Jordan Country Handbook

This handbook provides basic reference information on Jordan, including its geography, history, government, military forces, and communications and transportation networks. This information is intended to familiarize military personnel with local customs and area knowledge to assist them during their assignment to Jordan.

The Marine Corps Intelligence Activity is the community coordinator for the Country Handbook Program. This product reflects the coordinated U.S. Defense Intelligence Community position on Jordan.

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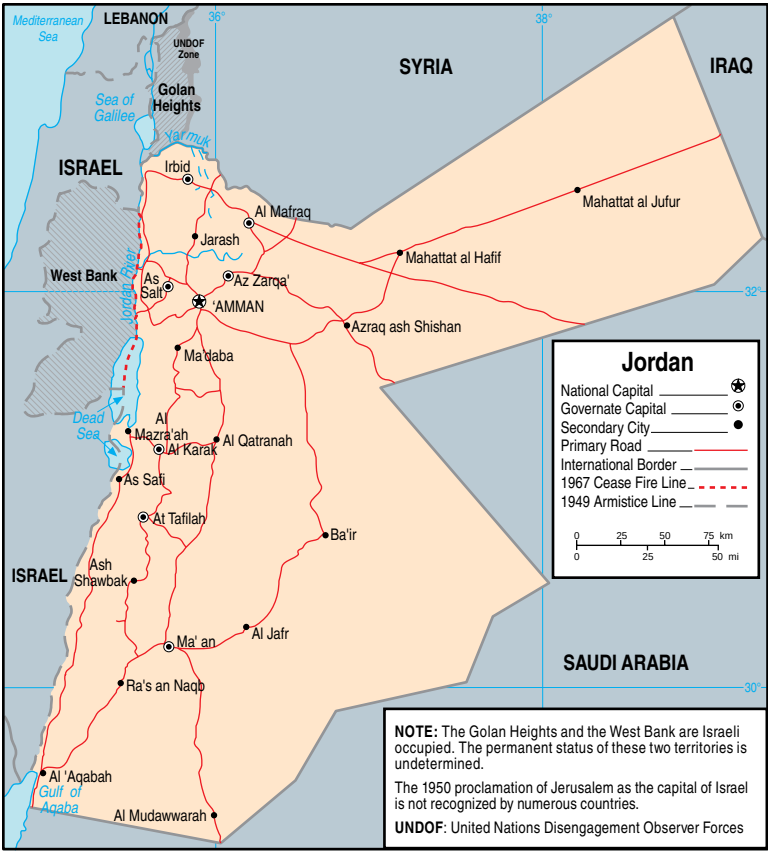
Mediterranean Sea
LEBANON
UNDOF Zone
SYRIA
IRAQ
Sea of Galilee
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Yarmuk
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Al Jafr
Ma'an
SAUDI ARABIA
Ra's an Naqb
Al 'Aqabah
Gulf of Aqaba
Al Mudawwarah
36°
38°
32°
30°
Jordan
National Capital
Governate Capital
Secondary City
Primary Road
International Border
1967 Cease Fire Line
1949 Armistice Line
0 25 50 75 km
0 25 50 mi
NOTE: The Golan Heights and the West Bank are Israeli occupied. The permanent status of these two territories is undetermined.
The 1950 proclamation of Jerusalem as the capital of Israel is not recognized by numerous countries.
UNDOF: United Nations Disengagement Observer Forces

Jordan

KEY FACTS

Official Country Name. Hashemite Kingdom of Jordan.
Short Form. Jordan.
Local Form. Al-Urdun.

Head of State. King Abdullah ibn Hussein II (7 February 1999).

Capital. Amman.

National Flag. Horizontal bands of black, white, and green with a red triangle on the hoist side with a white 7-pointed star in its middle.

Time Zone. UTC+2 hours.

Telephone Country Code. +962.

Population. 6,198,677 (July 2008 est.).

Languages. Arabic (official), English.

Currency. Jordanian *dinar* (JOD).

Exchange Rate. 1 JOD = 1,000 *fils*; US$1= 0.7 JOD.

Calendar. Jordan uses the Gregorian calendar, but Islamic holidays are based on the Islamic calendar.

National Flag

U.S. MISSION

U.S. Embassy

Location	Abdoun, Amman
Mailing Address	P.O. Box 354 Amman 11118 Jordan
Telephone	962-6-590-6000
Fax	962-2-592-0121
E-mail	ResponseAmman@state.gov
Internet Address	jordan.usembassy.gov
Hours	Sunday through Thursday, 0800 to 1630; closed on U.S. federal holidays and some national holidays

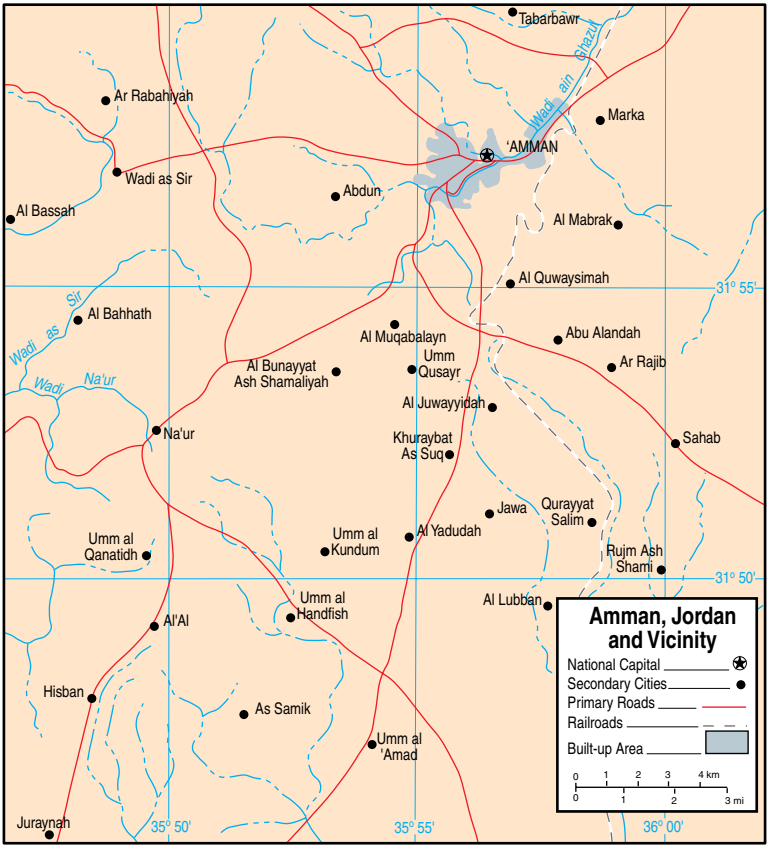
U.S. Consulate

The United States does not have a separate consulate in Jordan; however, the embassy in Amman has an American Citizen Services (ACS) section that provides administrative and notary services to U.S. citizens living or traveling in Jordan. In addition, ACS assists U.S. citizens in the event of an emergency.

Telephone	962-6-590-6950
E-mail	Amman-ACS@state.gov
Internet Address	jordan.usembassy.gov/service.html
Hours	Sunday through Thursday, from 1230 to 1530; the consulate is closed on U.S. holidays, some national holidays, and the last business day of each month

U.S. Military Facilities

The United States has no military facilities in Jordan. The nearest U.S. military facility is Naval Medical Research Unit 3 in Cairo, Egypt, a medical research laboratory that supports U.S. military personnel in the Middle East, North Africa, and Southwest Asia.



Amman

Travel Advisories

The threat of terrorism in Jordan is high; there have been confirmed terrorist plots against U.S. interests as recently as November 2006. U.S. citizens should be alert to their surroundings at all times and take precautions to protect their personal security. The border with Iraq is susceptible to vehicle-borne improvised explosive devices (IEDs), and the State Department warns against any attempt to enter Iraq.

U.S. citizens should avoid demonstrations or large gatherings of people, particularly around mosques and religious sites. Anti-U.S. and anti-Western sentiment in Jordan occasionally results in incidents of harassment or violence.

Violent crime is not a serious problem, but petty theft is common in downtown Amman. Purse snatching and pocket picking are the most common crimes, and travelers should exercise caution when leaving banks and when using automated teller machines (ATMs).

Jordan has had multiple cases of avian flu, including one human case. Travelers should avoid poultry farms, animals in live-food markets, and any area that might have been contaminated with poultry feces. Travelers should also avoid eating uncooked eggs or poultry.

Road conditions range from good in Amman to fair in rural areas, and lighting is poor outside Amman. Drivers should avoid border areas and military installations, which often have land mines planted around them for a 3 kilometer (2 mile) radius. Jordan's government has checkpoints on main roads, particularly those leading to tourist spots. Drivers should comply with instructions from security personnel at these checkpoints. Due to security concerns, the U.S. Embassy discourages U.S. citizens from using public buses.

Travel advisories for Jordan are typically updated every 6 months. Updates are usually minor changes.

Entry Requirements

Passport/Visa Requirements

U.S. citizens must have a passport and visa to enter Jordan. The passport must be valid for at least 6 months beyond the date of planned departure from Jordan. Single-entry visas can be obtained at most international ports of entry (including airports) and international land border crossings. The exception is the King Hussein Allenby Bridge crossing between Jordan and Israel, where U.S. citizens must already have an entry visa or permit from the Ministry of Interior in order to enter Jordan. Jordan's consulates issue multiple-entry visas, which are valid for 1 month. Visitors staying longer than 1 month can extend their visas to 3 months by registering at one of Jordan's police stations prior to the visa's expiration. A visa can be extended for a maximum of 6 months. Anyone staying longer than 3 months must undergo testing for tuberculosis and HIV in order to obtain a health certificate from the Ministry of Health.

Travelers failing to register are subject to a fine upon departure of US$2 per day of overstay. Jordan levies a departure tax. The amount depends upon the means of exit: land borders are US$6, the Port of Aqabah is US$9, and air departures are US$21. The United States and Jordan do not have international travel or open border agreements.

Immunization Requirements

Jordan requires a certificate of immunization for cholera and yellow fever if the traveler is arriving from an infected area. The

Centers for Disease Control and Prevention recommend up-to-date routine immunizations prior to travel, as well as immunizations for hepatitis A and B, typhoid, rabies, and polio.

Customs Restrictions

Most personal items, such as cameras and hair dryers, are duty free. Other duty-free items include the following:

- 200 cigarettes, 25 cigars, or 200 grams (7 ounces) of tobacco
- 1 liter of alcohol or 1 bottle of wine
- Reasonable amount of perfume for personal use
- Gifts of a value up to JOD50 (US$71)
- Currency up to JOD100 (US$142)

Travelers should avoid importing items that may offend Muslim cultural sensitivities or cause uneasiness in relation to the Middle East security situation. These items include pork products, religious publications or figures, imitation firearms or related items, and military uniforms. The following items are also prohibited imports:

- Furs
- Gambling devices
- Liquor (except for duty-free allowance)
- Playing cards
- Jewelry, precious metals, and stones
- Prescription drugs

Cash Exchange

Credit and debit cards are accepted at major hotels, restaurants, and tourist attractions; they should be used with caution because of the risk of fraud. ATMs are limited outside Amman and the Queen Alia Airport.

GEOGRAPHY AND CLIMATE

Geography

Jordan is an arid country with varying topography that includes river valleys, highlands, and flat desert. It has few large bodies of water, but it has numerous *wadis* (seasonal or dry river beds), some oases, and a few wetland areas. Available water is used for cultivation in the northern highlands or to support Jordan's growing population. Vegetation is scarce, particularly in the desert areas. Jordan has 26 kilometers (16 miles) of coastline along the Gulf of Aqaba to the south.

Land Statistics

Total Area:	92,300 square kilometers (35,637 square miles)
Water Area:	329 square kilometers (127 square miles)
Coastline:	26 kilometers (16 miles)
Area:	Slightly smaller than Indiana
Coordinates:	3100N/03600E
Land Usage:	Cultivated: 1.2% Inhabited: NA

Boundaries

Direction	**Country**	**Kilometers/Miles**
Northeast	Iraq	181 / 112
East and south	Saudi Arabia	744 / 462
West	Israel	238 / 148
	West Bank	97 / 60
North	Syria	375 / 233
Total		1,635 / 1,015

Middle East

Border Disputes

Jordan resolved its last border dispute in 2005 when it signed an agreement with Syria to demarcate the Jordan-Syria boundary. The agreement ended a 22-year dispute about 125 square kilometers (48 square miles) of land. The boundary was established in 1931 by Great Britain and France, but boundary markers were never placed on the physical border. Jordan formally renounced its claims to the West Bank in 1988 and formalized its border with Israel in the 1994 Jordan-Israel Peace Treaty.

Bodies of Water

The Dead Sea is a landlocked salt lake between Jordan on the east and Israel and the West Bank on the west. The Dead Sea is the lowest point in the world, reaching a depth of 400 meters (1,312 feet) below sea level. It is 80 kilometers (50 miles) long and 18 kilometers (11 miles) wide at its widest point, with a

Al-Azraq Wetlands Reserve

surface area of 1,020 square kilometers (394 square miles). The Jordan River and several small *wadis* feed the Dead Sea. The water is extremely salty. The water level is decreasing by 85 centimeters (33 inches) each year.

The Ayn al-Azraq Oasis is the largest source of water in Jordan's desert. Ayn al-Azraq is a wetlands area located in a depression in northern Jordan and covers 12,710 square kilometers (4,907 square miles). Water levels in the oasis vary with rainfall amounts and water withdrawal for irrigation and drinking water.

The Jordan River (Nahr Al-Urdun) is a key river in Jordan. It begins at the foot of Mount Hermon in the Israeli-occupied Golan Heights. The Jordan River flows south through Israel to the Sea of Galilee, which it enters on the northern shore. The river flows out of the southern shore, where it forms the border between Israel and the West Bank on the west and Jordan on the east. It empties into the Dead Sea, 360 kilometers (224 miles) from its source. The Jordan is shallow and swift, even during the high-water peri-

od from January to March. The water is salty as a result of thermal springs that feed the river in the Sea of Galilee.

The Yarmuk River (Nahr Al-Yarmuk) is the main tributary of the Jordan River. It rises in southwest Syria and follows a winding, southwestern course for 80 kilometers (50 miles), at which point it joins the Jordan River. The Yarmuk forms Jordan's northern border with Syria and provides water for the irrigation of the eastern Jordan River Valley.

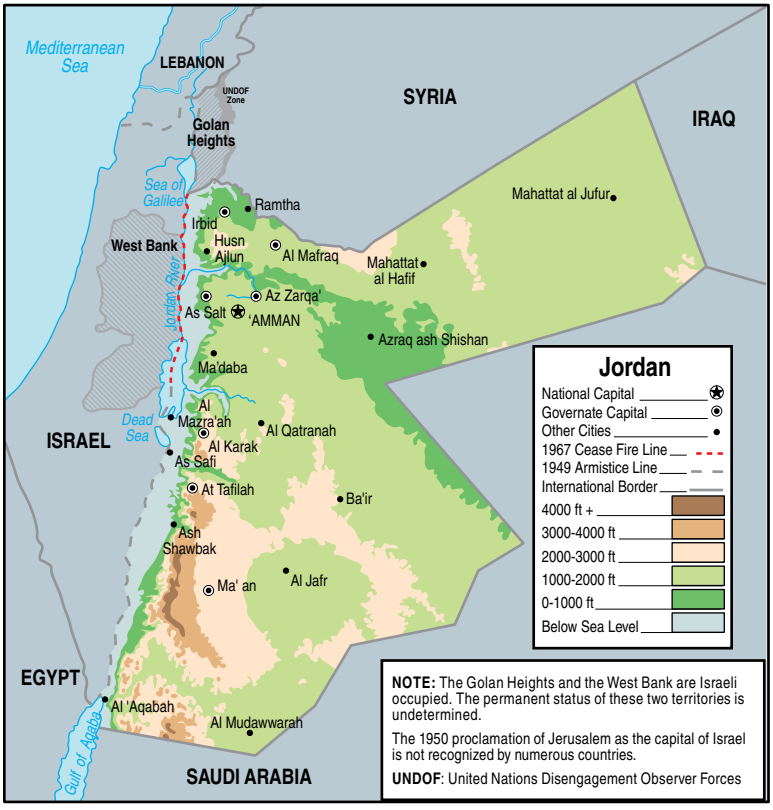
The second tributary of the Jordan River is the Zarqa River, located entirely within Jordan. The river begins in north central Jordan and flows 72 kilometers (45 miles) west to meet the Jordan River. The Zarqa is perennial, and its flow is regulated by the King Talal Dam, which diverts water to the King Abdullah Canal for irrigation.

Topography

Jordan River Valley

The Jordan River Valley, the northern part of the Great Rift Valley, forms the entire western border from the Yarmuk River in the north to the Gulf of Aqaba in the south. The Jordan River, Dead Sea, and Wadi Al-Arabah (Wadi al-Jayb) lie in this depression. The valley reaches its lowest point in the Dead Sea at 400 meters (1,312 feet) below sea level, which is also the lowest elevation in Jordan. From the Dead Sea, the valley rises gradually to sea level before ending at the Gulf of Aqaba.

The rainfall and water sources in the Jordan River Valley allow for a variety of plants. The Jordan River Valley has forestland with poplar, willow, olive, eucalyptus, oak, pine, and cedar trees. The shrubs are Mediterranean species, including almond, cherry, Judas trees,



Topography

and fig and flowering plants such as poppies, roses, and irises. The soil in the valley and around the Dead Sea, considered the best in Jordan; it was naturally deposited by the Jordan River.

Highlands

The land rises east of the Jordan River Valley to a chain of limestone plateaus called the Jordanian Highlands (also called the

Eastern Heights or Mountain Heights Plateau). The highlands separate the valley from the desert, and they stretch the entire length of the country. The steppes range between 900 and 1,200 meters (2,953 and 3,937 feet) high. *Wadis* cross the plateaus.

View of the Jordan Valley

The plateaus north of Amman are called the Northern Highlands. The highlands receive the most rainfall and have a Mediterranean climate suitable for agriculture. This fertile region is almost entirely cultivated and produces fruits and vegetables.

The southwestern highland region is called the Wadi Rum. The sandstone and granite formations can reach 1,500 meters (4,921 feet) or higher; Jabal Ramm, the highest elevation, is 1,754 meters (5,755 feet). The Wadi Rum has desert topography and deep gorges.

The steppes have some forests, but the vegetation is primarily shrub land with grasses and small trees. The vegetation is not dense in the highlands. Well-watered areas have reeds and tamarisk and poplar trees. The fertile areas are primarily cropland.

Syrian Desert

All of Jordan east of the highlands is desert, accounting for 80 percent of the land area. Jordan's desert is part of the Syrian Desert (also called the Northern Arabian Desert), which also covers portions of Syria, Iraq, and Saudi Arabia. The desert has vast

Mountains in Jordan

expanses of sand and dunes with occasional salt flats, sandstone hills, and low mountains. This region is arid and supports only sparse vegetation. Elevations are between 600 and 900 meters (1,969 and 2,953 feet).

The northern desert is called the Black Desert or Basalt Desert after its appearance and geology. The rocks and boulders are lava and basalt rock. Northeast of Amman is the Eastern Desert, which has more vegetation due to its seasonal *wadis.* The Ayn al-Azraq Oasis wetland is located in the Eastern Desert. The desert south of Amman is the Central Desert. A prominent feature is the Wadi Sarhan, which forms part of the border with Saudi Arabia and drains into the Ayn al-Azraq Oasis.

The Al-Jafr Basin in the southeast is the intersection of many *wadis.* The desert south of Al-Jafr is known as the Al-Mudawwarah Desert. It has scattered hills, low mountains, and wide *wadis.*

Desert Landscape

Vegetation is sparse in the desert because rainfall is minimal. Shrubs are the most prevalent form of vegetation. Varieties such as salt bushes and sedges are the most common shrubs. Grasses appear after rainfall. *Wadis* have wetter soil and support denser vegetation. Large shrubs and trees are scattered around the desert. Acacia and *ghaf* trees are found in the Syrian Desert.

Cross-country Movement

Any travel off highways or outside major cities and towns requires a high-clearance four-wheel-drive vehicle in good repair. Jordan requires that all automobiles carry a fire extinguisher and an orange warning triangle.

Sudden sandstorms may reduce or eliminate visibility. Northern Jordan experiences occasional winter snowfalls, which may block routes or make travel difficult. Heavy rains from December to March can cause flooding. It is dangerous to be in *wadis* during conditions that could lead to flash floods as *wadis* channel fast-flowing water.

The terrain in Jordan varies widely, but off-road conditions are generally rough. Most of the country is desert, characterized by sand, rock, and uneven terrain. Climbs to higher elevations can be steep, and hiking in some areas is difficult.

Land mines are planted in a 3-kilometer (2-mile) radius around borders and military installations. Mined areas are fenced off and marked with a skull and crossbones sign, but some fences and markers are damaged or in disrepair and may not be readily visible.

The border with Iraq is closed; travel to the area is not recommended. The borders with Israel and the West Bank are sensitive areas and are subject to closure.

Urban Geography

Amman is a young, modern city compared to other major Middle Eastern cities. Since most of Amman's growth took place after 1924, it lacks the ancient historical areas of other Middle Eastern cities. The city has experienced population surges from refugees fleeing major crises in the Middle East, including the creation of Israel in 1949, the Six-Day War in 1967, the civil war in Lebanon in 1975, the Persian Gulf War in 1991, and Operation IRAQI FREEDOM in 2003. Amman has not had adequate infrastructure or an urban growth plan to deal with the growing population, and urban spread has been haphazard.

Amman sits on 19 hills (*jabals*) in northwest Jordan. It originally occupied seven hilltops, but as the city has grown, the urban sprawl has taken over additional hilltops, radiating from the origi-

View of the Roman Theater in Amman

nal central hills. As space demands have increased, the neighborhoods have spread down the hillsides. West Amman has modern amenities such as supermarkets, art galleries, and cafés. East and south Amman have fewer conveniences. Large Palestinian refugee camps are on the outskirts of Amman.

Environment

Jordan faces serious environmental problems as a result of low rainfall and overuse of existing water resources. Water shortage is the most pressing problem, as per capita water resources are expected to reach critical levels by 2025. The country is also dealing with desertification and the degradation of pastureland from overgrazing. Agricultural chemicals, waste, and wastewater are contaminating water supplies and decreasing the soil quality.

Forest cover accounts for less than 0.5 percent of Jordan's land area. Most forestland is found in the northern mountainous areas of Jordan. Virtually every forest has experienced deforestation. The effects of deforestation are still evident because there is little natural regrowth.

Goats and sheep have overgrazed on the natural vegetation in desert areas designated as pastureland. The overgrazing has led to soil erosion and increasing desertification.

Poor air quality is an increasing problem in Jordan, particularly in Amman. Almost all registered vehicles in Jordan are used in Amman, and they run on leaded gasoline or fuel with high sulfur content. The hills surrounding downtown Amman exacerbate the problem by trapping polluted air. Jordan has a small industrial sector, and many factories release pollutants into the air.

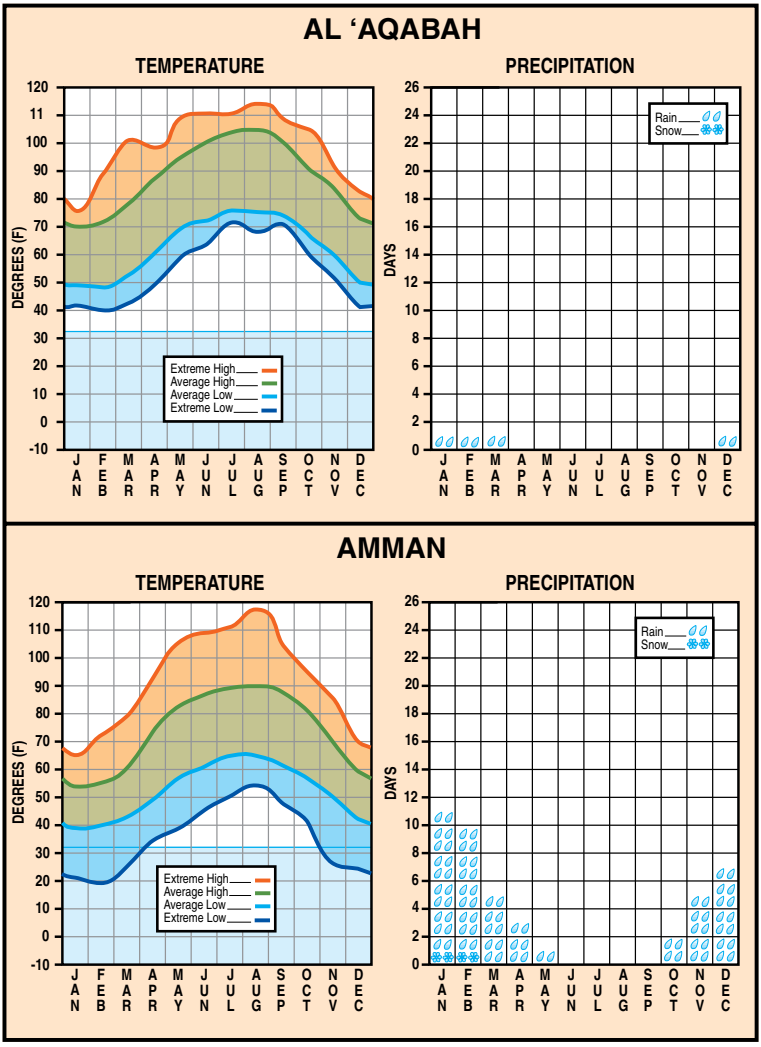
Jordan has environmental policies regarding desertification, grazing management, wildlife management, water scarcity, protected areas, and agriculture practices. The government has also established restrictions on carbon monoxide emissions and leaded gasoline in an effort to reduce air pollution in Amman. Multiple agencies share responsibility for environmental issues, and they often have competing interests. The primary ministry in charge of the environment is the Ministry of Municipalities, Rural Affairs, and Environment. Despite the many policies in place, specific regulations to implement the policies are lacking, and enforcement is sporadic.

Jordan is party to international agreements on environmental issues such as biodiversity, climate change, desertification, endangered species, hazardous wastes, Law of the Sea Treaty, marine dumping, ozone layer protection, and wetlands.

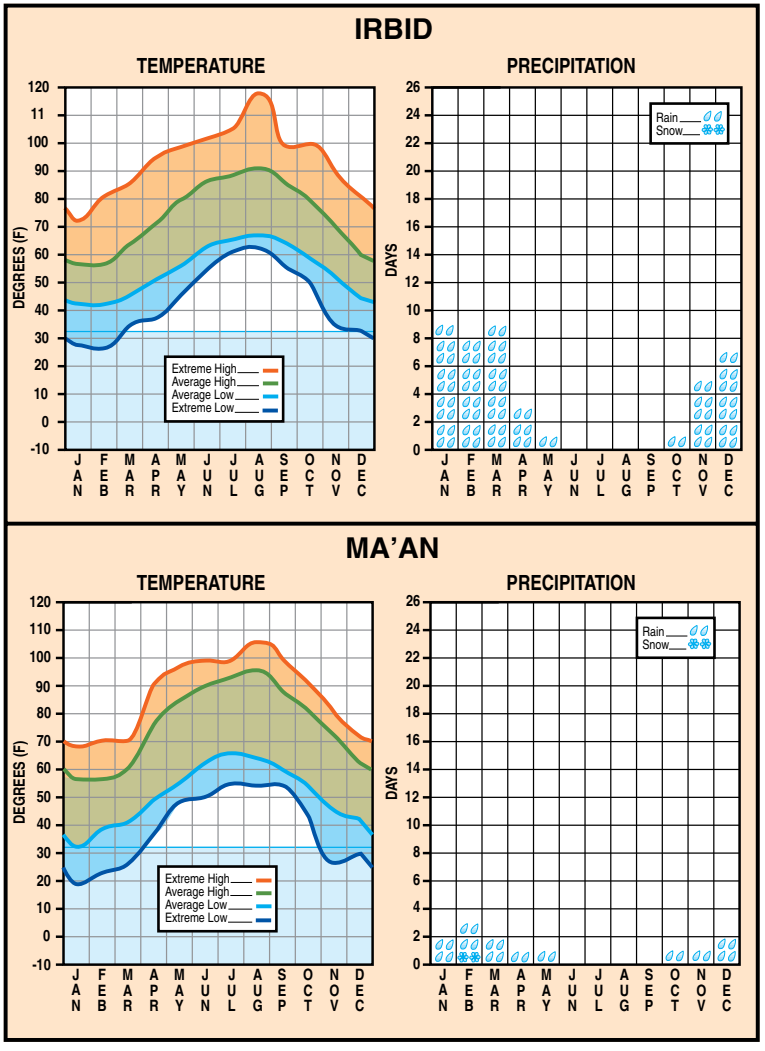
Climate

Jordan has a Mediterranean climate with a hot, dry summer and a mild rainy season. The rainy season is the shorter of the two seasons, lasting from November to April, with an average temperature of 13ºC (55ºF). The rest of the year has a hot, arid climate with an average daytime temperature of 32ºC (90ºF). Temperatures in the summer can reach 49ºC (120ºF). The Dead Sea area is the warmest with a record high of 51°C (124°F). The nighttime has cooler, comfortable temperatures. Humidity in the summer is low.

Three-fourths of the country is desert, which has little rain and wide temperature variations. Daytime temperatures are hot, but at night the climate is cold and windy. Amman, the capital city, has milder temperatures and distinct seasons. The summer highs are usually between 27 and 32°C (80 and 90°F). Wind and dust clouds blow in from the desert. Most of the rain falls between January



Al ‘Aqabah and Amman Weather



Irbid and Ma'an Weather

and February. Winter temperatures rarely drop below freezing, but winds are strong. A few light snowfalls are common.

The western part of Jordan and the higher elevations receive more rainfall than the eastern desert does. The desert receives 100 to 120 millimeters (4 to 5 inches) of rain; but, in the highlands, the south receives 300 millimeters (12 inches), and the north receives 500 millimeters (20 inches). The Dead Sea receives less than 120 millimeters (5 inches) of rain.

Phenomena

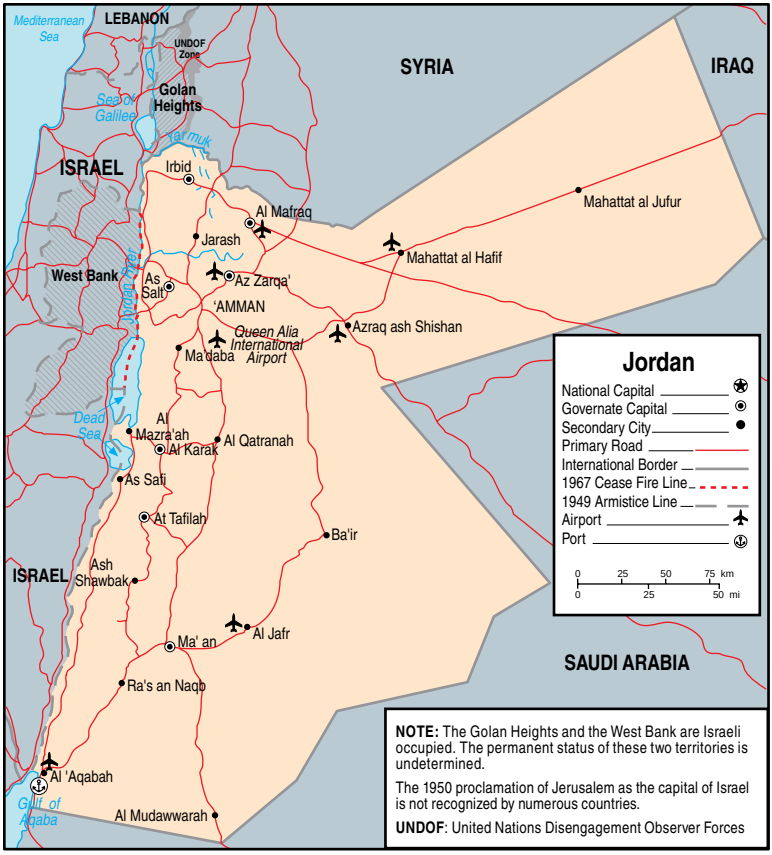
The *khamsin* is a strong, dry wind accompanied by large dust clouds. It typically arrives from the south or southeast 1 month before and after the dry season. Indications of an incoming *khamsin* include hazy skies, dropping pressure, and decreasing humidity. The temperature may rise by 10 to 15°C. The *khamsin* blows for a day or longer. The dust and strong winds may cause physical irritation.

The *shamal* winds blow from the north or northwest from June to September. It is usually hot and dry, accompanied by dust storms. In Jordan, the *shamal* blows for several days at a time, stops for a day or so, and then resumes for another several days. The gusts are strong during the day and weak at night.

INFRASTRUCTURE

Transportation

Jordan's transportation system was underdeveloped until the 1990s when the government implemented multiple improvement projects. The government also attracted foreign investment to help with modernization and expansion. The roads are the best means of domestic transportation for passengers and cargo. The railroad



Transportation

system is old and small, and it primarily serves the phosphate industry. The three main airports are international airports with direct flights to and from countries in North America, Europe, Middle East, Africa, and Asia. Jordan has one port, the Port of Aqabah, a vital link for regional and international trade. In 2000, Jordan's government made the area around Aqabah a free-trade

zone called the Aqabah Special Economic Zone (ASEZ). The zone was designed to promote Aqabah as a trade and economic investment hub with special services, infrastructure, and tax rates for businesses. The ASEZ master plan calls for the Port of Aqabah facilities to be moved south to consolidate the existing three zones into one in the Southern Industrial Zone.

Roads

Jordan has 8,003 kilometers (4,973 miles) of paved roads. Major trunk roads account for 3,471 kilometers (2,157 miles), and agricultural and provincial roads account for 4,532 kilometers (2,816 miles). The main highways are generally in good condition and receive regular maintenance.

Jordan has four major roads. The most significant road is the Desert Highway, a north-south road between Aqabah and Amman. Portions of the Desert Highway are narrow, winding, steep, and

Border Crossing

crowded with vehicles and trucks. An extension of this highway is the four-lane Jarash-Irbid Road, which connects Amman and Irbid, an industrial city to the north. The Azraq-Iraq Road is a two-lane highway connecting Iraq and Jordan. The Irbid-North Shunah Road is a two-lane highway that links Irbid to agricultural areas in northern Jordan. The Salt-Ardah Road is a two-lane road that connects Amman with the central Ghor region, a major agricultural area. Traffic congestion is a problem in urban areas, particularly Amman.

The truck route between Aqabah and the Iraq border at Turaybil is a key corridor for goods shipped to Iraq. Traffic on the road decreased significantly due to safety concerns after Operation IRAQI FREEDOM began; however, trucking companies in Jordan and Iraq still use this highway. The road is in good condition.

The secondary roads in Jordan include rural, paved roads; desert tracks; and agricultural roads. The paved roads are generally rough, and some have construction defects.

Highway in Petra, Jordan

Sudden sandstorms can reduce or eliminate visibility on roads. Roads may become flooded, or conditions may worsen, if the rain is heavy during the rainy season from December to March. The northern mountainous areas, including Amman and Petra, experience occasional snows that can close or block roads and trap cars.

Roads are essential to Jordan's economy because the road network is the most advanced means of transportation in the country. Trucks use the highways to transport goods from Jordan to neighboring countries and to the Port of Aqabah for export.

Jordan sometimes closes its border crossings with Israel and the West Bank with little notice. The Jordan-Iraq border crossing can be a dangerous area; previously, terrorists have targeted it with vehicle-borne improvised explosive devices (IEDs).

Land mines have been planted in a 3-kilometer (2-mile) radius around some military installations and border areas. Police have set up security checkpoints on highways, and they may perform random security checks. Drivers should carry identification and comply with any instructions from the police.

Roads are hazardous at night. Many roads are unlit, and some vehicles do not have or use headlights. Livestock stray into the road, even in urban areas, and collisions between animals and vehicles are common. Traffic travels on the right side of the road.

The driver is guilty in any accident in which a pedestrian is injured. The driver faces fines and possible prison time.

