

A day-by-day accounting of 1990–91 events in Operations Desert Shield and Desert Storm.

The Gulf War: A Chronology

July 17, 1990 In televised speech, Saddam Hussein warns he will attack Kuwait if his demands are not met regarding (1) old border dispute, (2) decrease in Kuwaiti oil production, (3) reduction in Kuwait's share of oil from Rumaila oil field, which extends under Iraqi territory.

July 18 Kuwait places forces on alert. US Ambassador to Iraq April Glaspie tells Iraqi Foreign Ministry that US insists all disputes in Mideast be settled peacefully.

July 19 Gen. Colin Powell, Chairman, Joint Chiefs of Staff, telephones Gen. H. Norman Schwarzkopf, commander in chief, US Central Command, to discuss contingency planning for defense of Kuwait and Saudi Arabia against attack by Iraq.

July 20 Iraqi newspapers report deployments of Iraqi troops to border with Kuwait. CIA reports 30,000 Iraqi troops deployed.

Last two weeks of July At Eglin AFB, Fla., Lt. Gen. Charles Horner, commander, US Central Command Air Forces, holds Internal Look, command post exercise postulating invasion of Saudi Arabia by "a country to the north." Considerable exercise time spent determining where US reinforcements would be deployed in Saudi Arabia in such contingency.

July 21 US installs mobile tactical air control center at Abu Dhabi, capital of United Arab Emirates.

July 24 US, UAE announce joint exercise.

July 25 Ambassador Glaspie summoned to meet with Saddam. He says he is dismayed at US support for Kuwait. As separate matter, he states he will not resolve dispute with Kuwait by force. Bush Administration officials announce willingness to use military force to defend the flow of oil through Strait of Hormuz.

July 26 Kuwait agrees to cut oil production to levels demanded by Iraq.

July 30 CIA reports 100,000 Iraqi troops, 300 tanks massed on Kuwait border. Iraqi, Kuwaiti, Saudi representatives meet in Jeddah, Saudi Arabia, to reconcile differences. Talks fail. Saddam reassures President Hosni Mubarak of Egypt, Saudi King Fahd ibn Abdul Aziz that he will not attack Kuwait.

Aug. 2 At 1 a.m., local time, Iraq invades Kuwait, using land, air, naval forces. President George Bush

issues Executive Orders 12722 and 12723, declaring national emergency; addressing threat to national security, implications for foreign policy; freezing Kuwaiti, Iraqi assets in US; freezing trade relations. Joint Staff reviews options, including CENTCOM Operations Plan 1002-90, top-secret contingency plan to move ground troops and supporting air and naval forces to region over three to four months. CENTCOM staff starts formulating air campaign for defense of Saudi Arabia. UN Security Council, in 14–0 vote with Yemen abstaining, passes Resolution 660 calling for the unconditional withdrawal of Iraqi troops from Kuwait.

Aug. 3 New US naval forces deploy. Powell confers with service chiefs on options. Bush makes no decision and chiefs defer any recommendation. Horner meets Schwarzkopf at MacDill AFB, Fla. They finalize concept for CENTCOM defensive air campaign for briefing to Bush.

Aug. 4 At Camp David, Schwarzkopf briefs Bush, Powell, Secretary of Defense Dick Cheney on concept for ground war. Also, Horner briefs concept for air campaign. *Eisenhower* battle group dispatched from Mediterranean to Red Sea. *Independence* battle group in Indian Ocean heads for north Arabian Sea.

Aug. 5 Bush vows Iraq's invasion of Kuwait "will not stand." He demands complete Iraqi withdrawal from Kuwait.

Aug. 6 Cheney, Schwarzkopf, Horner (at Bush's direction) go to Saudi Arabia to confer with King Fahd. US proposes Operation Plan 1002-90, which would place 250,000 US troops in Gulf region within three months. Fahd invites US, coalition forces into kingdom. Cheney, Schwarzkopf return to Washington. Horner stays in Riyadh, Saudi Arabia, as "CINCCENT Forward." Bush sends to Gulf F-15 fighters from 1st Tactical Fighter Wing (Langley AFB, Va.), troops of 82nd Airborne Division (Ft. Bragg, N.C.), maritime pre-positioning ships anchored at Diego Garcia and Guam.

Aug. 7 F-15s depart Langley for Saudi Arabia. *Independence* battle group arrives in Gulf of Oman, just south of Persian Gulf. US calls for other nations to send ground forces to aid defense of Saudi Arabia.

Aug. 8 C-141 carrying airlift control element lands in





Members of the 48th Tactical Fighter Wing, RAF Lakenheath, UK, wait to board a KC-10A on their way to Saudi Arabia for Desert Shield.

Dhahran, Saudi Arabia, first USAF aircraft in crisis zone. F-15s from 1st TFW, elements of 82nd Airborne arrive in Saudi Arabia. US Airborne Warning and Control System aircraft augment Saudi AWACS orbiting over Saudi Arabia. Iraq annexes Kuwait. Headquarters USAF activates contingency support staff. Schwarzkopf asks Lt. Gen. Mike Loh, USAF vice chief of staff, for help drawing up strategic air campaign. Checkmate, Air Staff planning group under Col. John Warden in Directorate of Plans, starts developing basic plan for strategic air war. Britain agrees to send air and naval forces to defend Saudi Arabia. West Germany, Italy, Spain agree to give US transports use of airspace and bases. Greece, Egypt authorize US airplanes to use airspace but not bases. Japan, Soviet Union, European Community express support for decision by US to dispatch troops.

Aug. 9 UN Security Council votes 15-0 to declare Iraq's annexation of Kuwait null and void (Resolution 662). Soviets state they will not participate in military intervention in the Gulf, adding that they oppose force and unilateral actions.

Aug. 10 DoD announces operation name, Desert Shield. Warden, staff brief initial air concept plan to Schwarzkopf at MacDill. He approves. USAF, Navy, Army units start arriving in Gulf in large numbers, stretching available facilities. F-16s from Shaw AFB, S.C., C-130s from Pope AFB, N.C., arrive. Horner draws up contingency plan for coalition forces to fall back to Bahrain, Qatar, UAE if Iraq attacks Saudi Arabia before sufficient defensive forces are in place. Saddam calls for Arab holy war against US troops in Gulf and "corrupt" Arab leaders who denounced his actions.

