5]Lt. Gen. Henry J. Hatch, Ltr, "Our Nation Assistance Mission," *Military Review*, Jan 1992, p. 85.

[6]Hatch interv, p. 47.

[7]Locurcio, "Nation Assistance in Kuwait," p. 10.

[8]Frix, interv by Fishel, p. 15.

[9]Frix, interv by Carlton, p. 13.

[10]Livingstone interv, p. 39; Kelly comments on draft manuscript/telephone conversation, 19 Aug 1997.

[11]Msg, Richard Cheney to Civil Affairs Symposium, 23 Oct 1991, *Civil Affairs Symposium*, p. 3; Kelly, interv by author, 7 Apr 1991, p. 23.

[12]Locurcio, interv by author, 8 Sep 1991, p. 75; Slana interv, p. 47; Ben Wood, interv by author, Kuwait City, 6 Apr 1991.

[13]Livingstone interv, p. 37.

[14]Msg, Edward W. Gnehm to Secretary of State, 20 Jul 1992, Subj: Straub visit wrap-up, Kuwait Reconstruction, Fisher Files.

[15]Ltr, Edward W. Gnehm to Col. Charles S. Cox, 5 Oct 1993, Information papers: Jones Files.

[16]Hatch interv, p. 38; Livingstone interv, pp. 31–33.

[17]"Kerp members awarded de Fleury medal," *Transatlantic News*, v. 6, no. 2, Feb 1993, p. 1.

Bibliography

Books

Fishel, John T. *Liberation, Occupation and Rescue: War Termination and Desert Storm*. Fort Leavenworth, Kans: U.S. Army Command and General Staff College, 1992.

Gordon, Michael R., and Gen. Bernard E. Trainor. *The Generals' War: The Inside Story of the Conflict in the Gulf*. Boston: Little, Brown and Company, 1995.

McDonnell, Janet A. *Supporting the Troops: The U.S. Army Corps of Engineers in the Persian Gulf War*. Alexandria, Va.: Office of History, U.S. Army Corps of Engineers, 1996.

Scales, Brig. Gen. Robert H., Jr., et al. *Certain Victory: The United States Army in the Gulf War*. Washington, D.C.: Office of the Chief of Staff, U.S. Army, 1993.

Schubert, Frank N. *Building Air Bases in the Negev: The U.S. Army Corps of Engineers in Israel, 1979–1982*. Washington, D.C.: Office of History, Corps of Engineers, and Center of Military History, 1992.

———, and Theresa L. Kraus, eds. *The Whirlwind War: The United States Army in Operations Desert Shield and Desert Storm*. Washington, D.C.: U.S. Army, Center of Military History, 1995.

Sullivan, Gordon R. *The Collected Works, 1991–1995*. n.p., n.d.

Whelan, John, ed. *Kuwait: A MEED Practical Guide*. London: Middle East Economic Digest Limited, 1985.

Articles

Allingham, Mary. "KERO moves fast to help soldiers in Saudi." *Engineer Update*, v. 15, no. 8, Aug 1991.

———. "Kuwait defense facilities leveled by war." *Transatlantic News*, v. 6, no. 5, May 1991.

———. "Kuwait Recovery Efforts Reach Damaged Schools." *Engineer Update*, Jul 1991.

———, and Ron Ruffennach. "KERO helps troops find comforts of home." *Transatlantic News*, v. 6, no. 6, Jun–Jul 1991.

Coffey, Lt. Col. Douglas. "Kuwaiti Students Enjoy First Day of School." *Transatlantic News*, v. 6, no. 7, Aug–Sep 1991.

"Contracts awarded for two Kuwait air bases." *Transatlantic News*, v. 7, no. 1, Jan 1992.

Cook, William J. "Rebuilding a Ruined Nation." *U.S. News and World Report*, 11 Mar 1991: 26–28.

Frix, Maj. Gen. Robert S., and Capt. Archie L. Davis III. "Task Force Freedom and the Restoration of Kuwait." *Military Review*, Oct 1992: 3–10.

Griffin, Lt. Col. Robert H. "Pacemakers in Southwest Asia." *Engineer Officer Bulletin*, no. 13, Jul 1991: 13–15.

Hasenauer, Heike. "Corps Rebuilds Kuwait." *Soldiers*, Aug 1991: 14–16.

Hatch, Lt. Gen. Henry J. Ltr, "Our Nation Assistance Mission." *Military Review*, Jan 1992: 85.

Houck, Maj. Boyd D. "Nation Assistance: An Evolving (But not new) Concept." *Engineer*, v. 22, Apr 1992: 11–16.

Huntington, Samuel P. "New Contingencies, Old Roles." *Joint Forces Quarterly*, no. 2, Autumn 1993: 39.

Kelly, Michael. "Rolls–Royce Revolutionaries." *The New Republic*, 8 Apr 1991: 22–24.

"Kerp members awarded de Fleury medal." *Transatlantic News*, v. 6, no. 2, Feb 1993.

Kibler, Joan F. "Corps to assist with Kuwait air base restoration." *Transatlantic News*, v. 6, no. 7, Aug–Sep 1991.

———. "Destroyed Kuwaiti air base rebuilt." *Engineer Update*, v. 17, no. 4, Apr 1993.

———. "Kuwait focus turns to parliament building." *Transatlantic News*, v. 7, no. 3, Mar–Apr 1992.

———. "Kuwait parliament building complete." *Transatlantic News*, v. 7, no. 6, Aug–Sep 1992.

———. "Rising from the rubble in Kuwait." *Transatlantic News*, v. 8, no. 2, Feb 1993.

Kosowatz, John J. "Brits brought first power." *Engineering News–Record*, 6 May 1991: 43.

———. "Return trip is bittersweet." *Engineering News–Record*, 6 May 1991: 42.

Kramer, Michael. "Toward a New Kuwait." *Time*, 24 Dec 1990: 27–33.

"Kuwaiti Cleanup." *Military Engineer*, v. 85, no. 554, Jan–Feb 1993.

Locurcio, Brig. Gen. Ralph V. "Nation Assistance in Kuwait." *Engineer*, v. 22, Apr 1992: 2–10.

———. "The Reconstruction of Kuwait Following Desert Storm." *Site World*, World Development Council, 1992.

——, and Maj. Charles R. Maggio. "The Corps in Kuwait." *Engineer Officer Bulletin*, no. 13, Jul 1991: 16–17.
McDonnell, Janet A. "Rebuilding Kuwait." *Military Review*, v. 73, no. 7, Jul 1993: 50–62.
McFaul, James L. "KERO hosts first partnering session." *Transatlantic News*, v. 7, no. 2, Feb 1992.
——. "U.S.–Kuwait team form repair partnership." *Engineer Update*, v. 16, no. 4, Apr 1992, p. 1.
Miller, John A. "After the Storm, the Effects Linger On." *The Military Engineer*, v. 84, no. 547, Jan–Feb 1992.
Parker, James N., Jr. "Corps Journalist Recounts Trip Into Kuwait City." *Engineer Update*, May 1991.
——. "Doha explosion required cooperation, sacrifice." *Transatlantic News*, v. 6, no. 6, Jun–Jul 1991.
——. "KERO assists during and after the explosion." *Engineer Update*, v. 15, no. 8, Aug 1991.
Ray, Maj. Gen. James, Lt. Col. Michael J. Fisher, and Lt. Col. Stephen Sheppard. "Emergency Recovery Assistance to Kuwait." *The Military Engineer*, v. 83, no. 52. May–Jun 1991: 10–15.
"Renovation work begins at Camp Doha." *Transatlantic News*, v. 10, no. 3, Mar–Apr 1995: 1.
Schriener, Judy. "Kuwaitis rethinking management plans." *Engineering News-Record*, Jul 1/8, 1991: 26–30.
"Stanley goes to Kuwait." *Engineering News-Record*, 9 Sep 1991.
Sullivan, Gordon R. "Power Projection and the Challenges of Regionalism." *Parameters*, Summer 1993, in *The Collected Works, 1991–1995*, p. 189.
Tatu, Denise. "Kuwait issues discussed during workshop." *Transatlantic News*, v. 8, no. 1, Jan 1993.
Tarricone, Paul. "The Incredible Shrinking Rehab." *Civil Engineering*, Sep 1991: 42–45.
"U.S. Corps Wins Air Bases Project." *New Arabia*, 15 Aug 1991.
Wilson, Capt. Bonnie F. "Forward–Area Support in Desert Storm." *Army Logistician*, Sep–Oct 1992: 2–4.
Yates, Lt. Col. Mark B. "Coalition Warfare in Desert Storm." *Military Review*, Oct 1992: 46–52.

Printed Reports and Unpublished Manuscripts

Brinkerhoff, John R. "Waging the War and Winning the Peace: Civil Affairs in the War with Iraq," in *Civil Affairs in the Gulf War: A Symposium. Proceedings, 25–27 Oct 1991*. Fort Bragg, North Carolina.

Civil Affairs in the Gulf War: A Symposium. Proceedings, 25–27 Oct 1991. Fort Bragg, North Carolina.

Grathwol, Robert P., and Donita M. Moorhus, "History of the U.S. Army Corps of Engineers Europe Division and its Predecessors." Office of History Files.

Graves, Gregory. Draft chapter for "Water Resources Policy and Issues," 19 Aug 1997. Office of History Files.

Greenwood, John T. "Diplomacy Through Construction: The U.S. Army Corps of Engineers in Saudi Arabia." Kuwait Reconstruction, Office of History Files.

"Gulf Reconstruction Report," v. 1, no. 2. Kuwait Reconstruction, Office of History Files.

Nelson, Anna Kasten. "A History of the Office of the Assistant Secretary of the Army for Civil Works" (draft). Office of History Files.

Swain, Col. Richard M. "'Lucky War': Third Army in Desert Storm" (unedited draft), 29 Mar 1993.

U.S. Army Special Operations Command (USASOC). "Army Special Operations in Operations Desert Shield/Desert Storm." Office of History Files.

Newspapers

Baltimore Sun. 19 May 1991.

Chicago Tribune. 8 Apr, 22 Apr 1991.

Los Angeles Times. 28 Feb, 19 Mar 1991.

New York Times. 30 Dec 1990; 28 Feb, 22 Mar, 5 Apr, 8 Apr, 9 Apr, 14 Apr, 21 Apr, 22 Apr, 11 Jun, 21 Jun, 26 Jul 1991.