Jordan has private taxis, buses, and group taxis. Amman's yellow private taxis are metered and charge reasonable rates, but they can be difficult to find in residential areas and during off-peak hours. They are usually in good condition. Amman also has city buses

Desert tracks in Wadi Rum

and white group taxis. These are generally crowded, and they follow fixed routes. Buses and taxis run routes between Amman and nearby cities, and yellow taxis transport riders between cities. Jordanians consider public transportation safe and reliable, but the buses and public taxis can also be dirty and crowded.

Bridges in Jordan are vital economic and transportation links because the country relies heavily on ground transportation. The Al Mat Bridge between Jordan and Iraq was reopened in 2004 after being heavily damaged during Operation IRAQI FREEDOM. The bridge is a vital route for trucks carrying food and supplies to Iraq. The Wadi Abdoun Bridge connects two districts in Amman. It is a cable-stayed span bridge 390 meters (1,280 feet) long and two lanes wide, built in an S curve. The Sheikh Hussein Bridge is a four-lane suspension bridge 90 meters (295 feet) long, which links northern Jordan with Israel. The King Hussein Bridge con-

nects Jordan and the West Bank. It is a truss bridge 110 meters (361 feet) long and 19 meters (62 feet) wide. The city of Amman has multiple traffic tunnels.

Rail

Jordan has two railroads, which total 622 kilometers (386 miles) in length with 1.1-meter (3.6-foot) narrow gauge tracks. The oldest is the Hejaz Jordan Railway (HJR), which runs between Damascus, Syria and Medina, Saudi Arabia. Jordan's portion goes through Amman, and an express train runs twice weekly between Damascus and Amman. The government-owned HJR administers the Jordan section of the railroad. The primary cargo is phosphate, which is transported from mines to Aqabah. HJR has eight locomotives that transport passengers and cargo. HJR carried 30,000 passengers and 5,732 tons of cargo in 2000. HJR is considered self-regulating because it must compete for tourist business with other methods of land transportation. Operation is governed by the 1992 Railway Law. The railroad infrastructure is operational but outdated.

The government-owned Aqabah Railway Corporation (ARC) opened the second railroad in 1975 for the purpose of transporting phosphate from the mines in El Hassa and El Abiad to the Port of Aqabah. Since the railroad is relatively new, the equipment is in good condition. ARC has problems with sand accumulation on the railroad lines, which require periodic cleaning to continue operation. ARC owns 37 locomotives built in the 1970s. ARC transported 3.3 million tons of phosphate in 2000. Public rail safety is not a concern for ARC because it does not transport passengers. Most accidents occur when cars, buses, or passengers cross railroad crossings. Operation is governed by the 1992 Railway Law. ARC generally runs on time.

Historically, the rail system has been an important transportation link for Jordan's economy. However, its economic impact is declining as modernization and expansion become more expensive.

Jordan has no light rail or subway systems. The government announced plans in 2005 to build a 26-kilometer (16-mile) light rail network in the Amman-Zarqa area, but as of early 2009, construction had not yet begun.

Air

Primary Airfields

Name	Coord.	Elevation meters (feet)	Runway Length x Width; meters (feet)
Aqabah King Hussein Intl	2936N 03501E	53 (174)	3,004 x 45 (9,856 x 148)
H4	3232N 03811E	686 (2,250)	2,504 x 30 (8,215 x 98)
King Hussein	3221N 03615E	683 (2,241)	2,993 x 45 (9,819 x 148)
Marka Intl	3158N 03559E	779 (2,556)	3,275 x 45 (10,745 x 148)
Prince Hassan	3209N 03708E	677 (2,221)	2,988 x 43 (9,803 x 141)
Queen Alia Intl	3143N 03559E	730 (2,395)	3,660 x 61 (12,008 x 200)
			3,660 x 61 (12,008 x 200)
Shaheed Mwaffaq	3149N 03646E	520 (1,706)	(2) of 2,748 x 45 (9,016 x 148)
Zarqa	3201N 03608E	732 (2,402)	1,264 x 24 (4,147 x 80)

The above airfields have asphalt runway surfaces, with the exception of Queen Alia International, which has a concrete surface.

The national airline is the government-owned Royal Jordanian Airline (RJA). It offers flights to destinations in the Middle East, North Africa, Europe, the Indian subcontinent, East Asia, and North America. RJA flies to Chicago, Detroit, and New York. Jordan's government is in the process of privatizing RJA by selling off five airline service units. Other airlines flying directly to Jordan include Air France, British Airways, KLM, Alitalia, Turkish Airlines, Austrian Airlines, Cyprus Airlines, Air Romania, Lufthansa, Olympic, SwissAir, and airlines from Middle Eastern countries.

Jordan has 17 airports, 15 of which have paved runways, and 1 heliport. The three main airports are Queen Alia International outside Amman, Marka International in East Amman, and King Hussein International in Aqabah. These airports serve more than 2 million passengers and carry 77,162 tons of cargo each year.

Jordan remains at risk for a terrorist attack, and airports are potential targets. Jordan security forces disrupted a plot by a cell linked to Al Qa'ida to attack the Queen Alia International Airport in February 2006.

According to the assessment of the U.S. Federal Aviation Administration, Jordan's Civil Aviation Authority meets the aviation safety standards of the International Civil Aviation Organization (ICAO) for air carrier oversight. The Civil Aviation Authority has air safety regulations similar to those of the ICAO. The standards address aircraft operation, airworthiness, air traffic management, instruments and equipment, submission of flight plans, and visual and instrument flight rules. They also cover meteorology, pilot re-

sponsibility, public health measures, transport of dangerous goods, and unlawful interference with aircraft in flight.

Jordan's airports use basic luggage X-ray machines, walk-through metal detectors, and containers for detonating explosives. The metal detectors are not capable of detecting explosive material. Some color differential screening equipment has been introduced. The government intends to acquire more sophisticated screening equipment, such as handheld inspection devices, truck X-ray machines, and 3-D X-ray machines.

Maritime

Jordan's primary port is in Aqabah, (2931N/03500E). It has berthing for vessels up to 152 meters (500 feet) in length. Aqabah's anchor depth is 3.4 to 4.6 meters (11 to 15 feet). Its cargo piers have a depth of 6.4 to 7.6 meters (21 to 25 feet). There is also an oil terminal with a pier depth of 23.2 meters (76 feet).

Aqabah is situated at the head of the Gulf of Aqaba. The port handled 15 million tons of cargo in 2002. The most common goods going through Aqabah are fertilizers, phosphate, potash, and grain. The port is the primary transit point for imported goods into Jordan, and it also serves as an export location. The port also serves as an unloading point for goods destined for Iraq.

Aqabah has three port zones to handle different types of vessels. The main port zone, located close to the town of Aqabah, is designed for passenger traffic, cargo, grain, phosphate, and roll-on roll-off traffic. The container zone is 5-kilometers (3-miles) south of the main zone. It has the capacity for container vessels of Panamax size (maximum dimensions of a vessel that can pass through the Panama Canal). The industrial port zone, 18-kilome-

ters (11-miles) south of the main port zone, has berths for timber and industrial cargo as well as an oil jetty.

Maritime terrorism is a concern in Jordan and the Middle East. Al Qa'ida claimed responsibility for an unsuccessful rocket attack on two U.S. Navy vessels anchored at the Port of Aqabah in 2005.

The Jordan Maritime Authority (JMA) was created in 2002 to oversee and regulate the maritime transport sector. JMA is slowly taking control of the Port of Aqabah from the Aqabah Port Corporation. JMA is responsible for licensing maritime activities, registering ships, certifying seafarers, conducting inspections of vessels and equipment, controlling navigation, conducting accident investigations, and representing Jordan in the international maritime community.

JMA has regulations for almost every aspect of maritime activity. Pursuant to maritime safety, JMA standardizes safe container handling, marine maintenance, safety equipment repairs, health services, pilot and seafarer licenses, security codes, safe navigation practices, ship-manning principles, and maritime accident investigations. It also prohibits the transport of hazardous material and waste. JMA has regulations for handling dangerous materials and conducting cleanups after spillage.

Jordan's major rivers and lakes are not navigable.

Communication

Jordan has one of the most advanced information and communication technology sectors in the Middle East. The government has invested significant resources in improving technology and attracting foreign investment in an effort to become a regional communications hub. Privatization efforts in the telecommunication

sector have opened the market to a number of companies, which reduces rates and improves service. The government still wholly owns or partially owns many media outlets.

The constitution guarantees freedom of speech and freedom of the press; but, in practice the government places significant restrictions on these freedoms. Criticism of the king and royal family is prohibited, as is any publication deemed harmful to the state. The government pressures journalists to conform to the government's position and to exercise self-censorship. The government wields significant power in the operations of mass media. The Internet is generally open and accessible with a few instances of political censorship.

Radio and Television

The government owns Radio Jordan, the largest radio media provider. Radio Jordan broadcasts on FM, AM, and shortwave frequencies in three languages. The Arabic General Channel broadcasts 24 hours each day in Arabic on FM and AM frequencies. The shortwave channel is on air 9 hours daily. All Arabic frequencies broadcast news, sports, documentaries, dramas, and Arab music. Radio Jordan English is on air 21 hours daily. It broadcasts documentaries, drama, news, sports, and music on FM, AM, and shortwave frequencies. The French FM Channel offers similar programming in French for 13 hours each day.

Jordan also has numerous privately owned stations that primarily broadcast popular music. Ahlen FM broadcasts English and European hits 24 hours per day. Mood FM offers continuous American and European music from the 1970s to the present. Play 99.6 is an FM station playing popular music and some BBC programming. Radio Fann, reportedly run by the armed forces,

broadcasts 24 hours each day with Arab, English, and international music as well as morning talk shows and custom programs.

Numerous foreign broadcasts are available in Jordan. Voice of America, BBC Arabic Service, BBC English radio, Monte Carlo International, Radio Orient (Lebanon), and Jerusalem music stations can be heard via FM or satellite radio. Radio ranks below television and newspapers in media usage surveys. Sixty-one percent of Jordanians listen to radio, with most preferring FM stations to AM or shortwave.

Major Stations	**Programming**
BBC Arabic Service (103.1 FM, Amman)	English and Arabic news and information
Monte Carlo Doualiya (satellite; 97.4 FM, Amman; 106.2 FM, Ajloun)	French news
Mood FM (92.0 FM, Greater Amman)	Music
Play 99.6 (99.6 FM, Amman)	Music and BBC
Radio Fann (104.2 FM, Amman)	Music; entertainment
Radio Jordan Arabic General Channel (612 and 1035 AM, Amman; 801 AM, Aijun; 88.0 FM, Greater Amman; 99.0 FM, al-Karak; Al Karanah and Amman)	News, sports, documentaries, dramas, Arab music
Radio Jordan English FM Channel (855 AM, Aijun; 96.3 FM, al-Karak, Al Karanah, Amman)	Documentaries, news, sports, music
Radio Jordan French FM Channel (90.0 FM, al-Karak)	Documentaries, news, sports, music
Radio Orient (88.3 FM, Amman)	Entertainment, politics, sports

State-owned Jordan Television operates four television networks: Channel One (main), Channel Two (sports), Channel Three (movies), and Jordan Satellite Channel. Channel One broadcasts news, entertainment, documentaries, cultural programs, educational programs, English movies, and French and English news bulletins. It focuses on local interest and news. Channel Two televises international and national sporting events. Channel Three features cartoons, children's programs, and three English movies and one French movie each day. The Jordan Satellite Channel transmits programming from Channel One and some custom talk and news shows.

Jordan's first private television station, ATV, began broadcasting in August 2007 as an alternative to the state-run television channels. ATV features news, sports, and children's programs. It is available as free-to-air and satellite. ATV was started by a prominent Jordan businessman who also owns other media outlets.

Jordan has satellite and cable providers, though satellite is more popular. Satellite has 212 subscribers per 10,000 people, whereas cable has 2 subscribers per 10,000 people. In Amman, there are multiple satellite providers with prices comparable to U.S. prices.

Television is a popular media form in Jordan. Jordanians have satellite access to hundreds of international channels. Some of the well-known networks are al-Jazeera, Nile TV of Egypt, CNN, BBC, and NBC. A small percentage of the population watches channels broadcast by HAMAS and Hizballah.

Primary Television Stations	**Location**
Channel One, Jordan Television	Amman
Channel Two, Jordan Television	Amman
Channel Three, Jordan Television	Amman
ATV	Amman

Telecommunication

The leading telecom provider in Jordan is Jordan Telecom. The company was wholly owned by the government until 2000. After Jordan Telecom was partially privatized, the government retained a 60 percent share, and the holding company JITCO (owned by France Telecom and the Arab Bank) held 40 percent of the shares. France Telecom manages Jordan Telecom.

Three other companies have fixed line licenses. One is Zain, which is also the leading cellular provider in Jordan. Zain, also known as Jordan Mobile Telephone Services Company, is part of the Zain Group of Kuwait with some shares owned by Motorola.

La Silkee Virtual Connection owns a fixed line license covering wireless communications, and it plans to introduce new generation network technology into Jordan. Batelco Jordan is an Internet service provider that obtained a fixed line license in 2006. Batelco is majority owned by Batelco Bahrain.

Zain's top competitor in the cellular market is Orange, which is part of Jordan Telecom. XPress Telecommunications entered the cellular market in 2004 with Press to Talk (Direct Connect) and mobile phone services. XPress is jointly owned by investors from Jordan and Saudi Arabia. Umniah is the latest mobile operator in Jordan, obtaining a license in 2004. Umniah is owned by a group from Kuwait.

The cellular phone operators in Jordan have GSM licenses from the government. However, many are seeking to introduce new technologies as soon as licensing issues are settled. Zain has a GSM 900 network, but it plans to roll out a third generation (3G) network. Zain also provides mobile Internet and multimedia messaging services. Orange has a GSM 900 network, and its services include mobile TV,

video, and e-mail. Umniah has a second generation (2G) network, but it is upgrading some of its services to 3G technology.

Jordan connects with Saudi Arabia by a fiber optic cable and to Egypt and Syria by a microwave radio relay link. Since 1999, Jordan has been connected to FLAG (Fiber Optic Link Around the Globe), an international cable. Jordan began building a new communications backbone around Greater Amman in 2000 as a means to transform the area into a regional communications hub. This backbone will have 4,000 international links and two switching centers.

As of 2006, 76 percent of Jordan's households had landline phones, bringing the number of fixed lines to 614,000. Jordan also had 1.6 million cellular subscribers, accounting for 71 percent of Jordan's households. Cellular service is available in more than 90 percent of Jordan's populated areas. Networks are reliable, although international calls can be low quality and expensive. More than 40 percent of Jordanians prefer to use their landlines for international calls, and 28 percent use their cellular phones.

Jordan Post Company in conjunction with Jordan Telecom offers a telegraph service. Rates start at 20 cents per word, including the address.

Jordan Telecommunication Statistics

Total telephone subscribers	4,957,000 (2006)
Telephone subscribers per 100 inhabitants	85
Main telephone lines	614,000
Main telephone lines per 100 inhabitants	11
Mobile users	4,343,100

Internet

Thirteen percent of Jordanians had access to the Internet in 2006. Personal computer ownership is low, and Internet access and computers are expensive, so many Jordanians use cyber cafés and free government Internet centers. The government has made expanding Internet access a priority by creating more Internet centers in schools and other public places.

Jordan's eight Internet service providers offer dial up, ADSL, Wi Fi, roaming Internet, and ASDN as methods of accessing the Internet. ADSL is available in 95 percent of populated areas. Link has pre-paid and post-paid Internet subscriptions.

Internet access is largely uncensored, with the exception of a few political web sites. Internet cafés are required to record personal information about patrons and provide some method of blocking pornographic sites, offensive religious material, web sites promoting drugs and gambling, and information on how to manufacture material for military use. The cafés must produce this information upon request from the government.

Jordan Internet Statistics

Total Internet hosts	2,500 (2007)
Hosts per 10,000 inhabitants	6 (2003)
Users	796,900
Users per 100 inhabitants	14
Total number of Personal Computers (PCs)	245,000 (2003)
PCs per 100 inhabitants	5 (2003)
Internet broadband per 100 inhabitants	1

Newspapers and Magazines

Jordan has 6 daily newspapers, 14 weekly newspapers, and 270 other publications. The official news agency is the Petra News Agency, which was partially privatized in 2004. It publishes daily news releases in Arabic and English.

The government has whole or partial ownership of some major publications. Other publications are owned by private individuals and political parties. Jordan has laws requiring ownership by Jordanian nationals.

Eighty-two percent of Jordanians read newspapers. The average circulation is 148,000 copies. The major publications are also available online. Major European and U.S. newspapers and magazines are available 1 to 2 days after publication date. Notable publications include *USA Today, Time, Newsweek,* and *International Herald Tribune.*

Publication Frequency	**Politics**	**Audience; Web Address**
Ad-Dustour Daily	Partially government owned; pro establishment	Arabic; www.addustour.com
Al Ray Daily	Majority government owned; pro establishment	Arabic; www.alrai.com
Al Ghadd Daily	Independent	Arabic; www.alghad.jo
Al Arab al Yawm Daily	Government influenced; pan-Arab; anti-Western; nationalist	Arabic; www.alarabalyawm.net
Jordan Times Daily	Published by the same house as Al Ray but more independent	English; www.jordantimes.com

Postal Service

Jordan Post Company (JPC) is the largest postal service in Jordan. The government began privatizing JPC in 2004. Most Jordanians have access to postal services; 50 percent receive mail at home, and an additional 45 percent can collect mail from a post office. Mail to Europe takes 4 to 5 days, but mail to North America can take up to 2 weeks.

Rapid delivery services at extra cost are available for mail to some countries. Shipping packages internationally is expensive, and they must be left open for customs officials. Major international delivery companies such as Aramex, DHL, and FedEx have locations in Amman and Aqabah.

Satellites

Jordan has 3 Intelsat and 1 ARABSAT earth stations and 29 Inmarsat satellite terminals. Jordan is an Arab League member state of ARABSAT. Jordan Media City (Amman) and ARABSAT have joint venture broadcasting center and agreement. ARABSAT owns or leases four satellites, which provide television, radio, and broadband. The satellites were launched in the 1990s.

Inmarsat provides similar telecommunications services, but it emphasizes its maritime and aeronautical coverage. Inmarsat wholly owns two satellites and has a total fleet of ten satellites. They were launched in the 1990s and 2005.

Intelsat provides public telecommunications services to member countries by a global satellite system. Jordan is a member of Intelsat. Intelsat owns the satellites, but each member country owns the ground equipment for satellite reception.

CULTURE

Statistics

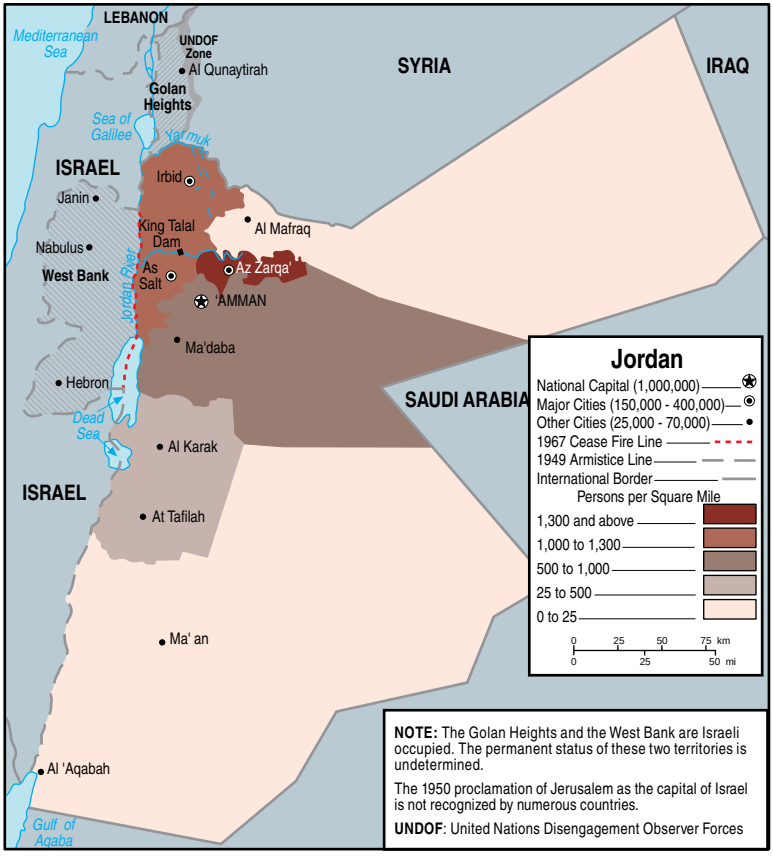
Population	6,198,677 (July 2008 est.)
Population Growth Rate	2.3%
Birth Rate	20.1 births per 1,000 population
Death Rate	2.7 deaths per 1,000 population
Net Migration Rate	6.0 migrants per 1,000 population
Life Expectancy at Birth	*Total population*: 79 years *Male*: 76 years *Female*: 81 years
Average Life Span	70 years
Population Age Structure	*0 to 14 years*: 32.2% *15 to 64 years*: 63.7% *65 years and older*: 4.1%
Date of Last Census	2004

Population Patterns

Jordan is one of the least densely populated countries in the Middle East, with 58 people per square kilometer (22 people per square mile). Three quarters of Jordan's population live in urban areas, and 38 percent of the population lives in the capital city of Amman. Most of the population is concentrated in Greater Amman. Other main population centers are the cities of Al-Zarqa, Irbid, and Al-Rusayfah. Three of the 12 governorates (Amman, Al-Zarqa, and Irbid) account for more than 70 percent of the population.

The population tends to live where rainfall can support agriculture. Most of the population lives in the northwest portion of Jordan near the shared border with Israel and Syria. The southeast is pri-

marily uninhabitable desert and steppes. This type of terrain accounts for more than 70 percent of the country. Only 20 percent of the population lives in rural areas. Smaller rural towns generally have only a few thousand residents but are old settlements with ancient history. Villages are concentrated in the northern Jabal Ajlun region but are sparse in southern and eastern regions.



Population Density

Rapid urban migration from 1952 to 2002 doubled the percentage of urban dwellers. The urban population has also grown due to the influx of refugees and migrants from Lebanon, Palestine, and Iraq. Estimates claim that Jordan hosts as many as 750,000 Iraqis annually.

Less than 10 percent of the population is nomadic Bedouin. The Bedouins, who have retained a traditional lifestyle reside in the desert regions, some parts of the steppes, and the uplands during the winter months. During the agricultural season, some Bedouins will settle in one place for the season. The number of nomadic Bedouins has decreased as many have taken advantage of government-sponsored permanent settlement programs.

Iraqi refugees now account for as much as 10 percent of the population. Immigration controls have been tightened; Jordan recognizes only recent passports. The effect of the Iraqi immigrants on society has yet to be determined, but free public education and economic opportunity will most likely lead many to relocate permanently.

City	Population (2004)
Amman	1,036,330
Al-Zarqa	395,227
Irbid	250,645
Al-Rusayfah	227,735
Al-Quwaysimah	135,500
Wadi as-Sir	122,032
Tila al-Ali	113,197
Khuraybat as-Suq	84,975
Al 'Aqabah	80,059
As-Salt	73,528

Ethnic Density

Ninety-eight percent of Jordanians are Arabs, and more than 90 percent of those living in Jordan are full Jordanian citizens. Half of Jordan's Arabs are Palestinians, most of whom were refugees from the 1948 and the 1967 Arab-Israeli wars. Most Palestinian refugees are from the West Bank. Iraqi refugees entered Jordan during the 1991 Persian Gulf War, but many returned home afterward. Since 2003, a second surge of Iraqi refugees have entered Jordan. It is estimated that as many as 1 million Iraqi refugees are living in Jordan. Most refugees are full Jordanian citizens and employed, although one-sixth live in camps.

The remaining 2 percent of the population are members of Circassian, Chechen, or Armenian minority groups. These minority groups have largely adapted to Arab culture. The Circassians are a non-Arab Islamic people from western Asia who immigrated to Jordan in 1878. They live in cities in northern Jordan. The North Jordan Valley is home to a small community of Turkomans.

A third of Jordanians trace their ancestry back to the nomadic Bedouins. Bedouins are considered to be the original Arab ethnic group, particularly by their descendents.

Society

Jordanians view themselves as part of the larger Arab community. Jordan initially attempted to create a national identity through citizenship laws, shared regional traditions, and forceful settlement of nomadic peoples. Although this attempt has been somewhat successful, Jordanians identify more strongly with their ethnic origins than with their nationality.

Jordanians view their nation as composed of Jordanians and Palestinians. Residents of Jordan who trace their ancestry west of the Jordan River consider themselves Palestinian. Those born to the east of the Jordan River, including nomadic Bedouin, consider themselves Jordanian.

More than half of the population is Palestinian. Even those who have become Jordanian citizens still consider themselves to be Palestinians. Jordanians generally sympathize with the Palestinian cause and do not have a favorable view of Israel. Jordan is the only Arab nation that allows Palestinians to become citizens, although many Palestinians do not support Jordan's government.

Jordanians are optimistic about their future and their nation. They are typically dissatisfied with their economic status but content with their family life. Jordanians generally believe that their country is on the right track and have a positive view of their leaders and the armed forces. Most Jordanians believe that their nation is doing well and has made wise choices. Seventy percent see their religious leaders as having a positive impact on the nation.

Jordan and the United States have had good diplomatic relations for decades. Despite this close relationship, Jordanians' perception of the United States rapidly declined after Operation IRAQI FREEDOM. Popular opinion has gradually recovered since then, but only 20 percent of the population had a favorable view of the United States in 2007.

Jordan's society has a conflicted relationship with the United States. While two-thirds of society has a positive view of the spread of U.S. science and technology, and two-fifths have a positive view of the spread of U.S. culture, most remain opposed to the spread

of American ideas. While they welcome American business, half dislike American business methods.

Jordanians also believe that U.S. foreign policy favors Israel disproportionately. Most Jordanians oppose U.S. and NATO military operations and want the U.S. troops to leave Iraq as soon as possible. Public support for Operation IRAQI FREEDOM decreased after the 2005 terrorist bombings in Amman.

Since the Amman bombing in 2005, Jordanians' perception of terrorists and similar acts of terrorism has changed. Jordan's society increasingly does not support terrorism. Most Jordanians believe suicide bombing to be unjustifiable, and most dislike Usama bin Ladin. Jordanians still generally support the Palestinian cause, but only 53 percent support Palestinian Authority President Abbas. Most Jordanians have great faith in the leadership of Saudi Arabia.

People

The main culture within Jordan is Arab. The Arab culture has a rich history and strong traditions that govern most of daily life. The creation of a specific Jordan culture dates only from when Jordan gained independence in 1946 and is still secondary to regional origins. The Bedouin and Palestinian cultures are primary influences in the creation of a distinct Jordan culture.

Jordan is an Islamic Arab society. Jordanians are typically good natured, friendly, and hospitable. Arabs place a heavy emphasis on family and honor, and they have a large set of rituals for events such as birth, marriage, and death. Protecting family honor has led to a tradition of societal restrictions on interactions between genders. Family provides a source of identity, socialization, and support.

Jordan is more liberal than other regional Arab societies. The culture has adopted many aspects of Western society, including dress and entertainment. Jordan is generally more relaxed and supportive of Western ideas than its Arab neighbors are.

Several minorities have distinct cultures. Although the Circassians have generally blended into the Arab culture, they have retained their cultural traditions. The Armenian minority who fled Turkey in the 1930s retain many aspects of their original culture. Armenians continue to follow many of their religious and cultural traditions, including native arts and social functions.

Ethnic Groups

Palestinian Arabs account for half of Jordan's population. Palestinians from the West Bank are full Jordanian citizens, while Palestinians from the Gaza Strip live in refugee camps. Palestinian Arabs are proud of their heritage and resent being referred to as Jordanians. Nearly all still support the creation of a Palestinian homeland. Palestinians are seen as hard-working individuals, and their contributions have led to a more varied economy and higher standards of education. Palestinians dominate Jordan's private sector. Palestinians face discrimination in government employment, the military, and public universities.

Most of the non-Palestinian population of Jordan is of Bedouin origin. Fewer than 5 percent of Bedouins have maintained their traditional lifestyle. Most of the Bedouin population has settled in the south and east of Jordan and practice agriculture. Bedouin culture is tribal based with an emphasis on hospitality and honor. Each family has a tent, and a clan lives in a collection of tents. Bedouins are well respected and have a large degree of influence within the military, holding many top-level positions.

Circassian immigrants originally settled primarily in Amman and, during the population boom, quickly became the city's largest landholders. They are primarily upper-class citizens. Their reputation for loyalty has led to the creation of the king's all-Circassian honor guard. Circassian settlements outside urban areas are primarily agricultural. Circassians have adapted to the Arab culture, but they maintain some of their traditional values and customs. Circassian women may marry Arab men, but Circassian men rarely marry outside their ethnicity. Circassians are primarily Sunni Muslims.

Family

The extended family is the central unit of family and a vital source of identity. Jordanians are loyal and family oriented. Family members typically live in the same city or housing area, and cousins are as close as brothers and sisters. Types of families vary greatly, but they are generally based on patrilineal kinship with households built on blood ties between men. Often, parents will live with their married children and other members of the extended family.

Jordanians rely heavily on their extended family network for support. Children receive substantial time and attention. Elderly family members are greatly respected and protected. It is a source of honor and a great duty to aid a family member. Parents often support their children even after marriage, and care for their own aging parents. Jordanians generally want large families, which are often not economically possible, so family size has decreased.

Family loyalty is highly valued, and *Ird* (family honor) is fiercely protected. Honor is a matter of reputation and can be lost by a female family member's failure to behave and dress modestly or through a male family member's failure to maintain self-control.

Family members are expected to obey family rules. Relational ties govern social relationships and obligations.

In larger urban areas, dating men and women meet in universities, offices, clubs, or cafés, but they do not meet without a chaperone until after the engagement or marriage contract has been signed. Marriages are often arranged by the family in towns and rural areas. Cousins often marry, and couples barely know each other before their engagement is announced. After the engagement party, couples begin to get to know each other but are considered already legally married. Weddings are festive times, and many traditional rituals are observed. Celebrations continue for 3 nights filled with dancing and singing.

Polygamy is legal in Jordan but extremely rare. Husbands have the right to take additional wives without permission from their spouse. Divorce is legal, but due to societal pressures and inequalities in custody law, many women choose to remain married, even in situations where other wives have joined the household.

Circassian culture places an emphasis on family and care for the elderly. Circassians often live with their extended families. Marriages between anyone sharing the surname of either parent are forbidden. Polygamy and divorce are rare, and family sizes tend to be small.

Roles of Men and Women

Men are the leaders in Jordan's society. Men dominate politics and government. Men are the heads of households and are expected to support them. Men are also in charge of guarding the family honor. Sons are usually higher than daughters in the family hierarchy.

Women generally fill traditional roles in Jordan. Women typically care for the children and the household, but the percentage of women in the workforce is growing. Women are expected to serve male family members. Married women's lives are controlled by their husbands. Women are generally segregated from men in public situations and have limited interaction with men who are not part of their extended family. This traditional separation has been lessened in Western-influenced urban areas.

Traditional social pressures discourage women from working, particularly after marriage. Despite this, women work in many professions, including government, engineering, medicine, education, military, and law. Women are legally guaranteed equal pay, but they do not generally receive it in practice. The unemployment rate is higher for women.

Women have had the right to vote and run for political office since 1982, but they remain underrepresented in public life. No woman has won a political office at the national level through popular election, although women have won several local-level races. In 2003, King Abdullah II appointed six women to parliament, and other seats were granted to women to ensure marginal representation. The prime minister-designate appointed four women as cabinet members in 2007. Women generally make up less than 10 percent of governing bodies. One traditional obstacle to increased female political participation is tribalism, which plays a strong role in a candidate's viability, as local politics are typically governed by voting blocs based on kinship.

Women do not have full equality under the law. Women face legal discrimination in pension and social security benefits, divorce, inheritance, freedom to travel, child custody, the value of Shari'a court testimony, and citizenship. Legislation passed in 2003 al-

lows women to apply for passports without spousal or custodial consent, to initiate divorces, and to pass their retirement benefits on to their spouses or children at death.

Legal discrimination hinders effective violence prevention for women. Honor killings are declining, but remain a problem due to traditional notions of family honor in Muslim and Christian communities. Specific provisions of the penal code allow significant sentence reduction for honor killers. The government has taken some legal action to combat this; however, efforts have been largely ineffective due to a lack of public support. Societal and family pressures often prevent abused women from seeking legal recourse, and no legal provisions guard against marital rape.

The legal age for marriage is 18, but children as young as 15 can marry with the consent of a legal guardian. While the legal age of employment is 16, younger children often work as street vendors.

Education and Literacy

Jordan has put significant investment into its education system. It has one of the highest literacy rates in the region, which may be as high as 98 percent among youth. Jordan has consistently increased investment in public education, allocating 18 percent of the budget for education in 2003. At the same time, Jordan launched the Education Reform for the Knowledge Economy, one of the largest educational reforms in the Middle East.

Public education is tuition-free and compulsory from ages 6 to 16. It consists of 2 years of preschool education followed by 10 years of primary education. Half the students entering primary school attend preschool and kindergarten, which focus on national identity, traditions, and nature. At age 6, children begin primary education, which lasts until age 15. Primary education includes

morality teaching and religious studies, and is typically co-ed. A primary education instructor must hold a bachelor's degree.

Secondary education is free, but not compulsory, and consists of 2 years of study. Comprehensive secondary education is either vocational or academic. At the end of the second year, students take their general secondary education test and, if successful, are awarded their *tawjihi* (general secondary school certificate). The academic track qualifies graduates for admission to university, while the vocational track leads students to community college. Applied secondary education provides vocational training and apprenticeship in tracks ranging from agriculture to child care. Most vocational students enter the industrial training track. Graduates receive a certificate from the Vocational Training Corporation, part of the Ministry of Labor. A secondary education instructor must hold a bachelor's degree and a 1-year postgraduate diploma of higher education.

Higher education consists of private community colleges, public community colleges, and universities. There are eight public and 12 private universities in Jordan, along with 48 community colleges. The academic year is from September until July. The Ministry of Higher Education and Scientific Research oversees higher education. A higher education instructor must hold a doctorate or a master's degree.

Community colleges offer 2- to 3-year programs in fields such as general commerce and banking, medical and paramedical specializations, education, and electronics. Five colleges offer engineering programs. Students take the *al-shimel* (comprehensive exam) at the end of their program.

Universities offer standard 4-year degree programs, along with some associate 2-year degree programs. Five-year programs are

available for dentistry, pharmacy, and engineering, along with a 6-year program for medical studies. Public universities offer 2-year graduate studies programs and 3- to 5-year doctorate programs that require the submission of a dissertation.

Jordanians value education. The enrollment rate is 95 percent for primary school, 87 percent for secondary school, and 40 percent for higher education. Male enrollment is slightly higher in preschool and primary education, but more women enroll in higher education. Almost half the students enrolled in higher education are women, and in some disciplines, the percentage is as high as 80 percent.

Jordan's literacy rate is 90 percent for the entire population, with men at 95 percent and women at 85 percent. These percentages may be even higher among a younger demographic, which is thought to be 98 percent literate.

Jordanians do not see themselves as having a separate or distinct linguistic or literary identity, and their literature is tied to the broader context of the Arab community. Local literature of Jordan has traditionally been oral and began with Bedouin poetry. *Qasida* (epic odes) primarily composed by Bedouins recorded the history of the Arabs and continue to be recited today. Bedouins still compose *qasida*, although it is adapted to contemporary settings. *Zajal* poetry is also popular throughout the Arab community, as it relies on spoken dialect and is easily set to music. Arab poetry is popular in daily life due to its participatory nature.

Contemporary Arabic literature began in the cultural centers of Beirut and Cairo in the second half of the 19th century, spreading literary forms such as the novel and *maqamah* (rhymed prose) throughout the Arab nations. Few Jordanian writers are internationally known, but several have written works well known

throughout the Arab nations. Many Palestinian writers have a close connection to Jordan, as they have settled there as refugees.