Aug. 11 Military Airlift Command adds capabilities with Guard-Reserve volunteers and aircraft. Strategic Air Command calls for Guard-Reserve volunteers for KC-135 tankers. Warden briefs air concept plan to Powell, who directs expanding it to ensure Iraqis cannot escape Kuwait before their tank force is destroyed. Powell suggests adding Navy, Marine aviators to Warden's group.

Aug. 12 Thirty-two KC-135 tankers deploy to Saudi Arabia as vanguard of tanker force soon to total more than 300 KC-10s and KC-135s. MH-53J Pave Low helicopters of 1st Special Operations Wing arrive in Dhahran. News pool deploys to Saudi Arabia.

Aug. 14 Soviet Union joins US, coalition in naval quarantine of Iraq. DoD announces presence of E-3

AWACS, KC-10s, KC-135s, RC-135s in Gulf region.

Aug. 15 F-117 stealth fighters from Tonopah, Nev., and F-4G Wild Weasels of George AFB, Calif., deploy.

Aug. 16 A-10 attack aircraft, Myrtle Beach AFB, S.C., deploy.

Aug. 17 Iraqi forces in Kuwait, heavily reinforced, build defensive positions along Saudi border. Warden briefs revised concept plan to Schwarzkopf, CENTCOM staff. Schwarzkopf directs Warden to take plan to Saudi Arabia, brief it to Horner. Stage 1 of Civil Reserve Air Fleet activates for first time in 38-year history of CRAF, as 16 civilian carriers provide 18 Long-Range International passenger aircraft and crews, 21 LRI cargo aircraft, crews. Air Force Space Command establishes DSCS satellite communications links for Desert Shield. First afloat pre-positioned ships begin off-loading in Saudi Arabia. Speaker of Iraqi parliament says citizens of "aggressive" nations will be held until crisis ends, threatens use of "human shields."

Aug. 18 John F. Kennedy battle group deploys to Gulf.

Aug. 19 Additional F-117 fighters deploy from Tonopah to Gulf.

Aug. 20 More US troops, including 82nd, 101st Airborne Divisions, 24th Mechanized Infantry Division, arrive. Horner concludes air, ground strength now sufficient to defend Saudi Arabia against Iraqi invasion. Warden and his group brief concept plan to Horner in Riyadh.

Aug. 21 USAF Gulf presence includes A-10s, C-130s, E-3 AWACS, F-4Gs, F-15s, F-15Es, F-16s, F-117s, KC-135s, KC-10s, RC-135s. Needing 6,000 Air Force reserve volunteers, USAF gets 15,000 ready to go in 72 hours. Cheney announces Saudi Arabia can now be successfully defended against attack by Iraq.

Aug. 22 Bush issues Executive Order 12727, invoking his authority to call to active duty up to 200,000 troops and units of Selected Reserve for duration of 90 days. Second Executive Order, 12728, suspends legal provisions relating to promotion, retirement, separation of members of armed forces. Stop-Loss action used to stabilize US military force for duration. Bush announces mobilization of 40,000 reserve forces.

Aug. 23 Cheney issues memorandum implementing call-up of reserves, setting maximum numbers: USAF, 14,500; Army, 25,000; Navy, 6,300; Marine Corps, 3,000.

Aug. 24 117th Tactical Reconnaissance Wing (Birmingham, Ala.) deploys six RF-4C aircraft to Gulf, joining RF-4Cs deployed by 67th TRW (Bergstrom AFB, Tex.).

Aug. 25 USAF F-111 fighters from RAF Lakenheath, UK, deploy.

Aug. 27 First sealift forces arrive in Saudi Arabia.

Aug. 28 Iraq declares Kuwait to be its 19th province. Bush, in meeting with 170 members of Congress, defines US objectives in Gulf—"immediate, complete, and unconditional withdrawal of all Iraqi forces from Kuwait, the restoration of Kuwait's legitimate government, security and stability of Saudi Arabia and the Persian Gulf, and the protection of American citizens abroad."

Aug. 29 C-5 transport, flown by AFRES volunteers and carrying active duty passengers and cargo to Gulf, crashes after takeoff from Ramstein AB, Germany, killing 13 of 17.

Aug. 30 Bush urges nations around world to help pay

costs, contribute personnel, equipment for Desert Shield. USAF F-16 fighters from Torrejon AB, Spain, deploy to Qatar.

Sept. 4–5 Idea of “second front” in Turkey briefed by Gen. Robert Oaks, USAFE commander, to Army Gen. John Galvin, CINCEUR, who in turn discusses it with Powell.

Sept. 5 Five ANG units begin deployment of C-130H aircraft.

Sept. 8 First AC-130H gunships from 16th Special Operations Squadron arrive in Gulf.

Sept. 11 Bush, in nationally televised address to joint session of Congress, asks for continued support for Gulf policy, repeats that Iraq’s aggression “would not stand.”

Sept. 12 Iran’s supreme religious leader, Ayatollah Ali Khamenei, announces that Islamic “holy war” is justified against US and US troops in Gulf. AC-130H gunships from 16th Special Operations Squadron arrive in Gulf.

Sept. 13 In Riyadh, Brig. Gen. Buster Glosson (deputy commander, Joint Task Force Middle East) briefs Schwarzkopf and Powell on now-complete operational air war plan. Powell asks when USAF could execute plan. Glosson says, “Within 24 hours.”

Sept. 16 In dispatch from Saudi Arabia, *Washington Post* quotes Gen. Michael Dugan, USAF Chief of Staff, saying US planned to unleash major bombing campaign against Iraq and that airpower would be effective.

Sept. 17 In response to *Post* article, Cheney fires Dugan, claiming he “showed poor judgment at a sensitive time.”

Sept. 20 Guard, Reserve maintenance personnel called from units and assigned to MAC to cover surge to war-time sortie rates. Iraq’s Revolutionary Command Council declares there will be no retreat and says “mother of all battles” is inevitable.

Sept. 23 Saddam threatens to destroy Middle East oil fields if Iraq is “strangled” by UN sanctions.