USA Today. 14 Feb 1991.

Wall Street Journal. 21 Feb, 8 Jul, 8 Mar 1991.

Washington Post. 14 Jan, 22 Feb, 5 Mar, 20 May, 25 Jun, 12 Jul 1991; 27 Feb 1996.

Congressional Documents

Congressional Record, Section 606, 21 Mar 1991, p. H1981.

U.S. Congress. House of Representatives. "Operation Desert Shield/Desert Storm Supplemental Appropriations Bill, 1991," 5 Mar 1991, To accompany H.R. 1282, 102d Cong., 1st sess., Rpt 102–10.

U.S. Congress. House of Representatives. Committee on Small Businesses. Subcommittee on Exports, Tax Policy, and Special Problems. Hearing, "The Role of U.S. Small Business in Rebuilding Kuwait," 102d Cong., 1st sess., 11 Mar 1991.

U.S. Congress. Senate. Committee on Small Business. Hearing, "Small Business Opportunities in the Postwar Reconstruction of Kuwait," 102d Cong., 1st sess., 12 Mar 1991.

Manuscript Collections

Papers of Col. Patrick W. Carlton: Civil Affairs in the Gulf War, National Defense University.
Defense Reconstruction Assistance Office Files.
Maj. Gen. Ernest Edgar File.
Lt. Col. Michael Fisher Files.
John Jones Files.
Col. William Miller Files.
Office of the Assistant Chief of Engineers Reference Files.
Office of the Assistant Secretary of the Army for Installations, Logistics and Environment Files.
Third U.S. Army G–3. Tactical Operations Center Logs.
U.S. Army Corps of Engineers, Headquarters, Office of History Files.
U.S. Army Corps of Engineers, South Atlantic Division, Emergency Operations Center Files.
U.S. Army Corps of Engineers, Transatlantic Division Files.

Interviews

Alexander, Lt. Col. Joseph. Interviewed by author. Washington, D.C. 27 Apr 1992.
Auletta, Anthony. Interviewed by Col. Patrick W. Carlton. 12 Nov 1991. Carlton Papers, Box 1.
Bergner, Maj. Kirk M. Interviewed by author. Kuwait City. 12 Sep 1991.
Blount, Col. Lawrence. Interviewed by Col. Patrick W. Carlton. 5 Dec 1991. Carlton Papers, Box 1.
Blount, Col. Lawrence. Interviewed by Dr. Richard Stewart. 13 Jul 1991. Carlton Papers, Box 1.
Bolton, Capt. Peter K. Interviewed by Col. Patrick W. Carlton. 8 Jan 1992. Carlton Papers.
Brooks, Maj. James. Interviewed by author. Dhahran, Saudi Arabia. 26 Mar 1991.
Caplan, Maj. Les M. Interviewed by Lt. Col. William A. McGrew, 3 May 1992. Center of Military History/Center for Low Intensity Conflict.
DeWire, James. Interviewed by author. Washington, D.C. 16 Jun 1992.
Elliott, Col. Randall T. Interviewed by Col. Patrick W. Carlton. 6 Dec 1991. Carlton Papers, Box 2.
Elliott, Col. Randall T. Interviewed by Dr. Richard Stewart. 14 Jul 1991. Carlton Papers, Box 2.

Frix, Maj. Gen. Robert S. Interviewed by author. Kuwait City. 5 Apr 1991.
Frix, Maj. Gen. Robert S. Interviewed by Col. Patrick W. Carlton. 6 Apr 1992. Carlton Papers, Box 3.
Frix, Maj. Gen. Robert S. Interviewed by Lt. Col. John Fishel. 8 Nov 1991. Carlton Papers, Box 3.
Fuller, Wynne. Interviewed by author. Kuwait City. 6 Apr 1991.
Gnehm, Amb. Edward. Interviewed by author. Kuwait City. 11 Sep 1991.
Gnehm, Amb. Edward. Interviewed by Col. Patrick W. Carlton. 13 Mar 1992. Carlton Papers, Box 3.
Harbell, Maj. John W. Interviewed by Thomas W. Crouch. 2 May 1992. Center of Military History/Center for Low Intensity Conflict.
Hatch, Lt. Gen. Henry J. Interviewed by author. Washington, D.C. 15 Feb 1992.
Hess, Charles. Interviewed by author. Kuwait City. 9 Sep 1991.
Huber, Lt. Col. James. Interviewed by Thomas W. Crouch. 2 May 1992. Center of Military History/Center for Low Intensity Conflict.
Hurteau, Brig. Gen. Joseph C. Interviewed by Col. Patrick W. Carlton. 31 Jan 1992. Carlton Papers, Box 2.
Jinkins, Maj. Larry. Interviewed by author. Kuwait City. 5 Apr 1991.
Kaminsky, Lt. Col. Albert F. Interviewed by author. Kuwait City. 12 Sep 1991.
Kelly, Maj. Gen. Patrick J. Interviewed by author. Kuwait City. 7 Apr and 7 Sep 1991.
Kelly, Maj. Gen. Patrick J. Interviewed by Lt. Col. Douglas Coffey. Kuwait City. n.d.
Kerr, Col. James T. Interviewed by Col. Patrick W. Carlton. 2 Apr 1992. Carlton Papers, Box 4.
Kerr, Col. James T. Interviewed by Lt. Col. John Fishel. 20 Dec 1991. Carlton Papers, Box 4.
Kiesling, Capt. Robert F. Interviewed by author. Kuwait City, 12 Sep 1991.
Leaf, Barbara. Interviewed by Col. Patrick W. Carlton. n.d. Carlton Papers, Box 4.
Livingstone, Susan. Interviewed by author. Washington, D.C. 18 Jun 1992.
Locher, James R. Interviewed by Dr. Carnes Lord. 18 Mar 1992. Carlton Papers, Box 4.
Locurcio, Col. Ralph V. Interviewed by author. Kuwait City. 7 Apr and 8 Sep 1991.
Locurcio, Col. Ralph V. Interviewed by Ron Ruffennach. Kuwait Reconstruction: Office of History Files, Locurcio Interv. and Letter.

Mooney, Brig. Gen. Howard. Interviewed by author. Kuwait City. 5 Apr 1991.
Mooney, Brig. Gen. Howard. Interviewed by Col. Patrick W. Carlton. 4 Dec 1991. Carlton Papers, Box 5.
Mooney, Maj. Gen. Howard. Interviewed by Thomas Crouch. 25 Mar 1992. Center of Military History/Center for Low Intensity Conflict (no transcript).
Mooney, Brig. Gen. Howard. Interviewed by Dr. Richard Stewart. 14 Jul 1991. Carlton Papers, Box 5.
Natsios, Maj. Andrew. Interviewed by Lt. Col. William McGrew. 2 May 1992. Center of Military History/Center for Low Intensity Conflict.
Peixotto, Col. David E. Interviewed by author. Winchester, Virginia. 19 Aug 1991.
Plaisance, Russell. Interviewed by author. Kuwait City. 11 Sep 1991.
Al-Qabandi, Bader. Interviewed by author. Kuwait City. 10 Sep 1991.
Sadek, Col. Charles E. Interviewed by Thomas W. Crouch. 3 May 1992. Center of Military History/Center for Low Intensity Conflict (no transcript).
Santucci, Ceasar. Interviewed by author. Kuwait City. 5 Apr 1991.
Al-Shaheen, Dr. Ibrahim. Interviewed by author. Kuwait City. 12 Sep 1991.
Slana, Edward. Interviewed by author. Kuwait City. 13 Sep 1991.
Townsend, Houston. Interviewed by author. Kuwait City. 13 Sep 1991.
Underwood, Maj. Robert. Interviewed by author. Kuwait City. 11 Sep 1991.
Urbine, Wayne. Interviewed by author. Kuwait City. 7 Sep 1991.
Vadlamani, Kesh. Interviewed by author. Kuwait City. 8 Apr 1991.
Walz, Col. Arthur H. Interviewed by Thomas Crouch. 3 May 1992. Center of Military History/Center for Low Intensity Conflict (no transcript).
Weber, Mary. Interviewed by author. Kuwait City. 7 Apr 1991.
Wood, Ben. Interviewed by author, Kuwait City, 6 Apr 1991.
Yeosock, Maj. Gen. John J. Interviewed by Col. Patrick W. Carlton. 18 Mar 1992. Carlton Papers, Box 7.

Index

Abdul Aziz Al Kulaz: 143
Abdullah Al Naser General Trading: 174
Accounting systems: 161–62
Addington, David S.: 103, 146
Agency for International Development: 90
Ahmadiah Trading and Contracting Company: 211
Ahmed Al-Jaber Air Base, Kuwait: 35, 143, 152, 172, 193, 194, 196, 198, 202, 210, 211, 213
Air base construction programs
  in Israel: 5–6, 155–56, 161, 210–11, 213
  in Saudi Arabia: 5–6, 213
Air bases, Kuwaiti. *See also* Ahmed Al-Jaber Air Base; Ali Al-Salem Air Base.
  assessment of damage to: 143, 192, 193, 194, 210–11, 212
  emergency repairs at: 136, 143, 193, 194, 198–99, 200, 205, 210–16
  long-term reconstruction of: 196–216, 227
  need to conform to U.S. standards: 197, 198, 207
  planning for reconstruction of: 194, 198–99, 200–201, 205, 207, 209, 210–16
  problems with unexploded ordnance: 212–13
Air conditioning systems
  installed: 219–20, 221, 223
  needed: 95, 217, 219
  repaired: 67
  stolen: 139, 175, 219–20
Air quality problems: 109–10, 188, 189–90
Air traffic control towers: 125, 205
Airborne Corps, XVIII: 9–10, 52, 63, 93–94
Airborne Division, 82d: 9–10
Aircraft
  C–5A transports: 136, 187–88, 198
  F–18s: 194, 207, 210
  helicopters: 73
  Kuwaiti: 196, 197–98
Al-Amiri, Rashid: 186
Al-Bader, Suliman: 176
Al-Dawoud, Faisal Ali: 196, 197–98, 202
Al-Fahad, Ahmed: 198, 200, 204, 209
Al-Fulaij United Group: 211
Al-Harbi Trading & Contracting Co., Ltd.: 126
Al-Jaleel, Fahad: 198, 212
Al-Mutawa, Sulayman Abdul Razaq: 17
Al Nasser, Sabah: 197–98, 199–200
Al-Oraifan, Khaled: 199–200
Al-Qabandi, Bader: 15, 37, 81–82, 116, 164–65
Al-Qatami, Abdulla: 165
Al-Sabah, Ali Al-Khalifa: 17
Al-Sabah, Ali Al-Sabah Al-Salem: 197–98
Al-Sabah, Fatima: 31, 38–39, 58, 116, 164, 234–35
Al-Sabah, Jaber Al-Ahmed, Emir of Kuwait: 7, 9, 13, 34, 46, 47, 118, 140–42, 180, 190, 232
Al-Sabah, Maj. Gen. Jaber Khalid: 52–53
Al-Sabah, Sabah Al-Ahmed Al-Jaber: 40
Al-Sabah, Saud Nasir: 16–17, 34, 36, 102, 121
Al Saud, Fahd bin Abdul Al-Aziz: 9
Al-Sayegh, Maj. Gen. Abdul Aziz: 152
Al-Shaheen, Ibrahim. *See* Shaheen, Ibrahim Al-.
Al-Sultan, Fawzi: 15, 17, 34
Al-Suwaidan, Col. Saber: 198
Ali Al-Salem Air Base, Kuwait: 152
  damage to: 143, 210–11
  emergency repairs to: 136, 172, 193, 194, 195–96, 197–98, 200, 202, 205, 210–11, 213–14