Language

The official language of Jordan is Arabic. Classical Arabic is used in education and the media. Jordan's dialect of Arabic is considered to be the closest to classical Arabic. Slight variations are spoken in different regions, including Levantine Arabic and Najdi Arabic. English is widely understood by the middle and upper classes and is taught in schools. The minority Circassians also speak Circassian. Some Armenians still speak Armenian.

Religion

More than 92 percent of the population is Sunni Muslim. Official estimates place the number of Christians at 6 percent, but Christian officials estimate it to be as low as 3 percent. There are between 12,000 and 14,000 Druze, members of an offshoot of Shi'a Islam, living in and around Amman, along with a small number of non-indigenous Shi'a Muslims in the Jordan Valley and the south. There are around 1,000 Bahais.

Two-thirds of Jordan's Christians are members of the Greek Orthodox Church. Other officially recognized Christian denominations include the Armenian Orthodox, Maronite Catholic, Coptic, Assyrian, Lutheran, Seventh-day Adventist, United Pentecostal, Latter-day Saints, and Presbyterian churches. Christians predominately reside in several northern cities surrounding Amman, such as Husn, Fuheis, and Madaba. Jordan is one of the few Arab countries with Christian Bedouin, who live near al-Karak. Most non-Arab Christians are Armenian. A small group of Druze lives in Jordan near Syria's border. The North Jordan Valley is home to a small community of Bahais.

The constitution guarantees religious freedom, and this freedom is generally upheld. The government does not interfere with the practice of any recognized religion, but it does not officially recognize all religious groups. For a religious group to receive official recognition, it must have citizens among its practitioners and pass a background check by the Ministry of the Interior. A tax exemption is granted to recognized religions. Members of unrecognized religious groups face legal discrimination. The government does not officially recognize Jehovah's Witnesses, the Church of Christ, Mormons, Bahais, and Druze.

Islam is the official state religion and heavily impacts society and government in Jordan. Employment applications for government positions require the applicant to disclose his religious status. The

King Abdullah Mosque

Ministry of Religious Affairs oversees all Islamic institutions and appoints all imams, who are civil servants. The ministry monitors sermons for content and regularly requires imams to teach certain topics. Imams are prohibited from preaching politically motivated messages. While public schools provide mandatory religious instruction, Christian students are not required to attend courses about Islam.

Muslims in Jordan are officially under Shari'a (Islamic law). Shari'a courts deal with personal status matters, such as marriage, divorce, child custody, and inheritance. Other recognized religions have religious courts with similar jurisdiction. Muslims are unable to convert officially to any other religion, and those who do face social and government discrimination and remain under Islamic law.

Relations between Muslims and Christians are generally amicable. Converts from Islam to Christianity face social ostracism, threats, and abuse from their Muslim family members and religious leaders. Bahais face official discrimination but not social discrimination.

Recreation

The most popular sport in Jordan is soccer, followed by basketball, volleyball, and martial arts. Jordan has a national basketball team and has won several regional championships. Jordanians love to play soccer and often follow their favorite teams on television. Waterskiing and scuba diving are also popular on the Gulf of Aqaba, along with boating, windsurfing, and kayaking.

Automobile racing is also popular. The annual Jordan Rally is one of the largest sporting events in the Middle East. Camel and horse

Al Faisaly Soccer Club Fans at a Game

races take place during the summer. Camel races are typically long-distance endurance races.

Women do not participate in sports as much as men do because of social restrictions, but they do play some sports in clubs and school. Fewer than 10 percent of youths participate in sports, social, and cultural activities. Jordan's youth centers have low attendance, because many parents are reluctant to allow their children to attend them.

Jordanians enjoy watching television and going to the movies, along with cultural activities such as theater, lectures, concerts, and festivals. Men enjoy socializing in coffee houses while playing backgammon and smoking the hookah (water pipe). Women often socialize within the home but also enjoy volunteer work and other social activities.

Customs and Courtesies

Visitors should note religious traditions and restrictions that affect daily life. Muslims are forbidden to consume pork and alcohol. Alcohol is widely available but should never be offered to a Muslim. Public displays of affection between opposite genders are offensive, as is most public physical contact between genders. Wearing revealing clothing for both men and women is offensive as well. Business dress should be conservative.

The month of Ramadan is a major cultural event. During Ramadan, it is illegal to consume food or drink, alcohol, and tobacco during daylight hours. Eating and drinking should be kept discreet. Offering food to Muslims during Ramadan can offend them. Large meals are served after sundown.

Jordanians are generally good natured, friendly, and hospitable. They admire education more than wealth and greatly respect bravery and patience. They also appreciate a strong work ethic and respect those who put forth extra effort.

Arabs appreciate any effort a foreigner makes to understand Arabic. Although English is widely understood, learning a few key phrases in Arabic, such as greetings, will be useful and will build respect.

Punctuality is not taken seriously by Jordanians, and meetings will often start 5 to 15 minutes late. Deadlines are also not viewed seriously unless explicitly stated. Meetings should be scheduled to allow time for late arrivals and should not be scheduled on Fridays.

Jordanians place a strong emphasis on building business relationships, and they prefer to do business with people with whom they have a relationship. Work associates are close. Jordanians consider it rude to immediately discuss business; they expect to share a cup

of coffee or tea and discuss non-business related topics before any meeting. Controversial topics such as politics and religion should be avoided if possible; but, if discussed, opinions should be expressed in a manner respectful to other points of view.

Normal business hours are from 0930 to 1330 and 1530 to 1800, Sunday through Thursday. Friday is a day of rest, and many businesses open half a day on Thursdays. Some businesses are also open for a half day on Sunday. Government departments are open 0800 to 1400 daily. During Ramadan, working hours are shortened.

Cultural Considerations

Gestures

Jordanians use hand gestures in daily communication. Rubbing the index finger and the thumb indicates money. Pumping a fist in the air or shaking one's index finger at the person addressed emphasizes a point. Tilting the head upwards rapidly and making a "tsk" sound indicates "no." Jordanians touch their fingers to their foreheads and bow slightly to indicate respect.

Several gestures and motions should be avoided. Touching the forehead with the back of the hand indicates disrespect. The "thumbs up" gesture is considered offensive throughout the Arab community, along with pointing directly at someone. Large, expressive gestures are considered indicative of anger. Showing the soles of one's feet is extremely offensive. Good posture is expected in social settings.

Greetings

Jordanians are expressive, and they greet one another warmly. Greetings are lengthy and sincere. Handshakes are the most com-

mon greeting, accompanied by verbal greetings and inquiries about each other's health. Common greetings include *assalam alaikum* (peace be with you), *ahalan wa sahlan* (you are welcome in this place), *sabah al khair* (good morning), *masaa al khair* (good evening), and the casual *marhaba* (hello). Good friends of the same gender often kiss one another on the cheek. Friends often slap each other's hands together.

Gender and age peers use first names after an initial introduction. Otherwise, first names are reserved for friends and family. Adults are often addressed as the *um* (mother) or *abu* (father) of their eldest son. Those who have completed the *hajj* (religious pilgrimage) are referenced by *al-haf* (men) or *al-hajjah* (women). Other titles for acquaintances include "brother," "sister," "Mr.," "Mrs.," or "Miss."

Public physical interaction between members of opposite genders is forbidden for Muslims. It is best to allow women to establish the level of physical contact that will be permitted. If they do not offer a handshake, a verbal greeting is sufficient. Maintaining eye contact shows respect among members of the same gender, but it is not recommended between opposite genders, as it may be taken to mean more than intended. Quiet voices are a sign of respect.

When entering or leaving a room, it is customary to shake hands with everyone. Jordanians, and the Arab culture in general, are comfortable with a smaller degree of personal space than Westerners. Members of the same gender hold hands as a sign of friendship.

Dress

Jordanians have adopted a Western style of dress and are generally well dressed and fashion conscious. While Jordan has one of the more liberal Arab societies, modesty is still vital. Conservative dress for all social occasions is necessary. Dress is more pro-

gressive in western Amman than the more conservative eastern Amman and the rest of the country.

Most Jordanian men wear Western-style clothes, sometimes with the traditional red and white checkered headdress. In winter, dark suits are standard dress; in summer, various other colors are acceptable. Shorts are only worn for sporting activities at clubs or events.

Women in more urban areas will also wear Western-style clothing, but more conservative women wear traditional Islamic dresses and head scarves. Clothing is always modest. During the summer, women wear cotton and lightweight suits but never wear shorts or halter tops. Skirts reach below the knees, if worn at all. Young girls follow the same dress code. Jordanian youth love European fashions, which are sold throughout the country. Head scarves are often brightly colored.

Etiquette

Visiting friends and relatives is a significant part of Jordanian social life and is a popular leisure time activity. Visiting is also a duty in the case of sickness, births, circumcision, and graduations. Close friends and relatives will often visit each other unannounced, particularly in urban areas. Otherwise, make advance arrangements.

Good hospitality is expected, and hosts will always offer guests refreshments. Coffee is served during longer visits. Guests must stay until after coffee has been served. Jordan's coffee is strong and bitter and consumed slowly to keep the grounds at the bottom. To indicate that he has had enough, a guest shakes his cup back and forth. If a visit extends into mealtime, guests are invited to stay for the meal. Guests often politely refuse invitations as many as three times before accepting. Women and men traditionally socialize in separate rooms, but they may mix in more Western-influenced households.

Jordanians generally prefer to entertain in their homes rather than eat at restaurants; being invited to someone's home is an honor. Guests bring gifts on special occasions or after long periods of absence. Gifts (typically sweets, flowers, or fruits) are initially politely refused and, if wrapped, only opened after the giver leaves. Alcohol is forbidden to Muslims and should never be brought as a gift. Better restaurants will add a tip of 10 to 12 percent to the bill, but smaller establishments expect diners to leave a tip.

Lunch is the main meal of the day. When dining, never use the left hand to pass food or to eat, as it is considered unclean. Families often eat from a shared platter, but individual plates and utensils are used when guests from other cultures are present. Guests are served first. A variety of dishes are prepared. Typical meals include platters of spiced rice and meat, along with smaller dishes of yogurt, legumes, and assorted vegetables. Flatbread halves are

Marketplace in Amman

used to scoop and eat the food. The guest leaves a small portion of food on the plate as a sign of satisfaction and wealth.

Bargaining is expected when dealing with merchants, particularly in markets. In more ancient *souqs* (markets) it is still customary to haggle extensively.

MEDICAL ASSESSMENT

Disease Risks to Deployed Personnel

The National Center for Medical Intelligence (NCMI) assesses Jordan as **INTERMEDIATE RISK** for infectious diseases with an overall disease risk that will adversely impact mission effectiveness unless force health protection measures are implemented.

The following is a summary of the infectious disease risks in Jordan. Risk varies greatly depending on location, individual exposures, and other factors. More detailed information is available at http://www.ncmi.detrick.army.mil.

Food- and Water-borne Diseases

Sanitation varies with location but typically is well below U.S. standards. Local food and water sources (including ice) may be contaminated with pathogenic bacteria, parasites, and viruses to which most U.S. service members have little or no natural immunity. Diarrheal diseases can be expected to temporarily incapacitate a high percentage of personnel within days if local food, water, or ice is consumed. Hepatitis A and typhoid fever can cause prolonged illness in a smaller percentage of unvaccinated personnel. In addition, although not specifically assessed in this document, significant outbreaks of viral gastroenteritis (e.g., Norwalk, Norwalk-like virus) and food poisoning (e.g., *Bacillus cereus*, *Clostridium perfringens*, and *Staphylococcus*) may occur.

Vector-borne Diseases

During the warmer months (typically April through October), ecological conditions countrywide support arthropod vectors (including mosquitoes, ticks, and sandflies) with variable rates of disease transmission. A small number of cutaneous leishmaniasis cases could occur among personnel exposed to sand fly bites. Other vector-borne diseases are transmitted at low or unknown levels and may constitute a significant risk.

Sexually Transmitted Diseases

Gonorrhea, chlamydia, and other infections are common and may affect a high percentage of personnel who have sexual contact, especially with prostitutes. HIV/AIDS and hepatitis B also occur. Although the immediate impact of HIV/AIDS and hepatitis B on an operation is limited, the long-term health impact on individuals is substantial. Although not assessed individually in this document, other diseases often common in prostitutes include chancroid, herpes, lymphogranuloma venereum, syphilis, and venereal warts.

Water-contact Diseases

Operations or activities that involve extensive water contact may result in personnel being temporarily debilitated with leptospirosis and schistosomiasis in some locations. In addition, although not specifically assessed in this document, bodies of surface water are likely to be contaminated with human and animal waste. Activities such as wading or swimming may result in exposures to enteric diseases such as diarrhea and hepatitis via incidental ingestion of water. Prolonged water contact also may lead to the development of a variety of potentially debilitating skin conditions such as bacterial or fungal dermatitis.

Animal-contact Diseases

Rare cases of anthrax, brucellosis, and Q fever could occur in personnel who consume or are exposed to infected livestock, their products, or contaminated environments.

Respiratory Diseases

Deployed U.S. forces may be exposed to a wide variety of common respiratory infections in the local population. These include influenza, pertussis, viral upper respiratory infections, viral and bacterial pneumonia, and others. U.S. military populations living in close-quarter conditions are at risk for substantial person-to-person spread of respiratory pathogens. Influenza is of particular concern because of its ability to debilitate large numbers of unvaccinated personnel for several days.

Medical Capabilities

Jordan has a good-quality health care system. Medical care is generally available throughout the country. Concerted efforts have been made in recent years to provide facilities accessible to Bedouin populations who previously had to travel great distances to receive care. The best care is located in the capital of Amman. Care is provided by the Ministry of Health (MOH) and by the military via the Royal Medical Services (RMS). Care provided by the RMS approaches Western standards and is considered to be higher quality than that received at MOH facilities. The RMS offers comprehensive medical insurance to 30 percent of the Jordanian population and often takes complicated cases referred by the MOH.

The quality of care provided at medical treatment facilities is slightly below Western standards. Major deficiencies confronting most hospitals, particularly government hospitals, include heavy

patient loads, shortages of well-trained nurses, poor nursing care, inadequate infection control programs, medical supply shortages, and marginal medical equipment repair capabilities.

Jordan has a few exceptional medical facilities. The best medical facility in the country is the King Hussein Hospital, part of the RMS King Hussein Medical City (KHMC). Al Khalidi Hospital is the country's best private hospital; however, like all Jordanian medical facilities, lack of adequate nursing care greatly diminishes the quality of in-patient care.

Overall, the quality of medical personnel is good. Jordan depends heavily on foreign medical personnel. Although a majority of physicians are Jordanians, most nurses are expatriates trained in their native lands. The best physicians work at KHMC and in private medical facilities. The quality of nursing care is poor. Excluding Western nursing supervisors, most nurses are native to Asia and have been trained in India and Southeast Asia. Non-supervisory nurses generally have very minimal training.

Public ambulance service is available (telephone 199). Ambulances are not very responsive to emergency calls, are minimally equipped, and lack two-way radios. Moreover, ambulance attendants normally have little or no medical training. The RMS provides exclusive aeromedical evacuation on a national level.

The quality of Jordanian pharmaceuticals is very good. Numerous Western pharmaceutical companies authorize Jordanian pharmaceutical companies to produce raw ingredients and finished products. In addition, the U.S. Food and Drug Administration approved pharmaceuticals and raw materials produced by the Jordanian Dar al-Hikma Pharmaceutical Company for use in the United States. Pharmaceutical quality is expected to remain high. However, some Jordanian pharmaceutical companies have been cited for unauthorized production of Western pharmaceuticals.

Blood collection centers test for HIV, other sexually transmitted diseases, hepatitis C, and hepatitis B, however, blood testing quality control is questionable and makes the safety of the blood supply unreliable. Jordan's main blood bank, the Central Blood Bank (telephone 775-111 or 749-121), is located within the Al Bashir Hospital compound in Amman. English is widely understood and spoken in the medical community.

Key Medical Facilities

King Hussein Hospital

Coordinates	31-58-48N 035-49-54E
City	Amman
Location	On 8th Circle, 11 kilometers northwest of U.S. Embassy
Telephone	813-813, 815-572
Type	Military
Bed Capacity	593
Capabilities	**Medical** - cardiology, pulmonary, endocrinology, nephrology, gastroenterology, neurology, psychology, pediatrics. **Surgical** - general, ophthalmology, neurosurgery, orthopedic, thoracic, urology, and vascular. **Ancillary** - dental, 8-bed trauma unit, 16-bed burn unit, 20-bed ICU, 12-bed cardiac ICU, blood bank, organ bank, pathology, radiology, laboratory, pharmacy, MRI, CT scanners, kidney dialysis, helipad (4), ambulances
Comments	Best medical treatment facility in Jordan. Used by the U.S. Embassy. The Queen Alya Heart Institute (telephone 836-813) and the Farah Royal Jordanian Rehabilitation Center are co-located with this facility. Director of the RMS is located in the complex.

Al Khalidi Hospital

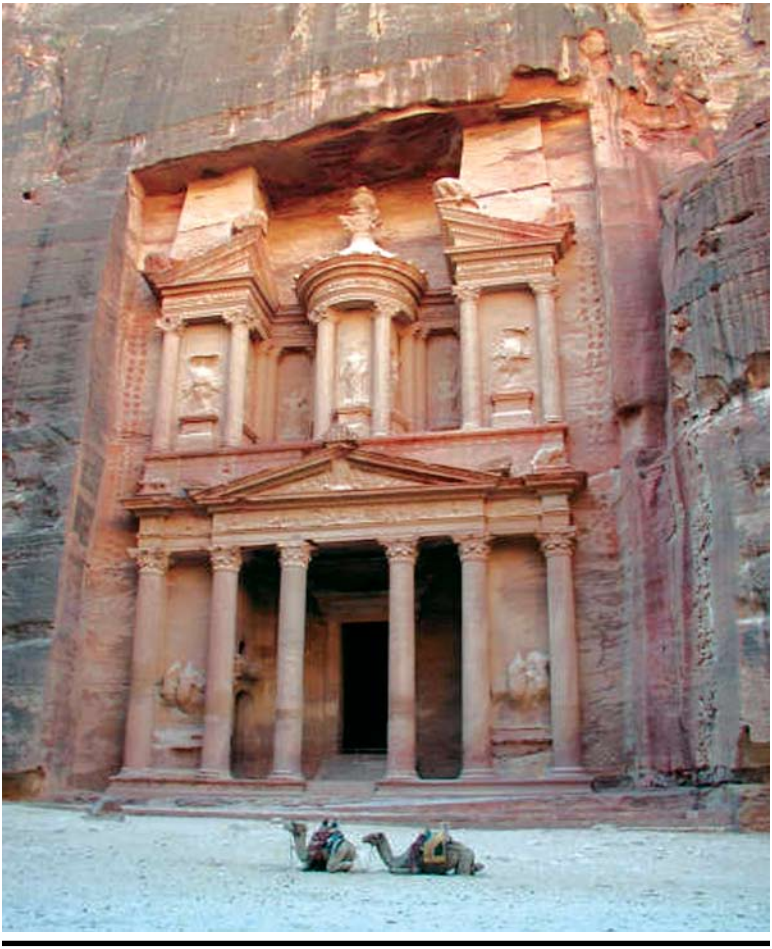
Coordinates	31-57-00N 035-54-14E
City	Amman
Location	Ben Khaldoun Street
Telephone	644-281 through 644-289
Type	Private
Bed Capacity	160
Capabilities	**Medical** - general, cardiology, dermatology, gastroenterology, hematology, nephrology, oncology, pathology, pediatrics. **Surgical** - general, cardiovascular, obstetrics/gynecology (OB/GYN), neurosurgery, maxillofacial, ear-nose-throat (ENT), plastic, pediatric, thoracic. **Ancillary** - 10-bed ICU/cardiac care unit (CCU), emergency room, x-ray, CT scanner, ultrasound, angiography, laboratory, pharmacy, blood bank, ambulance
Comments	Quality of medical staff is very good. Most speak English. Hospital and equipment are very clean and well maintained. U.S. Embassy personnel frequently use this facility. Offers best-quality care in Jordan.

HISTORY

Early History

Jordan began as part of the Fertile Crescent region without specific territorial boundary lines. The area was used primarily as a buffer between various contending empires. A variety of settlers occupied this area over time, including Israelites, Egyptians, Hittites, Assyrians, Babylonians, Persians, and Greeks. The region began to emerge as a distinguishable entity during the reign of Alexander the Great. While Greek culture had previously been slowly cultivated in the region, the Hellenistic influence of his empire allowed

the culture to flourish. Many cities established during this time remain today, including Amman and Jarash. Shortly after the death of Alexander, his kingdom began to divide as his authority was distributed. Territorial disputes over Jordan flared between the Seleucids



Al-Khazna, the Treasury of Petra

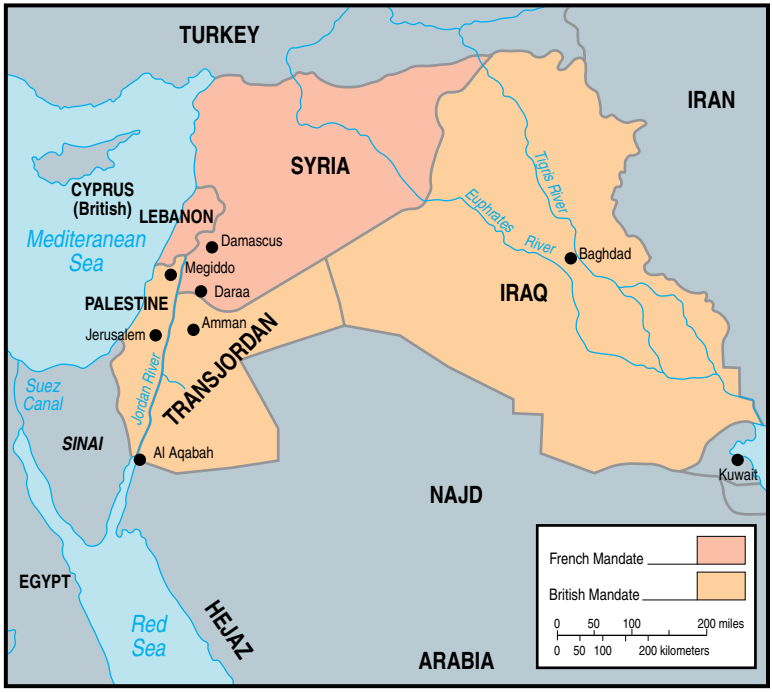
of Syria and the Ptolemies of Egypt, following conflict between Alexander's generals for control of the region. The Seleucids eventually conquered and remained in power until they were overtaken by the expanding Roman Empire during the early 1st century AD.

Between 632 and 636 AD, following the split of the Roman Empire and Byzantine rule over Jordan, Arab armies invaded the region and defeated a Byzantine army at the Battle of the Yarmuk River for control of the area. Arab rule was established, and the region was heavily influenced by Islam. Islamic empires controlled the region from that point forward. The most prominent empire was that of the Ottoman Turks, which ruled from 1517 to 1917.

During the rule of the Ottoman Empire, the Arab population became dissatisfied with Turkish leadership. The Hashimi family, claiming descent from the prophet Muhammad, became particularly outspoken in their frustration with the regime. During World War I, Sharif Hussein, a prominent member of the Hashimi family, joined with British forces in leading an Arab revolt against the Turks. The consequences of this conflict resulted in a British mandate, in which the territories now made up of Jordan, Israel, the West Bank, Gaza, and Jerusalem were divided, and the semi-autonomous Emirate of Transjordan was created from the region east of the Jordan River.

The British mandate ended after a series of treaties, particularly through the Anglo-Transjordanian Treaty. The treaty granted Transjordan full independence in 1946, after which it became the Hashemite Kingdom of Jordan in 1950. Abdullah II, the son of King Hussein, had been given leadership over the region by Britain during the mandate, and he became the first king of Jordan.

Jordan became almost immediately involved in the ongoing and volatile Arab-Israeli conflict. Two years after gaining indepen-



1920 Jordan

dence, Jordan joined its Arab counterparts in support of Palestine in the Arab-Israeli War of 1948 against the newly established state of Israel. The conflict left 500,000 Palestinian refugees in Jordan, a trend that would continue during other major conflicts. In 1949, an armistice halted hostilities, and Jordan and Israel formally agreed to demarcation lines. The armistice gave Jordan control of the West Bank and East Jerusalem. Jordan formally annexed the territory the following year, despite Palestinian opposition. Only Britain and Pakistan recognized the action.

King Abdullah was assassinated in 1951 by a Palestinian in Jerusalem at Al-Aqsa Mosque. Following his death, his son Talal assumed the throne. However, due to his mental illness, parliament proclaimed Talal unfit to rule. The throne was passed to his eldest son, Hussein I, who was crowned king after he turned 18 in 1953.

The first decades of King Hussein's reign were characterized by political and economic instability and continuing Arab-Israeli tensions, the effect of which caused strain in Jordan's relations with neighboring Arab countries and the West. Notably, Hussein had previously relied on Britain's aid to ensure the continued sovereignty of Jordan, despite the opposition from the Arab community. However, due to Britain's involvement in both the 1956 Suez Crisis and Tripartite Invasion, maintaining positive relations with Great Britain was not possible. Following the conflict, Hussein ended political relations with Britain to assure neighboring Arab states of his support.

The end of Jordan's relations with Britain signaled the end of Britain's military aid to the country. This caused a tremendous amount of instability in the region. Jordan was unable to defend itself against internal turmoil and external threats. Following the formation of the United Arab Republic (UAR), Hussein joined his cousin, King Faysal II, in a federal union with Iraq. Faysal and his family were killed in a coup led by an Egyptian army general in 1958. After the incident, Hussein accepted military and economic aid from both Great Britain and the United States.

Jordan's economic and political structure began to stabilize during the late 1950s and continued through the 1960s. Rapid development of Jordan's industrial foundations, combined with considerable foreign military and economic aid resulted in economic expansion. Britain stationed paratroopers within the country to se-

cure Hussein's reign, and the United States aided economic expansion by providing an estimated US$100 million annually. Jordan also improved its education system and transportation structure. Jordan's gradual internal stability allowed King Hussein to begin repairing relations with neighboring Arab states.

Israeli-Arab tensions continued despite Jordan's internal stabilization. Resistance toward Israel from Arab states continued to increase. In 1964, the Arab League's creation of the Palestine Liberation Organization (PLO) and the rise of independent Palestinian militant groups such as Yasir Arafat's Fatah movement became a threat to the sovereignty of Jordan through their use of the nation as a base from which to launch raids on Israel. Following the attacks, Hussein was forced to end his support for the PLO and other militant groups. This action was unpopular with the Arab population and caused renewed tension between Jordan, Syria, and Egypt. Israel retaliated against the militants by attacking the Jordan-controlled West Bank territory. In May 1967, Jordan realigned itself with Egypt and signed a joint defense treaty. In June 1967, Jordan joined its neighbors in the Arab-Israeli Six-Day War.

Jordan's involvement in the 1967 Six-Day War was a crucial point in its history, particularly with regard to territorial claims and economic position. During the conflict, Israel's armies captured and occupied large portions of Arab territory, including the West Bank, Syrian Golan Heights, the city of Jerusalem, Egypt's Sinai Peninsula, and the Gaza Strip. Jordan's proximity to the West Bank territory made it the primary location for between 150,000 and 300,000 Palestinian refugees unwilling to live under Israeli rule. The refugees caused internal tension, eventually leading to minor skirmishes between the refugees and native Jordanians. The economic cost of losing the West Bank was substantial; much

of Jordan's tourism, agricultural, and industrial profit was derived from that region. The Six-Day War concluded through a cease-fire agreement between Israel and Jordan.

Following the Six-Day War, Jordan and Israel made strides toward positive relations. Israel agreed to allow Jordanians to farm in the Israeli-occupied Jordan Valley, and Hussein negotiated privately with Israel in attempt to restore further territory to Jordan. The negotiations laid the groundwork for an eventual peace treaty between Jordan and Israel.

Despite the end of the war, an internal threat to Hussein's regime continued with the influx of Palestinian refugees hostile to Jordan. Minor skirmishes between native Jordanians and various militant organizations had begun immediately following the Six-Day War; however, in September 1970, full hostilities erupted. Members of a militant PLO faction hijacked four foreign airliners over Jordan and Cairo, destroying three. After the attacks, Hussein imposed martial law on the region, and Jordan's military took action to drive the PLO out of the country.

Hussein's actions against the PLO angered Jordan's Arab neighbors, and Hussein was forced to request military aid from the United States, Great Britain, and Israel to defeat Syrian troops that had entered in support of the PLO. Known as Black September, the conflict cost more than 3,000 lives and significant internal damage. The PLO was driven out of Jordan by 1971.

Jordan's economy stabilized through the 1970s. The nation was not involved in major conflict, with the exception of sending limited military aid to Syria during the Yom Kippur War of 1973.

In 1974, Hussein worked with Arab leadership to pass a resolution that recognized the PLO as the only legitimate representation of the

Palestinian people. This action allowed the Palestinians to govern themselves in any territory in liberated Palestine. The West Bank was included in liberated Palestine territory; thus, Jordan would no longer negotiate with Israel for the return of the territory.

Following the passing of the resolution, Hussein refused to enter into talks regarding territorial claims to the West Bank. He continued to see a Palestinian majority as a threat to his kingdom and would not enter into a federation with a Palestinian state.

Hussein was wary of Jordan becoming known as the primary Palestinian state due to its location, and he attempted to peacefully negotiate territorial claims with the PLO in the early 1980s to ensure the Palestinian population had a place to settle. During the negotiations, Hussein intended to establish a confederated status between the West Bank and Jordan; the West Bank would come under Jordanian sovereignty while still allowing Palestinians to self-govern in the region. Negotiations continued until 1986, when Hussein decided Jordan and the PLO could no longer politically cooperate. Hussein then announced that the economic welfare of Palestinians in the West Bank would fall under his authority, independent of the PLO. Though it was a reversal of previous policy regarding the region, Hussein hoped the effort would aid him in reaching an agreement with Israel that would allow him to regain the territory.

Despite these attempts, the Palestinian population desired a separate state. Hussein relinquished claims to the West Bank to the PLO in 1988, recognizing the PLO as the sole legitimate representative of the Palestinian people.

Jordan's political system and foreign relations were significantly reformed in the late 1980s and early 1990s. In 1989, Jordan held parliamentary elections for the first time in more than 20 years.

Islamic groups gained most seats. Martial law was revoked in 1991, and in 1994, Jordan ended almost 50 years of hostilities with Israel by signing a formal peace treaty. The nation's involvement in the 1991 Persian Gulf War was limited, though refugees from the conflict fled once more into Jordan, and the nation was condemned for its support of Iraqi President Saddam Hussein. Relations with the United Arab Emirates, Kuwait, and Saudi Arabia improved following the Persian Gulf War.

King Hussein died from cancer in February 1999. He reigned for 46 years, almost the entire period of time in which the country existed as a sovereign entity. His decisions and leadership shaped Jordan in every major event in its existence until his death. His memory continues to be revered and respected by Jordanians.

Hussein's eldest son, Abdullah II, had been sworn in as the crown prince shortly before the death of his father and assumed his position immediately after Hussein's death. King Abdullah II continued the work his father began, most notably in support for peace within the Middle East and economic and education reform.

Recent History

Jordan continues to navigate the long-standing tensions between Israel and the Palestinians and supports an independent Palestinian state. Most Jordanians oppose Jordan's peace treaty with Israel. Jordan began participating with the World Trade Organization and the European Free Trade Association in the early 2000s. Although Jordan initially supported the United States following the terrorist attacks of 11 September 2001, it did not immediately give formal support for Operation IRAQI FREEDOM, though it later provided operational assistance in 2003.

The threat of terrorism is significant, as is the possibility for violence through civil unrest. Since 2001, several terrorist attacks have occurred at tourist locations, military facilities, and residential areas. A senior U.S. diplomat was assassinated outside his home in Amman by two members of Al Qa'ida in October 2002. His death marked the first time a Western diplomat had been assassinated in Jordan. In 2003, a car bomb exploded at the Jordan Embassy in Baghdad, Iraq. The blast killed 11 people and injured many others. In 2005, suicide bombers attacked three international hotels in Amman. Members of Al Qa'ida claimed responsibility for these attacks that killed 60 people.

In the most serious militant attack on U.S. naval forces since the bombing of the USS *Cole*, rockets were fired at a U.S. naval ship stationed in Aqabah, killing a Jordanian soldier.

In early 2006, Jordan announced the death of Abu Musab al-Zarqawi, the leader of Al Qa'ida in Iraq. Jordanian-born Zarqawi, had been killed in a U.S. air strike north of Baghdad.

Local elections were held in summer 2007 for the first time since 1999 in a push toward a more democratic political system. The Islamic Action Front, a political faction of the Muslim Brotherhood, pulled out of the elections, claiming the votes had been rigged.

Chronology

Year	**Event**
1946	Transjordan gains full independence.
1948	State of Israel created; first Arab-Israeli war.
1950	Transjordan becomes the Hashemite Kingdom of Jordan; King Abdullah I is its first ruler; Jordan annexes West Bank.
1951	Assassination of King Abdullah.

1952 Talal declared mentally unfit to rule; Hussein is made king.

1957 Britain cuts off military aid to Jordan.

1967 Six-Day War.

1970 Hostilities peak between Palestinian militants and government forces; "Black September" ensues.

1973 Yom Kippur War.

1986 Hussein cuts all ties with the PLO.

1988 Hussein backs the *intifadah*; he relinquishes control of the West Bank to the PLO.

1989 General elections held for the first time since 1967.

1994 Peace treaty with Israel ends 46 years of hostility.

1999 King Hussein passes away in February; Abdullah II becomes king.

2003 First parliamentary elections occur under King Abdullah II; two-thirds of the seats won by candidates loyal to the king; Jordan Embassy in Iraq bombed.

2005 Three international hotels in Amman bombed; al Qa'ida claims responsibility.

2006 Zarqawi, Jordanian-born al Qa'ida leader, killed by U.S. air strike.

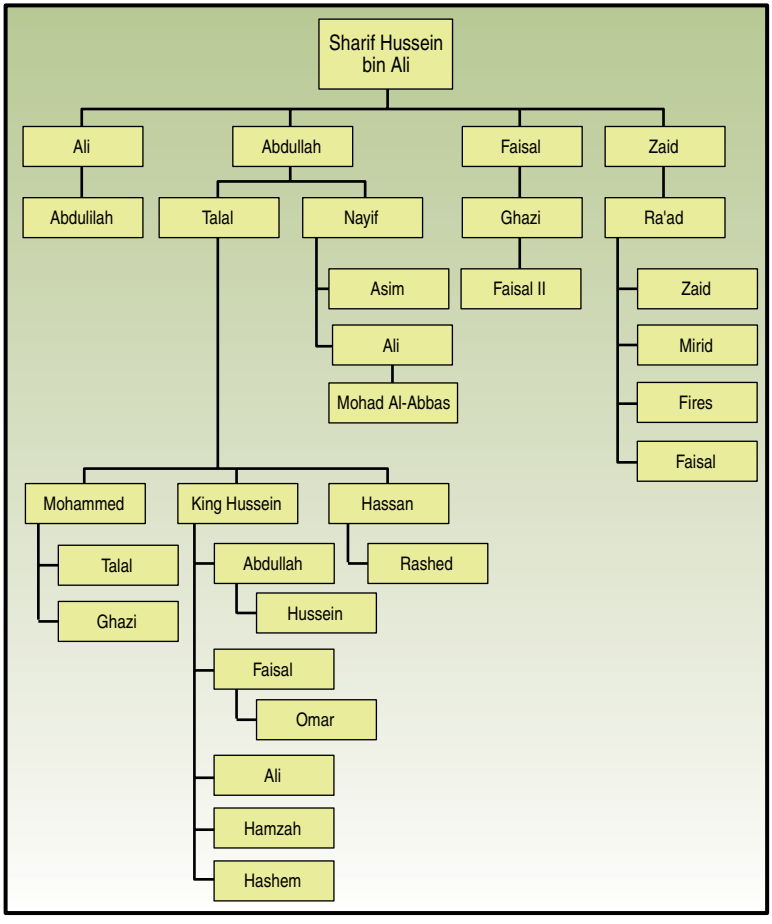
2007 Local elections are held for the first time since 1999; Islamic Action Front withdraws after claiming the government tampered with the voting system.