Sept. 28 Desert Shield sealift reaches peak with 90 ships at sea—69 en route to Mideast, 21 on way back for more cargo.

Sept. 29 *Washington Post* reports that US intelligence sources say Iraq had stockpile of biological weapons.

Oct. 1 British Prime Minister Margaret Thatcher rejects any negotiations with Iraq.

Oct. 2 *Independence* enters Persian Gulf—first car-



USAF photo

Airmen fill sandbags that will be placed around aircraft revetments during Desert Shield. An F-15C Eagle aircraft of the 1st TFW, Langley AFB, Va., is in the background.

rier to sail in those confined waters since 1974.

Oct. 4 *Independence* exits Gulf.

Oct. 10 USAF fighter units arriving in area of responsibility fly training sorties to prepare for desert warfare. F-15C combat air patrol is now routine. In US, small anti-war movement emerges. Relatives of some troops deployed to Gulf participate in Capitol Hill protest against Desert Shield.

Oct. 15 *L’Express* of Paris publishes article describing four-stage US plan to attack Iraq: (1) US Air Force destroys Iraqi air force; (2) US Air Force destroys Iraq’s military industries; (3) US Special Forces cut out Iraqi communications lines; (4) US Army and Marines invade Kuwait. According to *L’Express*, operation would take four days and would cost 20,000 US casualties.

Oct. 18 Soviet envoy Yevgeni Primakov meets with Secretary of State James Baker and National Security Advisor Brent Scowcroft in Washington. On next day, Primakov meets with Bush to discuss Persian Gulf crisis.

Oct. 30 MAC launches Desert Express, overnight airlift to Gulf of critical items. Bush tells White House meeting of 15 Congressional leaders that he is growing impatient with absence of progress in Gulf and with “barbarous” treatment of US and other Western hostages in Iraq, factors that some interpret as signal that President is considering military action against Iraq.

Nov. 8 Bush announces US will deploy additional armed forces to provide coalition in Persian Gulf with offensive option. Press speculates total would be about 150,000 to 200,000 armed forces personnel, added to 230,000 already in Gulf region.

Nov. 9 DoD announces deployment of *Theodore Roosevelt*, *America*, and *Ranger* battle groups to Gulf. Several Republican Senators say Bush should call special session of Congress to approve President’s plans for new military deployments in Gulf. Administration rejects proposal.

Nov. 13 Bush issues Executive Order 12733, extending by 90 days the active duty period of those called up under 10 USC 673b. Congressional leaders announce Congress will hold hearings on Persian Gulf in December. Some believe Congress should call special session to consider legislation giving Bush authority to launch offensive actions against Iraq without declaration of war.

Nov. 14 Hospitals at two bases in Britain and one in Germany prepare to receive casualties. Cheney autho-

USAF photo by MSgt. Boyd Belcher



Ground crews service these F-117A aircraft from the 37th TFW at Tonopah, Nev., as they prepare to deploy to Saudi Arabia during Desert Shield.

rizers activation of some 72,500 reservists that might be needed in Saudi Arabia.

Nov. 15 Bush tells CNN that world remains united against Saddam and Iraq's aggression against Kuwait. President says he has not made decision to launch offensive action against Iraq but maintains all options. President says he would continue to consult with Congress but dismisses need for special session of Congress to discuss Persian Gulf problem.

Nov. 17 Air Force Space Command repositions DSCS II satellite over Indian Ocean to improve communications support for Desert Shield.

Nov. 20 Forty-five members of House of Representatives file suit in US District Court in Washington to force Bush to seek Congressional approval before launching attack against Iraq.

Nov. 21 OA-10s from Davis-Monthan AFB, Ariz., deploy.

Nov. 22 Bush spends Thanksgiving in Gulf with US troops. EC-130 psychological operations aircraft broadcast Voice of America into Kuwait. Bush warns that Iraq is developing nuclear weapons.

Nov. 26 House Foreign Affairs Committee, House Armed Services Committee, Senate Foreign Relations Committee, Senate Armed Services Committee begin hearings on Gulf crisis.

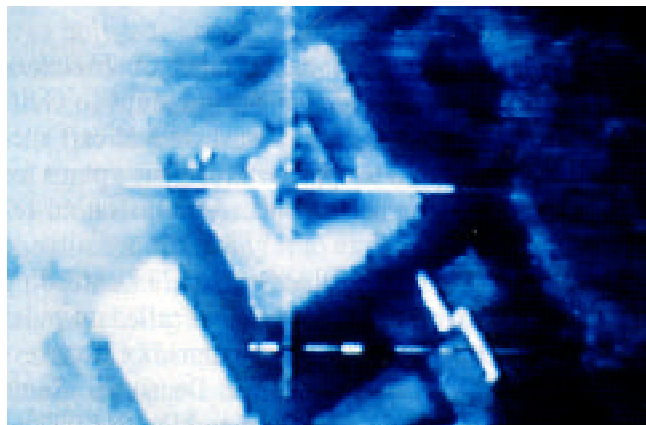
Nov. 29 UN Security Council passes Resolution 678, authorizing use of force to expel Iraq from Kuwait. Resolution allows grace period, giving Iraq "one final opportunity" to comply with previous resolutions.

Nov. 30 Saddam rejects Bush's offer to send Secretary of State Baker to Baghdad. Two former JCS Chairmen, retired USAF Gen. David Jones and retired Adm. William Crowe, tell Senate Armed Services Committee that US should not rush into war with Iraq and should wait for economic sanctions to take effect.

Dec. 1 DoD enacts Stop-Loss authority (contained in Aug. 22 Executive Order) to prevent retirement or separation of troops having critical skills. Advisor to Soviet President Mikhail Gorbachev says USSR will not send troops to Persian Gulf.

Dec. 2 More F-117 stealth fighters deploy.

Dec. 3 Call-up alerts go to three ANG units: 169th Tactical Fighter Group (McEntire ANGB, S.C.); 174th TFW (Syracuse-Hancock IAP, N.Y.); and 152nd Tacti-



Strike camera footage from an F-117A shows a Baghdad Defense Ministry building in its crosshairs. Coalition forces used precision munitions and high technology to great advantage.