Ali Al-Salem Air Base—Continued
long-term repairs to: 202, 210–11
Alm, Col. Phil: 91
American Catastrophics Environmental Services: 171
American Dredging Company: 126, 135
American International Contractors Incorporated: 210, 225–26
American Techno Trade, Inc.: 174
American Telephone and Telegraph (AT&T): 109, 120–21, 144
Ammunition
abandoned: 149
cleared from public buildings: 76, 77, 176
storage of: 223–24
Animal feeding program: 71, 90–91
Arab forces (DESERT STORM): 48, 52–53, 62–63
ARCENT: 9, 66, 104–05
and 352d Civil Affairs Command: 21–22, 23, 49, 52
civil affairs annex to operations plan: 32–33
Civil Affairs Task Force Planning Cell: 50–51
coordination with CENTCOM on emergency response planning: 50–51
as executive agent for civil-military operations for DESERT STORM: 49–51
facilities in Kuwait: 225–26
and Kuwait Task Force: 43–44, 45–46
Medical Command: 55, 77, 80, 89
planning for civil-military operations after liberation: 33–34, 43, 47, 48–51, 57, 67, 69
Plans and Policy Directorate: 33, 48, 49, 50–52
relationship to Combined Civil Affairs Task Force: 51, 53
and Task Force Freedom: 54, 55, 63, 91, 93–94
telecommunications team: 65
ARCENT (Forward): 53, 54, 57, 95
Area Support Group, 301st: 46, 47, 53, 55, 76
Armored Cavalry Regiment, 11th: 218, 220
Armored Division, 3d: 217–18
Army, Secretary of the: 21, 93, 94, 99–100, 104, 155, 159, 168–69, 206, 218, 222
Army Audit Agency: 156, 161, 162
Army component of CENTCOM. *See* ARCENT.
Army Directorate of Engineering and Housing for Doha: 220
Army Environmental Hygiene Agency: 189
Army Staff: 4, 17, 19, 104
and Army role in recovery: 20, 22–23, 100, 101–02
and Brig. Gen. Mooney: 25
directions from Joint Staff: 18, 21
Kuwait Emergency Recovery Office communications with: 100–101, 109
and Kuwait Recovery Task Force: 4
and Kuwait Task Force: 26–27, 41, 43
oversight over Corps of Engineers: 37–38, 100–102, 104, 105–06
and relationship between Task Force Freedom and Ambassador Gnehm: 91–92
relationship with Maj. Gen. Kelly: 158, 159–60
and small business opportunities: 173
and use of Operations and Maintenance funds: 218
and U.S.-Kuwaiti civil affairs working group: 20
Assistant Secretary of Defense for International Security Affairs: 17, 18, 23, 25, 27
Assistant Secretary of Defense for Reserve Affairs: 23
Assistant Secretary of Defense for Special Operations and Low Intensity Conflict: 17, 18, 23
Assistant Secretary of the Army for Civil Works: 100, 101, 114, 228–29
Assistant Secretary of the Army for Financial Management: 101, 161, 165
Assistant Secretary of the Army for Installations, Logistics and Environment: 100, 169, 196, 221–22, 228

Assistant Secretary of the Army for Research, Development, and Acquisition: 102
Associated Kuwait Office: 205
Atwood, Donald J.: 222
Auditors: 105, 117, 155–56, 162, 167, 241
Audits: 126
Auletta, Anthony J.: 16–17, 27
Aviation Brigade, 2d: 55, 77

Bahrain: 5
Baker, James A. III: 17, 36, 40–41
Banking and currency system: 29, 86
Barlow, Lt. Col. Dennis C.: 17
Batteries, shortages of: 75–76, 97
Bayan Palace: 71, 73, 125, 126, 140–42, 147
BEC Construction/joint venture: 174
Bechtel Group, Inc.: 30–31, 184, 185, 188
Bentley, Helen Delich: 121
"Blackhorse" base: 223
Blount, Col. Lawrence C.: 48, 49, 92
Blount Construction International: 66, 110, 126, 140, 144–45, 167, 176, 207
Bolton, Capt. Pete: 25
Booby traps: 65, 77, 128
Boots and Coots: 183–84, 185
Bounds, Julius "Bo": 58, 117
Brackney, Col. Richard C.: 50–51
Bridges: 181
Brigade camps: 192
  6th: 153, 196, 218–19, 221, 223, 224
  15th: 196
  35th: 196
  80th: 196
British armed forces: 48, 76, 120, 223
  civil affairs elements: 52
  engineering team: 65, 131–32
  medical team: 65
  ordnance team: 65, 76, 149
  preventive medicine team: 80
British Electricity International: 131–32
British Royal Ordnance Corps: 149
Brook, Douglas A.: 165
Brooks, Maj. James: 65–66
Brown and Root International: 30–31, 126, 140, 143–44, 176, 207, 219
Bubiyan: 8
Bunkers, Iraqi
  built to guard roads and bridges: 65
  demolished: 76, 94, 132–33, 135, 181
Burgan oil field: 183, 188–89, 190
Burke, 1st Lt. William: 90
Bush, George: 8–9, 13, 15, 17, 121, 189, 222
Bush administration: 228, 229

Camp #1 (Jubail, Saudi Arabia): 53, 63
Camp Doha, Kuwait: 225
Camp Freedom, Kuwait: 63, 74, 75, 76, 78–79, 90–91
Canada: 52, 149
Capstone program: 16–17, 21–22, 23, 43
Carns, Lt. Gen. Michael P. C.: 17, 18, 22–23, 24
Carpenters: 74–75
Carter, Jimmy: 8
Carter doctrine: 8, 9
Caterpillar, Inc.: 82, 120
CENTCOM. *See* U.S. Central Command.
Central Intelligence Agency: 33, 60
Chambers, David L.: 196, 199–200
Checkpoints: 66, 67, 76, 77, 86
Chemical Bank of New York: 164
Cheney, Richard: 8–9, 50, 94, 96, 99, 102–03, 155, 169, 180, 189–90, 217–18, 222–23, 240
China: 186
Chrysler Corporation: 120–21
Civil Affairs and Psychological Operations Command: 23–24, 29
Civil affairs annexes to operations plans: 32–33
Civil Affairs Battalion, 96th: 51–52, 53, 77, 93–94
Civil Affairs Brigade, 354th: 25
Civil Affairs Command, 352d: 3–4, 11, 52–53, 156
  and Capstone program: 16–17, 21–22, 23, 43
  and coordination of emergency response effort: 95–96, 237–38
  and KERO: 61, 118–19
  and Kuwait Task Force: 24, 28–29, 38, 39–40, 43, 48

Civil Affairs Command, 352d—Continued
mobilization of: 24, 25, 50–52, 63, 65, 237–38
relationship to Task Force Freedom: 76
relationship to Third U.S. Army: 21–22
Civil affairs companies
418th: 90
431st: 51–52, 63, 65, 77, 93–94
432d: 51–52, 63, 65, 77, 90, 93–94
Civil Affairs Group, 308th: 86–87
Civil Affairs Task Force: 51–52, 84
Civil affairs units: 158
activation of: 21, 24, 25, 50–52, 63, 65
command and control of: 49, 50, 51–53, 54, 156
composition of: 21, 96
and damage assessment: 80, 119
history of: 21
and logistics aid to oil firefighters: 185
logistics support for: 54, 55, 57
missions of: 20–21, 26, 57
oversight of: 20–21, 24–25, 104
and planning for the reconstruction of Kuwait: 21, 54, 96
Civilian Skills Data Base: 28–29
Cluster bombs, unexploded: 109–10, 128–29, 149, 192, 193
Cobb, Jim: 65–66, 67
Combat engineer vehicles: 188
Combined Civil Affairs Task Force (CCATF): 10, 43, 51–53, 63, 65, 67, 69, 238
civil-military operations center: 80
composition of: 52, 77
damage assessment teams: 80
mission: 53, 97
organization of: 52–53, 95–96
relationship to Kuwait Emergency Recovery Office: 80
support for: 53, 54
and Task Force Freedom: 55
Commerce, U.S. Department of: 102
and contractor inquiries: 121, 126–27
Gulf Reconstruction Center: 121
and small business opportunities: 168, 174
Commerce Business Daily: 123, 124, 127, 167, 173, 200, 201
Communications equipment. *See* Telecommunications equipment.
Communications networks, military: 76, 144, 194
Computer equipment: 31
Construction
contracts: 120, 124, 126–27, 141–43, 172, 175, 199, 200, 209–16
of facilities for U.S. troops: 219, 221–22
Kuwaiti military facilities: 191–216
materials: 73, 144
by U.S. engineer troops: 219
Construction platoons: 74–75
Contract administration: 115, 146–47, 212–16, 218–20, 223
Contract award procedures: 101
accelerated: 124
and competition: 170, 199, 201, 204, 207
cultural influences on: 30, 202, 215
discussions with Kuwaiti officials about: 58, 107, 121–22
evaluation factors: 123, 171–72, 174, 201–02
and Kuwait Task Force: 31, 38–39
Kuwaiti-Kuwait Emergency Recovery Office prequalification and selection board: 124–25
and Kuwaiti laws: 146–47
Kuwaiti role in: 58, 124, 125, 146–47, 167–68, 180, 184, 199, 200, 202, 204, 206–07, 209, 234
limited competition: 167, 200, 201
preference for Kuwaiti firms: 146, 180, 206–07, 209
preference for U.S. firms: 58, 120–22, 146–47, 166, 168, 169–70, 222–23
requests for proposals: 123
selection of contractors: 124, 146–47, 202, 204–05, 206–07, 234–35
selection criteria: 171, 201
and small businesses: 102, 166, 168–70, 201–02, 237
and U.S. laws: 11, 62, 121–22, 123, 146–47, 202, 204, 206