GOVERNMENT AND POLITICS

Government

Jordan is a hereditary constitutional monarchy with a parliamentary system. Its constitution has been in place since 1952, 6 years after Jordan's independence. The government is structured to give

the king, who wields ultimate authority and immunity, a mechanism by which to govern. He appoints local governors, judges, members of the upper house of parliament, the prime minister, and the cabinet. While these institutions are modeled after some



Royal Family

Western countries, the king is not checked or balanced by other branches and institutions in government. Deputies elected to the lower house of parliament serve 4-year terms and are directly elected by the people.

The Ottoman Empire ruled Jordan from 1517 to 1917. Jordan became a British mandate after World War I and remained a British protectorate until it gained independence in 1946. After it gained independence, Jordan took on its present form of government.

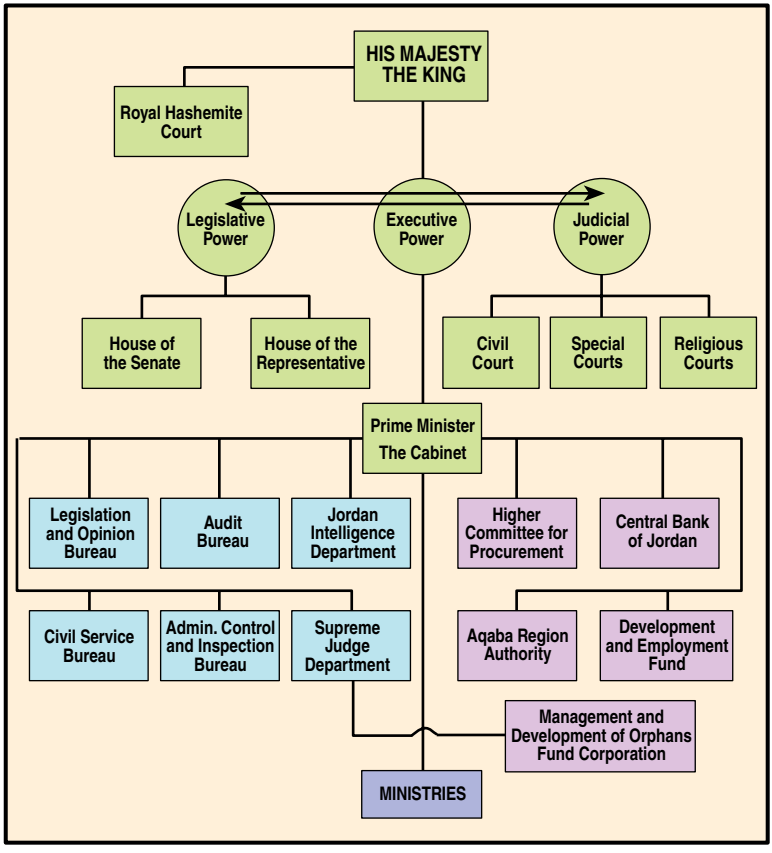
National Level

The king is the ultimate authority over the executive, legislative, and judicial branches. He crafts all laws and oversees administration through the cabinet, also called the Council of Ministers. The legislative branch has the power to introduce legislation, which happens infrequently. The legislative's primary activity is debating, amending, and approving legislation from the king and cabinet. The judiciary is constitutionally independent, but the king has significant influence on the courts because he appoints judges.

The king appoints the 12 local governors and some municipal and village council members. The national government exerts significant control over the governorates through the appointed governors and council members.

Executive Branch

The king appoints the prime minister and cabinet ministers. All ministers must be Jordanian nationals. Through the cabinet, the king makes and approves all policy. He appoints senators, judges, and regional governors. He has the power to dissolve the parliament and suspend elections. He also signs treaties and commands the armed forces.



Government

The constitution stipulates that additional oversight of the ministers is conducted by the Chamber of Deputies, which has the power to force the ministers' resignations or impeach them with a two-thirds vote. Each new cabinet must present its national policies and programs to the Chamber of Deputies.

The throne of Jordan passes through a direct line of male heirs of King Abdullah I. The king's eldest son is heir apparent. If he dies, his eldest son becomes heir apparent unless the king selects one of his own brothers to be heir apparent.

Legislative Branch

The constitution does not outline many duties or powers for either house of the National Assembly (Majlis al-Umma). Assemblies perform duties entrusted by the king, keep internal rules and discipline, and participate in the lawmaking process. The king may dismiss the National Assembly and veto its bills. Legislation is typically drafted by the cabinet, sent to the National Assembly for comment, and then given to the king for ratification.

It is legal for 10 or more members of the National Assembly to propose a law, but the cabinet will draft, and the king will ratify, any proposal that originates this way. The National Assembly has historically been inactive, being vested with little power. However, public debate, amendment, and approval of legislation from the executive branch have become common practices in recent years.

The National Assembly has two houses. The senate, also called the House of Notables, is the upper house, composed of 55 members appointed by the king to 4-year terms. The lower house, or Chamber of Deputies, has 110 representatives elected to 4-year terms. Representatives are apportioned based on population in the various districts, except for nine seats reserved for Christians, six seats reserved for women, and three seats reserved for the Circassian and Chechen minorities.

Judicial Branch

The judicial branch is constitutionally independent from other branches of government, though in practice it is heavily influenced

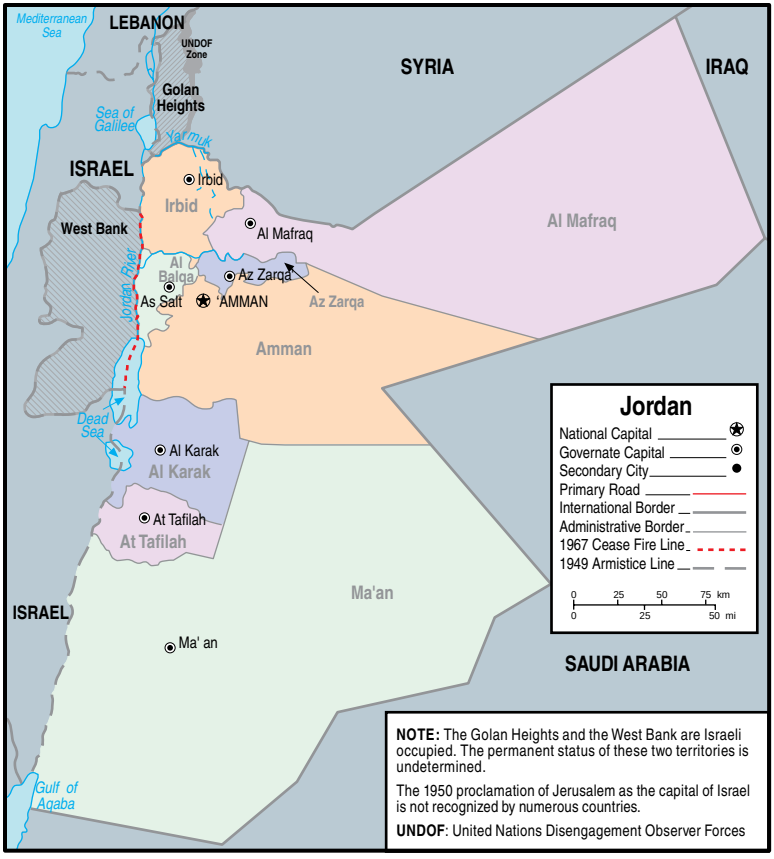
by the king and his ministers. There are three court systems: civil, religious, and special. The civil courts have jurisdiction over civil and criminal offenses and generally all cases except those for which religious or special courts have specific jurisdiction. Officials of the civil courts are appointed by royal decree.

Religious courts are divided along religious lines and have jurisdiction over marriage, divorce, and child custody. Shari'a courts are the largest branch of religious courts and have jurisdiction over Muslims in Jordan. These courts are based on Islamic law. In Shari'a courts, unlike the other religious courts, the testimony of two women is equal to that of one man. The king appoints the Shari'a court judges by royal decree. Christian and other religious courts are constituted by their religious communities in accordance with their systems of justice.

Special courts are created for specific roles. The State Security Court (two military officers and a civilian) has authority over drug trafficking, sedition, offenses against the king, and similar matters. Other special courts include a High Tribunal, High Court of Justice, and Supreme Council, each with various duties, such as interpreting the constitution or conducting cabinet member trials.

Local Level

Jordan is divided into 12 governorates, which are further divided into districts, subdistricts, municipalities, cities, and towns. Cities and towns have mayors appointed by the king and councils that are partially elected, but most local authority comes directly from the king. Local governments oversee projects in their areas, but they always act in accordance with the direction of the national government.



Administrative Districts

In July 2007, local elections were held with new rules. Half of municipal seats were filled by appointment rather than direct election, as in the past. Twenty percent of municipal seats were reserved for women, and the voting age was reduced from 19 years to 18 years.

Key Government Officials

- King, Abdullah ibn Hussein II
- Prime Minister and Minister of Defense, Nader Dahabi
- Minister of Finance, Hamad Kasasbeh
- Minister of Foreign Affairs, Salah Bashir
- Minister of Interior, Eid Fayez
- Minister of Justice, Ayman Odeh
- Minister of Political Development and Minister of State for Legal Affairs, Kamal Nasser

Politics

Election cycles are frequently adjusted by the king. Elections were suspended between 1967 and 1989 by King Hussein and again between 2001 and 2003 by King Abdullah II. Elections were held on schedule in 2007. The king can suspend or call elections at any time. All Jordanian citizens 18 years and older are eligible to vote, except those serving in the military or other security services.

Although Jordan has been steadily moving toward democracy in past decades, it will not completely open elections because of the possibility of electing a radical government. In the 2007 elections, Jordan was accused of shuffling voter registrations throughout districts to ensure that pro-government candidates were chosen, which outraged the opposing Islamic Action Front (IAF). Jordan prevents critics of the government and radical Islamists from running for office. The government also prohib- its full oversight of its conduct throughout elections, though it claims to be neutral in the polls.

Jordan has moderately high voter turnout rates. Rates for the 2003 and 2007 parliamentary and municipal elections were

between 58 and 59 percent of eligible voters. Turnout can vary widely between districts.

Political Parties

Political parties were initially allowed under the 1952 constitution, but the declaration of martial law in 1957 forced political parties to survive unofficially, which many did by taking the form of a labor union. Political parties were once again allowed in a 1992 law, and they have participated in the 1993, 1997, 2003, and 2007 elections. Parties must register with the Ministry of Interior, have at least 500 members from five governorates, and generally respect the law and the king.

There are four categories of licensed political parties: Islamist, leftist, Arab nationalist, and Jordan nationalist. Most parties do not declare candidates, since most members of parliament are elected on the basis of tribal ties. Official affiliation with parties might steer tribal and rural votes away from candidates and toward independent candidates. Political parties have little influence on national policies, partially because of the great number of parties in a small country. King Abdullah II has urged greater unity for political parties by combining them into three or four major groups.

Arab nationalist parties have little influence. Some of these parties have had only one member in parliament. While they differ on some economic issues, all are committed to liberating Palestine, and some call for the establishment of a single Arab state. Jordanian nationalist parties call themselves centrist, but they lack roots in any well-known ideological or political philosophy. Most of these parties support a Western-style economy.

Major Political Parties	Description
Islamic Action Front (IAF)	Backbone of the Islamist movement in Jordan and the largest party; between 3,000 and 5,000 members; dedicated to the peaceful implementation of Shari'a; argues that the government is corrupt and unfair in elections; occasionally boycotts elections, such as the July 2007 municipal elections
Arab Islamic Democratic Movement (Duaa)	Islamist; modern Islamic alternative dedicated to combining Arab nationalist orientation with Islam; membership is small, and includes some Christians
Islamic Center Party	Islamist party formed in 2001; spin-off of the IAF; considered more moderate than the IAF
Jordanian Communist Party (JCP)	Leftist; influence has been decreasing because of several internal splits and seemingly outdated position; vocal critic of economic ties and normalizing relations with Israel
Jordanian People's Democratic Party (Hashd)	Leftist; spin-off of the Democratic Front for the Liberation of Palestine; committed to Marxist socialism
Jordanian Democratic Left Party	Leftist; result of a merger in 1994 between the Democratic Socialist, Arab Democratic, and Progressive Democratic parties; espouses a leftist form of Jordanian nationalism

Foreign Relations

Jordan's position as a small country between Saudi Arabia, Syria, Iraq, and Israel leaves it susceptible to regional influence and also

makes it a key player in the peace process. Jordan strongly supports an inter-Arab free trade agreement.

Jordan is dependent on foreign aid to cover governmental expenditures. The United States is one of the top providers of aid to Jordan. In 2006 the United States gave Jordan US$206 million in military aid. Jordan receives subsidized crude oil from Saudi Arabia and the United Arab Emirates, and Jordan has negotiated with Israel and Syria various resource-sharing agreements that increase water and wheat supplies.

Jordan does not regularly provide foreign aid. However, in 2006, Jordan offered humanitarian aid to Lebanon after Israeli-Hizballah hostilities. Jordan also has offered to train Iraqi security forces and has provided military equipment to help promote stability.

United States

Jordan and the United States have a positive relationship, characterized by cooperation on economic and security issues, the Global War on Terrorism, and peace in the Middle East. The United States has been providing Jordan with economic and military assistance since the 1950s. Despite the absence of a formal alliance between Jordan and the United States, Jordan has long been a Western supporter in the Middle East. The only major disagreement was Jordan's support of Saddam Hussein in 1990. The United States has supported political reforms in Jordan that have resulted in steps toward greater representation of the people in government.

Jordan's cooperation with the United States in the Global War on Terrorism is of particular symbolic and practical importance. As one of few pro-Western countries in the Middle East, Jordan's stand is a significant act of leadership in the region. Jordan changed its laws to enforce actively against financial operations linked to ter-

rorist activities, arrested and prosecuted associates of Usama bin Ladin, and sent mine clearing and medical units with U.S. troops in Afghanistan to assist the war effort.

Jordan and the United States have forged strong trading ties. The United States has extended several duty-free benefits to Jordan since 1996, culminating in a free trade agreement in 2001. A bilateral investment treaty was signed in 1997. The treaty gave benefits to Jordan for its progress in rehabilitating its economy and making economic reforms.

Israel

Israel and Jordan signed a peace treaty in 1994 and have made several steps toward normalized relations, including formulating an agreement concerning water sharing. Many Jordanian opponents of normalization have published "black lists" of Jordanians who deal with Israel. Jordan fears Israeli action against Palestinians in the West Bank could cause mass immigration of Palestinians into Jordan, which it believes it is unprepared to handle.

Despite participating in the invasion of Israel in 1967, Jordan has been a key player in the peace process, holding joint meetings with the United States and Israel. Jordan lost all of its territory west of the Jordan River (the West Bank) to Israel in the 1967 war. Jordan has condemned HAMAS and Hizballah attacks on Israel, though it has also called for an immediate cease fire from Israel when it felt Israel was overreacting.

Saudi Arabia

Saudi Arabia has had a protective attitude toward Jordan since 1958, providing economic assistance during the 1960s, subsidizing Jordan's budget after the 1967 war, and mediating between Jordan and its rivals, Syria and the PLO, in the 1970s and 1980s. Relations

deteriorated during the 1991 Persian Gulf War when Jordan supported Saddam Hussein; however, relations improved after Jordan ceased to support Saddam in the late 1990s. Saudi Arabia recognizes important strategic interests in the stability of Jordan, the continued rule of King Abdullah II, and Jordan's positive role in the Middle East peace process. After oil imports from Iraq were halted due to Operation IRAQI FREEDOM, Saudi Arabia committed to supply Jordan with 50 percent of its oil needs until 2004.

Iraq

More than 500,000 Iraqi refugees immigrated to Jordan since Operation IRAQI FREEDOM. The primary strain on relations resulted from the terrorist attacks in 2005 in Jordan by Iraqi-based terrorists. Jordan alleges that Iraq is not doing enough to stop terrorists, while Iraq argues that Jordanian citizens are coming into Iraq to bolster the insurgency. King Abdullah II is concerned about tensions between Shi'ites and Sunnis, urging the Iraqi government to take a more balanced approach that prevents Iraq from being dominated by Shi'ite interests. Jordan is committed to the effort to stabilize Iraq.

Syria

Relations with Syria have improved dramatically since 2001. Trade and travel have been increasing, strengthening economic ties between the two countries. However, the countries still disagree on security issues, and Jordan is concerned that Syria may be supporting HAMAS operations in Jordan. Jordan and Syria have planned meetings to address security issues.

Egypt

Jordan signed a mutual defense treaty with Egypt in 1967, just before assisting Syria, Iraq, and Egypt in the 1967 war with Israel.

Relations with Egypt were tense during the latter years of the Cold War, but they have since improved. Jordan now conducts joint military exercises with Egypt. The leaders of Jordan and Egypt are considered key mediators in the peace process. Jordan obtains most of its natural gas through the Egypt-Jordan pipeline. Jordan is seeking a free trade agreement with Egypt.

Iran

Jordan has had poor relations with Iran since the founding of the Islamic Republic in 1979. The main source of conflict has been Iran's alleged interference in Iraq. Jordan wants to protect the Sunnis in Iraq as a means of counteracting the Shi'ite and Persian influence of Iran. Jordan accused Iran of trying to manipulate Iraq politics to support a Shi'ite government. Jordan sees a Shi'ite-dominated Iraq as a threat to its security. It has frequently accused Iran of encouraging radical Islamist opposition groups inside Jordan. Relations between Iran and Jordan are also strained due to Jordan's support of Iraq during the Iran-Iraq War from 1980 to 1988.

European Union

Jordan and the European Union (EU) have close relations through the European Neighborhood Policy and several economic agreements. The Neighborhood Policy implements political, economic, cultural, technological, and agricultural cooperation. As incentives, the EU offers a stake in the EU internal market as long as Jordan continues to implement democratic political reforms, including equal treatment of women, development of an independent judiciary, liberalization of trade and trade restrictions, and liberalization of key investment areas. Trade between the EU and Jordan has been increasing rapidly in recent years.

International Organizations

Jordan participates in the following international organizations:

- Arab League
- International Atomic Energy Agency
- International Labour Organization
- International Monetary Fund
- Interpol
- Organization of the Islamic Conference
- United Nations
- World Bank
- World Health Organization
- World Trade Organization

Non-governmental Organizations

Several major international non-governmental organizations (NGOs) operate within Jordan, often cooperating with one of the cabinet ministries, governorates, or religious organizations. NGOs operating within Jordan include the Cooperative Housing Foundation, CARE International, the Red Cross and Red Crescent, Near East Organization for Development, Save the Children Foundation, Nippon International Cooperation for Community Development, and Young Muslim Women's Association.

NGOs are well received, but they have to register with and be monitored by the Ministry for Social Development. NGOs with narrow political goals are not allowed.

Corruption

Jordanians believe that the government has little ability to combat nepotism, fraud, and graft. A poll found that 64 percent of

Jordanians believe that corruption is rampant in the public sector, and most believe it is increasing. The monarchy uses patronage networks and access to public or private goods to reward allies and punish enemies. Jordan's prime minister has pledged to fight corruption, and parliament has stepped up its role in investigating corruption within the ministries.

Corruption is, however, primarily in the management levels, not on the level of daily interactions, such as civil service workers and the police. It is not acceptable to write publicly about government corruption in Jordan.

ECONOMY

Jordan's generally robust economy has managed to grow despite a lack of natural resources. The economy benefits from political stability in a region known for instability and also from an educated and skilled labor force. Since King Abdullah II came to power in 1999, Jordan has implemented sweeping economic reforms emphasizing liberalization and privatization. Reforms have increased gross domestic product (GDP) and boosted the private sector, but remaining economic restrictions hinder some growth.

The economy is dominated by the service industry. Other key components are manufacturing and heavy industry. Increased foreign investment has created economic development. Careful fiscal policy has consistently reduced inflation and provided steady growth. Poverty, unemployment, inflation, and budget deficits remain issues.

Economic Aid

Jordan is dependent on foreign economic aid to cover budget deficits and fuel the economy. The United States has consistently

increased economic aid (grants and loans) to Jordan as relations have progressed. The United States planned to give US$245 million in economic aid to Jordan in fiscal year 2007 and has given Jordan similar amounts since 2003. Another source of aid is the World Bank, which established a US$540 million lending ceiling as part of its 4-year Country Assistance Strategy.

Banking Services

The banking and securities sector is primarily regulated and controlled by the Central Bank of Jordan (CBJ), which was founded in 1964. CBJ is responsible for issuing currency, managing Jordan's financial reserves, maintaining the safety of the banking system, and regulating credit. CBJ acts as a banker and fiscal agent for the government, public institutions, banks, and credit institutions. CBJ is also responsible for licensing banks to operate and establish branches in Jordan.

The banking sector includes, along with CBJ, 13 commercial banks, 8 foreign banks, 2 Islamic banks, 1 industrial development bank, and 3 public ownership development banks. Banks tend to be small and fiscally conservative. The state owns and operates five commercial banks, including the Arab Bank, the Bank of Jordan, and the Jordan-Kuwait Bank. Five of the 13 commercial banks are branches of foreign banks. Foreign banks account for a third of all banking.

The largest banks in Jordan are the Arab Bank PLC and the Housing Bank for Trade and Finance. The Housing Bank is a public shareholding bank, and it has the largest network of branches in Jordan. The bank provides extensive banking and investment services, including online banking and widespread ATM access. The Arab Bank PLC is owned by Arab shareholders and is one of the largest financial institutions in the Arab community. The Arab Bank continues to provide banking services to Palestinians.

The Islamic banking system in Jordan has had mixed success, but continues to grow. Islamic banks follow Shari'a and accordingly do not charge interest; instead, they charge a fixed rate on capital. The Jordan Islamic Bank for Finance and Investment was created in 1978 as part of the Al Baraka network of Islamic banks and is 90 percent owned by Jordanians. It is now one of the largest banks in Jordan in terms of assets. The Islamic International Bank PLC was founded as a public shareholding bank in 1998 to meet growing demand for Islamic banking services. Islamic banks offer general banking services, including loans, deposits, money transfers, and ATM services.

The following foreign banks operate in Jordan:

- HSBC Bank Middle East Ltd
- Egyptian Arab Land Bank
- Rafidain Bank
- Citibank N.A.
- Standard Chartered Bank
- National Bank of Kuwait
- Audi Bank
- BLOM Bank

Economic Statistics

GDP	US$31 billion (2008 est.)
GDP Growth	4.5% (2008 est.)
GDP Per Capita	US$5,000 (2008 est.)
Inflation Rate	15.5% (2008 est.)
Budget Revenues	US$5.8 billion (2008 est.)
Budget Expenditures	US$7.6 billion (2008 est.)
Debt	US$18.0 billion (2008 est.)
Unemployment	13.3% (2008 est.)

Total Value of Imports	US$15.7 billion (f.o.b.)
Import Commodities	Machinery and transport equipment: 27.4%; Crude oil and petroleum products: 23.3%; Manufactured goods: 20.9%; Food and live animals: 12.2%; Other: 16.2%
Import Partners	European Union: 27.1%; Saudi Arabia: 23.2%; China: 8%; United States: 5.3%; Egypt: 3.4%; Korea: 3.4%; Other: 29.6%
Total Value of Exports	US$5.2 billion
Export Commodities	Manufactured goods: 35.3%; Chemicals: 17%; Crude materials: 9.6%; Food and live animals: 8.1%; Other: 30%
Export Partners	United States: 25.2%; Iraq: 16.9%; India: 8%; Saudi Arabia 5.8%; European Union: 5.5%; Syria: 4.7%; Other: 33.9%
Labor Force	Agriculture: 5%; Industry: 12.5% Services: 82.5%

Resources

Jordan's limited natural resources have hindered economic growth. Mineral resources contribute the most to the economy and are the primary source of gross manufacturing output. Phosphate deposits are Jordan's primary natural resource and are a major source of export earnings. Jordan has an estimated 1.5 to 2.5 billion tons of phosphate reserves, and it is the world's sixth-largest producer of phosphate.

Potash is the second major mineral resource that contributes to the national economy. Jordan extracts potash from the Dead Sea at a low cost by using natural evaporation. Jordan also produces bromide and magnesia from the minerals in the Dead Sea. Other commercially exploited minerals include feldspar, gravel, gypsum, kaolin, lime, limestone, marble, salt, and silica sand. Jordan has yet to exploit copper deposits that are located between the Dead Sea and the Gulf of Aqaba. Other natural resources that are not commercially produced are dolomite, glass sand, iron, lead, oil shale, tin, travertine, and tripoli (a polishing mineral). Jordan also has deposits of copper, gold, iron ore, sulfur, and titanium.

Jordan has no significant oil reserves. Extensive exploration has yielded only one field. Production from the Hamza field is insignificant in comparison to domestic demand. The primary domestic production of energy is from natural gas. Jordan continues to discover natural gas reserves. Primary production is from the Risha field.

Jordan had forests in the uplands of southern Jordan, but now forests account for less than 1 percent of the total land area. Major forests are in Ajlun in the north and near Maan.

Jordan suffers from air and water pollution. Air pollution, which is concentrated near industrial and metropolitan areas, is the result of industrial activity and the use of leaded fuel. Thermal power production and dust from open pit mining operations also contribute to pollution. Jordan plans to install air pollution monitors, phase out leaded fuels, and enforce industrial waste regulations to combat the pollution.

Water pollution is a significant problem in Jordan due to limited water resources. The primary sources of water pollution in Jordan's water supply are sewage, herbicides, and pesticides. The Gulf of Aqaba, due to its enclosed nature, is particularly vulnerable to ma-

rine pollution from trade, industry, and tourism. Existing threats to water quality include sewage leaks, industrial pollution from mineral production, oil spills, and an increase in waste products from the tourist industry.

Industry

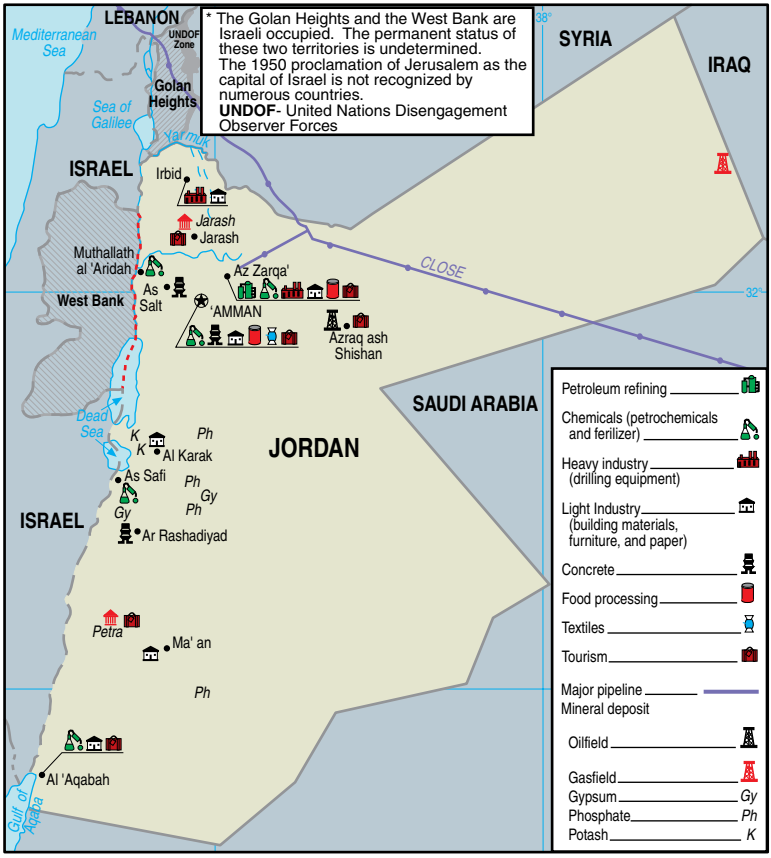
Industry in Jordan contributes to 29 percent of the GDP and employs 22 percent of the labor force. The primary heavy industry is phosphate extraction, followed by cement production and mining of potash, limestone, granite, and other minerals. Jordan also produces iron and steel. Potash is exported as rock and also processed into fertilizer. The Jordan Phosphate Mine Company holds a monopoly on phosphate mining. Jordan's government holds a controlling interest in both phosphate and potash production.

Manufacturing is concentrated around Amman. The main goods produced include food, clothing, and a variety of consumer products. Jordan's pharmaceutical industry is particularly well developed. Primary consumer goods include detergent and soap.

Bromide is produced on the Dead Sea. The sea's status as an endangered natural resource and the environmental damage caused by bromide production have resulted in the UN mandate that Jordan phase out bromide production by 2015.

The services sector is vital to the economy, contributing to 69 percent of the GDP and employing 82 percent of the labor force. The government is the largest employer in the services sector; it employs half the entire work force of Jordan in public administration and defense. Jordan's military expenditures are above average for the region, due to its location.

Tourism is a growing industry and is promoted by the government. Tourist traffic began to increase in the 1990s. Regional tourism remains the primary source, but the number of tourists from Europe and the United States is increasing.



Industry

Agriculture

Agriculture plays a limited role in the economy, accounting for 10 percent of exports in 2005. Agriculture employs 5 percent of labor. Only 4 percent of Jordan's total land area is used for agriculture; 2 percent is forested or being reforested, and the remainder is agricultural land. Agriculture has limited water supplies, inadequate agricultural knowledge and skills, poor regulation, and high production costs.

Fertile rain-fed land is primarily concentrated in the northern and western highlands. Tree crops dominate the hilly terrain of the western highlands. Government projects have aided crop expansion, particularly olive production. The major crop of the northern highlands and plains is wheat, along with tobacco, sorghum, and summer crops of lentil and chickpea. Agriculture in the highlands is dependent on the weather.

Bedouin Shepherd

The Jordan Valley is irrigated by both modern systems and by groundwater. Crops grown in the Jordan Valley include citrus, bananas, wheat, potatoes, tomatoes, cucumbers, melons, cabbages, *aubergines* (eggplants), and onions.

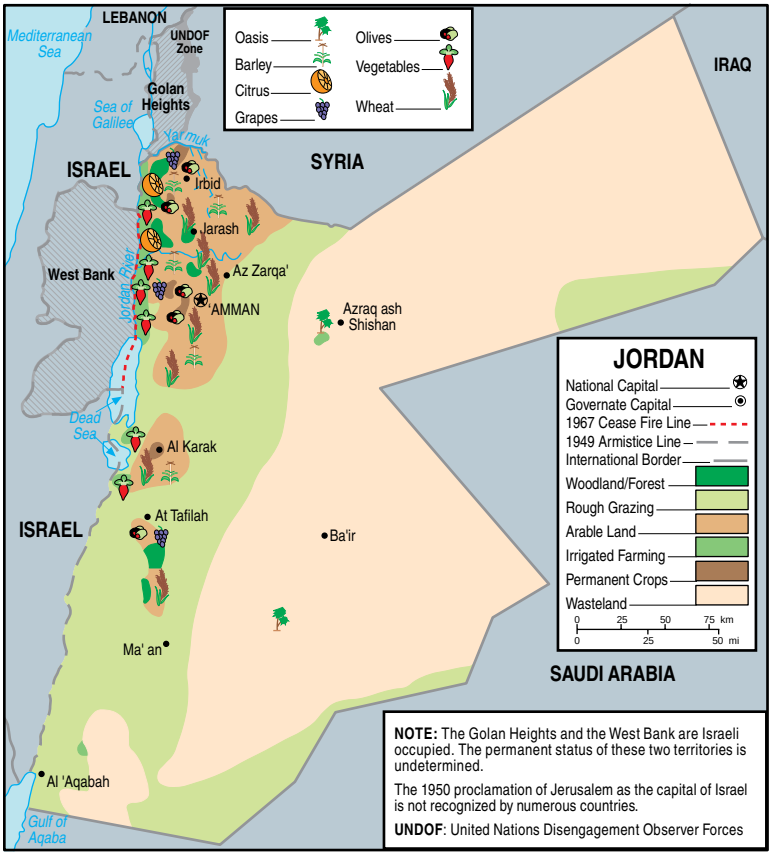
The Jordan Valley produces 70 percent of food crops, although it only accounts for 15 percent of the total arable area. The area benefits from a year-round growing climate.

Animal husbandry is mainly practiced by the nomadic Bedouin, although animal products form a key part of agricultural output. Ninety percent of the land area of Jordan is non-cultivated rangelands located in the arid zone. Rangelands provide vital grazing and browsing lands for nomadic and semi-nomadic flock owners. Sheep and goats are the most valued livestock. Other animals raised include cattle, camels, horses, donkeys, and mules.

Barley is occasionally cultivated for hay in the rangelands, but it has a low yield. Jordan has limited fishing and forestry industries. Inadequate forest area hinders the industry, despite continued reforestation programs. Fishing is evenly divided between aquaculture and live catches.

Utilities

Jordan has limited domestic energy resources and relies heavily on oil and natural gas imports to generate electrical power. Jordan's one productive oil field does not produce enough to offset any significant portion of domestic oil demand. The cost of importing oil has increased since the loss of crude oil supplies from Iraq, which used to be sold to Jordan for a quarter of market value. Since Operation IRAQI FREEDOM, Jordan has been forced to import oil at market value from Kuwait, Saudi Arabia, and the United



Land Use

Arab Emirates. Jordan allocated 14 percent of its GDP in 2005 to securing energy resources, including oil.

Jordan has worked to convert energy production plants to natural gas instead of oil as domestic energy demand increases at 4 percent a year. Jordan has limited reserves of natural gas. Production

from the sole natural gas field near Risha in the eastern desert is used to fuel a nearby power plant. This plant provides less than 10 percent of the domestic energy. In 2003, Jordan negotiated the creation of the Pan-Arab Energy pipeline, allowing it to import natural gas from Egypt. Jordan has converted five thermal power plants to natural gas, including Aqabah Thermal Power Station, the largest in the country.

Electrical production relies almost exclusively upon thermal energy production. Electrical production is managed by the National Electric Power Company, a state-owned utility company. It is aided by several subsidiaries, only one of which is privately owned. Jordan has moved towards privatization of the energy industry in an effort to attract infrastructure investment. Jordan plans to retain national control over the distribution apparatus while drawing power from a series of private production facilities. As part of its privatization strategy, Jordan sold the Central Electric Generating Company, a production subsidiary managing five plants, to ENARA Energy Arabia in late 2007. The distribution network effectively reaches the entire population.

Renewable energy is the largest domestic energy source. So far, production is limited, providing only 2 percent of domestic energy; however, Jordan's government plans to expand renewable energy exploitation. Jordan promotes wind, solar, and biomass energy production. Jordan has the potential to exploit geothermal energy for heating functions, but does not have sufficient resources for electrical production. Numerous regions in Jordan could provide wind energy production. Exploratory projects in wind turbine energy generation have been successful, and the World Bank granted a loan of US$92 million to support a project to create a wind energy market. Solar energy is used to evaporate large

quantities of water from the Dead Sea to aid in the production of potash and other salts.

Water

Jordan has limited water resources, having one of the lowest levels of per capita resources in the world. As demand exceeds renewable water resources, water resources are projected to fall to half the current levels by 2025, resulting in a severe water shortage. Jordan plans to increase the use of fossil water reserves and desalinated water for municipal use and wastewater for agricultural use. Water resources are rationed, and Jordan plans to increase water resource management.

Jordan's water resources consist of surface and groundwater. Surface water comes from 15 major basins that drain into the Red Sea, the Dead Sea, or the eastern mud flats. The main sources of surface water are the Yarmuk and Zarqa Rivers. Dams and lake release controls by neighboring countries have reduced the flow of the Jordan River to a trickle, except during flood season. Available surface water resources vary with seasonal rainfall, which primarily falls during the winter.

Groundwater aquifers provide a valuable source of renewable annual water supply. The largest aquifer is located near Greater Amman. Water levels in the main aquifers near urban areas are declining from over-exploitation and sewage infiltration. Jordan has limited nonrenewable fossil groundwater resources in the Disi Aquifer.

More than 60 percent of available water resources are used by agriculture, leaving only 30 percent to satisfy consumer demand. Jordan has begun to use treated wastewater for irrigation. Wastewater is primarily used in the Jordan Valley. More than one

third of municipal wastewater is converted for use. Jordan is developing more efficient irrigation systems to maximize resources and has received international assistance in developing wastewater reclamation facilities. By 2020, available treated wastewater resources will double.