USAF photo by TSgt. Perry Heimer

An F-111F of the 48th TFW takes off for a mission during Desert Storm. The fighter is armed with laser guided bombs.

cal Reconnaissance Group (Reno/Tahoe IAP, Nev.). AFRES 926th TFG (New Orleans) also alerted.

Dec. 5 152nd TRG, with RF-4Cs, deploys to Saudi Arabia to replace 117th TRW aircraft and personnel.

Dec. 6 Saddam announces he will release all civilian hostages held since beginning of crisis.

Dec. 8 First European Desert Express mission undertaken.

Dec. 19 Army Lt. Gen. Calvin Waller, CENTCOM second in command, tells press US forces won't be combat-ready by Jan. 15 deadline set in Resolution 678. Waller says forces won't be ready until late January or mid-February. However, over next few days, Pentagon and White House say US forces are ready and can respond to Iraqi attack if one is launched.

Dec. 20 ANG KC-135E units alerted for call-up. By end of year, SAC has 200 tankers in Gulf.

Dec. 21 USAF EF-111s deploy to Gulf.

Dec. 29 F-16-equipped 169th TFG deploys to Saudi Arabia, first ANG fighter unit to do so.

Jan. 2, 1991 ANG's 174th TFW deploys 18 F-16s to Saudi Arabia and, along with 169th TFG, is incorporated into 4th TFW (Provisional). CENTCOM announces US strength in Gulf exceeds 325,000.

Jan. 8 DoD announces US troop strength in Gulf is 360,000. Analysts estimate 540,000 Iraqi troops in or near Kuwait. Bush sends letter to Congress asking for resolution approving President's use of "all necessary means" to remove Iraq from Kuwait.

Jan. 9 In Geneva, Baker meets with Iraqi Foreign Minister Tariq Aziz, but talks fail.

Jan. 10 House and Senate begin debate on possible war.

Jan. 12 Congress, after intense debate, clears US forces for war against Iraq. House votes 250-183 to authorize President to use military force to implement UN Resolution 678 to force Iraq to withdraw from Kuwait. Senate votes 52-47 in favor of same authorization.

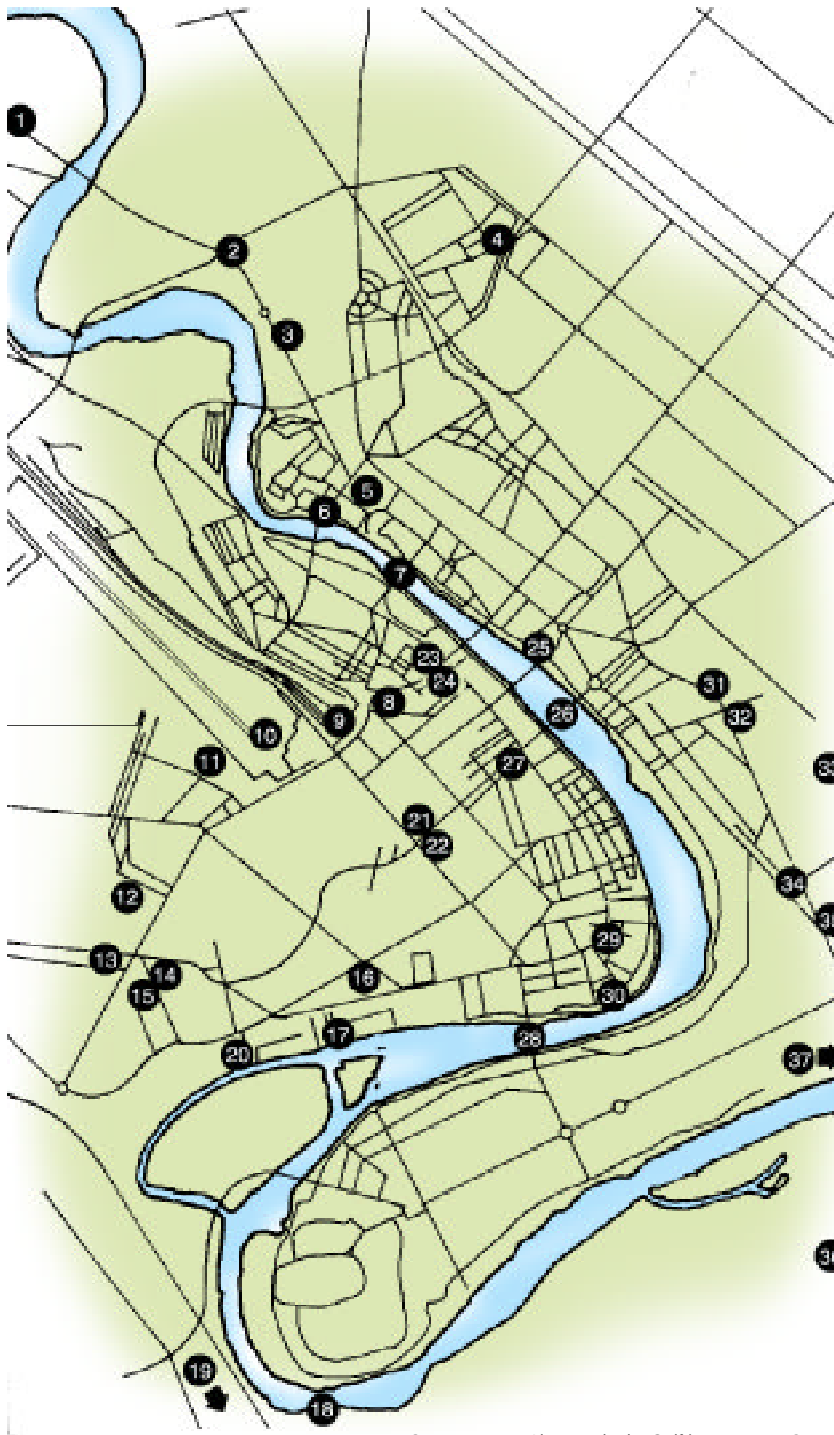
Jan. 13 UN Secretary General Javier Perez de Cuellar meets with Saddam, concludes there is little hope for peace.