Contract awards made by Kuwaitis: 19, 29–30, 31, 46, 47, 58, 86, 97, 107, 120–21, 122, 135, 146–47, 150, 152, 186, 202, 206–07, 209, 211, 214–16, 223
Contracting specialists: 115, 117, 123, 124, 126
Contractors: 4, 57
for air base construction: 195–96, 200, 201, 204, 207, 210–16
architect-engineer: 180, 199, 200–201, 205, 229–30, 232
British: 120, 125, 126, 186, 197, 198
building repairs: 126, 140, 219–20
Canadian: 184, 186
capabilities: 124–25
construction: 124–25, 126–27, 132–33, 195–96, 200, 201, 204, 207, 210–13, 229–30
design: 229–30, 232
difficulties getting equipment to Kuwait: 144, 169
eligibility: 199, 200, 206
for emergency supplies: 28, 29–30
emergency work orders to: 219–20, 224
equipment: 124–25
estimates of costs: 124–25, 126, 127
French: 197
inquiries about work in Kuwait: 101, 102, 121
killed: 84, 110, 128–29, 140, 153
Kuwaiti: 120, 124, 125, 126, 171, 173–74, 176, 180, 199, 200–201, 205, 206–07, 209–10
mobilization plans: 113, 119, 124–25, 126
need for civilian firm to serve as project manager for the recovery effort: 30–31, 35–36, 59–60
oil firefighters: 30, 183–90
payments to: 223, 224–25
personnel: 176, 234
potential: 16, 29, 101, 102, 121, 124, 172–73, 206
prequalified: 38–39, 58, 122–23, 124–25, 167, 169, 171, 200–201, 204, 206–07
problems mobilizing: 143–44, 168, 213–14, 219, 222–23
Contractors—Continued
representatives of, on damage assessment teams: 112, 119
Saudi: 84, 125, 126, 211
small and small disadvantaged: 10, 102, 168–75, 201–02
subcontractors: 124–25, 168–70, 171–72, 173, 174–75, 176, 180, 201, 234
task orders to: 119–20
Turkish: 197
U.S.-Kuwaiti joint ventures: 173–74, 199, 200–201, 205, 206–07, 209–10
used for explosive ordnance removal and disposal: 76, 172
for water: 28, 29–30, 83–84
work camps: 144
Contracts
architect-engineering: 123, 142, 172, 199, 200–201, 202, 205
construction: 122, 123, 124–25, 126, 172, 175, 199, 200, 209–16, 229
design: 122, 123, 180, 181, 199, 200, 229, 232
dredging: 121, 124–25, 126, 135, 167
duration of: 167
electrical work: 125, 126, 128–32, 142, 144
for emergency supplies: 28, 29–30, 46
explosive ordnance disposal: 149–53, 224
fixed price: 142
indefinite delivery type contracts (IDTC): 122, 172
joint venture: 120, 166–67, 173–74, 199, 200–201, 205, 206–07, 209–10, 212
marine survey: 124–25
modifications of: 127, 167, 170, 172–73, 175–76, 201, 210, 212–13
noncompetitive letter contracts: 38–39, 58, 124, 125, 126, 145, 170, 201, 205, 219–20
oil firefighting: 183–90
paving: 124–25, 133, 135
with relief organizations: 30

Contracts—Continued
sanitation: 87, 124–25, 136–37, 139–40
scope of work: 125, 126, 136
service: 123
supplies: 123
to support U.S. forces: 219–20, 222–23, 224
Conventional Munitions Systems: 152
Convoys. *See* Truck convoys.
Corps, VII: 52, 63, 89–90, 93–94
Corps of Engineers Management Information System (COEMIS): 161–62
Cost estimates
general: 120, 147, 162, 164–66, 199–200, 213, 227
for specific repair projects: 113, 119–20, 162, 164–66, 192–93, 194, 199–200, 204–05, 212–13
Cox, Col. Charles S.: 241
Cultural differences
and contract award procedures: 30, 202, 215
and relations between Task Force Freedom and Kuwaitis: 92–93, 239

Damage assessments
by 416th Engineer Command: 73–74
duplication of effort: 81, 108–09, 119
by Kuwait Emergency Recovery Office: 73, 108–09, 110, 112, 119–20, 191–92
by Kuwaitis: 108–09
planning for: 57
by Task Force Freedom: 80, 93
Damage survey reports: 119–20
Dammam, Saudi Arabia: 41–42, 46, 47, 143
Daniel, Mann, Johnson, and Mendenhall: 181
Dausman, George: 170
Dawson, Robert K.: 228–29
Defense, Office of the Secretary of
and call-up of reserve units: 21
and funding for facilities for U.S. troops: 221–22
and U.S.-Kuwaiti civil affairs working group: 20, 22
Defense, Secretary of: 3, 4, 93, 94, 102–03, 104, 105, 155, 222, 227
See also Cheney, Richard.
Defense, U.S. Department of
administrative expenses for Kuwait recovery effort: 147, 161, 162, 164
civil affairs capabilities: 15, 16
and civil affairs support: 20
contracting strategy: 166–75
General Counsel: 19
reimbursements from foreign nations: 221–22
relations with State Department: 18, 20–21, 22, 39–42
relations with State Department Representative to Kuwait: 99–100, 101–02
responsibility for recovery operations: 10, 13, 19, 22–23, 27, 93, 99–100, 101–03, 104–05, 155, 167–68, 202
Defense Contract Audit Agency: 126
Defense Cooperation Account: 221–22, 224, 225
Defense Intelligence Agency: 33
Defense Reconstruction Assistance Office: 4, 10, 155, 166
and civil affairs mission: 156
and contracting strategy: 166–75, 197, 200, 204
and facilities for U.S. Army units: 217–26
financial management role: 155–56, 158, 160–66, 227
logistics support for: 156
and long-term reconstruction of military facilities: 199, 200, 205
missions: 156, 158
personnel: 155, 158
relationship with Kuwait Emergency Recovery Office: 106, 152, 158, 159–60, 197, 227, 229
and small business opportunities: 167–75
and support for oil firefighters: 187–88
and support for U.S. troops: 217–26
and Task Force Freedom: 156
and work agreements: 164–65

Defense Security Assistance Agency: 8, 38, 196, 200
Desalinization plants
  Al-Zour: 83, 94, 138
  Doha: 74–75, 83, 94
  repairs to: 74–75, 84, 181
  Shuaiba: 83, 94
DESERT SHIELD: 9, 24, 36–37, 124
DESERT STORM: 9–10, 47–48, 49, 124
Dhahran, Saudi Arabia: 5, 41–42, 45, 47, 65–66, 71, 73, 77, 109, 112, 123, 196
Directorate of Strategic Plans and Policy: 18, 228
Doha desalinization/electrical power plants: 74–75, 82–83, 94, 130–31, 132
Doha, Kuwait: 217–26
Dorn, Nancy P.: 228–29
Duckenfield, Thomas A. III: 172
Dymally, Mervyn M.: 169

Educational facilities. *See* Schools.
Egyptian armed forces: 63, 176
Electrical engineers: 66, 117
Electrical power, emergency provisions for: 46
Electrical power system
  assessment of damage to: 38
  damage to: 73
  repairs to: 125, 127, 144, 145, 175, 181
  restoration of power to Kuwait City: 71, 79–80, 81–82, 132, 144, 181
  restoration of power to military facilities: 194, 195–96, 210, 213, 219
Electrical transmission lines. *See* Power distribution system.
Elliott, Col. Randall (Army Reserve): 16–17, 25, 30, 50, 97
  and human rights issues: 31
  and Kuwait Task Force mission: 26–27, 32–33, 44, 48, 78–79
Emir of Kuwait. *See* Al-Sabah, Jaber.
Energy, U.S. Department of: 186
Engineer battalions (combat heavy)
  43d: 74–75
  864th: 74–75, 219
Engineer Brigade, 23d: 219
Engineer Command (Forward), 416th: 55, 65, 73–74, 82–83, 119
Engineer Company (Combat Support), 259th: 74
Engineer Detachment (Prime Power), 535th: 74–75, 82
Engineering Services Company: 212
Engineers, Kuwaiti: 112, 119, 239
Engineers, U.S. Army Corps of: 3–4, 11. *See also* Kuwait Emergency Recovery Office.
  Army Staff control over: 101–02, 104, 105–06, 168, 228–29
  briefings to Kuwaitis: 27–28, 36, 58
  and construction of Kuwaiti military facilities: 35, 158, 196, 198, 211–16
  contracting strategy: 120–27
  and design of Kuwaiti military facilities: 196, 197, 198, 211–12, 214–16
  and facilities for U.S. troops: 219, 221–22
  history of work in Kuwait: 35
  Kuwaiti funding of mobilization costs: 125
  letter of agreement on nature of emergency assistance to Kuwait: 36–37, 58, 145–47
  logistics support for emergency response operations: 25, 39, 61–62, 117–19
  Middle East/Africa Projects Office: 35, 36–37, 38, 58, 60, 61, 118, 123
  Middle East Division: 35
  missions: 37–38, 58–59, 73, 122, 127, 214, 229
  as project manager for Kuwait emergency response: 37–38, 101, 108, 110, 189–90
  prospects for long-term role in Kuwait: 101, 158, 167–68, 191, 196, 197, 198, 200, 205–07, 214–16
  relationship with interagency steering group committee: 37–38
  relationship with Kuwaiti officials: 214–16
  and small business set-asides: 173, 201–02