Ninety-seven percent of Jordanians have access to water supply systems, and 96 percent have access to safe water. All urban residents and 94 percent of rural dwellers have access to pure water. Water demands have increased due to the influx of refugees, increased economic standards, and municipal growth. Municipal demand has greatly expanded, especially in the areas of Greater Amman, Irbid, and Aqabah. Only 66 percent of demand is met.

While only 60 percent of Jordanians are connected to central sewage systems, 95 percent of urban dwellers and 85 percent of rural dwellers have access to improved sanitation facilities. There are 21 wastewater treatment plants in Jordan, and there are plans to upgrade and rehabilitate existing plants while building 13 new plants by 2015.

The Ministry of Water and Irrigation (MWI) is responsible for monitoring the water sector, water supply, and wastewater systems. The MWI is responsible for planning and management, formulating national water strategies, and research and development. They are assisted by the Water Authority of Jordan and the Jordan Valley Authority. With the support of donor countries, Jordan has increased the production of fresh water through constructing dams, desalinating brackish water, and developing groundwater resources. MWI's 5-year plan includes legal guidelines for water usage and protection policies that are being implemented by parliament.

Foreign Investment

Foreign investment in Jordan has grown considerably since 1995 and is well above the regional average. Official statistics are not available, but it is estimated that foreign direct investment in Jordan was US$1.1 billion in 2006, rising from US$787 million in 2000. Foreign investment is influenced by regional political developments, which have presented some obstacles.

Since 1995, Jordan's government has worked to create an environment attractive to foreign investment, beginning with the implementation of a series of legal reforms. Jordan has strengthened banking regulations, increased protection for property rights, and privatized several domestic industries. Jordan has also signed several bilateral free trade agreements. The free trade agreement with the United States will result in the elimination of tariff barriers by 2010. To further encourage investment, Jordan has created 13 qualified industrial zones, including a special economic zone in Aqabah, allowing commerce to avoid paying the usual excise fees and taxes. This strategy has created hundreds of thousands of new jobs and a large boost in foreign investment.

Foreign investors are involved in a number of sectors, including banking, retail, mining, telecommunication, water treatment, construction, and energy production. The information technologies sector receives major inflows of investment. United States and Canadian investors provided the primary investment in Jordan's economy during the first half of 2007, followed by Arab and Asian investors.

The construction industry has received particular attention from foreign investors and has experienced a boom since 2005. High-end shopping, corporate, and residence complexes are under construction, along with expansion of tourist infrastructure. The eco-

nomic zone in Aqabah has contributed to a development boom geared toward coastal tourism. The primary investment is from the Arab community, including developers from the United Arab Emirates, Bahrain, Kuwait, Saudi Arabia, and Lebanon.

Outlook

As long as Jordan continues its program of economic reform and promoting foreign investment, the domestic economy will continue to experience solid growth. GDP growth will be fueled by growth in the real estate and tourism sectors, along with a rise in domestic exports of manufactured materials. The budget deficit will continue to be a problem despite the reduction in fuel subsidies, but increasing use of oil alternatives may help to alleviate the cost. Water resource management will continue to be a critical issue. Increasing foreign investment should provide continued infrastructure development, lowering unemployment and boosting economic expansion, particularly in the special economic zones.

THREAT

Crime

Jordan has a low crime rate by international standards with a low rate of violent crimes. Non-violent petty theft is the most common crime, which often involves purse snatching or pocket picking. It is particularly prevalent in urban areas such as downtown Amman and in old city centers where crowded conditions are conducive to pocket picking. Concealing valuables and signs of affluence is recommended, as thieves may attempt to snatch valuables from moving vehicles. Thieves also look for individuals leaving banks or ATMs.

Western women occasionally report sexual harassment, stalking, and unwanted advances. Actual assaults are rare. Women should

never travel alone and should dress conservatively to avoid unwanted attention.

Drug Trafficking

Jordan is a transit country for illicit drug trafficking and has no production operations within its borders. Jordanians are not major consumers of illegal drugs, but the vast desert borders make Jordan vulnerable to smuggling. The Public Security Directorate's Anti-Narcotics Department (AND) estimates that 85 percent of drugs entering Jordan are intended for export to regional countries. Jordan is situated between drug-producing countries directly to the north and east that supply countries to the south and west and European markets. Drug trafficking through Jordan increased in 2006 with a noticeable increase in trafficking from Iraq.

Heroin and morphine processed in Turkey and Lebanon enter Jordan from Syria on their way to Israel and Egypt. Cannabis typically enters Jordan from Lebanon and Iraq, with Iraq accounting for most of the supply. Hashish and opium from Afghanistan enter Jordan through Iraq on to markets in Europe. Captagon, a methamphetamine stimulant from Bulgaria and Turkey, enters Jordan through Syria on the way to the gulf. Captagon accounts for a large portion of drug trafficking.

The AND is responsible for most counternarcotics activity and for coordinating all agencies involved. Most drug seizures are on the Jaber border-crossing point between Jordan and Syria and at the port crossings in the Gulf of Aqaba. Preventing trafficking outside specific entry points is difficult due to the challenge of patrolling a vast and open desert border inhabited by tribes that primarily subsist off smuggling.

The AND is assisted by the Desert and Border Police responsible for patrolling the barren borders with Syria and Iraq; the General Customs Department is responsible for anti-smuggling in the port areas; and the Jordan military, which controls portions of the border with Syria and Iraq. The AND also cooperates with the U.S. Drug Enforcement Agency. Jordan has bilateral counternarcotics cooperation agreements with Syria, Lebanon, Iraq, Saudi Arabia, Turkey, Egypt, Pakistan, Israel, Iran, and Hungary.

Jordan is part of the 1988 UN Drug Convention, the 1971 UN Convention on Psychotropic Substances, and the 1961 UN Single Convention. Jordan is also engaged in international cooperation against drug trafficking as a member of the League of Arab States and Interpol. Jordan is the regional hub for the UN Drug Control Program due to its location and its traditional role as regional mediator. It also provides training for regional counternarcotics officers. The United States and Jordan have an extradition treaty allowing drug smugglers to be extradited to the United States. No illicit drugs smuggled through Jordan are known to be intended for the U.S. market.

The drugs most commonly used in Jordan are cannabis and heroin. The Public Security Directorate estimates that there was a decrease in the number of drug abusers in 2006 due to programs intended to both reduce availability and warn the public of the dangers involved.

Possession or trafficking of controlled substances is a serious offense. Offenders receive lengthy prison sentences and heavy fines.

Major Intelligence Services

The primary intelligence agency within Jordan is the Dairat al Mukhabarat, or the General Intelligence Department (GID). The

GID was established in 1964 to defend Jordan's national security and protect its interests. It is tasked with collecting and analyzing information to assist the government in political decision-making. The GID lists its duties as combating ideological and physical sabotage, espionage, corruption, and terrorism, along with protecting Jordan's democracy. The GID briefs government officials on national security matters and coordinates efforts with the military and national law enforcement agencies.

The GID focuses its efforts on collecting intelligence pertinent to security issues within the Middle East, including surveillance of paramilitary groups and guarding borders. Due to the consolidation of Jordan's intelligence community within one organization, the GID maintains several special task forces. These task forces include communication surveillance and counterintelligence, along with a counterterrorism task force monitoring terrorist organizations operating in Jordan and the Middle East.

The GID also monitors the security of government information systems and staff, and it carries out duties assigned by the prime minister. Specific tasking can involve combating corruption, preventing arms smuggling, and exposing counterfeiting operations.

ARMED FORCES

Army

Mission

The Royal Jordanian Land Force's (RJLF) primary missions are to protect the kingdom's borders from invasion, protect the people and their rights, and protect the king.

Organization

The RJLF is a highly professional, well-disciplined force. Jordan stopped conscription after its peace treaty with Israel and converted to an all-volunteer force. Standards are high, quality is emphasized over quantity, and it does not expand the force more rapidly than its training and organizational capabilities will permit. Although it has some good equipment, most of it is aging; and some is nearing obsolescence. A chronic dearth of spare parts has left much of their gear in disrepair, particularly armor and artillery. Foreign military aid is critical to Jordan's efforts to modernize and strengthen the

Enlisted						
	Jundi	Raqib	Arif	Raqib	Wakil	
U.S. Equivalent	*Private*	*Private 1st Class*	*Corporal*	*Sergeant*	*Sergeant 1st Class*	
Officers						
	Wakil	Mulazim	Mulazim Awwal	Naqib	Raid	Muqaddam
U.S. Equivalent	*Warrant Officer*	*2nd Lieutenant*	*1st Lieutenant*	*Captain*	*Major*	*Lieutenant Colonel*
Officers						
	Aqid	Amid	Liwa	Fariq	Fariq Awwal	Mushir
U.S. Equivalent	*Colonel*	*Brigadier General*	*Major General*	*Lieutenant General*	*General*	*Field Marshal*

force. The RJLF is arguably the best-trained Arab army in the Middle East and has participated in UN peacekeeping missions.

The RJLF, like its predecessor the Arab Legion, was organized and operated on the British military model. A force of 88,000, the RJLF is currently organized into four commands – Northern, Central, Eastern, and Southern – with a separate Special Operations Command and a Strategic Reserve. The army had been organized along a traditional structure with four divisions; however, following a force-wide organization a few years ago, the force is now organized along a brigade structure with a single armored division as the strategic reserve. The result is an army that is lighter, more mobile, and more capable to respond quickly to emergencies. The Special Operations Command (SOCOM) includes the Royal Jordanian Special Forces (RJSF) the Police Public Security Directorate (PSD), the Royal Guard, some intelligence units and an airlift squadron.

Disposition

The role of the army is to protect the borders and territorial integrity of Jordan and assist in maintaining internal security. Full details are unavailable about the deployment of troops under the new organizational arrangement, but are likely to reflect the previous structure of the army.

The North Command defends the border with Syria. The western part of Jordan's frontier with Syria is a deep gorge along the Yarmuk River, but there is flatter ground to the east where an attack could take place. Jordan's forces traditionally maintained a defensive posture along this sector. A number of major roads link Jordan and Syria in this region, crossing undulating terrain with no natural obstacles. The city of Irbid and the air base at Mafraq

are less than 20 kilometers (12 miles) from the border with Syria and are therefore vulnerable to surprise attack or artillery bombardment. As a result, Jordan's forces traditionally paid particular attention to their defenses in this region.

The Central Command likely has a particular focus on the 348-kilometer (216-mile) frontier with Israel (the longest border with Israel of any Arab state). The Jordan Valley, which forms the natural boundary between the two countries along this sector, is a deep, winding depression, and the line of hills to the east of the valley forms a natural defensive line for Jordan's forces.

Jordan's forces have not been deployed in the Jordan Valley itself, where they would be vulnerable to Israeli air power and artillery. Forces were deployed on the heights above the valley in positions that enable them to obstruct any enemy movement up the routes to the central plateau leading to the main cities. Surfaced roads lead up to the top of the escarpment, about 800 to 1,200 meters (2,625 to 3,937 feet) above the floor of the valley; but, a well-entrenched force could ensure that any enemy advance up those roads could only be attempted at great cost.

The Eastern Command, which is being reorganized as a result of the fall of Saddam Hussein's regime, has two mechanized, one artillery, and one air defense brigade.

The Southern Command had one armored and one infantry command. A number of infantry battalions are normally assigned to defend Karak, located just to the east of the southern part of the Dead Sea, and Aqabah, the port city in the deep south of Jordan, near the border with Saudi Arabia. Some of the units based in the Aqabah area also have a coastal defense role.

The Strategic Reserve is a heavy, highly mobile force composed of the Royal Armored Division and has three armored, one artillery, and one air defense brigade.

Jordan Special Operations Command

The Jordan Armed Forces (JAF) SOCOM consists of the RJSF, the PSD (also known as the Police Security Forces brigade, which falls under the Jordanian Armed Forces in wartime, but is otherwise under the Ministry of the Interior), the Royal Guard, intelligence units, and an airlift squadron. King Abdullah II was formerly the commander of JAF SOCOM.

The RJSF, the third most-capable force in the Middle East (behind Israel and Turkey), is deployed in the desert areas of northeast Jordan. Personnel train for unconventional warfare operations, including airborne infiltration/insertion and psychological operations. The RJSF has two special forces/counterterrorist battalions, (71 and 101), and an airborne brigade. The latter includes two conventional parachute battalions (81 and 91) and a number of supporting elements, including an M102 howitzer-equipped artillery battalion, and a psychological operations unit.

The RJSF has a range of roles, including the following:

- To form part of the strategic reserve for Jordan's armed forces during major deployments.
- To carry out anti-insurgency and unconventional warfare operations.
- To undertake internal security and anti-terrorism missions.
- To combat attempts to sabotage Jordan's installations and to defend such sites abroad.
- To provide special operations training to other units of the armed forces.

- To undertake hostage rescue operations and similar missions both within Jordan and abroad.
- To maintain border security in support of the peace process with Israel.

The Royal Guards Brigade is based in Amman and charged with guarding King Abdullah II, the royal family, and key installations. Some Royal Guards units protect the Port of Aqabah in a coastal defense role. The members of the Royal Guards Brigade are normally of Bedouin background, and their role is to guard the king, the royal family, the various royal palaces and key installations. There is also a special bodyguard unit assigned to King Abdullah II, called the Security and Protection Unit of the Supreme Commander. The unit is commanded by the king's half-brother, Prince Ali.

Order of Battle

Unit/Formation	Location
Northern Command	Irbid
2 × mechanized brigade	
1 × infantry brigade	
1 × artillery brigade	
1 × air defense brigade	
Central Command	Amman
1 × mechanized brigade	
1 × infantry brigade	
1 × artillery brigade	
1 × air defense brigade	
Eastern Command	Zarqa
2 × mechanized brigades	
1 × infantry brigade	
1 × artillery brigade	

Unit/Formation	Location
Southern Command	Aqab
1 × armored brigade	
1 × infantry brigade	
Strategic Reserve	
Royal Armored Division	
3 × armored brigade	
1 × artillery brigade	
1 × air defense brigade	
Special Operations Command	
1 × airborne brigade consisting of:	
81 Airborne Bn	
91 Airborne Bn	
1 × AB artillery Bn	
1 × Psychological Operations Unit	
71 SF Bn	
101 SF Bn	
Royal Guards Brigade (under Operational Control of SOCOM)	Amman

Women's Corps

Jordan has recruited women into the armed services. There is a Royal Jordanian Arab Army Women's Corps headed by Her Royal Highness Colonel Aisha bint Al-Hussein, daughter of the late King Hussein. Princess Aisha is a graduate of the British Army's Royal Military Academy, Sandhurst and has visited Israel to observe the operations of the Israel Defense Force Women's Corps.

Training

Recruits are taught basic military skills and discipline in a 19-week course. Advanced technical proficiency training is conduct-

ed after the recruit joins his permanent unit. Non-commissioned officer (NCO) courses and more specialized training are available to those who qualify for promotion.

Officer candidates are trained at the Mutah Military University, south of Amman. A cadet who completes the 4-year program is commissioned as a second lieutenant. Senior captains, majors, and lieutenant colonels attend the Jordanian Command and Staff College to earn a BA in military science. Senior colonels and generals attend the War College, where a master's degree is offered. Jordanian officers and NCOs are often sent to study abroad in the United States and Great Britain.

Trained to a high standard, Jordan military personnel and their training regimen have an excellent reputation throughout the Arab community. Many Arab countries send their Special Forces and counterterrorist personnel to Jordan's schools for training.

Many Jordanian officers study abroad at the U.S. Army General Staff College, or at the British Army Staff College, and many Jordanian cadets have graduated from the UK's Royal Military Academy, Sandhurst. Members of the Jordanian Royal Family have a tradition of attending Sandhurst. The late King Hussein graduated from the college in 1952. He was followed by his son, the present ruler, King Abdullah II in 1981; his daughter Aisha, now head of the Royal Jordanian Army Women's Corps, in 1987; his son Prince Ali in 1994; Crown Prince Hamzeh in 1999, and Prince Hashem, stepbrother of King Abdullah II, in 2000. In addition, both officers and NCOs attend specialized courses abroad. The British Government arranges for senior Jordanian officers to attend the Royal College for Defense Studies in the UK.

British and Jordanian units regularly carry out joint training exercises in Jordan. The kingdom provides British Army units (based

in Cyprus) with the opportunity to train in a desert environment alongside Jordanian units. It has become a regular practice for two British Army infantry battalions based in Cyprus to exercise in Jordan yearly between August and October.

Bilateral military relations between France and Jordan were strengthened after a visit to the kingdom by Defense Minister Michele Alliot-Marie in November 2006. Alliot-Marie announced that training programs, joint exercises and the exchange of information and analysis will be developed between the two countries in the future.

A U.S.-Jordanian Joint Military Commission has functioned since 1974. Combined training exercises by U.S. and Jordanian military units continue to take place in Jordan, at least on an annual basis. The United States has provided significant assistance towards the training of Jordanian military personnel. Under the U.S. International Military Education and Training Program (IMET), US$3 million was allotted to the training program for Jordan in 2006.

Jordanian personnel are trained to a very high standard, and Jordan's military training has a very high reputation in the Arab community, to the extent that many Arab states, as well as states beyond the Arab community, have sent personnel to be trained at Jordan's military schools. In recent years, personnel from the following countries have attended military training in Jordan:

- Bahrain
- Egypt
- France
- Lebanon
- Oman
- Qatar
- Pakistan
- South Korea
- Tunisia
- United Arab Emirates

At the tactical level, unit training and exercise integration are reportedly good up to the brigade level. However, shortfalls in spare

parts and ammunition, and limited unit funding have restricted training at higher echelons. In a crisis situation, the RJLF may encounter difficulty executing large combat operations.

Doctrine

Despite years of U.S. training, British military concepts influence the RJLF. British forms of organization are seen in administration, logistics, and technical units.

Equipment

The RJLF is equipped with a mix of older U.S. and British armored vehicles (see tables). Older tanks, such as the Tariq (upgraded UK Centurion) will probably be phased out with the deliveries of the Challenger I tanks from the British Army. Individual weapons include U.S. M16s, M-4s, their Taiwanese-manufactured equivalents, and Browning HP pistols. Machine guns include the M-60 and FN M.A.G. Units subordinate to the PSD carry Beretta 5.56-mm rifles.

Note: The following list details only the major military end items and does not indicate operational status. The total numbers listed for each equipment type do not represent the sum of the items listed; instead, they provide a frame of reference for total potential equipment capability.

Main Battle Tanks

Quantity	Type
350	M-60A1/A3
288	Challenger 1 (Al Hussein)
274	Khalid (upgraded UK Chieftain)
(probably surplus)	Tariq (upgraded UK Centurion)
867	Total

Light Tracked Armor Fighting Vehicles

Quantity	Type
61	YPR 765
1,200	M113A1/A2 APC
35	BMP-2 IFV
19	FV 101, Scorpion Recon Vehicle

Light Wheeled Armored Fighting Vehicles

Quantity	Type
24	EE-11 Urutu 6 x 6 APC
unk	Marauder 4 x 4 APC/Mine Resistant Vehicle (MRV)
unk	Matador 4 x 4 Armored Combat Vehicle/Mine Resistant Ambush Protected (MRAP)
unk	NIMR/Tiger 4 x 4 High Mobility Tactical Vehicle
341	Ratel 20

Artillery (Cannons/Mortars)

Quantity	Type
30	105-mm M52 SP howitzer
18	105-mm MOBAT truck-mounted howitzer
234	155-mm M109A1/A2 SP howitzer
20	155-mm M44 SP howitzer
148	203-mm M110A2 SP howitzer
50	105-mm M102 towed howitzer
10	155-mm M59/M1 towed gun
30	155-mm M114A1 towed howitzer
450	81-mm mortar (estimate)
300	120-mm mortar
50	107-mm M30 mortar

Antitank (Missiles/Rocket Launchers)

Quantity	Type
110	Javelin
330	BGM-71 TOW ATGM
310	M-47 Dragon ATGM
2,300	122-mm APILAS RPG
2,500	94-mm LAW 80 ATRL

Tactical Air Defense (SAMs/AA)

Quantity	Type
218	40-mm M42 Twin SP
45	23-mm ZSU-23-4 Shilka SP
100	20-mm M163 Vulcan SP
250	FIM-43A Redeye (obsolete)
50	SA-8 Antey 9K33
300	SA-14 Strela-3
240	SA-16 Igla-1
80	I-Hawk Long range SAM

Aviation

Quantity	Type
28	AH-1F Huey Cobra Attack
18	UH-1 Light Lift
13	EC 135-EC 635 T1 Light lift
10	AS-332M Super Puma Medium lift
3	AS 350B3 Ecureuil Utility
9	MD 500D Trainer
8	UH-60L Black Hawk
3	S-70A-11 Black Hawk
6	Bell 212 Utility

Air Force

Mission

The primary task of the Royal Jordanian Air Force (RJAF) is to defend airspace of the Kingdom of Jordan against any potential air threats. Secondary tasks are to support land forces in any armed conflict with any external power, to support security forces in their tasks of maintaining internal security, anti-smuggling operations, and broader security operations.

Enlisted						
	Jundi	**Wakil Arif**	**Arif**	**Raqib**	**Raqib Awwal**	**Wakil**
U.S. Equivalent	***Airman Basic***	***Airman 1st Class***	***Sergeant***	***Staff Sergeant***	***Master Sergeant***	***Warrant Officer***
Officers						
	Murashah	**Mulazim**	**Mulazim Awwal**	**Naqib**	**Raid**	**Muqaddam**
U.S. Equivalent	***Officer Cadet***	***2nd Lieutenant***	***1st Lieutenant***	***Captain***	***Major***	***Lieutenant Colonel***
Officers						
	Aqid	**Amid**	**Liwa**	**Fariq**	**Fariq Awwal**	**Mushir**
U.S. Equivalent	***Colonel***	***Brigadier General***	***Major General***	***Lieutenant General***	***General***	***Field Marshal***

Air Force Ranks

Organization

The RJAF conducts all military air operations, to include ground-based air defense and close air support (CAS) to maritime and ground units. This force is composed of almost 13,000 active duty personnel, 4,000 of which are assigned to Jordan's air defense units. The RJAF enjoys prestige within the armed forces and is granted a great deal of autonomy in its operation. The RJAF controls Jordan's airspace and, in time of war, intercepts and repels enemy aircraft, as well as provides CAS to ground units.

Ten air force squadrons are subordinate to the Operations Command, and four squadrons are training units. The RJAF has four fixed-wing fighter/ground attack squadrons and two transport squadrons, one of which handles VIP travel. The remaining four squadrons are rotary-wing – two combat, two transport. The four training squadrons train pilots on fixed-wing and helo maneuvers, as well as weapons tactics. The fighter and transport squadrons are deployed to King Abdullah Airbase (Marka International), King Faisal, and Prince Hassan. The training squadrons are based at the King Hussein Air College in Mafraq. Two air defense brigades also belong to the RJAF. They consist of 14 I-HAWK missile batteries in fixed emplacements.

Like the army, the RJAF suffers from a lack of funding, resulting in a shortage of spare parts and munitions; therefore, it is not clear how long the air force could sustain air operations in a crisis situation. Although effective in an attack role, without modern electronic warfare equipment, the Jordanians are unable to compete with Israeli capabilities. In order to preserve scarce resources, training opportunities and flight hours have been reduced, further degrading the RJAF's combat readiness.

Training

RJAF cadets are trained at the Royal Jordanian Air Academy at King Abdullah Airbase. After completion of a program of academic and military instruction, the cadets are commissioned as second lieutenants. Success in initial flight training determines which officers qualify to become jet pilots. Jordanian pilots receive excellent training and are highly regarded within the region. Many attend flight-training programs in the United States and United Kingdom. Given this training, Jordan's air tactics and operations are heavily influenced by U.S. aviation doctrine and concepts.

Equipment

With aid from the United States, Jordan is modernizing its aircraft inventory. By March 1998, 12 refurbished F-16As and four F-16Bs were delivered to Jordan as part of a US$300 million military aid package from the United States. The agreement included logistical support, training, and spare parts. Eighteen surplus U.S. UH-1 Hueys were also delivered to the RJAF in October 1996. These assets will likely provide air assault capability to the Jordanian SOCOM units. Additional aircraft acquisitions, including airborne surveillance platforms, are under consideration. However, budgetary constraints will hamper rapid modernization.

Fixed-Wing

Fighter/Air Defense

Quantity	Type
12	F-16A
44	F-5E Tiger II
13	Mirage F1BJ/CJ
16	Mirage F1EJ

Transport/Communications

Quantity	Type
5	C-130 Hercules
1	L-1011 TriStar 500 (Royal Flight)
2	C-212-100 Aviocar
2	G-1159A Gulfstream II
1	BN-2A Islander
1	DH-104 Dover SRS 7

Trainers

Quantity	Type
4	F-16B
13	F-5F Tiger II
2	Mirage FIBJ
15	Bulldog 125/125A
12	C-101CC Aviojet

Helicopters

Quantity	Type
24	AH-1F Cobra attack helos
36	UH-1H Iroquois utility helos
5	S-70A-11 Black Hawk (US UH-60A)
10	AS 332M1 Super Puma
7	MD 500D

Air Defense

Quantity	Type
80	I-HAWK SAM systems

Navy

Organization

In 1991, the Royal Jordanian Naval Force (RJNF) was formed out of the Jordanian Coastal Guard. The RJNF has fewer than 600 active duty personnel, all of whom serve voluntarily. The RJNF is subordinate to the Royal Arab Army. It operates the country's 12 combat patrol craft and is assessed capable of guarding the 25 kilometer southern coastline. Jordan's single naval base is located at the Port of Aqabah on the Red Sea. The primary missions of the RJNF are controlling maritime traffic in the port and patrolling the Dead Sea.

Training

Like the Army cadets, Jordanian naval officers receive basic military training at the Mutah Military University.

Equipment

Surface Ships:

Quantity	Type
3	AL HUSSEIN (HAWK) PB
Unk	AL HUSSEIN
Unk	AL HASSAN

Coastal Defense

Both the Royal Jordanian Navy and Royal Jordanian Army units deployed to the greater Aqabah area are responsible for the defense of Jordan's coastline, but Jordan probably does not maintain units dedicated solely to coastal defense.

Paramilitary Forces

People's Army

The People's Army (PA) or Civil Militia was founded in 1985 and is subordinate to the Armed Forces General Staff. The PA is organized into five military regions and is open to men between the ages of 16 and 65 and women aged 16 to 45 who have completed a basic military training curriculum. During wartime, it takes over the internal security mission from the regular army and guards key installations and LOCs. While the peacetime strength is estimated to be 35,000 personnel, its ranks could increase to over 200,000 in time of war.

National Police

Public Security Directorate

The 25,000-man PSD responsible for law enforcement and internal security is subordinate to the Ministry of the Interior during peacetime and under the Jordanian Armed Forces in time of war or crisis. The PSD is responsible for maintenance of public order and peacetime internal security. Its main component is the Public Security Force, which includes the National Police, the Desert Patrol, and the Security Forces Brigade. The National Police conduct conventional public security missions, including policing the Port of Aqabah. The Desert Patrol operates a small number of Scorpion light tanks, EE-11 Urutu, and FV603 Saracen armored personnel carriers in the desert near the borders with Syria and Iraq.

The Security Forces Brigade is a lightly armed gendarmerie that deploys outside major metropolitan areas when civil unrest arises. These units are also responsible for rear area defense during armed conflict. Police weapons, equipment, and vehicles vary depending on location: in urban areas, they are well equipped

Enlisted					
	Arif	**Raqib**	**Wakil**	**Wakil**	
U.S. Equivalent	***Corporal***	***Sergeant***	***Warrant Officer***	***Chief Warrant Officer***	
Officers					
	Mulazim	**Mulazim Awwal**	**Naqib**	**Raid**	**Muqaddam**
U.S. Equivalent	***2nd Lieutenant***	***1st Lieutenant***	***Captain***	***Major***	***Lieutenant Colonel***
Officers					
	Aqid	**Amid**	**Liwa**	**Fariq**	**Fariq Awwal**
U.S. Equivalent	***Colonel***	***Brigadier General***	***Major General***	***Lieutenant General***	***General***

and can have specialized crowd and riot control gear and armored vehicles; in desert areas, they may patrol on camels. There is also a Civil Defense Brigade, which includes Jordan's firefighters and ambulance personnel. The PSD's Special Police Force is responsible for countering terrorism.

The PSD is equipped with some Scorpion light tanks, 24 EE-11 Urutu APCs, and about 30 Saracen APCs. The police also operate two Bremse inshore patrol craft. In late 2002, the PSD announced a requirement for 40 AB2 Al-Jawad armored troop carriers, in

addition to the 20 already orders. The vehicles are produced by Jordan's King Abdullah II Design and Development Bureau in collaboration with the UK concern, Jankel Armouring. Additionally, the PSD has an air wing based on Marka Airbase, carrying out security and paramilitary duties and deploying three BO 105 CBS helicopters, normally manned by air force personnel.

APPENDIX A:
EQUIPMENT RECOGNITION

INFANTRY WEAPONS

0.38-in Revolver Smith & Wesson Model 10, Model 64

Caliber	9.07 x 29.0 mm
Effective Range	50 m
Method of Operation	Single or double action
Feed Device	6-round cylinder
Weight Unloaded	1.02 kg
Overall Length	225 mm (101-mm barrel)

NOTE: available with one of three barrel sizes: 50-mm (2-in), 76-mm (3-in), or 101-mm (4-in). Model 64 shown.

0.45-in Pistol Springfield M1911A1

Cartridges	0.45 cal. ACP (11.4 x 23 mm)
Method of Operation	Short-recoil, semiautomatic
Feed Device	7-round box magazine
Weight, Empty	1.13 kg
Overall Length	219 mm

NOTE: some versions have been chambered for 9- x 19-mm Parabellum or .38-cal Super (9- x 23-mm) cartridges.

9-mm Browning High-Power Model FN35

Cartridge	9- x 19-mm Parabellum
Effective Range	50 m
Method of Operation	Recoil, self-loading, semiautomatic
Feed Device	13-round box magazine
Weight Loaded	0.898 kg
Overall Length	203.5 mm

5.56-mm Assault Rifle Beretta Model 70/90 (AR70/90)

Cartridge	5.56 x 45.0 mm
Cyclic Rate of Fire	650 to 800 rounds per minute
Method of Operation	Gas blowback, selective fire (automatic, semi-automatic, 3-round burst)
Feed Device	30-round detachable box magazine
Weight Unloaded	4.05 kg
Overall Length	998 mm

5.56-mm Assault Rifle M16A2

Cartridge	5.56 x 45 mm
Range	
Maximum	3,600 m
Effective	800 m
Rate of Fire	
Cyclic	700 rounds per minute
Automatic	60 to 80 rounds per minute
Single-Shot	40 to 50 rounds per minute
Operation	Gas, direct action, selective fire (semiautomatic, 3-round burst)
Feed Device	20- or 30-round detachable box magazine
Weight Unloaded	3.40 kg
Length	1,005 mm

7.62-mm Assault Rifle AK-47

Cartridge	7.62 x 39 mm
Effective Range	300 m
Maximum Range	2,850 m
Rates of Fire	
Cyclic	600 rounds per minute
Single-Shot	40 rounds per minute
Operation	Gas, semiautomatic fire
Feed Device	30-round box magazine
Weight Unloaded	4.3 kg
Length	870.0 mm

7.62-mm Rifle Model FN FAL

Caliber	7.62 x 51 mm
Effective Range	600 m
Maximum Range	4,190 m
Cyclic Rate of Fire	650 rounds per minute
Operation	Gas, selective fire
Feed Device	20-round box magazine
Weight Unloaded	4.3 kg
Length Overall	1,100 mm

7.62-mm Sniper Rifle SAN Swiss Arms SSG 2000

Caliber	7.62 x 51 mm (0.308 Winchester); also available chambered for 0.300 Wetherby Magnum, 5.56 x 45 mm, and 7.5 x 55 mm cartridges
Effective Range	800 m
Operation	Bolt action
Feed Device	4-round detachable box magazine
Sight	Schmidt & Bender 1.5 – 6 x 42 or Zeiss Diatal ZA 8 x 56T telescope
Weight Loaded	6.6 kg, with magazine and sight
Overall Length	1.21 m

7.62-mm Sniper Rifle Steyr SSG 69

Caliber	7.62 x 51 mm
Effective Range	800 m
Operation	Rotating bolt action
Feed Device	5-round integral rotary magazine
Weight Unloaded	4 kg
Overall Length	1.14 m

0.50-in (12.7-mm) Antimateriel Rifle Barrett Model 82A1

Caliber	12.7 x 99.0 mm
Maximum Range	2,000 m
Effective Range	1,500 m
Operation	Short recoil, semiautomatic fire
Feed Device	10-round box magazine
Weight Loaded	13.6 kg
Overall Length	1,448.0 mm

4.6-mm MP-7 PDW

Caliber	4.6 x 30-mm
Maximum Range	2,000 m
Effective Range	500 m (protected target/200 m (unprotected target)
Operation	Short-stroke gas system, selective-fire
Feed Device	Detachable double-column steel box magazine
Weight Loaded	2 kg
Overall Length	590 mm

9-mm Submachinegun MP5K-series

Cartridge	9 x 19 mm parabellum
Cyclic Rate of Fire	900 rounds per minute
Operation	Delayed blowback, selective fire
Feed Device	15- or 30-round detachable double-column box magazine
Weight Loaded	2.53 kg
Overall Length x Width x Height	325 x 50 x 210 mm

NOTE: The MP5k-series are extra-short, stockless versions of the standard MP5 and are meant for carriage inside clothing or in limited spaces. A folding butt-stock, however, is available (as shown above).

9-mm Submachinegun Sterling-Patchett L34A1

Cartridge	9 x 19 mm Parabellum
Effective Range	
Semiautomatic Fire	185 m
Automatic Fire	Approximately 90 m
Cyclic Rate of Fire	550 rounds/minute
Method of Operation	Blowback, selective fire
Feed Device	34-round box magazine
Weight Unloaded	3.6 kg
Length Overall	
Butt Extended	864 mm
Butt Folded	660 mm

NOTE: The L34A1 is the suppressed version of the L2A3. Suppression is achieved by drilling 72 holes through the barrel to release propellant gas, thereby slowing muzzle velocity to subsonic.

7.62-mm General Purpose Machinegun HK 21

Cartridge	7.62 x 51 mm NATO (can be converted to fire 5.56 x 45-mm-long rounds)
Effective Range	650 m
Cyclic Rate of Fire	650 rounds per minute
Method of Operation	Delayed blowback, automatic
Feed Device	100-round disintegrating metallic-link belt
Weight Empty	8.31 kg
Overall Length	1,030 mm

NOTE: the 7.62-mm light machinegun HK 11 is based on the HK 21. Both machineguns can accept a 20-round box magazine; however, the HK 21 requires an adapter.

7.62-mm General Purpose Machinegun FN MAG

Cartridge	7.62- x 51-mm NATO
Effective Range	1,500 m
Cyclic Rate of Fire	650 to 1,000 rounds per minute
Operation	Gas, automatic
Feed Device	Disintegrating metal link belt
Weight Loaded	13.92 kg (with butt stock and bipod)
Overall Length	1,260 mm

NOTE: The FN-MAG is also known in U.S. nomenclature as the M-240G general purpose machinegun.