Jan. 15 Deadline for Iraq's withdrawal from Kuwait passes. DoD announces US has 415,000 troops in Gulf, opposed by 545,000 Iraqi troops.

Jan. 16 CENTCOM announces 425,000 US troops in theater, supported by ground forces of 19 nations and

The First Day in Baghdad

During the first 24 hours of the war, coalition aircraft struck critical targets in Saddam's capital and elsewhere. Weeks of fighting remained, but the initial attack was so overwhelming that Iraq was unable to mount a coherent military response thereafter. First day targets in Baghdad are numbered on the map.



Source: AFA's *Airpower in the Gulf* by James P. Coyne

1. Directorate of Military Intelligence
2. Telephone switching station
3. Ministry of Defense national computer complex
4. Electrical transfer station
5. Telephone switching station
6. Ministry of Defense headquarters
7. Ashudad highway bridge
8. Telephone switching station
9. Railroad yard
10. Muthena airfield (military section)
11. Air Force headquarters
12. Iraqi Intelligence Service
13. Telephone switching station
14. Secret Police complex
15. Army storage depot
16. Republican Guard headquarters
17. New Presidential Palace
18. Electrical power station
19. SRBM assembly factory (Scud)
20. Baath Party headquarters
21. Government conference center
22. Ministry of Industry and Military Production
23. Ministry of Propaganda
24. TV transmitter
25. Communications relay station
26. Jumhuriya highway bridge
27. Government Control Center South
28. Karada highway bridge (July 14th bridge)
29. Presidential Palace command center
30. Presidential Palace command bunker
31. Communications relay station
32. Secret Police headquarters
33. Iraqi Intelligence Service regional headquarters
34. Telephone switching station
35. National Air Defense Operations Center
36. Ad Dawrah oil refinery
37. Electrical power plant

naval efforts of 14 nations. First elements of USAFE Joint Task Force Headquarters deploy from Ramstein AB to Incirlik AB, Turkey, and prepare to establish USAF's first wartime composite wing. Seven B-52Gs, launching from Barksdale AFB, La., become first aircraft to take off on Desert Storm combat mission; BUFFs of 596th Bomb Squadron, 2nd Bomb Wing, carry super-secret, never-before-used AGM-86C Conventional Air Launched Cruise Missiles.

Jan. 17 Coalition air forces launch Desert Storm at about 3 a.m. local time (7 p.m. Eastern Standard Time on Jan. 16). Barksdale B-52Gs arrive over Saudi Arabia, launch 35 CALCMs against high-value Iraqi targets,

return to Barksdale, completing 14,000-mile, 35-hour nonstop mission—longest strike mission in history of aerial warfare. Coalition seeks to gain air superiority, destroy Iraq's special weapons capability, disrupt command and control. USAF Capt. Jon Kelk of 33rd TFW (Eglin AFB) shoots down Iraqi MiG-29 at 3:10 a.m. in first air-to-air victory. Coalition forces fly more than 750 attack sorties from land bases during early morning and day. US Navy launches 228 combat sorties from six carriers in Red Sea and Arabian Gulf. Turkey approves USAF use of Incirlik and Turkish airspace to open northern front against Iraq. USAFE immediately deploys aircraft to Turkey.

Jan. 18 Iraq launches Scud missiles against Israel, Saudi Arabia. Cheney activates CRAF Stage 2, raising total draw from airlines to 79 passenger aircraft and 108 civilian cargo aircraft. Navy Lt. Jeffrey Zaun captured after his A-6E is shot down.

Jan. 19 Two F-16Cs from 614th Tactical Fighter Squadron (Torrejon AB) shot down by surface-to-air missiles; pilots taken prisoner. Three more Scuds hit Israel, injuring 10. Iraq parades seven coalition airmen on television. US delivers to Israel two batteries of Patriot anti-aircraft missiles and US Army personnel to operate them. Bush signs Executive Order 12743, allowing him to call to active duty Ready Reservists and to extend tour of duty from six months up to two years for 160,000 reservists already activated.

Jan. 20 First Purple Heart of war awarded to Navy corpsman hit by shrapnel Jan. 17 while on Marine patrol near Kuwaiti border. USAF fighter-bombers attack Iraqi nuclear facilities, air defense complexes, Scud missile launchers. Iraqi TV broadcasts pictures of three US, two British, one Italian, one Kuwaiti airmen captured after their airplanes are hit by Iraqi ground fire.

Jan. 21 USAF MH-53J helicopter rescues Navy F-14 pilot more than 100 miles inside Iraq. Heavy bombing of Republican Guard in southern Iraqi city of Basra. Iraq fires 10 Scud missiles at Riyadh and Dhahran.

Jan. 22 After brief letup caused by bad weather, heavy air attacks resume in and around Basra, supply gateway to Kuwait, and against Republican Guard positions along Iraqi-Kuwaiti border. E-8A Joint STARS, orbiting over Saudi Arabia, detects large convoy moving toward Kuwait, vectors AC-130 gunship, two A-10s to attack. They destroy 58 of 71 vehicles in convoy. Scud



USAF photo by MSgt. Timothy Hadryck

USAF pararescueman Sgt. Ben Pennington meets up with Navy Lt. Devon Jones, who had been shot down the night before.

hits Tel Aviv, destroying 20 buildings. Three killed, 96 injured. DoD reports US has lost nine aircraft, Britain two, Italy and Kuwait one each. Coalition forces have shot down 17 Iraqi aircraft.

Jan. 23 Only five Iraqi air bases remain functional after week of bombing. Iraq sorties down from 235 to 40 per day. Iraq begins dumping Kuwaiti oil into Gulf, torching Kuwaiti oil wells, other facilities.

Jan. 24 Saudi pilot flying F-15C shoots down two Iraqi F-1 Mirages attempting to attack coalition ships with Exocet missiles. Coalition flies 2,570 attack sorties, for total of 14,750 during first eight days of war.

Jan. 25 Coalition destroys three Iraqi bombers on ground. Major attacks on Iraqi hardened aircraft shelters begin. USAF, using new I-2000 bomb, has spectacular success. British airman captured. Intelligence agencies report execution of commanders of Iraq's air force and anti-aircraft defenses. Five Scuds hit Israel, killing one, wounding 40. Iraq sabotages Kuwait's main supertanker loading pier, dumping millions of gallons of crude into Gulf.