Engineers, U.S. Army Corps of—Continued
South Atlantic Division: 117–18
Transatlantic Division: 109, 117–19, 121, 142, 159–60, 162, 164, 167, 170, 171, 172, 173, 180, 191, 197, 200, 205, 209–10, 225–26, 227, 229, 232, 234, 241
use of Kuwaiti volunteers: 37
volunteers to go to Kuwait: 39, 110, 117–18, 240
Environmental issues: 187–88, 189–90
Environmental Protection Agency: 189–90
Evans, James: 35
Explosive ordnance disposal center: 76
Explosive Ordnance Disposal Group, 1st: 55, 57, 76
Explosive ordnance disposal specialists
contract: 149–53, 172, 176, 224
military: 29, 65, 76, 119, 149, 150, 152–53, 185, 224
Explosive ordnance disposal units: 73
American: 76, 149, 150, 152–53, 158, 185
Bangladeshi: 149–50
British: 149–50, 153
Canadian: 149
Egyptian: 150, 153
French: 149, 150, 153
Pakistani: 150, 153

Fadden General Trading: 174
Failaka Island Ferry Terminal: 167
Federal Emergency Management Agency: 22, 27–28, 39
Federal procurement regulations (U.S.): 11, 121, 122–23
and foreign military sales agreements: 62, 147, 162, 167
lack of exceptions for disaster response: 62
and small business opportunities: 171, 172
Federation Internationale des Ingenieurs-Conseils (FIDIC): 211–12
Financial management
Defense Reconstruction Assistance Office and: 155–56, 160–66
Kuwait Emergency Recovery Office and: 160, 161–62
Financial management—Continued
and Section 607A of the Foreign Assistance Act: 160–66
Fire departments: 77, 94, 140, 174
Firefighting equipment: 30, 184, 185, 187–88
Fitzgerald, Rear Adm. J. R.: 19
Food distribution
centers for: 73, 77, 79–80, 88, 140
discrimination in: 88–89
and partisan politics: 88
Food supplies
distribution of emergency supplies: 30, 46–47, 65, 71, 87–89, 95
for emergency relief: 28, 29–30, 46–47, 49, 63, 65, 77, 86, 97
purchased by Kuwaiti government: 28, 29–30, 46–47, 87–88
stockpiling of: 28, 73
Ford Motor Company: 120–21
Foreign Assistance Act of 1961, Section 607A: 145–46, 158, 160–66, 167, 169, 172–73, 174, 175–76, 195, 218, 227, 232, 234
Foreign military sales case: 8
allocation of funds: 125, 165, 194–95, 218, 227
and assessment of damage to defense facilities: 191–92, 204–05, 210–11
cost estimates for repairs to military facilities: 192–93, 194–95, 204–05, 213
and emergency repairs at defense facilities: 194–96, 210–11
expanded: 145, 167
and Kuwait Emergency Recovery Office: 62, 118, 122, 125, 145, 167
for planning, design, and construction of Kuwaiti military installations: 194–95, 196–209, 210–11, 214–16, 227
scope of work: 199–200, 204–05, 212–13
and small business opportunities: 169, 172–73, 174, 201–02
and U.S. Army Corps of Engineers: 38, 58, 62, 105, 122, 145
and U.S. Congress: 169, 205–06

Fort Bragg, N.C.: 23
Forward area support coordination offices: 76
France: 53, 120, 149, 186
French armed forces: 48, 76
Frix, Maj. Gen. Robert S.: 49, 53, 63, 78, 97, 239
  and CCATF: 63, 65
  and Task Force Freedom: 54–55, 57, 79–80, 91, 92, 93, 94, 95, 96
Fuller, George A.: 210
Fuller, Wynne: 60–61, 80
Funding mechanisms. *See* Foreign military sales; Foreign Assistance Act of 1961, Section 607A.

General Accounting Office: 241
General Motors Corporation: 120–21
General Services Administration: 62
Generators
  brought to Kuwait by Kuwait Emergency Recovery Office: 67
  provided by contractors: 29–30, 82, 86, 120–21, 219–20
  provided by U.S. Army: 73, 75–76, 77, 82, 97
  for pumping stations: 139
  for radio repeaters: 109
  repaired: 75–76
  used to light city streets: 82, 94
Geneva Convention, violations of: 77
Germany: 21, 120, 186
Gianelli, William R.: 228–29
Gnehm, Edward W. "Skip," Jr.: 13, 15, 16–17, 19, 20, 23, 103, 241
  briefed by Locurcio: 58–59, 102
  and food distribution: 88–89
  and foreign military sales case: 122, 206, 213, 214–15
  and human rights issues: 31–32
  and Kuwait Emergency Recovery Office: 58–60, 61, 102, 118–19, 123–24, 164–65
  and Kuwait Task Force: 26–27, 30–31, 40–41, 44, 45–47, 59–60, 79
  and oil well fires: 185, 187–88
  and preference for U.S. firms: 121–22
  and reconstruction of air bases: 206, 213, 214–15
Gnehm, Edward W. "Skip," Jr.—Continued
  relationship with Brig. Gen. Mooney: 91
  relationship with CENTCOM: 44–47, 99
  relationship with Col. Peixotto: 209, 214–15
  relationship with Ibrahim Al-Shaheen: 118
  relationship with Kuwaiti officials: 92–93, 118–19
  relationship with Maj. Gen. Kelly: 103–04, 158, 160, 187–88
  and Task Force Freedom: 71, 91–92, 95
  and work agreements: 164–65
Grey, Ken: 65–66, 67
Groves and Tamimi: 212
Guest, Brig. Gen. Kenneth: 46, 54–55, 91
Gulf of Arabia, sewage released to: 84, 139

Haglund, S. Sgt. Robert: 86–87
Harbell, Maj. John W.: 47
Hatch, Lt. Gen. Henry J.: 36, 103, 238–39, 240
  and Ambassador Gnehm: 60
  and Army Staff: 105–06
  and contracting strategy: 121, 170
  and funding of recovery effort: 145
  and planning for emergency response: 38, 39–40, 45, 57, 61
  relationship to Nancy Dorn: 228–29
Hawalli, Kuwait City: 84, 88, 89
Health risks: 109–10, 189, 223
Helland, George: 186
Hellmuth, Obata, and Kassabaum: 180, 229–30, 232, 234–35
Henry, Wayne: 37
Highways. *See* Roads.
Hospitals
  damage assessment: 77, 80, 89, 140
  emergency: 77
  generators for: 73, 75–76, 89
  material stolen from: 49, 89
  repairs to: 79–80, 142–43
  restoration of utilities at: 74–76, 77
  supplies for: 47, 73, 77, 89–90, 94

Huber, James P.: 35
Huber, Lt. Col. Phil: 185
Hughes, Arthur H.: 19
Human rights issues: 31–32, 89
Hurteau, Brig. Gen. Joseph C.: 24, 25
Hussein, Saddam: 8, 9, 27–28

IBM: 31
Information management system: 161
Interagency steering group committee: 10
INTERNAL LOOK (joint exercise): 32
International Federation of Consulting Engineers: 211–12
International Security Assistance Middle East office: 27
Interpreters (Kuwaiti): 53
Iran: 186
Iraq: 8, 9
  collaborators with, in Kuwait: 31, 88
  displaced civilians in southern areas of: 49–50
  occupation of southern areas of: 48, 49–50, 217
Iraqi forces: 9, 63, 90
  bunkers: 65, 86
  looting by: 49, 75, 84, 136, 140–41, 217, 219–20, 234
  stockpiling of weapons by: 71, 86–87, 149
  war crimes by: 77
Israel
  air base program: 5, 30
  U.S. military construction programs in: 5
It Doesn't Take a Hero, by H. Norman Schwarzkopf: 62

Japan: 21, 120
Jinkins, Maj. Lawrence: 66, 67, 109
Joint Chiefs of Staff, Chairman of the: 21
Joint Forces Command–East: 48, 52, 53, 62–63
Joint Forces Command–North: 48, 52, 53, 62–63
Joint Staff
  briefing to Kuwait Task Force: 17
  and call-up of civil affairs personnel: 21
Joint Staff—Continued
  directions to Army Staff: 21
  Director of Operations: 18
  Director of Strategic Plans and Policy: 18
  and military role in recovery: 22–23, 103
  and U.S.-Kuwaiti civil affairs working group: 19, 20, 41
Joint ventures with Kuwaiti firms: 120, 166–67, 173–74, 199, 200–201, 205, 206–07, 209–10, 212
Jones Group Incorporated: 147
JUST CAUSE: 23, 28, 29, 36–37, 96

Kaminsky, Lt. Col. Albert F.: 217
Keener, Col. Allen W.: 16–17
Kelly, Maj. Gen. Patrick J.: 17, 21, 93, 103, 106, 240
  contracting strategy: 166–75, 196, 199–202, 204, 206–07, 222–23, 224
  duties and responsibilities: 103–04, 155–56, 158, 159–60, 161
  and explosive ordnance removal: 104–05, 152
  and facilities for U.S. Army units: 217, 218, 219–20, 222–23
  and foreign military sales case: 194–95, 196, 197–98, 199–200, 204, 206–07, 214
  and funding of recovery effort: 155–56
  and letter of exchange: 146–47, 158
  and long-term reconstruction of Kuwaiti military facilities: 196, 197–98, 199–200, 205–07, 239–40
  and office space for the Kuwait Task Force: 25
  relationship with Ambassador Gnehm: 103–04, 158, 160, 187–88, 206
  relationship with Col. Locurcio: 158, 159–60, 164–65, 166, 175–76, 180, 196
  relationship with Kuwait Emergency Recovery Office: 103–04, 105, 155, 158, 159–60, 162, 164–65, 166, 168, 176, 180, 195