7.62-mm General Purpose Machinegun M60

Caliber	7.62- x 51-mm NATO
Range	
Maximum	3,750 m
Effective Range With Bipod	1,100 m
Effective Range With Tripod	1,800 m
Rate of Fire, per	
Cyclic	500 to 650 rounds per minute
Practical	200 rounds per minute
Operation	Gas, automatic
Feed Device	Disintegrating link belt
Weight Loaded	11.1 kg
Overall Length	1.26 m

0.50-in Heavy Machinegun Browning M2HB

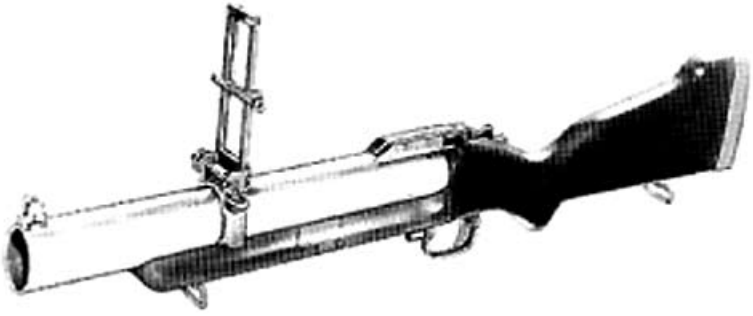
Cartridge	0.50-in Browning (12.7 x 99 mm)
Range	
Maximum	6,765 m
Effective	Over 1,500 m
Cyclic Rate of Fire	450 to 600 rounds per minute
Operation	Short recoil, selective fire
Feed Device	100-round disintegrating-link belt
Weight Loaded	38 kg
Overall Length	1.656 m

40-mm M203 Grenade Launcher

Cartridge	40 x 46 mm
Operation	Breech loaded, sliding barrel
Effective Range	Point target 150 m; area target 350 m
Weight Loaded	1.63 kg
Overall Length	380 mm

NOTE: The M203 grenade launcher was originally designed for attachment to the M16-series assault rifles. The M203 can be used attached to an M16 assault rifle or M4 carbine, or as a standalone weapon attached to a modified stock.

40-mm Grenade Launcher M79



Range	
Effective, Point Target	150 m
Effective, Area Target	350 m
Maximum	400 m
Operation	Manual, break-open, single shot
Sights	Front, blade; rear, folding leaf, adjustable
Weight Unloaded	2.72 kg
Overall Length	737 mm

ARMOR

Main Battle Tank Al Hussein (U.K. Challenger 1)

Crew	4
Armament	
Main	120-mm rifled gun
Coaxial	7.62-mm machinegun
Turret, Exposed	7.62-mm machinegun
Other	
Maximum Speed	56 km/h
Road Range	450 km
Gradient/Side Slope	58/30 percent
Vertical Step	0.9 m
Trench	2.8 m
Fording	1.07 m
Combat Weight	62,000 kg
Overall Length x Width x Height	11.6 x 3.5 x 2.8 m
Fuel Capacity	1,797 liters

Main Battle Tank Khalid (U.K. Chieftain Mk 3)

Crew	4
Armament	
Main	120-mm rifled gun
Coaxial	7.62-mm machinegun
Ranging	12.7-mm machinegun
Turret, Exposed	7.62-mm machinegun
Maximum Speed	48 km/h
Road Range	500 km
Gradient/Side Slope	60/30 percent
Vertical Step	0.91 m
Trench	3.12 m
Fording	1.1 m
Combat Weight	54,100 kg
Overall Length x Width x Height	10.8 x 3.6 x 2.7 m (gun forward)
Fuel Capacity	950 liters

Main Battle Tank Tariq (U.K. Centurion Mk 13)

Crew	4
Armament	
Main	105-mm rifled gun
Coaxial	7.62-mm machinegun
Ranging	12.7-mm machinegun
Turret, Exposed	7.62-mm machinegun
Maximum Speed	35 km/h
Road Range	190 km
Gradient/Side Slope	60/30 percent
Vertical Step	0.914 m
Trench	3.35 m
Fording	1.14 m, 2.74 m with preparation
Combat Weight	51,800 kg
Overall Length x Width x Height	9.9 x 3.4 x 3.0 m (gun forward)
Fuel Capacity	1,037 liters

Main Battle Tank M60A1, M60A3

Crew	4
Armament	
Main	105-mm rifled cannon
Coaxial	7.62-mm machinegun
Commander's Cupola	12.7-mm machinegun
Other	Tank-fired ATGM
Maximum Speed	48 km/h
Road Range	480 km
Gradient/Side Slope	60/30 percent
Vertical Step	0.91 m
Trench	2.59 m
Fording	1.22 m (2.4 m with preparation)
Combat Weight	52,600 kg
Overall Length x Width x Height	9.4 x 3.6 x 3.3 m
Fuel Capacity	1,420 liters of diesel

Main Battle Tank M48A5

Crew	4
Armament	
Main	105-mm rifled gun
Coaxial	7.62-mm machinegun
Top of Turret	7.62- or 12.7-mm machinegun
Maximum Speed	48 km/h
Road Range	500 km
Gradient/Side Slope	60/30 percent
Vertical Step	0.9 m
Trench	2.6 m
Fording	1.2 m
Combat Weight	49,000 kg
Length x Width x Height	9.3 x 3.6 x 3.1 m
Fuel Capacity	1,420 liters

NOTE: Optional armament includes a 40-mm automatic grenade launcher.

Reconnaissance Vehicle FV 101Scorpion

Crew	3
Armament	
Main	76-mm rifled gun
Coaxial	7.62-mm machinegun
Other	76-mm rounds may include HESH
Maximum Speed	80 km/h
Road Range	Up to 866 km
Gradient/Side Slope	60/45 percent
Vertical Step	0.5 m
Trench	2.06 m
Fording	1.07 m
Combat Weight	8,070 kg
Overall Length x Width x Height	4.4 x 2.2 x 2.1 m (height to top of turret)
Fuel Capacity	423 liters; limited multifuel capacity

NOTE: The Scorpion is air-transportable by C-130.

Amphibious Infantry Fighting Vehicle BMP-2

Crew; **Passengers**	3; 7
Armament	30-mm rifled cannon; coaxial 7.62-mm machinegun; AT-5 or AT-14 ATGMs
Maximum Road Speed	65 km/h (on water 7 km/h)
Road Range	600 km
Fording	Amphibious
Gradient/Side Slope	75/12 percent
Vertical Step	0.8 m
Trench	2.5 m
Fording	Amphibious (track propulsion)
Combat Weight	13,500 kg
Length x Width x Height	6.7 x 3.2 x 2.9 m
Fuel Capacity	460 liters of diesel

NOTE: Shown with 2x AT-14 launchers mounted on each side of turret.

Improved TOW Vehicle M901, M901A1

Type	Self-propelled TOW antitank missile system
Crew	5
Armament	
Main	2x TOW ATGM launch tubes
Auxiliary	12.7-mm heavy machinegun
Maximum Speed	63 km/h (5.8 km/h on water)
Road Range	497 km
Gradient/Side Slope	60/30 percent
Vertical Obstacle	0.61 m
Trench	1.68 m
Fording	Amphibious
Combat Weight	11,700 kg
Length x Width x Height	4.9 x 2.7 x 2.5 m

NOTE: The M901 is based on an M113 chassis.

Armored Infantry Fighting Vehicle YPR 765

Crew; Passengers	3; 7
Armament	
Main	25-mm rifled automatic cannon
Coaxial	7.62-mm machinegun
Maximum Speed	61 km/h (6.3 km/h on water)
Road Range	490 km
Gradient/Side Slope	60/30 percent
Vertical Obstacle	0.635 m
Trench	1.625 m
Fording	Amphibious with preparation
Combat Weight	13,600 kg
Length x Width x Height	5.3 x 2.8 x 2.8 m
Fuel Capacity	416 liters of diesel

NOTE: The YPR 765 was developed from the M113 chassis.

Armored Personnel Carrier M113A2 Mk1-J

Type	Armored personnel carrier
Crew; Passengers	2; 11
Armament	Cupola-mounted 12.7-mm heavy machinegun with gunner's shield
Maximum Speed	61 km/h (6 km/h on water)
Road Range	480 km
Gradient	60 percent
Vertical Obstacle	0.61 m
Trench	1.68 m
Fording	Amphibious
Combat Weight	11,250 kg
Length x Width x Height	4.86 x 2.69 x 2.52 m
Fuel Capacity	360 liters of diesel

NOTE: The upgrades to Jordan's M113 APCs may have improved mobility characteristics beyond those shown above.

Infantry Fighting Vehicle Ratel Series

Crew; Passengers	4; 7
Armament	
Main	90-mm semiautomatic cannon or see below
Coaxial	7.62-mm machinegun
Other	One to two 7.62-mm machineguns mounted at hull rear and possibly on top of turret
Maximum Speed	105 km/h
Range	1,000 km
Gradient/Side Slope	60/30 percent
Vertical Step	0.6 m
Trench	1.15 m
Fording	1.2 m
Combat Weight	18,500 kg
Overall Length x Width x Height	7.2 x 2.5 x 2.9 m
Fuel Capacity	430 liters of diesel

NOTE: Variants include the Ratel Mk III Fire Support Vehicle, armed with a 90-mm semiautomatic cannon in place of the main gun (shown above); Ratel 20 IFV, armed with a 20-mm belt-fed cannon; Ratel 60 IFV, armed with a 60-mm mortar; Ratel 81-mm Mortar Carrier; Ratel 120-mm Mortar Carrier; Ratel Command Vehicle, armed with a 12.7-mm machine gun; Ratel Swift ZT-3 ATGM Carrier, armed with a bank of three ZT-3 ATGWs; Ratel Armored Repair Vehicle, with a fixed lifting jib, spare parts, and repair equipment.

EE-11 Urutu Armored Personnel Carrier

Crew; Passengers	3; 10
Armament	12.7-mm machinegun w/1,000 rounds
Maximum Speed	100 km/h
Road Range	850 km/h
Gradient/Side Slope	60/30 percent
Vertical Obstacle	0.6 m
Fording	Amphibious
Combat Weight	14,000 kg
Length x Width x Height	6.1 x 2.65 x 2.13 m
Fuel Capacity	380 liters of Diesel

NOTE: The EE-11 can also be fitted with a 7.62-mm machinegun and 60-mm mortar, 20-mm cannon, 25-mm cannon, or 90-mm gun. When used for cargo, the EE-11 can carry a 2,000-kg payload.

High Mobility Multipurpose Wheeled Vehicle (HMMWV) M998A2 Series and Derivatives

Seating	2 or 4
Armament	
Maximum Road Speed	113 km/h
Range	443 km
Gradient/Side Slope	60/40 percent
Approach/Departure Angle	63/33 degrees
Fording	0.76 m (1.52 m with preparation)
Weights	
Curb Weight	2,544 kg
Gross Vehicle Weight	3,574 kg
Max. Internal Load	1,077 kg
Max. Towed Load	1,542 kg
Overall Length x Width	4.8 x 2.2 x 1.9 m (without weapons)
Fuel Capacity	94 liters of diesel

NOTE: Specifications are for base model. Models/variants with expanded capacity, improved power train, and added/incorporated armor protection available. Israeli HMMWV with add-on Plasan Sasa passive armor system shown above.

Black Iris, Desert Iris

Type	4x2 (Blaci Iris) or 4x4 (Desert Iris) utility truck
Mission	Reconnaissance, transport
Seating	Up to 4
Armament	Options include 7.62- or 12.7-mm machinegun, 106-mm recoilless rifle, or TOW system
Nominal Payload	500 kg
Maximum Speed	120 km/h
Road Range	
Ground Clearance	0.35 m
Gradient/Side Slope	60/40 percent
Approach/Departure Angle	50.0/40.0 degrees
Curb Weight	
Black Iris	1,238 kg
Desert Iris	1,650 kg
Length x Width x Height	
Black Iris	4.1 x 1.9 x 1.5 m
Desert Iris	4.25 x 1.9 x 1.75 m
Fuel Type	Diesel

NOTE: Black Iris shown above.

ARTILLERY

203-mm Self-Propelled Howitzer M110A2

Crew; Section Size	9; 13
Range	
Conventional	17,200 m
Extended	30,000 m
Rates of Fire	
Burst	2 rounds per minute
Normal	1 round in 2 minutes
Sustained	1 round in 2 minutes
Elevation Limits	–2 to +65 degrees
Traverse Limits	30 degrees left or right
Maximum Road Speed	54 km/h
Cruising Range	523 km
Grade/Side Slope	60 percent/13.5 degrees
Vertical Step	1.07 m
Trench	1.9 m
Fording Depth	1.066 m
Travel Weight	28,350 kg
Travel Length x Width x Height	10.7 x 3.1 x 3.1 m
Emplacement/Displacement Time	8.5/2 minutes

155-mm Self-Propelled Howitzer M109A2

Crew; Section Size	5; 8
Range, Indirect Fire	
Conventional	18,100 m
Extended	23,500 m
Rate of Fire	
Normal	2 rounds per minute
Sustained	1 round per minute
Elevation Limits	–3.0 to +75.0 degrees
Traverse Limits	360 degrees
Maximum Road Speed	56 km/h
Cruising Range	349 km
Gradient	60 percent
Vertical Step	0.53 m
Trench	1.83 m
Fording Depth	1.14 m
Travel Weight	25,000 kg
Travel Length x Width x Height	9.13 x 3.15 x 3.24 m
Emplacement/Displacement Time	1 minute

155-mm Self-Propelled Howitzer M44/M44A1

Crew	5
Gun Caliber	155.0-mm x 23.0
Ammunition Types	HE-frag, smoke, illumination,
Range	
Conventional	14,600 m
Direct Fire	2,000 m
Indirect Fire	100 m
Rate of Fire	
Burst	4 rounds/minute for 3 minutes
Normal	2 rounds/minute
Sustained	1 round/minute
Traverse Limits	80 degrees
Elevation Limits	5.0 to 65.0 degrees
Cruise Range	122 km
Maximum Cruise Speed	56 km/h
Gradient	60 percent
Vertical Step	0.76 m
Trench	1.83 m
Fording	1.06 m
Travel Weight	28,349 kg
Hull Length x Width x Height	6.28 x 3.24 x 3.23 m

NOTE: An obsolescent system, the M44 is a limited-traverse, open-mount system with ballistics matched to the M114. The M44A1 is a modified version with a fuel-injected engine.

105-mm Truck-mounted Howitzer "Mobile Artillery" (MOBAT)

Crew; Section Size	3; 5
Gun Size	105 mm x 33
Ammunition	HE-frag., HE-ER, HE-RAP
Range, Indirect Fire	
Conventional	7,300 to 14,400 m
Extended	Up to 19,600 m
Rate of Fire	
Burst	12 rounds per minute
Sustained	5 rounds per minute
Emplacement/Displacement Time	90/30 seconds
Elevation Limits	–5 to 70.9 degrees
Traverse Limits	
Manual	191.2 degrees left or right
Electric Motor	45.0 degrees left or right
Travel Weight	10,800 kg
Travel Length x Width x Height	7.2 x 2.5 x 3.3 m
Platform	4 x 4 truck such as Dutch DAF YA 4440 (above)

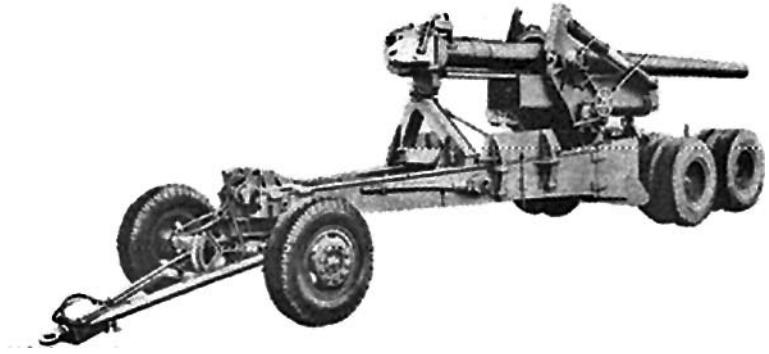
NOTE: MOBAT fires over the rear of the truck bed; can be made to resemble a standard military cargo truck with bows and a cover; is transportable by C-130. Mobility characteristics depend on the platform used.

155-mm Towed Howitzer M114A1

Crew	11
Range	14,600 m
Rate of Fire	40 rounds per hour
Combat Weight	5,760 kg
Travel Length x Width x Height	7.305 x 2.438 x 1.803 m

NOTE: The M114A1 is almost identical to the M114 shown.

155-mm Towed Gun M59/M1



Gun Size	155.0 mm x 45.0
Ammunition	HE-frag. point-detonating
Range	
Direct Fire	2,000 m
Indirect Fire	22,677 m
Rate of Fire	
Burst	2 rounds per minute
Normal	1 round per minute
Sustained	0.5 round per minute
Traverse Limits	30.0 degrees left or right
Elevation Limits	–1.0 to +63.0 degrees
Travel Weight	11,235 kg
Travel Length x Width x Height	11.2 x 2.5 x 2.7 m

NOTE: The M59 uses the same carriage as the 203-mm M115.

105-mm Towed Howitzer M102

Crew; Section Size	8; 9
Gun Size	105.0 mm x 30.0
Range	11.5 km
Rates of Fire	
Burst	10 rounds per minute for first 3 minutes
Normal	10 rounds per minute
Sustained	3 rounds per minute
Traverse Limit	360 degrees
Elevation Limits	–5.0 to +75.0 degrees
Travel Weight	1,363 kg
Travel Length x Width x Height	5.4 x 1.8 x 1.6 m
Emplacement/Displacement Time	1 to 2 minutes

NOTE: gun rotates on octagonal firing platform.

120-mm Towed Rifled Mortar MO-120-RT, RT-61

Range	1,100 to 8,350 m
Ammunition Types	HE-frag (PR 14, PR PA), IR illumination
Burst Rate of Fire	18 rounds/minute
Elevation Limits	40 to 85 degrees
Traverse Limits	7.5 degrees left or right
Travel Weight	582 kg
Travel Length x Width	2.70 x 1.55 m
Emplacement/Displacement Time	Less than 2 minutes
Prime Mover	VAB M120 (variant of VAB APC)

NOTE: a range of 13,000 m is possible with the PR PA rocket-assisted projectile.

4.2-in (107-mm) M30 Mortar

Crew	6
Range	920 to 6,600 m
Rates of Fire	
Sustained	3 rounds per minute
Normal	9 rounds per minute for 5 minutes
Burst	18 mounds per minute for 1 minute
Elevation	+40 to +65 degrees
Traverse	360 degrees
Ammunition Types	HE-frag, illumination, and smoke
Complete Weight	305 kg
Barrel Length	1.524 m
Prime Mover	2-ton truck (mortar not normally towed)

81-mm M29, M29A1 Mortar

Crew	2
Range	72 to 4,500 m
Rates of Fire	
Sustained	4 to 8 rounds/minute
Normal	15 to 25 rounds/minute
Burst	27 to 30 rounds/minute
Elevation	+45 to +85 degrees
Traverse	5.3 degrees left and right
Feed	Muzzle loaded
Empty Weight	43 kg
Barrel Length	1.295 m

ANTIARMOR

Antitank Guided Missile System BGM-71A TOW, BGM-71E TOW-2A

Type	Tube-launched optically tracked, wire-command-link-guided missile (TOW)
Crew	4
Key System Components	Tripod, traversing unit, launch tube, optical sight, missile guidance set
Range	65 to 3,750 m
Warhead	HEAT
Guidance	Wire command link
Launcher Weight	93 kg
Missile Weight	28.1 kg
Misslie Length x Max. Diameter	1,174 x 221 mm (TOW 2A)

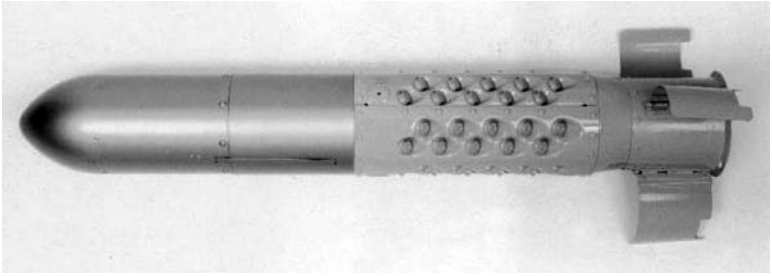
NOTE: TOW can also be mounted to vehicles and helicopters.

Disposable Light Antitank Weapon LAW 80

Crew	1
Rocket Diameter; Wingspan	94 mm
Effective Range	500 m
Warhead Type	HEAT
Guidance	Unguided
Armor Penetration	>700 mm
Travel Weight, System	10 kg
Launcher Length	
Travel Mode	1.0 m
Extended for Firing	1.4 m

NOTE: Warhead arms 10 to 20 m from launch tube. A 9-mm semiautomatic spotting rifle with five rounds ballistically matched to the rocket is built into the system. The launcher can be extended and retracted any number of times before the rocket is launched. Shown above extended for firing; note end caps on ground.

Medium Anti-armor Missile System FGM-77 (M47) Dragon II



Effective Range	65 to 1,000 m
Guidance	Command to line of sight
Overall Weight	22.1 kg (with night tracker)
Overall Length	1.15 m

112-mm Light Antitank Weapon APILAS

Type	Disposable manportable shoulder-fired recoilless weapon.
Effective Range	
Stationary Target	Over 500 m
Moving Target	Over 300 m
Type of Rounds	HEAT
Penetration	400 mm of RHA
Armor	
Reinforced Concrete	2 m
Overall Weight	9.5 kg
Overall Length	1,260 mm

Light Antitank Weapon Javelin

Type	Manportable fire-and-forget ATGM system with direct- and top-attack capability
Components	Command launch unit (CLU) with thermal imaging sight; launch tube assembly (missile in launch tube, power pack, CLU interface)
Ammunition	127-mm missile with tandem HEAT warhead
Guidance	Passive imaging infrared
Effective Range	65 to 2,500 m
Armor Penetration	Javelin can successfully engage targets with ERA
Ready-to-fire Time	30 seconds
Reload Time	20 seconds
System Weight	22.3 kg
Launch Tube Length	1.2 m

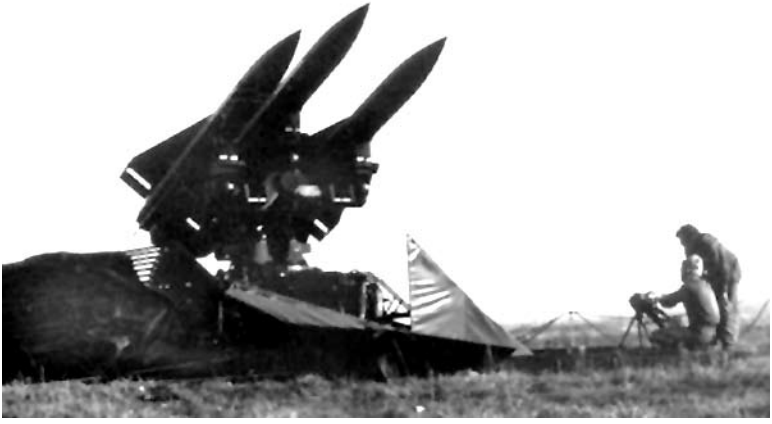
NOTE: Launch can be accomplished in confined spaces. The CLU can be used alone as a primary surveillance device. Javelin is compatible with TOW targeting system. Javelin can be used to engage helicopters and field fortifications.

105-mm Rocket-propelled Grenade Launcher Hashim (RPG-32)

Type	Manportable shoulder-fired reusable multipurpose rocket launcher
Components	Reusable launcher with optical sight; round in shipping-firing tube (attaches to rear of launcher)
Ammunition	105-mm rocket with tandem HEAT or thermobaric warhead
Range	
Effective	300 m (tandem HEAT)
Maximum	700 m (thermobaric)
Armor Penetration	800 mm ERA
System Weight	10.3 kg
System Length	1.2 m

AIR DEFENSE ARTILLERY

Low- to Medium-Altitude Surface-to-Air Missile System I-HAWK



Missile Designations	MIM-23A, MIM-23B
Effective Ranges	
High-Altitude Target	1,500 to 40,000 m (MIM-24B)
Low-Altitude Target	2,500 to 20,000 m (MIM-24B)
Effective Altitude	60 to 17,700 m
Warhead	54 or 75 kg HE blast-fragmentation
Guidance	Semi-active radar homing with proportional navigation
Fuze	Proximity and contact
Missile Launch Weight	584 kg (MIM-24A) or 627.3 kg (MIM-24B)
Missile Length x Diameter	5.08 x 0.37 m
Wingspan	1.19 m

NOTE: I-HAWK can be integrated with Patriot.

Low-altitude SAM System 9K33 Osa (SA-8 GECKO), Osa-1T

Crew	5
Missile	
Weight	127 kg
Length x Finspan x Diameter	3.15 x 0.65 x 0.21 m
Payload	Approx. 15-kg HE-frag. warhead with RF proximity and contact fuzing
Guidance	Command
Range	
Osa	1,500 to 10,000 m
Osa-1T	1,500 to 12,000 m
Target Altitude	
Osa	25 to 5,000 m
Osa-1T	15 to 8,000 m
Maximum Target Speed	
Osa	Inbound 1,800 km/h; outbound 1,080 km/h
Osa-1T	Inbound 2,520 km/h; outbound 1,260 km/h
Vertical Obstacle	0.5 m
Trench	1.2 m
Fording	Amphibious
System Combat Weight	18,800 kg
System Length x Width x Height	9.14 x 2.8 x 4.2 m (surveillance radar lowered)
Platform	BAZ-5937 6-wheel TELAR carrying 6 missiles

Low-Altitude SAM System 9K35 Strela-10 (SA-13 GOPHER)

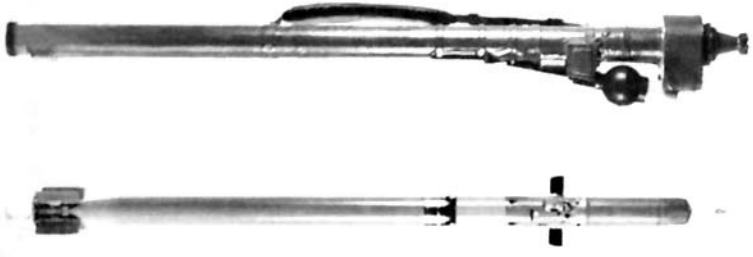
Missile	9M37M
Payload	3-kg HE-frag. warhead with impact and active xenon-lamp proximity fuzing
Guidance	Optical aiming and IR seeker
Launch Weight	39 kg
Lethal Radius	5 m
Range	500 to 5,000 m
Target Altitude	25 to 3,000 m
Maximum Target Speed	
Inbound	1,500 km/h
Outbound	1,100 km/h
Launch Container Dimensions	2.33 x 0.29 x 0.29 m
Platform	TELAR on MT-LB chassis with four ready-to-fire missiles in launch containers and four missiles for reload stored in the cargo compartment

Man-Portable Surface-to-Air Missile System FIM-43 Redeye

Type	Disposable Shoulder-fired 2-stage low-altitude air defense missile system
Basic System Components	Missile, launcher assembly, battery-coolant unit
Effective Range	500 to 5,500 m
Maximum Engagement Altitude	Ground level to 2,700 m
Warhead	2-kg HE-fragmentation
Guidance	Passive IR-homing
Fuze	Contact
Missile Weight	8.2 kg
Launcher Weight	13.1 kg
Wingspan	140 mm
Missile Length x Diameter	1,283 x 70 mm (launcher diameter is 90 mm)

NOTE: Not very effective against high-performance combat aircraft.

9M313 Igla-1 (SA-16 GIMLET) MANPADS



Type	Short-range MANPADS
Maximum Range	4,500 m (inbound target) 5,200 m (outbound)
Warhead	1-kg HE chemical-energy fragmentation with contact and grazing fuzes
Guidance	Single-channel passive infrared homing with seeker logic system
Combat Weight	16.65 kg
Length	1.7 m

NOTE: the seeker logic system shifts the missile's aiming point from the exhaust toward the central fuselage just before impact.

MANPADS Strela-3 (SA-14 GREMLIN)

Type	2-stage low-altitude manportable air-defense system (MANPADS)
Missile Payload	1.15-kg HE chemical-energy fragmentation warhead with contact fuze
Guidance	Single-channel passive infrared homing
Effective Range	
Approaching Target	Slow-moving 500 to 4,500 m; Fast-moving 500 to 2,000 m
Receding Target	Slow-moving 600 to 4,500 m; Fast-moving 600 to 4,000 m
Effective Target Altitude	
Approaching Target	Slow-moving 15 to 3,000 m; Fast-moving 15 to 1,500 m
Receding Target	Slow-moving 15 to 3,000 m; Fast-moving 15 to 1,800 m
System Weight	16 kg
Launcher Length	1.5 m

NOTE: in the photograph above, the missile points toward the back of the launcher.

40-mm Twin Self-propelled Air Defense Artillery System M42

Crew	6
Cartridge/Ammunition	40-mm x 311-mm/AP-T, HE-T, or TP-T
Range	
Tactical Antiaircraft	1,500 m
Maximum Vertical	6,500 m
Maximum Horizontal	9,500 m
Rate of Fire per Barrel	120 rounds per minute
Traverse Limits; Rate	Unlimited; 40 degrees per second
Elevation Limits; Rate	–5 to +85 degrees; 25 degrees per second
Maximum Travel Speed	72.4 km/h
Road Range	161 km
Gradient/Side Slope	60/30 percent
Vertical Step/Trench	0.7 m/1.8m
Fording	1.0 m
Combat Weight	22,452 kg
System Length x Width x Height	6.4 x 3.2 x 2.8 m (guns forward)
Fuel Capacity	530 liters
Fire Control	Lead-computing, reflex, and speed ring sights
Platform	M41 main battle tank chassis

NOTE: Most of its basic load of ammunition is carried externally

23-mm SPAAG ZSU-23-4

Crew	4
Caliber	23.0 x 152B mm
Ammunition	API-T, HEI, HEI-T
Number of Barrels	4
Ranges	
Tactical Antiaircraft	2,500 m
Maximum Vertical	5,000 m
Maximum Horizontal	7,000 m
Rate of Fire per Barrel	850 to 1,000 rounds per minute
Traverse Limits; Rate	Unlimited; 70 degrees per second
Elevation Limits; Rate	–4 to +85 degrees; 60 degrees per second
Weight	20,500 kg
Length x Width x Height	6.54 x 3.13 x 2.58 m (without radar)
Platform	GM575 Tracked Vehicle
Fire Control	Radar, optical sight, speed ring, periscope

NOTE: Height with radar dome is 3.57 meters.

20-mm Self-Propelled Anti-aircraft Gun System M163 Vulcan

Crew	4
Cartridge	20 x 102 mm
Ammunition Types	HEI, HEI-T, AP-T
Operation	Motor-driven Gatling-type, automatic fire
Range	
Tactical Antiaircraft	1,200 m
Maximum Vertical	4,000 m
Maximum Horizontal	4,500 m
Rate of Fire	Selectable, 1,000 or 3,000 rounds per minute
Reload Time	5 seconds
Emplacement/Displacement Time	1 minute/1 minute
Traverse Limits; Rate	Unlimited; 60 degrees per second
Elevation Limits; Rate	–5 to +80 degrees; 45 degrees per second
Maximum Travel Speed	67 km/h (highway)
Cruise Range	483 km
System Weight	12,310 kg
System Length x Width x Height	4.86 x 2.85 x 2.736 m (including turret)
Fuel Capacity	360 liters
Fire Control	Radar (range only); lead-computing sight

NOTE: The M163 uses an M113 chassis; the M167 is the towed version of the M163

AIRCRAFT

F-16A, -16B Block 15 with European Mid-life Upgrade (F-16AM, -16BM)

Mission	Multirole fighter
Crew	1 (C) or 2 in two tandem cockpits (D)
Maximum Level Speed	> Mach 2.0 at 12,200 m
Ferry Range	2,415 nmi (with external fuel, without CFTs)
Combat Radius	Up to approximately 1,000 nmi
Service Ceiling	>15,240 m
Armament	
Primary	20-mm multibarrel cannon, wingtip air-to-air missiles
Secondary	Combination of precision guided or unguided air-to-surface weapons, antiship missiles, anti-radiation missiles, air-to-air missiles
Max. Ext. Load, F-16C (with CFTs)	8,742 (9,190) kg
Maximum Takeoff Weight	21,772 kg (with full external load)
Weight Empty	
F-16C (with CFTs)	9,017 (9,466) kg
F-16D (with CFTs)	9,419 (9,867) kg
Length x Wingspan x Height	15.03 x 9.45 x 5.09 m

NOTE: The European Mid-life Upgrade (MLU) brings F-16A/B aircraft up to a standard similar to that of F-16C/D Block 50. The “AM” and “BM” designations apply to F-16A/B aircraft upgraded under the MLU program. Characteristics above are estimates based on those for F-16C/D Block 50. CFT – conformal (external) fuel tank.

Mirage F1BJ, F1CJ, F1EJ

Type	
F1BJ	Two-seat multirole fighter
F1CJ	Single-seat multirole fighter and attack aircraft
F1EJ	Single-seat multirole air-superiority, ground-attack, and reconnaissance aircraft
Maximum Level Speed	800 kn at low altitude, Mach 2.2 at high altitude
Combat Radius, High-low-high	230 nmi (max. internal fuel with reserves and typical combat load)
Air Patrol Endurance	2 hours, 15 minutes
Service Ceiling	20,000 m
Armament	
Primary (except F1BJ)	2x 30-mm cannon mounted in lower central fuselage
Secondary	Various air-to-air, antiradiation, antiship (Exocet) air-to-surface missiles; conventional, antirunway, precision-guided bombs
Maximum External Load	4,000 kg (6,300 kg theoretical)
Maximum Takeoff Weight	16,200 kg
Weight Empty	7,400 kg
Length x Wingspan x Height	15.30 x 8.40 (over wingtips) x 4.50 m F1BJ is 15.53 m long

NOTE: Characteristics are for F1C (shown above).