Jan. 26 Air emphasis shifts to strikes against Iraqi field army in Kuwait. Iraq sends aircraft to Iran for sanctuary (by war's end, 122 had fled). Marines fire 155 mm howitzers at Iraqi troops six miles inside Kuwait. In Washington, marchers protest war in Persian Gulf. Anti-war protesters march in Bonn, Berlin, Switzerland, France. Demonstrations in support of war in several US cities, among them Boston, Chicago.

Jan. 27 F-111s, using GBU-15 guided bombs, destroy oil-pumping manifold at Kuwaiti terminal, drastically reducing flow of oil into Gulf. Schwarzkopf announces coalition has attained air supremacy. F-16 "Killer Scout" operations begin.

Jan. 28 Baghdad radio announces at least one captured coalition pilot killed and others hurt in raids. Scud attack on Israel hits Arab villages on West Bank.

Jan. 29 US and USSR announce cease-fire possible if Iraq makes "unequivocal commitment" to withdraw all troops from Kuwait and takes "concrete steps" in that direction. In State of Union address, Bush repeats US goal is to "drive Iraq out of Kuwait, to restore Kuwait's legitimate government, and to ensure the stability and security of this critical region." Joint STARS detects 50 Iraqi tanks moving toward Saudi Arabia. Using deception, 1,500 Iraqi troops in three battalions attack Khafji

USAF photo by SSgt. J. Otero



The remains of a MiG-23 destroyed during Desert Storm.

The Destruction of Iraqi Airpower

Iraqi fixed wing inventory as of Jan. 10, 1991	724
Iraqi aircraft lost or destroyed by Feb. 28, 1991	408 (56%)
Iraqi fixed wing aircraft left at war's end	316 (44%)

Shot down	33
Destroyed in the open	113
Destroyed in shelters/bunkers	141
Fled to Iran	121
Total aircraft losses	408

in Saudi Arabia, come under coalition air attack. For first time, coalition ground forces counterattack. Elements of 1st Marine Division engage with anti-tank and automatic weapons.

Jan. 30 Marines lose three armored vehicles in battle for Khafji, while Iraqis lose 24 tanks, 13 armored vehicles. USAF fighter-bombers destroy oil pumping pipes and manifolds to stop one of biggest-ever oil spills. Commanders report US has lost 12 aircraft, UK five, Italy and Kuwait one each.

Jan. 31 AC-130H gunship, supporting Marines around Khafji, is shot down by Iraqi infrared surface-to-air missile, with 14 crew members killed. Two US soldiers are captured by Iraqi soldiers at Iraqi-Saudi border. Saudi troops, assisted by Qatari forces, US Marines, heavy air support, recapture Khafji. Coalition aircraft attack, rout two Iraqi divisions assembling north of Khafji for attack.

Feb. 1 Iraqi force, estimated at 60,000, masses for attack near Kuwaiti town of Al Wafra. Airstrikes drive Iraqis into defensive positions. Bush tells military families at Ft. Stewart, Ga., Iraq would not dictate when ground offensive would begin, and ground war would be launched only if needed.

Feb. 2 B-52 bomber goes down in Indian Ocean, returning to Diego Garcia after mission over Kuwait. Three crew members rescued, three lost.

Feb. 3 Iraq withdraws troops from Khafji area.

Feb. 4 Battleship *Missouri* uses 16-inch guns to pound Iraqi concrete bunkers in Kuwait, part of plan to deceive Iraqis into expecting Marine amphibious invasion. USAF fighter-bombers attack major targets at Tikrit, Saddam's home village 90 miles north of Baghdad. Coalition aircraft fly 2,566 sorties, bringing to 43,566 the total for first 19 days of war.

Feb. 5 Iranian President Ali Akbar Hashemi Rafsanjani offers to mediate between Iraq, US. USAF fighter-bombers attack Scud missiles, launchers. B-52s hit Republican Guard positions. *Missouri* knocks out two artillery emplacements, damages four others. *Missouri* destroys radar site and surface-to air missile position along Kuwait coast. At news conference, Bush says he is skeptical that air war alone can achieve desired result of removing Iraq from Kuwait.

Feb. 6 Capt. Robert Swain, 706th TFG (AFRES),



USAF photo by SSgt. Lee F. Corkran

A 401st TFW F-16C fighter from Torrejon AB, Spain, refuels from a KC-135 tanker as another F-16 stands by during Desert Storm.

shoots down Iraqi helicopter over central Kuwait in first-ever aerial victory by A-10. RAF knocks out key bridge across Tigris in Baghdad. US reports coalition aircraft have flown nearly 50,000 sorties, one-half of them combat attacks against Iraqi targets. US lists combat casualties as 12 killed, 11 wounded, 24 missing in action (plus three missing from noncombat posts), eight Prisoners of War. US troop strength reaches 503,000, other coalition troop strength reaches 200,000.

Feb. 7 Cheney and Powell head to Gulf for meeting with Schwarzkopf on air offensive and pending ground offensive. Some 21 House members send letter to Bush, urging President not to launch ground war because air war is succeeding and ground war would increase coalition casualties. US officials say 109 Iraqi fighter aircraft, 23 Iraqi transport aircraft have flown to Iran.

Feb. 8 As Iraqi-caused oil slick drifts down Gulf, Saudi desalination plant at Safaniya stops operation as precautionary measure.

Feb. 9 Scud hits Israel, injuring 26. Cheney, Powell meet for eight hours with Schwarzkopf. "Tank plinking"—picking off individual tanks with smart weapons—begins. Coalition sources tell press that 15 percent of Iraq's armor, about 600 tanks, and between 15 percent and 20 percent of overall fighting ability destroyed thus far in air war.

Feb. 10 Soviet Foreign Minister Eduard Shevardnadze tells Baker that Moscow will not deploy troops with the multinational effort in Saudi Arabia because of opposition at home.

Feb. 11 Coalition aircraft fly 2,900 attack sorties, bringing to 61,862 the total for 26 days of air war.