Kelly, Maj. Gen. Patrick J.—Continued
relationship with Kuwaiti officials: 160, 165, 180, 197–98, 199–200, 204, 206, 223, 227
relationship with Susan Livingstone: 104, 158–59, 166, 195, 201–02, 240–41
and small business opportunities: 169, 170–71, 173–74
KERO. *See* Kuwait Emergency Recovery Office.
Kerr, Col. James T., Jr.: 34, 44, 51
Khafji, Saudi Arabia: 65, 143
Khalid bin Sultan, Lt. Gen. (Saudi Arabia): 62
Kharafi: 126, 140, 142, 171, 176, 180, 210, 219–20, 224, 230, 232, 234–35
Khobar Towers (Dammam, Saudi Arabia): 41–42
Khudair Group: 126, 142, 219, 224
Kiesling, Capt. Robert, USN: 198, 204
Kimbrell, Allen: 110
King, Col. Edward A.: 51
King, James: 172
King Khalid Military City, Saudi Arabia: 5, 54, 55, 73–74, 89
Kuwait
budget: 164–66, 202
civil affairs personnel: 52
Council of Ministers: 180
Crown Prince of: 91, 92–93, 140–142, 165, 217–18, 227, 232, 234
elections: 180
financing for recovery effort: 6, 16, 19, 29–30, 120, 145–47, 155–56, 158, 160–66
foreign laborers in: 31–32, 88, 92–93, 95
and foreign military sales agreement: 145, 164, 192–216, 218
funding for construction of facilities for U.S. troops: 217–18, 221–22, 224, 225
funding for repairs to military facilities: 197–99
funding for Task Force Victory: 217–18
labor force: 86
Kuwait—Continued
letter of exchange with U.S.: 146, 158, 161, 162
liberation of: 10, 47–48, 62–63
Ministry of Commerce: 88–89
Ministry of Defence: 145, 158, 181, 191–216, 218, 223, 224, 227
Ministry of Education: 147, 175–76
Ministry of Electricity and Water: 36, 38–39, 82, 131–32, 136, 138, 147, 164, 176, 181, 213
Ministry of Finance: 164, 165–66
Ministry of Health: 87
Ministry of Information: 87
Ministry of Interior: 87, 143
Ministry of Justice: 87
Ministry of Oil: 183
Ministry of Public Service: 144
Ministry of Public Works: 15, 36, 136, 139, 147, 164, 165, 230, 232
National Assembly: 230, 232
National Guard facilities: 36
payments to U.S. Treasury: 38, 160–61, 162, 164–65, 202, 227
reconstruction plan for: 32–34
reimbursement for services rendered by U.S. government: 19, 161, 187, 217–18, 221–22, 224
request for reimbursable design and construction management services from Corps of Engineers: 35–39
resistance fighters: 49, 67, 77, 88, 89
support for CCATF: 53
willingness to pay for civil affairs assistance: 217–19
Kuwait Air Force: 7, 35, 136, 191, 195–96, 198, 199, 205, 210–11, 212–16
Kuwait Army: 77
and DESERT STORM: 63
facilities for: 176, 191
and removal of enemy munitions: 77
Kuwait City: 7, 37, 46, 47, 51
divided into sectors for emergency response: 53, 58, 77, 125, 140
foreigners in: 31–32, 84, 88, 89, 95
liberation of: 47–48, 50, 63, 67, 123–24
military intelligence regarding the situation in: 33, 53

Kuwait City—Continued
restoration of services to: 81–82, 94, 132, 144
zoo: 77, 91
Kuwait Civil Reconstruction Trust Fund: 164
Kuwait Emergency Recovery Office: 3–4, 107–47
and budget proposals: 58, 114
command and control of: 61, 117–19, 159–60, 227
communications problems: 109
and contract administration: 108, 112, 113, 115, 218–20, 223, 229–30
contracting procedures: 58, 107, 123–24, 126, 147, 166–75, 204
cost estimates: 119, 162, 164
damage assessment groups: 110, 112–13, 115, 119–20, 127–28, 136–38, 140, 192–93
damage assessment teams: 80, 108–09, 112, 119, 138, 142–43
damage survey report process: 58, 119–20, 139, 164–65
emergency management division: 110, 113–14, 115
emergency repair teams: 113
engineering division: 110, 112, 115
and explosive ordnance removal and disposal: 150, 152
facilities for: 67
and facilities for U.S. Army units: 217–26
and financial accounting: 160, 161–62
and foreign military sales case: 62, 145, 192–96, 197, 198–99, 205, 210–11, 218–19
identification cards for: 66
Kuwaiti funding of equipment for: 61–62
and Kuwaiti volunteers: 61, 66–67, 112, 115–17, 136, 158, 175, 239
logistics support for: 61–62, 112, 115, 238
Ministry of Defence damage assessment group: 191–93, 210–11
mission: 60–61, 110, 118–19, 140
organizational structure: 110–17, 147
Kuwait Emergency Recovery Office—Continued
oversight of, by Frix: 57, 118–19
personnel: 61, 110, 115–16, 117–18, 158, 175
priorities for emergency repairs: 107–08, 113, 114, 118–19, 120, 127, 138, 140, 146, 164–65, 176, 193, 194–96, 198
and project management division: 112, 113–15, 117, 212
quality control role: 113, 114, 115
recruitment of personnel for: 60–61
relationship to 352d Civil Affairs Command: 61, 118
relationship to Ambassador Gnehm: 58–59, 61, 118–19
relationship with Combined Civil Affairs Task Force: 80
relationship with the Defense Reconstruction Assistance Office: 106, 156, 158, 159–60, 227
relationship with Kuwait Emergency Recovery Program: 107–08
relationship with Kuwait Reconstruction Task Force: 100
relationship with Kuwait Task Force: 59, 118
relationship with Kuwaiti ministries: 61, 107–09, 110, 112, 113–15, 116, 120
relationship with Kuwaiti officials: 107–09, 113–14, 119–20, 136, 164, 198–99
relationship with Task Force Freedom: 73, 118–19
relationship with Transatlantic Division: 117–19, 159
relationship with U.S. Army Corps of Engineers headquarters: 117–18
and repairs at Kuwait International Airport: 195–96, 198
and repairs to military facilities: 192–217
and repairs to schools: 175–76
resident offices: 112, 113, 115, 212–16
resource manager: 112, 120
support for U.S. troops: 217–26
work orders: 164–66, 175–76

Kuwait Emergency Recovery Office Funds Control System: 162
Kuwait Emergency Recovery Program: 3–4, 13, 15–16, 38
  composition of: 15–16
  contracts awarded by: 30
  facilities for: 67
  and human rights issues: 31
  move to Saudi Arabia: 40–42
  and priorities for emergency repairs: 1, 164–65
  relationship with Kuwait Emergency Recovery Office: 164–65
  and scope of emergency response: 32–33, 34, 60
  and water provisions: 30
  work groups: 15–16
Kuwait International Airport: 48, 76
  air traffic control tower: 85, 125, 136, 180–81
  assessment of damage to: 110, 112, 135–36
  clearing of debris from: 75, 135–36
  damage to: 71, 73–74, 85
  emergency facilities for the Kuwait Air Force at: 195–96, 198
  as headquarters for Task Force Freedom: 55, 63
  repairs to: 94, 125, 126, 135–36, 167, 168, 172, 174, 180–81, 195–96
  restoration of utilities at: 75–76, 125, 135–36
Kuwait Investment Office: 164
Kuwait Land Forces: 52–53
Kuwait military facilities
  assessment of damage to: 110, 112, 143, 191–92
  damage to: 191–93, 217, 218–19
  emergency repairs to: 158, 195–98
  long-term construction of: 196, 205, 209–16
Kuwait National Guard facilities: 142–43, 192, 194–95
Kuwait Navy: 191, 192, 193, 194, 198
Kuwait Oil Company: 183–84, 185, 186, 188
Kuwait Plaza Hotel, Kuwait City: 7, 67
Kuwait Program Office: 4, 207, 209, 212, 227, 230
Kuwait Reconstruction Task Force (KRTF): 100–101, 104
Kuwait Recovery Task Force: 4
Kuwait Task Force: 3–4, 10
  briefings for: 25, 27–28
  and Civil Affairs Task Force: 51–52
  command and control of: 26–27, 43–47
  and contract awards: 29
  formation of: 23–27
  and human rights issues: 31, 32
  lack of military intelligence: 33
  lines of authority: 26–27
  logistics support for: 44–45
  mission: 26–27, 32–33, 40–41, 44, 45, 46, 59, 78–79
  move to Saudi Arabia: 34, 39, 40–42, 43, 48
  and need for program manager to administer the recovery effort: 30–31
  organization: 28, 81
  and planning for fighting oil well fires: 183–84, 185
  priorities: 33–34
  relationship between individual members and Kuwaiti counterparts: 40–41, 43, 77–79, 80
  relationship to Ambassador Gnehm: 40–41, 45, 79
  relationship to ARCENT: 25, 33, 43–47, 48
  relationship to Army Staff: 26, 43
  relationship to CENTCOM: 25, 33, 43–47, 48
  relationship to Task Force Freedom: 73, 77
  and scope of emergency response: 38–39
  use of individual members of, by CENTCOM and ARCENT: 43–44, 45–46
Kuwaiti funds
  released by U.S. Treasury Department: 162, 164–65, 166
  transferred to U.S. accounts: 164–65, 166
Kuwaiti government in exile: 9, 15, 19, 20
  briefings to: 27–28, 34
  return to Kuwait: 46, 77, 95

Kuwaiti officials
and CCATF: 52–53
and contracting strategies: 174–75, 202, 204
and Defense Reconstruction Assistance Office: 158, 164
Director of Public Works: 36
federal agency briefings to: 17, 164
and Kuwait Emergency Response Office: 107–09, 113–14, 119–20
Minister of Defence: 202, 205–06, 214–16
Minister of Finance: 15, 164, 166
Minister of Foreign Affairs: 13, 15
Minister of Planning: 15
priorities: 38, 60, 107–08, 119–20, 132, 140, 197–98, 204
and repairs to military facilities: 197–98, 212–16
and repairs to National Assembly building: 229–30, 232
return of exiles to Kuwait: 77–78
and Task Force Freedom: 92–93
and U.S. Army Corps of Engineers: 27–28, 36, 214–16
and U.S.-Kuwaiti civil affairs working group: 86
and work agreements: 164–66
Kuwaiti Red Crescent: 52

Lackey, Col. Glenn: 57, 239
Laundry facilities: 77
Leaf, Barbara: 92
Letters of credit: 164–65
Lichtenstein, Col. Jack: 82
Livestock feeding program: 77
Livingstone, Susan: 100–102, 105, 240–41
and contracting strategy: 121, 166–68, 170–71, 201–02, 206–07, 209
and foreign military sales case: 195, 197, 199, 201, 206–07
and opportunities for small businesses: 102, 166–67, 170–71, 172–73, 174, 201–02
relationship with Maj. Gen. Kelly: 104, 156, 158–59, 166, 176, 180, 195, 206, 239–40
Locher, James R. III: 17, 19, 22, 23, 24
Locurcio, Col. Ralph V.: 38, 93, 105 116, 207, 239, 240
and contracting strategy: 123–24, 125, 166, 171
and establishment of Kuwait Emergency Recovery Office: 57–62, 65–66, 67, 109
and facilities for U.S. Army units: 217
and foreign military sales case: 118, 122, 194–95
and Kuwait Emergency Recovery Office organization: 39, 60–62, 110–17
and letter of exchange: 146
and preference for U.S. firms: 121–22
relationship to Ambassador Gnehm: 58–59, 102, 118–19
relationship with Kuwaiti officials: 164–65
relationship with Maj. Gen. Kelly: 158, 159–60, 162, 180, 227
and repairs to military facilities: 194–95
and repairs to schools: 175–76
and small business opportunities: 171, 173, 175
Logistics support for CCATF: 54
Lucky Tac (mobile command post): 54, 63