F-5E, -5F TIGER II

Mission	Fighter, ground attack (F-5E); operational trainer (F-5F)
Crew	1 (F-5E) or 2 tandem (F-5F)
Maximum Speed	709 kn
Range	1,341 nmi
Armament	
Primary	2x air-to-air missiles on wing tips; 1x or 2x 20-mm cannon in fuselage
Secondary	Up to 3,175 kg of mixed ordinance including rockets, missiles, and cluster bombs
Service Ceiling	15,790 m
Maximum Takeoff Weight	
F-5E	11,214 kg
F-5F	11,409 kg
Weight Empty	
F-5E	4,410 kg
F-5F	4,797 kg
Overall Length x Wingspan x Height	
F-5E	14.45 x 8.13 x 4.07 m
F-5F	15.65 x 8.13 x 4.13 m

C-101CC Aviojet

Mission	Operational trainer, light attack
Crew	2 tandem
Maximum Level Speed	450 kn
Combat Radius, Typical Mission	About 250 nmi
Maximum Endurance	7 hours
Service Ceiling	13,410 m
Armament	
Internal Stores	Interchangeable packages include 30-mm cannon pod, twin 12.7-mm machinegun pod, reconnaissance camera, ECM package or laser designator
External Stores	Various rocket packs, bombs, and air-to-air missiles
Maximum External Stores	2,250 kg
Maximum Takeoff Weight	6,300 kg
Weight Empty, Equipped	3,470 kg
Length x Wingspan x Height	12.50 x 10.60 x 4.25 m

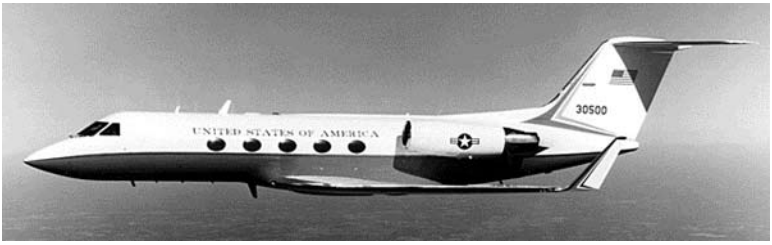
C-130H Hercules

Mission	Tactical transport and multimission
Crew	4 or 5
Passengers	92 troops, 64 paratroopers, or 74 litter patients with 2 attendants
Maximum Cruise Speed	325 kn
Range	
With Maximum Payload	2,046 nmi
With Standard Load, Max. Fuel	4,250 nmi
Service Ceiling	10,060 m
Maximum Payload	19,356 kg
Maximum Normal Takeoff Weight	70,310 kg
Operating Weight Empty	34,686 kg
Length x Wingspan x Height	29.79 x 40.41 x 11.66 m

C-212-100 Aviocar

Mission	
C212A	Military utility transport
C212AV	VIP transport
Crew	2
Passengers	
C212A	16 paratroops or 18 fully equipped troops
C212AV	12
Maximum Level Speed	194 kn at 3,660 m
Economy Cruising Speed	148 kn
Range at 3,050 m	949 nmi with maximum fuel and typical payload
Service Ceiling	8,140 m
Maximum Payload	2,100 kg
Maximum Takeoff Weight	6,500 kg
Operating Weight Empty	3,905 kg
Length x Wingspan x Height	15.16 x 19.00 x 6.68 m

Gulfstream III



Mission	Medium transport
Crew; Passengers	2 to 3; 19 (C-20 5; 13)
Maximum Cruising Speed	501 kn
Long-Range Cruising Speed	442 kn
Range	4,100 nmi
Maximum Operating Altitude	13,720 m
Typical Payload	726 kg
Maximum Takeoff Weight	31,615 kg
Operating Weight Empty	17,236 kg
Length x Wingspan x Height	25.32 x 23.72 x 7.43 m

AH-1F (modernized AH-1S) Cobra Attack Helicopter

Crew	2 tandem
Armament	20-mm multibarrel cannon, rockets, TOW ATGMs
Maximum Speed	129 kn
Dash Speed	170 kn
Range at 115 kn	322 nmi
Maximum Design Takeoff Weight	4,536 kg
Main Rotor	
Number of Blades	2
Diameter	13.4 m
Tail Rotor	
Number of Blades	2
Diameter	2.6 m
Wingspan	3.2 m
Fuselage Length x Width x Height	13.6 x 0.98 x 3.7 m

S-70A-1, S-70A-1L (VH-60L1), UH-60L, Desert Hawk/Blackhawk

Mission	Transport, VIP transport, medical evacuation
Crew; Passengers	3; up to 14
Armament	
External	Possibly anti-armor missiles, air-to-air missiles, mines, rockets
Internal	Two pintle mounts can accommodate 0.50-in machineguns or 7.62-mm 6-barrel miniguns
Never-Exceed Speed	193 kn
Range, Maximum Fuel	1,200 nmi (using external tanks)
Service Ceiling	5,700 m
Cargo Handling or Sling Load	4,082.4 kg
Maximum Design Takeoff Weight	9,979.2 kg (10,659.6 kg with external lift load)
Basic Weight Empty	5,118 kg
Main Rotor	
Number of Blades	4
Diameter	16.4 m
Tail Rotor	
Number of Blades	4
Diameter	3.4 m
Wing Span	6.4 m
Fuselage Length x Width x Height	15.4 x 2.4 x 3.8 m

AS-332M Super Puma

Mission	Medium transport
Crew; Passengers	2; 22
Maximum Dash Speed	150 kn
Range, Transport Mission	470 nmi
Cargo Handling or Sling Load	4,447 kg
Maximum Design Takeoff Weight	
Basic Weight Empty	4,265 kg
Main Rotor	
Number of Blades	4
Diameter	15.58 m
Tail Rotor	
Number of Blades	5
Diameter	3.04 m
Fuselage Length x Width x Height	15.52 x 3.88 x 4.93 (overall) m

AB-205A-1, UH-1H Iroquois

Role	Multirole transport, search and rescue, utility
Crew; Passengers	1 to 2; 11 to 14 troops
Armament	Possible guns, rockets
Maximum speed	124 kn
Range	250 nmi with 11 troops
Cargo Handling or Sling Load	1,814.4 kg
Maximum Takeoff Weight	4,309.2 kg
Basic Weight Empty	2,237 kg
Main Rotor	
Number of Blades	2
Diameter	14.72 m
Tail rotor	
Number of Blades	2
Diameter	2.59 m
Fuselage Length x Width x Height	12.62 x 2.61 x 4.15 m

Medium-Lift Utility Helicopter Bell 212, AB-212

Crew; Passengers	2; up to 13
Armament	Provisions for door-mounted weapons
Maximum Dash Speed	250 km/h
Range	500 km
Maximum Takeoff Weight	5,080 kg
Main Rotor	
Number of Blades	2
Diameter	14.6 m
Fuselage Length x Width x Height	12.9 x 2.9 x 4.0 m

EC 135, EC 635 T1

Missions	Transport, emergency medical service
Crew; Passengers	1; 5 to 7
Armament (EC 635 T1)	Options include 12 x 70-mm rocket pods, 20-mm gun, or 12.7-mm machinegun
Maximum Dash Speed	150 kn
Max. Endurance Cruise Speed	65 kn
Range, No Reserve	356 nmi
Service Ceiling	5,225 m
Main Rotor, No. Blades/Diameter	4/10.20 m
Tail Rotor, No. Blades/Diameter	10/1.0 m
Maximum Payload	1,150 kg
Cargo Handling or Sling Load	270 kg
Maximum Design Takeoff Weight	2,900 kg
Operational Weight Empty	1,570 kg
Fuselage Length x Width x Height	10.16 x 1.56 x 3.62 m

NOTE: EC 635 T1 is the military version of the EC 135. Rear of pod has clamshell doors.

SHIPS

AL HUSSEIN (HAWK) Class PC

LOA x Max. Beam x Mean Draft	30.5 x 2.5 x 1.5 m
Displacement, Full Load	124 metric tons
Complement	13
Speed, Full Power	32.5 kn
Range	1,500 nmi at 11 kn
Weapons	1x 30-mm x 75 cannon, 1x 20-mm x 85 cannon, 2x 12.5-mm machineguns
Radar System	
Surface Search, Navigation	Kelvin Hughes 1007
Acoustic System	Echo sounder
Optical Fire Control System	Radamec Series 2000

ABDULLAH (DAUNTLESS SEAARK 44-FT) Class PB

LOA x Max. Beam x Max. Draft	13.4 x 4.1 x 1.4 m
Displacement, Full Load	14.5 metric tons
Complement	6
Speed, Full Power	35 kn
Armament	2x 12.5-mm machineguns. 2x 7.62-mm machineguns
Radar System	
Surface Search, Navigation	Raymarine RL70C; I-band
Acoustic System	Echo sounder

FAISAL (COMMANDER, SEAARK 27-FT) Class PB

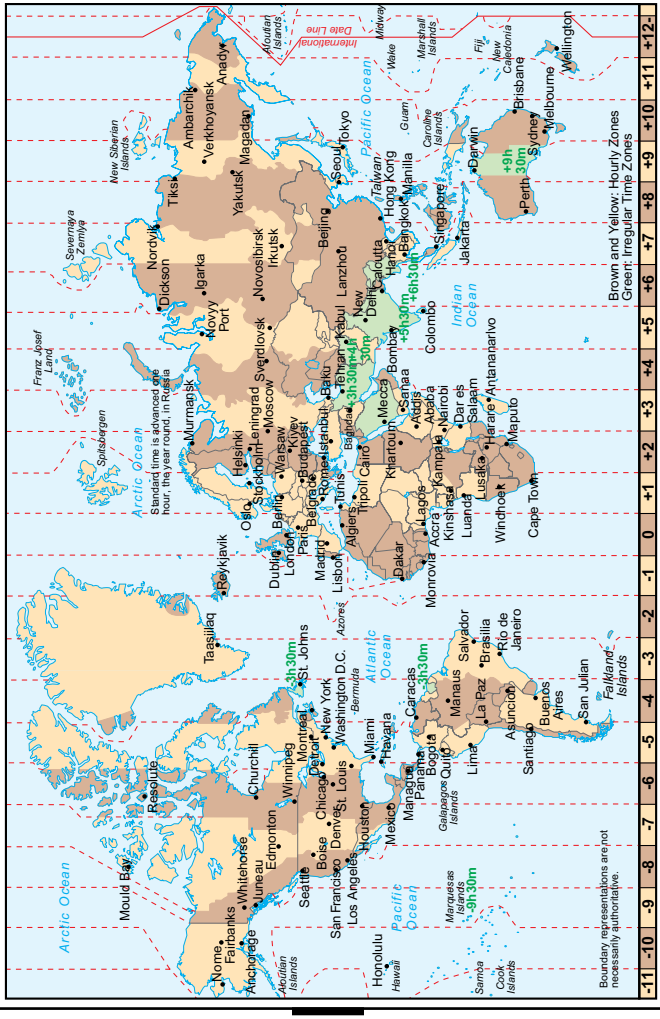
LOA x Max. Beam x Max. Draft	8.6 x 2.4 x 0.5 m
Displacement, Full Load	3.4 metric tons
Complement	4
Speed, Full Power	40 kn
Armament	2 or 3x heavy machineguns
Radar System	
Surface Search, Navigation	Raymarine RL70C
Acoustic System	Echo sounder

HASHIM (ROTORK) Class PB

LOA x Beam x Draft	12.7 x 3.2 x 0.9 m
Displacement, Full Load	9 metric tons
Complement	5
Speed	28 kn
Armament	1x 12.7-mm and 1x 7.62-mm machinegun
Military Lift	30 troops
Surface Search Radar System	Furuno

NOTE: used to patrol the Dead Sea.

APPENDIX B:
INTERNATIONAL TIME ZONES



Coordinated Universal Time (UTC)

To use the table, go to the country you are interested in, and add the number of hours corresponding to the United States time zone to the current time. The UTC is also known as Greenwich Mean Time (GMT).

Country	UTC	Eastern	Central	Mountain	Pacific
Afghanistan	+4.5 H	+9.5 H	+10.5 H	+11.5 H	+12.5 H
Albania	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Algeria	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
American Samoa	-11.0 H	-6.0 H	-5.0 H	-4.0 H	-3.0 H
Andorra	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Angola	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Antarctica	-2.0 H	+3.0 H	+4.0 H	+5.0 H	+6.0 H
Antigua and Barbuda	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Argentina	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
Armenia	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Aruba	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Ascension	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Australia North	+9.5 H	+14.5 H	+15.5 H	+16.5 H	+17.5 H
Australia South	+10.0 H	+15.0 H	+16.0 H	+17.0 H	+18.0 H
Australia West	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Australia East	+10.0 H	+15.0 H	+16.0 H	+17.0 H	+18.0 H
Austria	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Azerbaijan	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Bahamas	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Bahrain	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Bangladesh	+6.0 H	+11.0 H	+12.0 H	+13.0 H	+14.0 H
Barbados	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Belarus	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Belgium	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Belize	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Benin	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Bermuda	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Bhutan	+6.0 H	+11.0 H	+12.0 H	+13.0 H	+14.0 H

Country	UTC	Eastern	Central	Mountain	Pacific
Bolivia	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Bosnia Herzegovina	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Botswana	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Brazil East	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
Brazil West	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
British Virgin Islands	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Brunei	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Bulgaria	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Burkina Faso	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Burundi	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Cambodia	+7.0 H	+12.0 H	+13.0 H	+14.0 H	+15.0 H
Cameroon	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Canada East	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Canada Central	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Canada Mountain	-7.0 H	-2.0 H	-1.0 H	+0.0 H	+1.0 H
Canada West	-8.0 H	-3.0 H	-2.0 H	-1.0 H	+0.0 H
Cape Verde	-1.0 H	+4.0 H	+5.0 H	+6.0 H	+7.0 H
Cayman Islands	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Central African Rep.	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Chad Republic	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Chile	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
China	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Christmas Island	-10.0 H	-5.0 H	-4.0 H	-3.0 H	-2.0 H
Colombia	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Congo	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Cook Island	-10.0 H	-5.0 H	-4.0 H	-3.0 H	-2.0 H
Costa Rica	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Croatia	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Cuba	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Cyprus	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Czech Republic	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Dem. Rep. of the Congo	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Denmark	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Djibouti	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Dominica	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H

Country	UTC	Eastern	Central	Mountain	Pacific
Dominican Republic	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Ecuador	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Egypt	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
El Salvador	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Equatorial Guinea	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Eritrea	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Estonia	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Ethiopia	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Falkland Islands	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Fiji Islands	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H
Finland	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
France	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
French Antilles	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
French Guinea	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
French Polynesia	-10.0 H	-5.0 H	-4.0 H	-3.0 H	-2.0 H
Gabon Republic	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Gambia	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Georgia	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Germany	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Ghana	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Gibraltar	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Greece	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Greenland	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
Grenada	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Guadeloupe	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Guam	+10.0 H	+15.0 H	+16.0 H	+17.0 H	+18.0 H
Guatemala	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Guinea-Bissau	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Guinea	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Guyana	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
Haiti	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Honduras	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Hong Kong	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Hungary	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Iceland	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H

Country	UTC	Eastern	Central	Mountain	Pacific
India	+5.5 H	+10.5 H	+11.5 H	+12.5 H	+13.5 H
Indonesia East	+9.0 H	+14.0 H	+15.0 H	+16.0 H	+17.0 H
Indonesia Central	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Indonesia West	+7.0 H	+12.0 H	+13.0 H	+14.0 H	+15.0 H
Iran	+3.5 H	+8.5 H	+9.5 H	+10.5 H	+11.5 H
Iraq	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Ireland	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Israel	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Italy	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Jamaica	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Japan	+9.0 H	+14.0 H	+15.0 H	+16.0 H	+17.0 H
Kazakhstan	+6.0 H	+11.0 H	+12.0 H	+13.0 H	+14.0 H
Kenya	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Kiribati	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H
Korea, North	+9.0 H	+14.0 H	+15.0 H	+16.0 H	+17.0 H
Korea, South	+9.0 H	+14.0 H	+15.0 H	+16.0 H	+17.0 H
Kuwait	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Kyrgyzstan	+5.0 H	+10.0 H	+11.0 H	+12.0 H	+13.0 H
Laos	+7.0 H	+12.0 H	+13.0 H	+14.0 H	+15.0 H
Latvia	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Lebanon	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Lesotho	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Liberia	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Libya	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Liechtenstein	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Lithuania	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Luxembourg	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Macedonia	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Madagascar	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Malawi	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Malaysia	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Maldives	+5.0 H	+10.0 H	+11.0 H	+12.0 H	+13.0 H
Mali Republic	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Malta	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Marshall Islands	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H

Country	UTC	Eastern	Central	Mountain	Pacific
Mauritania	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Mauritius	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Mayotte	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Mexico East	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Mexico Central	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Mexico West	-7.0 H	-2.0 H	-1.0 H	+0.0 H	+1.0 H
Moldova	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Monaco	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Mongolia	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Morocco	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Mozambique	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Myanmar (Burma)	+6.5 H	+11.5 H	+12.5 H	+13.5 H	+14.5 H
Namibia	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Nauru	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H
Nepal	+5.5 H	+10.5 H	+11.5 H	+12.5 H	+13.5 H
Netherlands	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Netherlands Antilles	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
New Caledonia	+11.0 H	+16.0 H	+17.0 H	+18.0 H	+19.0 H
New Zealand	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H
Newfoundland	-3.5 H	+1.5 H	+2.5 H	+3.5 H	+4.5 H
Nicaragua	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Nigeria	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Niger Republic	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Norfolk Island	+11.5 H	+16.5 H	+17.5 H	+18.5 H	+19.5 H
Norway	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Oman	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Pakistan	+5.0 H	+10.0 H	+11.0 H	+12.0 H	+13.0 H
Palau	+9.0 H	+14.0 H	+15.0 H	+16.0 H	+17.0 H
Panama, Rep. of	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Papua New Guinea	+10.0 H	+15.0 H	+16.0 H	+17.0 H	+18.0 H
Paraguay	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Peru	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Philippines	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Poland	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Portugal	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H

Country	UTC	Eastern	Central	Mountain	Pacific
Puerto Rico	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Qatar	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Reunion Island	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Romania	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Russia West	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Russia Central 1	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Russia Central 2	+7.0 H	+12.0 H	+13.0 H	+14.0 H	+15.0 H
Russia East	+11.0 H	+16.0 H	+17.0 H	+18.0 H	+19.0 H
Rwanda	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Saba	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Samoa	-11.0 H	-6.0 H	-5.0 H	-4.0 H	-3.0 H
San Marino	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Sao Tome	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Saudi Arabia	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Senegal	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Seychelles Islands	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Sierra Leone	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Singapore	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Slovakia	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Slovenia	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Solomon Islands	+11.0 H	+16.0 H	+17.0 H	+18.0 H	+19.0 H
Somalia	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
South Africa	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Spain	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Sri Lanka	+5.5 H	+10.5 H	+11.5 H	+12.5 H	+13.5 H
St. Lucia	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
St. Maarten	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
St. Pierre & Miquelon	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
St. Thomas	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
St. Vincent	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Sudan	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Suriname	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
Swaziland	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Sweden	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Switzerland	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H

Country	UTC	Eastern	Central	Mountain	Pacific
Syria	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Taiwan	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Tajikistan	+6.0 H	+11.0 H	+12.0 H	+13.0 H	+14.0 H
Tanzania	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Thailand	+7.0 H	+12.0 H	+13.0 H	+14.0 H	+15.0 H
Togo	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Tonga Islands	+13.0 H	+18.0 H	+19.0 H	+20.0 H	+21.0 H
Trinidad and Tobago	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Tunisia	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Turkey	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Turkmenistan	+5.0 H	+10.0 H	+11.0 H	+12.0 H	+13.0 H
Turks and Caicos	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Tuvalu	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H
Uganda	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Ukraine	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
United Arab Emirates	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
United Kingdom	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Uruguay	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
USA Eastern	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
USA Central	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
USA Mountain	-7.0 H	-2.0 H	-1.0 H	+0.0 H	+1.0 H
USA Western	-8.0 H	-3.0 H	-2.0 H	-1.0 H	+0.0 H
USA Alaska	-9.0 H	-4.0 H	-3.0 H	-2.0 H	-1.0 H
USA Hawaii	-10.0 H	-5.0 H	-4.0 H	-3.0 H	-2.0 H
Uzbekistan	+5.0 H	+10.0 H	+11.0 H	+12.0 H	+13.0 H
Vanuatu	+11.0 H	+16.0 H	+17.0 H	+18.0 H	+19.0 H
Vatican City	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Venezuela	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Vietnam	+7.0 H	+12.0 H	+13.0 H	+14.0 H	+15.0 H
Wallis & Futuna Is.	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H
Yemen	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Yugoslavia	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Zambia	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Zimbabwe	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H

APPENDIX C: CONVERSION CHARTS

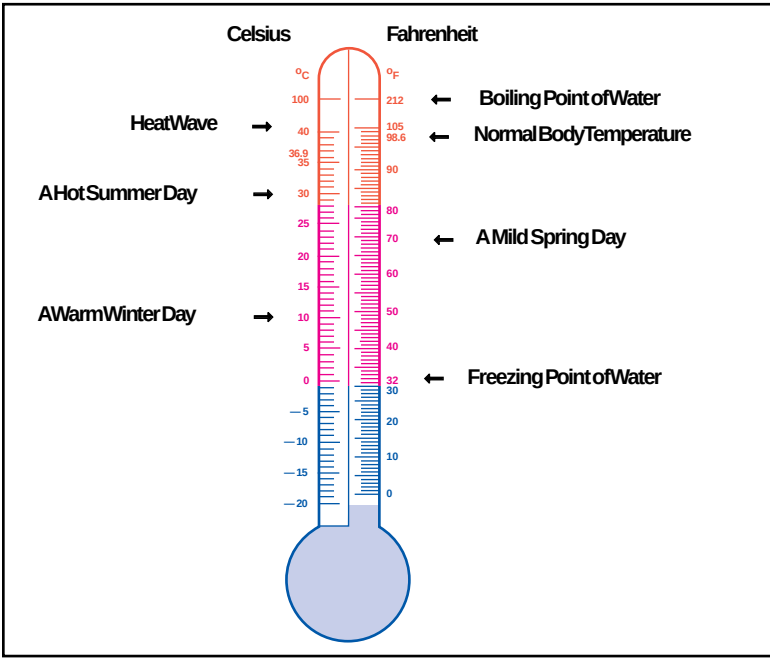
When You Know

Units of Length	Multiply by	To find
Millimeters	0.04	Inches
Centimeters	0.39	Inches
Meters	3.28	Feet
Meters	1.09	Yards
Kilometers	0.62	Miles
Inches	25.40	Millimeters
Inches	2.54	Centimeters
Feet	30.48	Centimeters
Yards	0.91	Meters
Miles	1.61	Kilometers
Units of Area		
Sq. Centimeters	0.16	Sq. Inches
Sq. Meters	1.20	Sq. Yards
Sq. Kilometers	0.39	Sq. Miles
Hectares	2.47	Acres
Sq. Inches	6.45	Sq. Cm
Sq. Feet	0.09	Sq. Meters
Sq. Yards	0.84	Sq. Meters
Sq. Miles	2.60	Sq. Km
Acres	0.40	Hectares
Units of Mass and Weight		
Grams	0.035	Ounces
Kilograms	2.21	Pounds
Tons (100kg)	1.10	Short Tons
Ounces	28.35	Grams
Pounds	0.45	Kilograms
Short Tons	2.12	Tons

Units of Volume	Multiply by	To find
Milliliters	0.20	Teaspoons
Milliliters	0.06	Tablespoons
Milliliters	0.03	Fluid Ounces
Liters	4.23	Cups
Liters	2.12	Pints
Liters	1.06	Quarts
Liters	0.26	Gallons
Cubic Meters	35.32	Cubic Feet
Cubic Meters	1.35	Cubic Yards
Teaspoons	4.93	Milliliters
Tablespoons	14.78	Milliliters
Fluid Ounces	29.57	Milliliters
Cups	0.24	Liters
Pints	0.47	Liters
Quarts	0.95	Liters
Gallons	3.79	Liters
Cubic Feet	0.03	Cubic Meters
Cubic Yards	0.76	Cubic Meters
Units of Speed		
Miles per Hour	1.61	Kilometers per Hour
Km per Hour	0.62	Miles per Hour

Temperature

To convert Celsius into degrees Fahrenheit, multiply Celsius by 1.8 and add 32. To convert degrees Fahrenheit to Celsius, subtract 32 and divide by 1.8.



Temperature Chart

APPENDIX D: HOLIDAYS

National Holidays

Traditional Date(s)	Holiday	Description
1 January	New Year's Day	Celebration of the beginning of the calendar year
18 December 2009 7 December 2010 26 November 2011 15 November 2012 (varies)	Al-Hijrah (Islamic New Year)	Celebrates Muhammad's journey from Mecca to Medina; time of reflection; cards sometimes exchanged between family and friends
30 January	King Abdullah II's birthday	Celebrates the birth of King Abdullah II
9 March 2009 26 February 2010 15 February 2011 5 February 2012 (varies)	Mawlid an-Nabi (Prophet Muhammad's Birthday)	Commemorates the birth of Muhammad; special candles are made and people dress well and have family gatherings; it is the Islamic equivalent of Christmas
10 April 2009 2 April 2010 22 April 2011 6 April 2012 (varies)	Good Friday	Remembrance of the crucifixion of Jesus Christ

Traditional Date(s)	Holiday	Description
12 April 2009 4 April 2010 24 April 2011 8 April 2012 (varies)	Easter	Sacred celebration of Jesus Christ's resurrection from the dead
1 May	Labor Day	International labor day
25 May	Independence Day	Celebrates Jordan's declaration of independence from Great Britain on 25 May 1946
10 June	Army Day	Marks King Hussein's takeover of the Jordan armed forces and the removal of all foreign officers
22 August 2009 11 August 2010 1 August 2011 21 July 2012 (varies)	First Day of Ramadan	Initiates a 29- to 30-day fast from food and water during daylight hours; Muslims believe that during this month, the first verses of the Qur'an were revealed
21 September 2009 10 September 2010 30 August 2011 19 August 2012 (varies)	Eid al fitr (end of Ramadan)	Celebrates the end of the Ramadan fast

Traditional Date(s)	Holiday	Description
14 November	King Hussein Remembrance Day	National remembrance of King Hussein
27 November 2009 12 November 2010 6 November 2011 26 October 2012 (varies)	Id al-Adha (Celebration of Sacrifice)	Commemorates Abraham's willingness to sacrifice his son; a Muslim offers a *quarbani* (sacrifice) and divides it into three portions: for the poor, friends and family, and his household
25 December	Christmas Day	Sacred holiday celebrating the birth of Jesus Christ

APPENDIX E: LANGUAGE

Arabic

Alphabet

The Arabic alphabet is written from right to left, but numerals are written from left to right. There are 28 characters, all of which are consonants, and 10 numerals. Short vowels are generally unwritten, although three markers are used to ensure proper pronunciation. While there is no capitalization in Arabic, each letter has a different form depending on where it falls in the word - at the beginning, middle, end, or standing alone.

Arabic is a semitic language; its structure and grammar are different from English. Words are formed from three letter roots (root verbs) by changing the vowels (vowel sounds or diacritics) between the consonants, which always begin and end the word. For example, the word for book is Ketab and the word for library is Maktabah. The root is K-T-B.

Key Phrases

English	**Arabic**
Yes	*aywaa*
No	*laa*
Please	*min fadlak*
Welcome	*aahlaan wa saahlaan*
Thank you.	*shukran*
Hello	*marhaba*
How are you?	*kayf halak?*
I am fine, thank you.	*kwayyis, shukran*

English	Arabic
Good morning.	*sobah al kheir*
Good morning (reply).	*sobah an noor*
Good evening.	*masaa' al kheir*
Good evening (reply).	*masaa' an noor*
Good night.	*laylaa saidaa*
Goodbye.	*maa'a ssaalamaa*
Praise be to God.	*al hamdulillah*
Excuse me.	*afwan*
I	*ana*
You	*inta*
We	*ihna*
Them	*hum*
Where?	*wayn?*
When?	*imta?*
What?	*shoo? or aysh?*
How?	*kayf?*
How much/many?	*gedeesh?*
Who?	*men?*
Why?	*laysh?*
Which?	*ay?*
What is this?	*shoo haada?*
This is mine.	*hada lee.*
This is not mine.	*hada mish lee.*
What does this mean?	*shoo maa'na hada?*
Do you speak English?	*ibtahki inta Englizi?*
I am an American.	*ana amreeki.*
I understand.	*mafhoom.*
I don't understand.	*ana mish faahim.*

English	Arabic
Can you help me?	*momkin tisa'idini?*
I'm hungry.	*ana joo'wan.*
I'm thirsty.	*ana aatshan.*
I'm tired.	*ana ta'abaan.*
I'm lost.	*ana toht.*
Hurry!	*bisor'aa! or yalla!*
No smoking!	*maamnoo' at tadkheen!*

Vocabulary

English	Arabic
American Embassy	*sifaara amreekiya*
Arm (body)	*zaraa'*
Bandage	*aasaabe*
Beach	*shawti*
Blanket	*baataniye*
Book	*ketab*
Boots	*boot*
Bridge	*jisr*
Building	*mabna*
Coat	*mi'taf*
Entrance	*dokhool*
Exit	*khorooj*
First Aid Kit	*ilbah is'aafaat awalliiyaa*
Flashlight	*batariiyaa*
Gloves	*jowanti*
Gulf	*khaleej*
Harbor	*mina'*
Hat	*kobaa'aa*

English	Arabic
Head	*ra'as*
Highway	*tareeg*
Hospital	*mostaashfah*
Insect Repellent	*tarid lilhaashaarat*
Knife	*sakeenah*
Leg	*rijil*
Map	*khareeta*
Market	*sooq*
Matches	*kabreet*
Medicine	*dawaa'*
Mosque	*masjid*
Passport	*jewazz as-safar*
Police	*shurta*
Radio	*radyo*
River	*nahr*
Soap	*saboon*
Sea	*bahr*
Seacoast	*sahil al bahr*
Shoes	*hiza'*
Taxi	*taaksi*
Toilet	*twaalet*
Tower	*borj*
Watch	*sa'aah*
Big	*kabeer*
Small	*sagheer*
Fast	*saree'*
Slow	*bati'*
Early	*mobakir*

English	Arabic
Late	*mit'aker*
Near	*kareeb*
Far	*ba'eed*
Hot	*sakhen*
Cold	*bareed*
Heavy	*thageel*
Light	*khafeef*
Open	*maftuuh*
Shut	*ma'fuul*
Right	*sahh*
Wrong	*ghalat*
Old	*kadeem*
New	*jadeed*

Military Vocabulary

English	Arabic
Aircraft	*ta'ereh*
Aircraft Carrier	*hamleh atta'erat*
Air Defense	*defa' jawi*
Airfield	*mutaar*
Ammunition	*zakheereh*
Amphibious	*bear-ma'i*
Antiair artillery	*maadfa'iyeh modawd atta'erat*
Antilanding Defense	*defa' ded al-aabrar*
Antitank artillery	*maadfa'iyeh modawd al-dababaat*
Army	*jaysh*
Artillery	*maadfa'iyeh*
Aviation	*teyiran*

English	Arabic
Battalion	*kateebeh*
Battleship	*baraajeh*
Bomb	*gunbuleh*
Camouflage	*tamwiyeh*
Cruiser (ship)	*torad*
Chemical Weapon	*salaah kimawi*
Coastal Defense	*defa' saaheli*
Corps	*faylag*
Destroyer (ship)	*modemmoreh*
Division	*firqeh*
Engineer	*mohandess*
Garrison	*hamieh*
Gun	*medfa'*
Handgrenade	*qunbuleh yedawiyeh*
Headquarters	*qiyadeh*
Helicopter	*helicoopter*
Howitzer	*howetzer*
Infantry	*mushaa't*
Latitude	*khatt al-arad*
Longitude	*khatt at-tool*
Machinegun	*reshashah*
Map	*khareetah*
Military	*aaskaaria*
Mine	*lagham*
Minefield	*haql alghaam*
Mortar	*howwen*
Nuclear weapon	*salaah noowawi*
Platoon	*faseeleh*

English	Arabic
Radar	*radar*
Reconnaissance	*'estitlaa'*
Rifle	*bunduqiyeh*
Submachinegun	*reshashah qaseerah*
Tank	*dababeh*
Tactics	*taktik*
Torpedo	*toorbid*
Topography	*toboografia*
Weapon	*salaah*
Weather	*at-taqs*

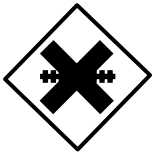
APPENDIX F:
INTERNATIONAL ROAD SIGNS

First-aid post

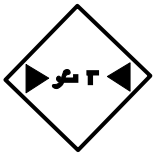
Petrol

Garage

One way



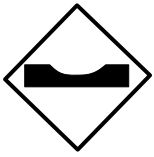
vel (railroad) crossing
without barrier



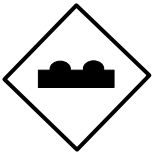
Maximum
width 3 m.

Maximum
height 4 m.

Opening or
swing bridge



Dip



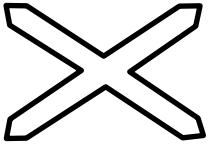
Uneven road

Winding road

Steep hill

Stop at major
road ahead

Side road



Location of level
(railroad) crossing without
gate or barrier

APPENDIX G:
DEPLOYED PERSONNEL'S GUIDE TO HEALTH MAINTENANCE

DoD-prescribed immunizations and medications, including birth control pills, should be brought in sufficient quantity for deployment's duration.

Only food, water, and ice from approved U.S. military sources should be consumed. Consuming food or water from unapproved sources may cause illness. Food should be thoroughly cooked and served hot.

Thorough hand-washing before eating and after using the latrine is highly recommended, as is regular bathing. Feet should be kept dry and treated with antifungal powder. Socks and underwear should be changed daily; underwear should fit loosely and be made of cotton fiber.

Excessive heat and sunlight exposure should be minimized. Maintaining hydration is important, as are following work-rest cycles and wearing uniforms properly. Sunglasses, sunscreen (SPF 15 or higher), and lip balm are recommended. Drinking alcohol should be avoided. Personnel with previous heat injuries should be closely monitored.

Uniforms should be worn properly (blouse boots). DEET should be applied to exposed skin and uniforms treated with permethrin; permethrin is not intended for use on skin. Proper treatment and wear of uniform, plus application of DEET to exposed skin, decreases the risk of diseases transmitted by biting insects.

Overcrowded living areas should be avoided. Ventilated living areas and avoiding coughing or sneezing toward others can re-

duce colds and other respiratory infections. Cots or sleeping bags should be arranged "head to toe" to avoid the face-to-face contact that spreads germs.

Contact with animals is not recommended. Animals should not be kept as mascots. Cats, dogs, and other animals can transmit disease. Food should not be kept in living areas as it attracts rodents and insects, and trash should be disposed of properly.

Hazardous snakes, plants, spiders, and other insects and arthropods such as scorpions, centipedes, ants, bees, wasps, and flies should be avoided. Those bitten or stung should contact U.S. medical personnel.

All sexual contact should be avoided. Properly used condoms offer some protection from sexually transmitted diseases but not full protection.

Stress and fatigue can be minimized by maintaining physical fitness, staying informed, and sleeping when the mission and safety permits. Alcohol should be avoided as it causes dehydration, contributes to jet lag, can lead to depression, and decreases physical and mental readiness. Separation anxiety, continuous operations, changing conditions, and the observation of human suffering will intensify stress. Assistance from medical personnel or chaplains is available.

Additional Information

Water

If unapproved water, as found in many lakes, rivers, streams, and city water supplies, must be used in an emergency, the water may be disinfected by:

- Adding calcium hypochlorite at 5.0 ppm for 30 minutes,
- Adding Chlor-Floc or iodine tablets according to label instructions,

- Heating water to a rolling boil for 5 to 10 minutes, or
- Adding 2 to 4 drops of ordinary chlorine bleach per quart of water and waiting 30 minutes before using it.

Either U.S. military preventive medicine or veterinary personnel should inspect bottled water supplies. Bottled water does not guarantee purity; direct sunlight on bottled water supplies may promote bacterial growth.

Water in canals, lakes, rivers, and streams is likely contaminated; unnecessary bathing, swimming, and wading should be avoided. If the tactical situation requires entering bodies of water, all exposed skin should be covered to protect from parasites. Following exposure, it is important to dry vigorously and change clothing.

Rodents

Rodents should not be tolerated in the unit area; they can spread serious illness. Diseases may be contracted through rodent bites or scratches, transmitted by insects carried on rodents (e.g., fleas, ticks, or mites), or by contamination of food from rodent nesting or feeding. Personnel can minimize the risk of disease caused by rodents by:

- Maintaining a high state of sanitation throughout the unit area
- Sealing openings 1/4 inch or greater to prevent rodents from entering unit areas
- Avoiding inhalation of dust when cleaning previously unoccupied areas (mist these areas with water before sweeping; when possible, disinfect area using 3 ounces of liquid bleach per 1 gallon of water)
- Promptly removing dead rodents; personnel should use disposable gloves or plastic bags over the hands when handling any dead animal and place the dead rodent/animal into a plastic bag prior to disposal

- Seeking immediate attention if bitten or scratched by a rodent or if experiencing difficulty breathing or flu-like symptoms

Insects

Exposure to harmful insects, ticks, and other pests is a year-round, worldwide risk. The following protective measures reduce the risk of insect and tick bites:

- Use DoD-approved insect repellents properly
- Apply DEET on all exposed skin
- Apply permethrin on clothing and bed nets
- Tuck bed net under bedding; use bed net pole
- Avoid exposure to living or dead animals
- Regularly check for ticks
- Discourage pests by disposing of trash properly; eliminate food storage in living areas
- Cover exposed skin by keeping sleeves rolled down when possible, especially during peak periods of mosquito biting (dusk and dawn); keep undershirts tucked into pants; tuck pant legs into boots

Uniforms correctly treated with permethrin, using either the aerosol spray (reapply after sixth laundering) or Individual Dynamic Absorption (IDA) impregnation kit (good for 6 months or the life of the uniform), will help minimize risks posed by insects. The date of treatment should be labeled on the uniform.

Bed nets should be treated with permethrin for protection against biting insects using either the single aerosol spray can (treating two bed nets) or the unit's 2-gallon sprayer. All personnel should sleep under mosquito nets, regardless of time of day, ensure net-

ting is tucked under bedding, and use poles to prevent bed nets from draping on the skin.