Feb. 12 Air attack destroys three downtown Baghdad bridges—Martyr's Bridge, Republic Bridge, and July 14 Bridge. Soviet envoy Primakov stops in Tehran en route to Baghdad, carrying Soviet peace plan. Saddam tells Primakov that Iraq would cooperate with efforts to arrange cease-fire in Gulf War.

Feb. 13 F-117 fighters bomb building in Baghdad that coalition forces believe to be military command bunker but which is being used as civilian air-raid shelter, and 200–400 civilians are killed. Iraqi armored division, caught moving at night, is destroyed by airpower.

Feb. 14 RAF Tornado is shot down by missile over Baghdad. Two USAF crewmen killed when EF-111A is lost in Saudi Arabia after mission over Iraq. Back in US,

USAF photo by MSGt. Kit Thompson



This close-up view of the tail section of a 23rd TFW A-10A aircraft from England AFB, La., shows the damage it sustained when an SA-16 missile exploded near it during Desert Storm.

anti-war demonstrators splash blood and oil on Pentagon doorway.

Feb. 15 Saddam's five-man Revolutionary Command Council announces that Iraq is ready "to deal" with UN resolution requiring withdrawal from Kuwait. US officials estimate three months of war against Iraq will cost \$56 billion, of which US would pay \$15 billion and other coalition members would pay \$41 billion.

Feb. 16 Two Scuds hit southern Israel.

Feb. 17 Heavy bombing of Iraqi army in Kuwait has, by this date, destroyed 1,300 of Iraq's 4,280 tanks and 1,100 of 3,110 artillery pieces, the Pentagon reports. Iraq's foreign minister, Aziz, arrives in Moscow for talks with Soviet President Gorbachev.

Feb. 18 Two US Navy vessels, amphibious assault ship *Tripoli* and guided missile cruiser *Princeton*, strike mines in Gulf, take significant damage. Aziz returns to Baghdad with peace proposal from Gorbachev. Soviet Union offers four-point peace plan: (1) unconditional Iraqi withdrawal from Kuwait; (2) protection for Iraqi territorial integrity; (3) no punishment of Saddam or other Iraqi leaders; (4) talks about other Middle Eastern problems, particularly Palestine problem.

Feb. 19 Bush declares Soviet peace proposal inadequate. Mixed force of F-4Gs, F-16s from composite wing in Turkey launch daylight attack on Baghdad from north. Coalition flies record 3,000 attack sorties; total for 34 days of air war rises to 83,000.

Feb. 20 US Army engages Iraqi reconnaissance unit, destroying five tanks, 20 artillery pieces.

Feb. 21 Iraq fires three Scuds toward King Khalid Military City in Saudi Arabia. US casualties reach 20 killed in action, 27 wounded in action, 29 missing in action (plus two noncombat missing in action), nine POWs. Coalition holds 2,500 Iraqi POWs. After meetings in Moscow with Iraqi Foreign Minister Aziz, Soviets announce that Iraq accepts Soviet peace proposal.

Feb. 22 US announces that F-15s of 33rd TFW (Eglin) have downed 15 Iraqi aircraft. Bush gives Iraq until 8 p.m. local time, Feb. 23, to begin withdrawing troops from Kuwait. Iraqi forces set fire to some 150 oil wells and other oil installations in Kuwait. White House estimates total cost of war would be \$77 billion and that other coalition members will pay about \$54 billion.

Feb. 23 B-52s pound Iraqi positions. Iraqis set 100



USAF photo by SrA. Chris Putman

A B-52G bomber takes off on a mission for Desert Storm. At the start of the war, B-52s from Barksdale AFB, La., flew the longest strike mission in history of aerial warfare.

more Kuwaiti oil wells on fire. Total of coalition attack sorties flown during air war reaches 94,000. Schwarzkopf determines attrition of Iraqi combat effectiveness is sufficient for successful ground offensive with few casualties.

Feb. 24 G-Day. Coalition ground forces embark on what turns out to be 100-hour campaign. Tanks fitted with bulldozer blades punch holes in Iraqi defenses. Air war enters final phase—support for coalition ground forces. Schwarzkopf throws 100,000 troops into assault on Iraqi forces, which surrender in large numbers. Coalition attack sorties total 97,000.

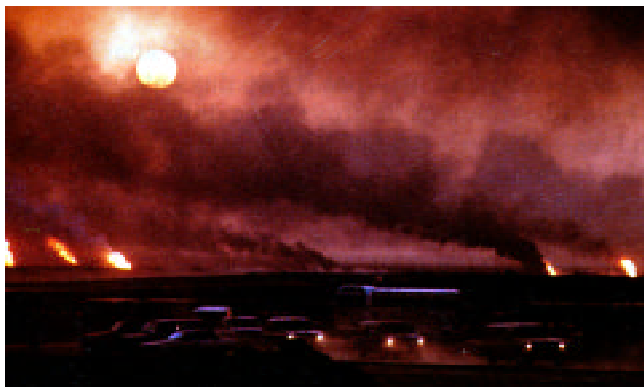
Feb. 25 Scud hits Dhahran barracks used by US Army Reservists, killing 28, wounding more than 100. Baghdad Radio airs Saddam order for Iraqi forces to withdraw from Kuwait. At least 517 oil wells in Kuwait on fire. US and French forces secure coalition western flank inside Iraq. US Army 101st Division moves north to An Nasiriyah on Euphrates River. US 24th Mechanized Infantry Division turns east to cut off possible Iraqi avenues of retreat north from Basra. US and British armored units move eastward toward Iraqi Republican Guards armored divisions along Kuwait-Iraq border.

Feb. 26 "Mother of all retreats" features Iraqi soldiers attempting to escape envelopment of Kuwait. Thousands of military, civilian vehicles, loaded with looted goods, clog four-lane highway out of Kuwait City. Repeated air attacks destroy much of panicked army's equipment. Coalition forces engage Republican Guards between Kuwait-Iraq border and Basra. Other coalition forces seize Kuwait City and Al Jahrah.