Macel, Col. John: 227
Mallory, Maj. Gen. Glynn C., Jr.: 26, 63, 159
Marine Expeditionary Force, 1st: 63
Martin Marietta: 31
Medical care: 47, 77
Medical Detachment, 105th: 89
Medical evacuation: 89
Medical personnel: 29, 65, 89–90
Medical supplies
assessment of: 89
distribution of: 46–47, 65, 71, 73
for emergency relief: 28, 29–30, 31, 46–47, 49, 63, 65, 71, 86, 97
looted by Iraqis: 89–90
stockpiled by Kuwait residents: 73
stockpiling of: 28, 29–30, 31, 46–47
Mercurio, Col. William: 46
Middle East Division: 5
Middleton, Joseph: 168
Military Airlift Command: 187

Military Construction, Army, funds: 221–22
Military intelligence, lack of availability to Kuwait Task Force: 33–34
Military Intelligence Brigade, 513th: 55
Military police: 29, 55, 73, 86, 158
Military Police Battalion, 720th: 55, 76
Military reconstruction program: 191–216
Mines
  cleared from air bases: 194
  cleared from power-line rights of way: 76, 128
  cleared from public buildings: 76, 77, 150, 152, 153
  cleared from shipping lanes: 135, 149
  in Kuwait City: 71, 76, 77, 109–10, 149, 150, 152
  in oil fields: 183, 185
  placement of, by Iraqis: 49, 71, 76, 86
  in water well fields: 83
Ministry of Defence headquarters building: 192, 195–96, 205
Ministry of Planning headquarters building: 168, 180
Minority-owned businesses: 169–72
Mitchell, Donald: 241
MME Contractors International: 174
Mohammed A. Kharafi: 126, 140, 142, 171, 176, 180, 210, 219–20, 224, 230, 232, 234–35
Mooney, Brig. Gen. Howard: 23–26, 83
  activated: 51
  and CCATF: 51, 53, 63, 65, 77, 95–96, 97
  and Kuwait Task Force: 28, 29, 32–33, 41, 46, 78
  relationship with Ambassador Gnehm: 91
  and Task Force Freedom: 87–88, 90–91, 92–93, 96
Moore, Ronald: 60
Morrison-Knudson: 210
Morrison Shand Construction, Ltd.: 172, 180
Mosbacher, Robert A.: 121
Motorola, Inc.: 31, 87, 109, 120–21

Nation-building activities: 21, 39–40, 96–97, 228, 229, 238–40, 241–42
National Assembly building
  assessment of damage to: 180
  cost of repairs: 180, 229, 232, 234
  damage to: 71, 73, 140, 142
  repairs to: 142, 147, 168, 171, 180, 181, 229–35
National Security Council: 8–9
  deputy secretaries committee: 18, 19
  policy group: 40
Natsios, Maj. Andre: 32–33, 89
New York Times: 71
Noriega, Manuel: 23

Oberoi Hotel (Dammam, Saudi Arabia): 41–42, 143
O'Brien, Goins and Simpson: 183–84
Office of Management and Budget: 221–22
Oil refineries: 183
Oil well firefighters
  contracts with: 30
  equipment for: 30, 184, 185, 187–88
  logistics support for: 184, 185, 187–88
  shortages of: 185–86
Oil well fires: 29, 30, 63, 65, 67, 81, 109–10, 183–90
Oil wells: 120–21, 183, 185, 188, 190
Operations and Maintenance, Army, funds: 218, 221, 225
Operations Management International Corporation: 139–40
Organization of Petroleum Exporting Countries (OPEC): 183
Owen, Michael W.: 169

Page, Robert: 114
Pagonis, Lt. Gen. William "Gus": 46, 53, 104–05, 218
Palestinian Liberation Organization: 31
Palestinians in Kuwait: 31–32, 84, 88, 89, 95
Panama: 23, 29, 57, 96
Parsons: 30–31
Partnering: 112, 230, 232, 234–35
Peixotto, Col. David E.: 207, 209, 212, 214–15, 229–30, 232, 235
Persian Gulf Conflict Supplemental Authorization and Personnel Benefits Act of 1991: 169–70, 221–22

Petroleum engineers: 29
Plaisance, Russell C.: 161, 162
Plumbing repairs: 74–75
Police Academy (Kuwaiti): 86–87, 142
Police cars: 71, 86, 87, 94, 97
Police departments: 75, 77, 86–87, 94
Police Special Forces Camp (Kuwaiti): 142
Ports
  assessment of damage to: 110, 112
  cleared of mines: 76, 149
  cleared of sunken vessels: 71, 135
  damage to: 84, 144
  Kuwait Navy: 193
  repairs to: 94, 125, 126, 135
  Shuaiba: 71, 76, 84, 94, 125, 126, 135
  Shuwaikh: 84
Potter, Maj. Terry: 45
Powell, General Colin: 8–9, 24, 41, 50, 99, 103
Power distribution system: 127
  assessment of damage to: 38, 60, 128, 129
  contracts for repair of transmission lines: 107, 129–30, 132
  damage to: 82–83, 95, 128–30
  repairs to: 76, 81, 129–30, 135–36, 145
  sabotaged by Iraqis: 82
Power plants
  Al-Zour: 82–83, 130
  assessment of damage to: 65, 110, 112, 127–28
  capacity of: 127
  damage to: 82–83, 130–32
  Doha: 74–75, 82–83, 130–31, 132
  repairs to: 74–75, 130–32
  Shuaiba: 82–83
  Shuwaikh: 82–83
Preventive medicine teams: 65, 80, 83
Prisoners of war, enemy
  medical care for: 77, 89
  repatriation of: 48
Project accounting: 161–62
Project management system: 112, 114–15, 117
Psychological Operations Battalion, 8th: 55
Psychological operations experts: 29, 57, 73
Public Authority of Applied Education and Training (Kuwait): 147
Public buildings. *See also* Bayan Palace; National Assembly building.
  assessment of damage to: 60, 110, 112, 141–43
  burned: 71, 73, 140, 141
  looted: 71, 73, 217
  repairs to: 115–16, 126, 142–43, 175, 181, 217–26
  rigged for demolition by Iraqis: 110
  used by Task Force Freedom: 63, 74
Public relations
  and Army Staff: 101–02, 105, 159
  and small business opportunities: 168–69
  and U.S. Army Corps of Engineers: 101–02, 105, 155, 159, 188
Public service announcements: 73, 87

Quality assurance specialists: 115, 234

Radio stations: 87, 94–95
Radio transmissions by psychological operations units: 73
Radios: 87, 109
Rangel, Charles B.: 169
Ras Al-Qalayah Navy Base, Kuwait
  damage to: 143
  repairs to: 193, 194, 195–96, 198, 205
Ray, Maj. Gen. James W.: 36, 38–39, 121, 194–95, 197, 200
Raytheon Services Co.: 125, 136
Razzak, Brig. Gen. Gahzi Abdul: 198
Reagan administration: 229
Red Adair Company: 183–84, 185
Red Cross: 30
Red Cross, International Committee of the: 52, 90
Refugees: 30
Reilly, William K.: 189–90
Reimer, Lt. Gen. Dennis J.: 39
Relief organizations: 30, 90
Relief supplies: 28, 29–30, 46–47, 63, 65, 87–88
Reservoirs: 77, 138
Reynolds, Tommy E.: 192–93
Riverdale, Md.: 21, 25, 29
Riyadh, Saudi Arabia: 5, 33–34, 48, 51, 101, 104

Roads
Al-Abdaly: 85–86, 133
Al-Salmi: 86, 132–33
assessment of damage to: 110, 112
clearing of: 71, 75, 132–33
damage to: 66–67, 71, 73, 75, 85–86, 110, 144
in Kuwait City: 71, 86
Nuwaisib: 86, 132–33
repairs to: 73, 75, 94, 125, 126, 132–33, 135, 181
Routson, Sam: 17
Rowen, Henry S.: 17, 18, 20, 22, 24
Ruck, Rear Adm. Merrill W.: 19, 25
Russia: 186
Ruyak, Jim: 210–11

Sadek, Col. C. H.: 26
Safety Boss of Calgary: 183–84
Safwan, Iraq: 90
Sanitary collection: 76, 84
Sanitation system
assessment of damage to: 136, 139, 140
damage to: 73, 84, 136–37, 139
repairs to: 125, 126, 139–40, 223
Santucci, Ceasar: 7, 35, 37
Satellite transmission systems: 63, 76, 109, 144, 187–88
Saudi Arabia: 48, 62, 120, 132–33, 189
border-crossing problems: 143–44
and CCATF: 52
Kuwait Emergency Recovery Program move to: 40–42
Kuwait Task Force move to: 39–42, 43, 48
Kuwaitis in exile in: 9, 15
Ministry of Defense and Aviation: 5, 35
U.S. military construction programs in: 5, 11, 101, 142
Saudi armed forces: 48, 63
Schardein, Brig. Gen. Max L.: 55, 74
Schools: 71, 73, 95, 140, 147, 175–76, 180
Schwarzkopf, General H. Norman: 8–9, 25, 50, 62, 99, 103, 104, 118
and Kuwait Task Force: 33, 41, 45–46, 49
and prevention of human rights abuses: 32
Schwarzkopf, General H. Norman—Continued
and Task Force Freedom: 54, 93, 94
Secretary of Defense Representative to the reconstruction effort. *See* Kelly, Maj. Gen. Patrick J.
Security Assistance Accounting Center: 202
Seif Palace: 71, 73, 140
Sewage pumping facilities: 139–40, 181
Sewage treatment plants: 84, 94, 110, 112, 139–40, 181
Shaheen, Ibrahim Al-: 34–35, 36, 37, 47, 58, 180, 227, 241
and contracting procedures: 38–39
as director of Kuwait Emergency Recovery Program: 67, 107–08, 165
and Kuwait Emergency Recovery Office: 119–20, 164–66
and letter of exchange: 146–47
and preference for U.S. firms: 121–22
relationship with Ambassador Gnehm: 118
and repairs to defense facilities: 194–95
and repairs to National Assembly building: 232, 234
and small business opportunities: 173–74
and use of Kuwaiti volunteers in recovery effort: 116–17
and work agreements: 164–65
Shaikha Isa Air Base, Bahrain: 5
Shand Construction, Ltd.: 126, 137–38, 139, 219
Shannon, John: 170
Sharp, Rear Adm. Grant: 32, 45, 48, 49–50
Sheehy, Col. Thomas J.: 39
Ships used to transport water: 83–84
Shower facilities: 219–20, 221, 223
Shuaiba port, Kuwait: 71, 76, 84, 94, 125, 126, 135
Shuwaikh port, Kuwait: 84
Signal Battalion, 44th: 76
Signal Brigade, 11th: 55, 76
Slana, Edward: 240
Small business opportunities: 237
and 607A program: 167, 169, 172