DoD-approved insect repellents are:

- IDA KIT: NSN 6840-01-345-0237
- Permethrin Aerosol Spray: NSN 6840-01-278-1336
- DEET Insect Repellent: NSN 6840-01-284-3982

Hot Weather

If heat is a threat in the area, personnel should:

- Stay hydrated by drinking water frequently
- Follow work-rest cycles
- Monitor others who may have heat-related problems
- Wear uniforms properly
- Use a sun block (SPF 15 or higher), sunglasses, and lip balm
- During hot weather, wear natural fiber clothing (such as cotton) next to the skin for increased ventilation
- Seek immediate medical attention for heat injuries such as cramps, exhaustion, or stroke. Heat injuries can also occur in cold weather
- Avoid standing in direct sunlight for long periods; be prepared for rapid drops in temperature at night, and construct wind screens if necessary to avoid blowing dust or sand

Sunscreens:

- Sunscreen lotion: NSN 6505-01-121-2336
- Non-alcohol lotion-base sunscreen: NSN 6505-01-267-1486

Work-Rest Table

		EASY WORK		MODERATE WORK		HARD WORK	
Heat Cat	WBGT Index (˚F)	Work/ Rest (min.)	Water Intake (Qt/Hr)	Work/ Rest (min.)	Water Intake (Qt/Hr)	Work/ Rest (min.)	Water Intake (Qt/Hr)
1	78 – 81.9	NL	1/2	NL	3/4	40/20	3/4
2	82 – 84.9	NL	1/2	50/10	3/4	30/30	1
3	85 – 87.9	NL	3/4	40/20	3/4	30/30	1
4	88 – 89.9	NL	3/4	30/30	3/4	20/40	1
5	> 90	50/10	1	20/40	1	10/50	1

The work-rest times and fluid replacement volumes in the specific heat category sustain performance and hydration for at least 4 hours. Individual water needs will vary ±¼ quart per hour.

NL = no limit to work time per hour. Rest means minimal physical activity (sitting or standing) and should be accomplished in shade.

Caution: Hourly fluid intake should not exceed 1½ quarts. Daily fluid intake should not exceed 12 quarts.

Note: MOPP gear adds 10˚ to WBGT Index.

Food

High risk food items such as fresh eggs, unpasteurized dairy products, lettuce and other uncooked vegetables, and raw or undercooked meats should be avoided unless they are from U.S. military-approved sources. Those who must consume unapproved foods should choose low risk foods such as bread and other baked goods, fruits that have thick peels (washed with safe water), and boiled foods such as rice and vegetables.

Human Waste

Military-approved latrines should be used when possible. If no latrines are available, personnel should bury all human waste in pits or trenches.

Cold Weather

If cold weather injuries are a threat in the area, personnel should:

- Drink plenty of fluids, preferably water or other decaffeinated beverages
- Closely monitor others who have had previous cold injuries
- Use well-ventilated warming tents and hot liquids for relief from the cold. Watch for shivering and increase rations to the equivalent of four MREs per day
- Not rest or sleep in tents or vehicles unless well ventilated; temperatures can drop drastically at night

WIND SPEED		COOLING POWER OF WIND EXPRESSED AS "EQUIVALENT CHILL TEMPERATURE"																				
KNOTS	MPH	TEMPERATURE (°F)																				
CALM	CALM	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60
		EQUIVALENT CHILL TEMPERATURE																				
3 - 6	5	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-70
7 - 10	10	30	20	15	10	5	0	-10	-15	-20	-25	-35	-40	-45	-50	-60	-65	-70	-75	-80	-90	-95
11 - 15	15	25	15	10	0	-5	-10	-20	-25	-30	-40	-45	-50	-60	-65	-70	-80	-85	-90	-100	-105	-110
16 - 19	20	20	10	5	0	-10	-15	-25	-30	-35	-45	-50	-60	-65	-75	-80	-85	-95	-100	-110	-115	-120
20 - 23	25	15	10	0	-5	-15	-20	-30	-35	-45	-50	-60	-65	-75	-80	-90	-95	-105	-110	-120	-125	-135
24 - 28	30	10	5	0	-10	-20	-25	-30	-40	-50	-55	-65	-70	-80	-85	-95	-100	-110	-115	-125	-130	-140
29 - 32	35	10	5	-5	-10	-20	-30	-35	-40	-50	-60	-65	-75	-80	-90	-100	-105	-115	-120	-130	-135	-145
33 - 36	40	10	0	-5	-10	-20	-30	-35	-45	-55	-60	-70	-75	-85	-95	-100	-110	-115	-125	-130	-140	-150
Winds Above 40 MPH Have Little Additional Effect		LITTLE DANGER					INCREASING DANGER Flesh may freeze within 1 minute						GREAT DANGER Flesh may freeze within 30 seconds									

- Dress in layers, wear polypropylene long underwear, and use sunglasses, scarf, unscented lip balm, sunscreen, and skin moisturizers
- Insulate themselves from the ground with tree boughs or sleeping mats and construct windscreens to avoid unnecessary heat loss
- Seek immediate medical attention for loss of sensitivity in any part of the body

First Aid

Basic Lifesaving

Those caring for injured persons should immediately:

- Establish an open airway
- Ensure the victim is breathing
- Stop bleeding to support circulation
- Prevent further disability
- Place dressing over open wounds
- Immobilize neck injuries
- Splint obvious limb deformities
- Minimize further exposure to adverse weather

Injuries and Care

Shock

Symptoms

- Confusion
- Cold, clammy skin
- Sweating
- Shallow, labored, and rapid breathing
- Rapid pulse

Treatment

- An open airway should be maintained
- Unconscious victims should be placed on their side
- Victims should be kept calm, warm, and comfortable
- Lower extremities should be elevated
- Medical attention should be sought as soon as possible

Abdominal Wound

Treatment

- Exposed organs should be covered with moist, clean dressing
- Wound should be secured with bandages
- Displaced organs should never be reintroduced to the body

Bleeding

Treatment

- Direct pressure with hand should be applied; a dressing should be used if available
- Injured extremity should be elevated if no fractures are suspected
- Pressure points may be used to control bleeding
- Dressings should not be removed; additional dressings may be applied over old dressings

Tourniquet

NOTE: Tourniquets should only be used when an injury is life threatening.

- A 1-inch band should be tied between the injury and the heart, 2 to 4 inches from the injury, to stop severe bleeding; wire or shoe strings should not be used
- Band should be tight enough to stop bleeding and no tighter
- Once the tourniquet is tied, it should not be loosened

- The tourniquet should be left exposed for quick visual reference
- The time that the tourniquet is tied and the letter "T" should be written on the casualty's forehead

Eye Injury

Treatment

- Embedded objects should not be removed; dressings should secure objects to prohibit movement
- Bandages should be applied lightly to both eyes.
- Patients should be continuously attended.

Chest Wound

Symptoms

- Sucking noise from chest
- Frothy red blood from wound

Treatment

- Entry and exit wounds should be identified; wounds should be covered (aluminum foil, ID card)
- Three sides of the material covering the wound should be taped, leaving the bottom untaped
- Victim should be positioned to facilitate easiest breathing.

Fractures

Symptoms

- Deformity, bruising
- Tenderness
- Swelling and discoloration

Treatment

- Fractured limb should not be straightened
- Injury should be splinted with minimal movement of injured person

- Joints above and below the injury should be splinted.
- If not in a chemical environment, remove clothing from injured area
- Rings should be removed from fingers
- Check pulse below injury to determine blood flow restrictions

Spinal, Neck, Head Injury

Symptoms

- Lack of feeling or control below neck

Treatment

- Conscious victims should be cautioned to remain still
- Airway should be checked without moving injured person's head
- Victims who must be moved should be placed, without bending or rotating victim's head and neck, on a hard surface that would act as a litter (door, cut lumber)
- Head and neck should be immobilized

Heat Injury

Heat Cramps

Symptoms

- Spasms, usually in muscles or arms
- Results from strenuous work or exercise
- Loss of salt in the body
- Normal body temperature

Heat Exhaustion

Symptoms

- Cramps in abdomen or limbs
- Pale skin
- Dizziness, faintness, weakness
- Nausea or vomiting
- Profuse sweating or moist, cool skin
- Weak pulse
- Normal body temperature

Heat Stroke

Symptoms

- Headache, dizziness
- Red face/skin
- Hot, dry skin (no sweating)
- Strong, rapid pulse
- High body temperature (hot to touch)

Treatment

- Victim should be treated for shock
- Victim should be laid in a cool area with clothing loosened.
- Victim can be cooled by sprinkling with cool water or fanning (though not to the point of shivering)
- If conscious, victim may drink cool water (2 teaspoons of salt to one canteen may be added)
- Seek medical attention immediately; heat stroke can kill

Burns

Burns may be caused by heat (thermal), electricity, chemicals, or radiation. Treatment is based on depth, size, and severity (degree

of burn). All burn victims should be treated for shock and seen by medical personnel.

Thermal/First Degree

Symptoms

- Skin reddens
- Painful

Treatment

- Source of burn should be removed
- Cool water should be applied to the affected area

Thermal/Second Degree

Symptoms

- Skin reddens and blisters
- Very painful

Treatment

- Source of burn should be removed
- Cool water should be applied to the affected area
- Blisters should not be broken
- A dry dressing should cover the affected area

Thermal/Third Degree

Symptoms

- Charred or whitish looking skin
- May burn to the bone
- Burned area not painful; surrounding area very painful

Treatment

- Source of burn should be removed
- Clothing that adheres to burned area should not be removed
- A dry dressing should cover the affected area

Electrical Burns

Treatment

- Power source must be off
- Entry and exit wounds should be identified

Burned area should be treated in accordance with its severity

Chemical Burns

Treatment

- Skin should be flushed with a large amount of water; eyes should be flushed for at least 20 minutes.
- Visible contaminants should be removed.
- Phosphorus burns should be covered with a wet dressing (prevents air from activating the phosphorous)

Cold Injuries

Hypothermia

Symptoms

- Body is cold under clothing
- Victim may appear confused or dead

Treatment

- Victim should be moved to a warm place
- Wet clothing should be removed; victim should be dressed in warm clothing or wrapped in a dry blanket
- Body parts should not be rubbed
- Victims must not consume alcoholic beverages

Frostbite

Symptoms

- Skin appears white or waxy
- Skin is hard to the touch

Treatment

- Victim should be moved to a warm place
- Affected area should be warmed in 104 to 108° F (40° C) water for 15 to 30 minutes (NOT hot water)
- Affected area should be covered with several layers of clothing
- Affected area must not be rubbed
- Victim must seek medical attention

Emergency Life-Saving Equipment

Equipment may be improvised when necessary. Following is a list of possible uses for commonly found items:

- Shirts = Dressings/Bandages
- Belts, Ties = Tourniquets, Bandages
- Towels, Sheets = Dressings/Bandages
- Socks, Panty Hose, Flight cap = Dressings/Bandages
- Sticks or Tree Limbs = Splints
- Blankets = Litters, Splints
- Field Jackets = Litters
- BDU Shirts = Litters/Splints
- Ponchos = Litters/Bandages
- Rifle Sling = Bandages
- M-16 Heat Guards = Splints

APPENDIX H:
INDIVIDUAL PROTECTIVE MEASURES

Security Threats

Individual protective measures are the conscious actions that people take to guard themselves against physical harm. These measures can involve simple acts such as locking the car and avoiding high-crime areas. When physical protection measures are combined they form a personal security program, the object of which is to make yourself a harder target. The following checklists contain basic individual protective measures that, if understood and followed, may significantly reduce one's vulnerability to the security threats overseas (foreign intelligence, security services, and terrorist organizations). If detained or taken hostage, following the measures listed in these checklists may influence or improve one's treatment.

Foreign Intelligence and Security Services

- Avoid illegal, improper, or indiscreet actions or activities.
- Guard conversation and keep sensitive papers in custody.
- Take for granted that you are under surveillance by both technical and physical means, including:
  - Communications monitoring (telephone, e-mail, cell phones, mail, etc.)
  - Eavesdropping in hotels, offices, and apartments
  - Do not discuss sensitive matters:
    - On the telephone
    - In your room
    - In a car, particularly in front of an assigned driver

- Do not leave sensitive personal or business papers:
  - In your room
  - In the hotel safe
  - In a locked suitcase or briefcase
  - In unattended cars, offices, trains, or planes
  - Open to photography from the ceiling
  - In wastebaskets as drafts or doodles
- Do not try to defeat surveillance by trying to slip away from followers or by trying to locate "bugs" in your room. These actions will only generate more interest in you. If you feel you are under surveillance, act as naturally as possible, go to a safe location (your office, hotel, U.S. Embassy), and contact your superior.
- Avoid offers of sexual companionship. They may lead to a room raid, photography, and blackmail. Prostitutes in many countries report to the police, work for a criminal organization, or are sympathetic to insurgent or terrorist organizations; in other words, are anti-U.S. Others may be employed by an intelligence service.
- Be suspicious of casual acquaintances and quick friendships with local citizens in intelligence/terrorist threat countries. In many countries, people tend to stay away from foreigners and do not readily or easily make contact. Many who actively seek out friendships with Americans may do so as a result of government orders or for personal gain.

In your personal contacts, follow these guidelines:

- Do not attempt to keep up with your hosts in social drinking.
- Do not engage in black market activity for money or goods.
- Do not sell your possessions.
- Do not bring in or purchase illegal drugs.

- Do not bring in pornography.
- Do not bring religious literature for distribution. (You may bring one Bible, or Qu'ran, or other such material for personal use.)
- Do not seek out religious or political dissidents.
- Do not take ashtrays, towels, menus, glasses, or other mementos from hotels or restaurants.
- Do not accept packages, letters, etc., from local citizens for delivery to the U.S.
- Do not make political comments or engage in political activity.
- Do not be lured into clandestine meetings with would-be informants or defectors.
- Be careful about taking pictures. In some countries it is unwise to take photographs of scenes that could be used to make unfavorable comparisons between U.S. and local standards of living or other cultural differences. Avoid taking any photographs from moving buses, trains, or aircraft.

The following picture subjects are clearly prohibited in most countries where an intelligence, terrorist, or insurgent threat is evident:

- Police or military installations and personnel
- Bridges
- Fortifications
- Railroad facilities
- Tunnels
- Elevated trains
- Border areas
- Industrial complexes
- Port complexes
- Airports

Detention

Most intelligence and security services in threat countries detain persons for a wide range of real or imagined wrongs. The best advice, of course, is to do nothing that would give a foreign service the least reason to pick you up. If you are arrested or detained by host nation intelligence or security, however, remember the following:

- Always ask to contact the U.S. Embassy. You are entitled to do so under international diplomatic and consular agreements, to which most countries are signatories.
- Phrase your request appropriately. In Third World countries, however, making demands could lead to physical abuse.
- Do not admit to wrongdoing or sign anything. Part of the detention ritual in some threat countries is a written report you will be asked or told to sign. Decline to do so, and continue demanding to contact the Embassy or consulate.
- Do not agree to help your detainer. The foreign intelligence or security service may offer you the opportunity to help them in return for releasing you, foregoing prosecution, or not informing your employer or spouse of your indiscretion. If they will not take a simple no, delay a firm commitment by saying that you have to think it over.
- Report to your supervisor immediately. Once your supervisor is informed, the Embassy or consulate security officer needs to be informed. Depending on the circumstances and your status, the Embassy or consulate may have to provide you assistance in departing the country expeditiously.
- Report to your unit's security officer and your service's criminal investigative branch upon returning to the U.S. This is especially important if you were unable to report to the Embassy or consulate in country. Remember, you will not be able to

outwit a foreign intelligence organization. Do not compound your error by betraying your country.

Foreign Terrorist Threat

Terrorism may seem like mindless violence committed without logic or purpose, but it is not. Terrorists attack soft and undefended targets, both people and facilities, to gain political objectives they see as out of reach by less violent means. Many of today's terrorists view no one as innocent. Thus, injury and loss of life are justified as acceptable means to gain the notoriety generated by a violent act in order to support their cause.

Because of their distinctive dress, speech patterns, and outgoing personalities, Americans are often highly visible and easily recognized when they are abroad. The obvious association of U.S. military personnel with their government enhances their potential media and political worth as casualties or hostages. Other U.S. citizens are also at risk, including political figures, police, intelligence personnel, and VIPs (such as businessmen and celebrities).

Therefore, you must develop a comprehensive personal security program to safeguard yourself while traveling abroad. An awareness of the threat and the practice of security procedures like those advocated in crime prevention programs are adequate precautions for the majority of people. While total protection is impossible, basic common sense precautions such as an awareness of any local threat, elimination of predictable travel and lifestyle routines, and security consciousness at your quarters or work locations significantly reduce the probability of success of terrorist attacks.

To realistically evaluate your individual security program, you must understand how terrorists select and identify their victims. Terrorists generally classify targets in terms of accessibility, vul-

nerability, and political worth (symbolic nature). These perceptions may not be based on the person's actual position, but rather the image of wealth or importance they represent to the public. For each potential target, a risk versus gain assessment is conducted to determine if a terrorist can victimize a target without ramifications to the terrorist organization. It is during this phase that the terrorist determines if a target is "hard or soft." A hard target is someone who is aware of the threat of terrorism and adjusts his personal habits accordingly. Soft targets are oblivious to the threat and their surroundings, making an easy target.

Identification by name is another targeting method gathered from aircraft manifests, unit/duty rosters, public documents (Who's Who or the Social Register), personnel files, discarded mail, or personal papers in trash. Many targets are selected based upon their easily identifiable symbols or trademarks, such as uniforms, luggage (seabags or duffle bags), blatant national symbols (currency, tatoos, and clothing), and decals and bumper stickers.

Travel Security

Travel on temporary duty (TAD/TDY) abroad may require you to stay in commercial hotels. Being away from your home duty station requires increasing your security planning and awareness; this is especially important when choosing and checking into a hotel and during your residence there.

The recent experiences with airport bombings and airplane hijackings suggest some simple precautions:

- You should not travel in uniform outside the continental U.S. on commercial aircraft.
- Before traveling by commercial aircraft, you should screen your wallet and other personal items, removing any documents that could reveal military affili-

ation (e.g., credit cards and club membership cards). Note that USMC policy requires service members to wear two I.D. tags with metal necklaces while on official business. In addition, service members must carry a current I.D. card at all times. These requirements are valid even while traveling to or through terrorist areas. In view of these requirements, service members must be prepared to remove and conceal these and any other items that could identify them as military personnel in the event of a hijacking.

- You should stay alert to any suspicious activity when traveling. Keep in mind that the less time spent in waiting areas and lobbies, the better. This means adjusting your schedule to reduce your wait at these locations.
- You should not discuss your military affiliation with anyone during your travels because this increases your chances of being singled out as a symbolic victim.
- In case of an incident, you should not confront a terrorist or present a threatening image. The lower your profile, the less likely you are of becoming a victim or bargaining chip for the terrorists, and the better your chances of survival.

Hostage Situation

The probability of anyone becoming a hostage is very remote. However, as a member of the Armed Forces, you should always consider yourself a potential hostage or terrorist victim and reflect this in planning your affairs, both personal and professional. You should have an up-to-date will, provide next of kin with an appropriate power-of-attorney, and take measures to ensure your dependents' financial security if necessary. Experience has shown that concern for the welfare of family members is a source of great stress to kidnap victims.

Do not be depressed if negotiation efforts appear to be taking a long time. Remember, chance of survival actually increases with time. The physical and psychological stress while a hostage could seem overpowering, but the key to your well-being is to approach captivity as a mission. Maintaining emotional control and alertness, and introducing order into each day of captivity can ensure your success and survival with honor.

During interaction with captors, maintaining self respect and dignity can be keys to retaining status as a human being in the captor's eyes. Complying with instructions, avoiding provocative conversations (political, religious, etc.), and establishing a positive relationship will increase survivability. Being polite and freely discussing insignificant and nonessential matters can reinforce this relationship. Under no circumstance should classified information be divulged. If forced to present terrorist demands to the media, make it clear that the demands are those of the captor and that the plea is not made on your behalf. You must remember that you are an American service member; conduct yourself with dignity and honor while maintaining your bearing.

Hostages sometimes are killed during rescue attempts; therefore, take measures to protect yourself during such an action. Drop to the floor immediately, remain still and avoid sudden movement; select a safe corner if it offers more security than the floor. Do not attempt to assist the rescuing forces but wait for instructions. After the rescue, do not make any comment to the media until you have been debriefed by appropriate U.S. authorities.

APPENDIX I:
DANGEROUS PLANTS AND ANIMALS

Snakes

Blunt-nosed or Levantine Viper

Description:
Adult length usually 0.7 to 1 meter; maximum of 1.5 meter. Background color generally light gray, khaki, or buff, with double row of opposing or alternating spots from head to tail along back. Belly light gray to yellow, with small dark brown spots; tail pinkish brown.

Habitat:
Wide variety of habitats from marshes and plains at sea level to mountainous areas at elevations up to 2,000 meters. also semi-desert areas and rocky, hilly country at moderate elevations, with scattered bushes and adequate water supply. Often near farms and grazing areas.

Activity and behavioral patterns:
Primarily nocturnal. Sluggish. Most active and alert at night, usually very slow-moving and almost oblivious to stimuli when encountered during day. However, temperament unpredictable, and may strike quickly and savagely at any time.

Venom's effects:
Primarily hemotoxic. Bite causes sharp pain at site, followed by local swelling and necrosis. Deaths reported.

Burrowing Asp

Description:
Adult length is usually less than 0.9 meter; relatively slender snake. Background color varies; usually uniform dark purplish-brown to black above. Short, conical head, not distinct from the neck; snout broad, flattened, often pointed. Its fangs are well-developed and comparatively large in relation to the size of its head. Small eyes with round pupils. Tail short, ending in distinct spine.

Habitat:
Rain forests and savanna. Commonly lives under stones or in burrows.

Activity and behavioral patterns:
May emerge at night, particularly after rain. Likely to bite as soon as it is touched.

Venom's effects:
Venom primarily hemotoxic. Victims may experience intense local pain, swelling, and, in some instances, necrosis.

Burton's Carpet Viper

Description:
Adult length usually 0.5 to 0.7 meter; moderately slender. Background color generally yellowish gray, light brownish gray, or pale blue gray, with gray to tan or bright reddish or pink-

ish, dark-edged blotches on the back. Belly white, grayish white, yellowish white, or pale pinkish brown, stripped with dark gray.

Habitat:
Can exist in extreme desert conditions but prefers firm, rocky ground and avoids loose sand. Found at elevations up to 1,500 meters.

Activity and behavioral patterns:
Primarily nocturnal in hot weather; may be active at dusk. Sometimes diurnal in cool weather. Often most active after rains or on humid nights. May bask during early morning in bushes more than 2 meters above ground. Basks in open during cooler weather, but more frequently found under rocks or among dead plant stalks. When confronted, quickly assumes figure-eight coil, rubbing inflated loops of body together to make distinctive noise similar to sawing wood. Will strike without provocation.

Venom's effects:
Venom highly toxic to humans; reports of biting incidents common. Venom primarily hemotoxic; causes internal and external hemorrhaging. Bite causes pain and swelling at site.

Montpellier Snake

Description:
Adult length usually 1.2 to 1.5 meters, maximum of 2.5 meters; moderately slender snake. Background color generally blackish, grayish, brown, or olive; belly yellowish white. May have indistinct pattern of brown spots along sides. Head distinctive; large eyes, roof-like supraorbital scales, and prominent rostral scale.

Habitat:
Dry, open, or stony areas, with low bushy vegetation, or semi desert areas along coast. Found at elevations greater than 2,000 meters.

Activity and behavioral patterns:
Diurnal. Aggressive; will bite if pestered or restrained. Savage biter.

Venom's effects:
Venom toxic. Bite may cause immediate pain, stiffness, swelling, and fever. Neurological symptoms, such as central nervous system depression, ptosis, and paresis of affected limb, observed in severe cases.

Palestine Viper

Description:
Adult length usually 0.7 to 0.9 meter, maximum of 1.3 meters. Background gray, yellowish, or reddish. Dorsal zigzag pattern of dark reddish brown edged with black and surrounded by bright, narrow line. Belly pale gray or yellow; may be speckled with black or brown. Distinctive dorsal pattern of dark diamonds. Dark spots extend from head to tail along each side. Dark V-shaped mark on top of head. Two dark lines extend from eyes to mouth on both sides of head.

Habitat:
Found in rocky hillsides, cultivated areas, and areas overgrown with brush and trees. Not found in sandy, desert regions. Often found along stream banks and irrigation ditches. Commonly found near human dwellings.

Activity and behavioral patterns:
Generally nocturnal, but may be seen during day basking in sun amid vegetation in marshy areas. Also may be seen in shrubs and low trees. Alert; will strike quickly if disturbed.

Venom's effects:
Venom neurotoxic and hemorrhagic. Symptoms include local swelling, which may spread within a few hours, hemorrhagic or serous blisters at bite area, and regional lymphadenitis. Severe cases may result in nausea, vomiting, abdominal pain, diarrhea, peripheral shock, gastrointestinal disturbances, severe dehydration, swelling of lips and face, fever, and internal hemorrhage which may cause blood clots.

Gasperetti's Horned Desert Viper

Description:
Adult length usually 0.3 to 0.6 meter, maximum of 0.85 meter. Background generally yellowish, yellowish brown, pale gray, pinkish, or pale brown with rows of dark spots along the back. Belly whitish. Tip of tail may be black. May have a long spine-like horn above each eye.

Habitat:
Found in deserts with rock outcroppings and fine sand. Often in very arid places, however, may be found near oases.

Activity and behavioral patterns:
Nocturnal. Can make itself almost invisible by wriggling down into loose sand. Hides in rodent holes and under stones. When angered, rubs inflated loops of body together to make rasping hiss. Can strike quickly if disturbed.

Venom's effects:
Venom primarily hemotoxic. Local symptoms include pain, edema, redness, possible hematoma at site of bite. No fatalities reported.

Sahara Desert Viper

Description:
Adult length usually 0.3 to 0.4 meter. Background generally yellowish, gray, or brown, with row of dark spots along back. Head lacks suborbital "horns."

Habitat:
Found in sand dunes, loose sand, and in desert shrubs from sea level up to about 300 meters elevation.

Activity and behavioral patterns:
Active at night; usually spends day buried in sand at base of scrub. Not usually aggressive. When provoked, gathers body into coil and rubs sides together to produce hissing noise.

Venom's effects:
Venom mild cytotoxic and neurotoxic components. Bites reportedly painful, but usually not serious.

False-horned Viper

Description:
Adult length usually 0.5 to 0.7 meter, maximum of 0.9 meter. Background generally pale or bluish gray to khaki; gray or brown-gray blotches or crossbands on back. Alternating faint

spots on throat and body sides. Ventral side white; tail black. Head very broad; distinct from neck. Horn, composed of several overlapping scales, above each eye.

Habitat:
Most often found in desert bush. Also found in sandy, rocky terrain, as well as burrows and crevices in elevations of up to 2,000 meters.

Activity and behavioral patterns:
Nocturnal. Sluggish, placid, less likely to bite during the day. Dangerously active and aggressive at night. When disturbed, hisses loudly but not particularly vicious. Locomotion characteristically sidewinding. Frequently hides in rodent tunnels and beneath rocks.

Venom's effects:
Primarily neurotoxic. May produce a few local symptoms such as minor pain, mild tingling of the local area, stiffness; more serious bite causes weakness followed by ptosis. Victim may be conscious, but be unable to respond due to paralysis.

Ottoman Viper

Description:
Adult length usually 0.7 to 1.0 meter, maximum of 1.35 meters. Background color yellow, olive, or reddish brown. Series of dark circular or rectangular spots along each flank. Belly yellowish with dark mottling or grayish. Underside of tail tip may be yellow or orange. Head large, slightly flattened, and distinct from neck. Two dark lines extend from each eye to mouth.

Some specimens have two prominent stripes on top of head that converge to form V-shaped mark with vertex between its eyes.

Habitat:

Found in various habitats, including swamps, rocky hillsides, and open grassy areas with few bushes or trees. Most often found in areas with ample water, moisture, and vegetation. Often found around populated areas in yards, fields, irrigation ditches, and gardens. Not found in sandy or desert regions.

Activity and behavioral patterns:

Generally nocturnal, but active in the day during cooler months. Usually terrestrial, but can climb into small trees and bushes. Lethargic and slow-moving, but can move rapidly and strike quickly. Not aggressive; avoids human confrontation, but has a short temper if disturbed or stepped on. When defending itself, rolls up into coil and emits whisper-like sound.

Venom's effects:

Moderately potent hemotoxin and neurotoxin. Envenomation causes sharp pain and local swelling, which may spread. Discoloration, blisters, and pus-filled pimples may appear within hours. Other symptoms may include dizziness, weakness, vomiting, and cold sweats. Internal hemorrhage and hypovolemic shock may result. Fatalities recorded.

Desert Black Snake

Description:

Adult length usually 0.9 meter to 1.2 meters; moderately stout snake. Background color generally glossy black sometimes with brownish tinge; belly more pale.

Habitat:
Various habitats, including open desert, cultivated fields, gardens, oases, irrigated areas, and around buildings. Also barren, rocky mountain hillsides and sandy desert with sparse brush.

Activity and behavioral patterns:
Nocturnal; spends much time underground. Can be very aggressive. When molested, threatened, or provoked, will hiss violently and strike.

Venom's effects:
Venom strongly neurotoxic.

Dangerous Invertebrates

Spiders

Although there are several spider species found in the region that are capable of inflicting a painful bite, including some very large and physically imposing tarantulas, none are known to be life-threatening.

Scorpions

Although scorpions in the region are capable of inflicting a painful sting, none are known to be life-threatening.

Insects

There is little specific information of medical importance regarding insects. However, nearly all countries have at least one species of moth having venomous/urticating hairs and/or whose larva (caterpillar) has venomous spines. Some caterpillars are very hairy (such as puss moths and flannel moths) and almost unrecog-

nizable as caterpillars, with long silky hairs completely covering the shorter venomous spines. Others bear prominent clumps of still, venomous spines on an otherwise smooth body. Contact with these caterpillars can be very painful. Some are brightly colored.

Paederus are small (usually 4 to 7 millimeters), slender rove beetles that do not look like typical beetles and have very short wing covers that expose most of their flexible abdomens. When crushed, their body fluid contains an agent that will blister skin on contact. The lesions take about a week to heal and the area remains painful for several weeks. The substance is extremely irritating if it gets into the eyes; temporary blindness has been reported.

Centipedes

Although area centipedes are capable of inflicting a painful bite, none are known to be life-threatening.

Millipedes

Millipedes do not bite and in general are harmless to humans. However, when handled, some larger millipedes (may be more than 50 centimeters long) secrete a very noxious fluid that can cause severe blistering upon contact; some can squirt this fluid at least 2 feet.

Dangerous Plants

Poisonvine

No Photograph Available

Other names:
Arrow poison plant.

Mechanisms of toxicity:
Seeds have digitalis-like toxins and are used as arrow and spear poison in Africa.

Comments:
Genus of 38 tropical species of shrubs. Monkeys have died after eating a few leaves.

Panama Tree

Other names:
Castano, tartargum.

Mechanisms of toxicity:
Seeds are edible, but pods have internal stiff bristles that easily penetrate skin, causing intense irritation.

Comments:
There are 200 tropical species.

Annual/French Mercury

No Photograph Available

Other names:
Dog's Mercury

Mechanisms of toxicity:
Native to Europe; entire plant is toxic. Has been mistaken for edible greens. Emetic and purgative. Has proven fatal.

Comments:
Dye source; carpeting rhizome herb often characteristic of disturbed woodland.

Nettle Tree

Other names:
Ortiga brava, pringamoza.

Mechanisms of toxicity:
Trees and shrubs with powerful stinging hairs. The intensity of sting delivered by these plants is species-variable. The bushy, tree-like varieties tend to be more irritating. Any contact between leaves or branches and skin can result in profound burning pain that can last for more than 24 hours. There is no permanent damage.

Comments:
35 native species in tropical and southern Africa, and tropical America. Often used as hedges or local medicinals.

Squirting cucumber

Mechanisms of toxicity:
Ingestion of the fruit causes severe purging. The plant, especially the ripe fruit, contains a terpene compound, elaterin, an extremely bitter and powerful intestinal worm-killing agent, for which it was cultivated in England and Malta into the 19th century.

Comments:
Rough hairy annual or perennial trailing herb with thick, succulent stems 1.5 meters long, with no tendrils; found in the Mediterranean area, maily on sandy or stony coastal soils in warm-temperate regions. Fleshy fruits about 3 centimeters long and half as wide are

covered with bristles. Yellow flowers. A fluid of numerous red to dark-brown seeds is squirted out of the explosively contracting pericarp after it drops off.

Heliotrope

Other names:
Cherry pie, scorpion's tail, Indian heliotrope.

Mechanisms of toxicity:
Contains pyrrolizidine alkaloids. Cause of large epidemics (Afghanistan, India) of illness following ingestion of bread made with flour contaminated with members of this genus. The pathologic effects (Budd-Chiari syndrome) take weeks to months, and death comes slowly over years. Chronic copper poisoning has occurred associated with this plant.

Comments:
A large genus of worldwide distribution (250 tropical and temperate trees and shrubs).

Freshwater Mangrove

No Photograph Available

Other names:
Putat, bitung, laut.

Mechanisms of toxicity:
Saponins and hydrocyanide have been isolated from fruit and seeds. Used as fish poisons in many Pacific islands. Fruit contains

a triterpenoid saponin, and the seeds are emetic and have been shown to induce hypoglcemia in rodents.

Comments:

Large tree found growing along shorelines; have large (20-38 centimeters-long, 10-15 centimeters-wide) non-toothed leaves, white to pink flowers (on individual stalks; square in cross section), and one-seeded fruits (9-13 centimeters-long; square in cross-section). Seeds are crushed and used as fish poison by Australian troops and aborigines.

Bitter Apple, Bitter Gourd

No Photograph Available.

Mechanisms of toxicity:

Dried pulp is a drastic purgative that has caused bloody diarrhea, even toxic colitis and death; chemical nature unclear.

Comments:

Has a thick tap-root and numerous coarse, sprawling, branched stems up to 18 feet long. Leaves are longer than they are wide and have stiff hairs on both surfaces. Tend to be most abundant in dry inland areas. Botanical literature frequently confused as to identification; easy to mistake for harmless plants.

English Yew

Other names:

Groundhemlock, American yew, Japanese yew.

Mechanisms of toxicity:

Taxine A and B, classed as steroid alkaloids, are present in all plant parts except the aril. A single chewed seed is deadly. An hour after ingestion, nausea, dizziness,

and abdominal pain begin. This is followed by reddening of the lips, dilatation of the pupils, shallow breathing, tachycardia, and coma. Then the pulse slows, blood pressure drops, and death occurs through respiratory paralysis. No proven treatment exists. Emptying the stomach hours after ingestion may be helpful as leaves may not pass through the GI tract expeditiously. Various clinical measures (circulatory stimulants, artificial respiration, cardiac pacemaker) have not prevented death in suicide cases.

Comments:

An evergreen shrub or small tree bearing a characteristic fleshy, red, sweet-tasting aril with a single green to black, partly exposed, hard-shelled seed within. In North America, the Japanese yew, the toxicity of which may exceed that of the English yew, has repeatedly caused fatal animal poisonings. Was once known as the “tree of death.”

APPENDIX J:
INTERNATIONAL TELEPHONE CODES

Algeria	213	Malta	356
Australia	61	Mexico	52
Austria	43	Morocco	212
Bahrain	973	Netherlands	31
Belgium	32	Nigeria	234
Brazil	55	New Zealand	64
Canada	1	Norway	47
China	86	Oman	968
Cyprus	357	Philippines	63
Denmark	45	Portugal	351
Djibouti	253	Qatar	974
Egypt	20	Republic of Korea	82
Ethiopia	251	Saudi Arabia	966
Finland	358	Senegal	221
France	33	Seychelles	248
Gabon	241	Singapore	65
Germany	49	Somalia	252
Greece	30	South Africa	27
Hawaii	1	Spain	34
Hong Kong	852	Sweden	46
Indonesia	62	Switzerland	41
Iran	98	Syria	963
Iraq	964	Taiwan	886
Ireland	353	Tanzania	255
Israel	972	Thailand	66
Ivory Coast	225	Tunisia	216
Japan	81	Turkey	90
Jordan	962	UAE	971
Kenya	254	United Kingdom	44
Kuwait	965	United States	1
Libya	218	Yemen	967
Madagascar	261	Zambia	260
Malaysia	60	Zimbabwe	263

AT&T (public phones)	0072-911 or 0030-911	On Base	550-HOME or 550-2USA

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