Feb. 27 Coalition liberates Kuwait City, envelops Iraqi forces. Coalition, Iraqi units fight largest tank battle since World War II Battle of Kursk between Germans and Soviets: Two Army divisions decimate two Republican Guard divisions. Two specially made 4,700-pound GBU-28 bombs destroy "impregnable" Iraqi command bunker at Al Taji. Coalition attack sorties reach one-day record of 3,500. Bush announces that coalition forces would suspend offensive operations the next day at 8 a.m. local time. Bush says Iraq must end military action, free all POWs, third country nationals, and Kuwaiti hostages, release remains of coalition forces killed in action, agree to comply with all UN resolutions, reveal location of land and sea mines.

Feb. 28 Fighting stops. Iraq agrees to observe cease-fire, attend military-to-military talks on cessation of

USAF photo by Dick Moreno



The smoke from oil well fires burning in the distance forces drivers to use their headlights during the day. The fires were set by Iraqi troops as they withdrew from Kuwait at the close of Desert Storm.

hostilities. Coalition air forces fly 3,500 sorties, for total of 110,000. Iraqi Foreign Minister Aziz notifies UN Security Council that Iraq accepts 12 UN resolutions dealing with invasion of Kuwait. DoD says coalition forces destroyed or rendered ineffective 42 Iraqi divisions, captured more than 50,000 Iraqi prisoners, destroyed or captured 3,000 of 4,030 tanks in southern Iraq and Kuwait, destroyed or captured 962 of 2,870 armored vehicles, 1,005 of 3,110 artillery pieces, 103 of 639 aircraft (with another 100 or so in quarantine in Iran). Coalition forces continue to destroy captured and abandoned Iraqi armor and artillery. Coalition airplanes flew 110,000 sorties over Iraq and Kuwait, one-half of which were combat and one-half support (reconnaissance, air refueling, search and rescue, etc.) US casualties are reported as 79 killed in action, 212 wounded in action, 45



USAF photo by A1C Janel Schroeder

Col. David Eberly waves to the crowd gathered to welcome him and other former POWs as they return home after being held captive by Iraqi forces during Desert Storm.

US Air Force Flight Operations Summary

USAF's in-theater fighter, bomber, and attack aircraft at the height of the war numbered 693, or 58 percent of all US in-theater air assets.

These in-theater USAF combat aircraft flew a total of 38,000 wartime sorties.

USAF aircraft dropped nearly 160,000 munitions on Iraqi targets, 72 percent of the US forces total.

USAF aircraft dropped 91 percent of all precision bombs and 96 percent of precision missiles used in the war.

USAF B-52 bombers flew 1,624 combat missions and dropped 72,000 bombs, or 26,000 tons of ordnance.

Before the ground battle began, the USAF-led air campaign against Iraqi ground forces destroyed 1,688 battle tanks (39 percent of total), 929 armored personnel carriers (32 percent), and 1,452 artillery tubes (47 percent).

USAF combat support aircraft numbered 487 at the height of the war, 54 percent of the US support assets in theater.

USAF C-5, C-141, KC-10, and Civil Reserve Air Fleet airlifters flew 14,000 long-range missions to the Gulf.

These airlifters delivered some 539,000 tons of cargo and nearly 500,000 troops and other passengers.

KC-10 and KC-135 tankers flew 17,000 sorties and conducted 52,000 aerial refuelings, off-loading 800 million pounds of fuel.

USAF Special Operations Forces aircraft flew 830 missions.

During Desert Storm, C-130 tactical transports flew nearly 14,000 sorties, including many dedicated to the redeployment westward of Army forces which executed the famous "left hook" flanking maneuver against Iraqi ground forces.

missing in action, nine POWs. (Casualties later revised to 613.)

March 2 Sporadic fighting erupts. Members of Iraqi tank column, evidently confused, come in contact with US troops, start shooting. Battle of Rumaila leaves 60 Iraqi tanks destroyed. Coalition forces occupy southeast corner of Iraq. Coalition air forces maintain "air occupation" of Iraq.

March 3 At Safwan in Iraq, Schwarzkopf and Lt. Gen. Khalid ibn Sultan, Saudi commander of Joint Arab-Islamic Force, and their associates from other coalition countries, meet eight Iraqi officers, led by Lt. Gen. Sultan Hashim Ahmad, commander of Iraqi III Corps in Iraq. Military leaders discuss cease-fire arrangements, including POW and detainee exchange, minefield locations, avoiding contact that could lead to armed clashes, coalition withdrawal as soon as formal cease-fire is signed. CENTCOM reports Iraqi equipment destroyed or captured increased to 3,300 tanks, 2,100 armored vehicles, 2,200 artillery pieces, and number of POWs increased to 80,000.

March 5 Iraq releases 35 POWs: nine Britons, nine Saudis, one Italian, one Kuwaiti, 15 US military personnel, including second woman POW, Army Maj. Rhonda Cornum.

March 8 1st TFW returns in victory to Langley AFB. Other early returning units include 42nd Bomb Wing (Loring AFB, Maine) and 55th and 9th SOSs (Eglin AFB).

March 10 Iraq releases 21 US POWs—including eight members of USAF. Former POWs return to Andrews AFB, Md., met by Cheney, Powell, several thousand spectators.

March 19 Redeployment of 545,000 US troops stationed in Gulf officially begins.

April 11 Iraq accepts all terms of UN cease-fire resolution. Gulf War officially ends April 11, 1991, at 10 a.m. EST.

Sources include:

Iraq-Kuwait Crisis: A Chronology of Events, July 17, 1990–Dec. 23, 1991, Congressional Research Service, April 6, 1992; *Airpower in the Gulf*, James P. Coyne, 1992; *Chronology of Significant Events*, US Central Command, 1991; *Conduct of Persian Gulf Conflict: an Interim Report to Congress*, Department of Defense; Military Airlift Command; Strategic Air Command; Air Force Special Operations Command; Air Force Space Command; Pacific Air Forces; Tactical Air Command; US Air Forces in Europe; USAF white papers, April 1991 and September 1991; Gen. Merrill A. McPeak, DoD press conference, March 15, 1991; Pentagon Working Document, United States Aircraft Losses, June 7, 1991; Gen. Charles A. Horner, USAF; Lt. Gen. Buster C. Glosson, USAF; Maj. Gen. John A. Corder, USAF; Col. John Warden, USAF.