Small business opportunities—Continued
and contract modifications: 167, 170, 172–73, 201
as contractor selection criterion: 171–72, 174, 201
Kuwaiti firms: 173
legality of expansion of: 171, 172
lists of qualified potential contractors: 171, 173, 174
and members of Congress: 166–67, 168–70, 173
seminars on: 174
set-asides: 171, 172–74, 201
as subcontractors: 168–70, 171, 172, 173, 174, 201
and Susan Livingstone: 166–67, 170–71, 172–73, 201–02
Smith, Frederick C.: 19, 20, 24–25
Sobke, Maj. Gen. John: 36–37
Spigelmire, Lt. Gen. Michael F.: 24
Stanley Consultants, Inc.: 205
State, U.S. Department of
and coordination of emergency response effort: 17–19, 22–23, 39, 99, 102–03
and letter of exchange: 146–47
Middle East Division: 16–17
Office of Foreign Disaster Assistance: 22, 27–28, 52
relations with DOD: 17, 18, 20–21, 39–42, 99, 101–02, 146–47, 155–56, 228
Stone, Michael P. W.: 93, 103–04, 121, 158, 159, 180, 214–15
Strategy and Plans, Office of the Under Secretary of Defense for: 186
Subhan Industrial Complex, Kuwait City: 63, 65
Sullivan, General Gordon R.: 5
Supplies for emergency relief: 28, 29–30, 46–47, 63, 65, 87–88
Support Command, 22d: 46, 55, 76, 83, 87–88, 93–94, 218–19, 224
Support for Others program: 229
Syrian armed forces: 63

Taif, Saudi Arabia: 15, 45, 58
Takakoshi, William: 170
Tarbell, David: 186
Task Force Freedom: 4, 10, 43, 63, 65, 66, 67, 69, 71–97, 149, 155, 156, 238, 239
command and control of: 55
composition of: 54–55, 57, 73
damage assessment survey teams: 73–74, 80
and food distribution: 88–89
logistics support for: 54–55, 73, 76–77, 91, 95
medical teams: 89
mission: 55, 57, 71, 73, 74–75, 79–80
priorities: 79–80, 81, 84, 91
and public security and safety: 86–87
radio broadcasts: 87
relationship with Kuwaiti government: 92–93
and sanitary system: 84
and U.S. embassy: 91–92
Task Force Victory: 217–18
Telecommunications equipment: 76, 87, 97
AT&T: 109, 120–21, 144
provided by U.S. military: 63, 65–66, 76
purchased by Kuwaitis: 29–30, 31, 109, 120–21
Telephone communications: 46, 71, 76, 94–95, 144–45
Emerson Marconi satellite telephones: 63
tactical telephones: 65–66, 109
Television stations: 87, 94–95
Tennessee Army National Guard: 86
"Terms of Reference for U.S. Civil Affairs Assistance to the State of Kuwait" (draft): 18
Texaco oil fields: 152
Third U.S. Army: 9, 21–22
Thomas, Maj. George: 29
Time magazine: 16
Training
in civil affairs: 53
of coalition troops: 53
for engineer units: 188
explosive ordnance disposal: 185
facilities for: 147, 180, 217, 218–19, 221, 225–26
for Kuwait reconstruction: 53

Training—Continued
of Kuwaiti engineers: 37, 239
of Kuwaiti police officers: 86–87, 142
of Kuwaiti volunteers: 37, 116–17, 239
in pest control: 87
Transportation
airlifts of equipment: 77, 97, 144, 185, 187–88, 232, 234
of emergency supplies: 63, 65, 83–84, 87–88
of equipment for Kuwait Emergency Recovery Office: 62
of firefighting equipment: 185, 187–88
for Task Force Freedom: 55, 77
of water: 83–84
Transportation Group, 7th: 55
Trash collection: 87, 94
Treasury, U.S. Department of the: 29–30, 38, 160–61, 162, 164–65, 227
Trombetta, Maj. Chuck: 52–53
Truck convoys: 97
composition of: 66
identification cards for: 66
logistics support for: 76
military escorts for: 76
problems encountered by: 66–67, 144
water tankers: 83–84, 91
Truck drivers
contract: 30, 46–47
guardsmen: 87–88, 97
reservists: 87–88, 97
support for: 30
Syrian: 66
Trucks
Army: 47
contracts for: 46–47, 83–84
Turkey, water from: 83–84

Uniforms purchased by Kuwaitis: 29–30
United Nations Security Council: 9
U.S. Air Force: 5, 52, 65, 76, 186
U.S. Army
civil affairs capability: 16–17, 21, 240
as Defense Department executive agent for Kuwait recovery mission: 10, 27, 227
as executive agent for civil affairs on the Joint Staff: 21
U.S. Army—Continued
General Counsel: 145, 172, 173, 196, 218
Judge Advocate: 171
Operations Center: 63
use of Operations and Maintenance funds: 218, 221, 225
U.S. Army Reserve: 96
activation of units: 21, 51
Capstone Operations: 16–17, 21–22, 23
civil affairs capabilities: 240
maintenance company: 86
U.S. Army Special Operations Command: 24, 29, 55, 77
U.S. Central Command (CENTCOM)
and 352d Civil Affairs Command: 21–22
Army component of. *See* ARCENT.
civil affairs annex to operations plan: 32–33
planning for civil-military operations after liberation: 33–34, 43, 47–49, 50–51, 67, 69
Plans and Policy Directorate: 33, 48, 50, 92
and potential for human rights abuses: 32
and prosecution of the Persian Gulf War: 8–9
and relationship between Task Force Freedom and Ambassador Gnehm: 91–92
relationship with DRAO: 158
relationship with Kuwait Task Force: 26, 33, 43–47, 48, 96
relationship with Task Force Freedom: 55, 57, 63, 92, 95, 96
representative for military coordination matters: 99, 104–05, 227
United States Code
section 2304: 124, 126
section 2808: 221–22, 223, 225
U.S. Congress: 222
and contractors: 101, 102
and foreign military sales case: 146, 196–97, 205–06
and small business opportunities: 102, 166–67, 168–70, 173, 174–75, 202

U.S. Embassy in Kuwait
logistics support for: 76–77
restoration of services to: 74–75, 91–92
U.S. House of Representatives
Appropriations Committee: 168–69, 222
Armed Services Committee: 222
Subcommittee on Exports, Tax Policy, and Special Problems: 169
U.S.-Kuwaiti Committee on Emergency and Recovery Programs: 19, 20
U.S. Liaison Office, Kuwait: 8, 104, 227
U.S. Marine Corps: 48, 52, 55
U.S. Military Support Group in Panama: 57
U.S. Navy: 52, 186
and clearing of mines from ports: 76, 135, 149
Preventative Medicine Detachment: 65, 80, 83
and transportation of emergency relief supplies: 46
U.S. Senate
Appropriations Committee: 222
Armed Services Committee: 222
Committee on Small Business: 169
U.S. steering group committee: 19, 20, 26, 33, 36–38, 44
U.S. troops
redeployment of: 4, 75–76, 93–94, 152, 217
support to: 217–26

Vadlamani, Kesh: 127–28
Vehicles
abandoned: 67, 85, 94
clearing of wreckage from highways: 75, 94, 132–33, 135, 181
clearing of wreckage from Kuwait City: 87, 94, 176
police cars: 86
purchased by Kuwaitis: 29–30, 97, 120–21
repaired: 86
roads blocked by wreckage of: 65, 66–67
Vietnam War: 21
Volunteers, Kuwaiti: 37, 61, 66–67, 112, 115–17, 158, 239
Vuono, General Carl E.: 25

Walz, Arthur: 27–28, 35, 78
Wanta, 1st Lt. Michael: 86–87
Warbah: 8
Ward, Col. Robert: 32, 48, 49
Waste Management, Inc.: 87
Water
for animals: 90–91
distribution of emergency supplies: 46–47, 65, 71, 77, 83–84, 86
emergency provisions for: 46–47, 49, 63, 65, 67, 77, 83, 97
for irrigation: 83
quality: 38
rationing of: 83, 137–38
in reservoirs: 83–84, 137, 181
stockpiling of: 28, 29–30, 71
transportation by truck: 30
from Turkey: 83–84
Water desalinization facilities. *See* Desalinization plants.
Water distribution system
assessment of damage to: 38, 60, 110, 112, 136–37, 140
damage to: 73, 83, 84, 136–37
repairs to: 71, 79–80, 94, 125, 126, 137–38, 175, 181, 210, 219
Water wells: 83
Weber, Mary: 136–37
Werle, Lt. Col. Christopher: 187–88
Wild Well Control, Inc.: 183–84
Wiles, Richard: 36–37
Wilhelm, Brig. Gen. Charles E.: 19, 24–25
Wilson, Maj. Tom: 29, 185
Winchester, Va.: 36, 61, 101, 109, 123, 124, 196
Witherspoon, Brig. Gen. Eugene: 103, 172–73
Wood, Ben: 58–59, 117, 240
Work for Others program: 229

Yates, Lt. Col. Mark: 57
Yeosock, Lt. Gen. John: 9, 104–05
and Combined Civil Affairs Task Force: 51, 53
and Kuwait Task Force: 34, 44–45, 46, 49
and Task Force Freedom: 54, 57, 91, 93–94, 95
Yugoslavia: 193

PIN : 076818–000