## Uzbekistan Country Handbook

1. This handbook provides basic reference information on Uzbekistan, 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 Uzbekistan.

2. This product is published under the auspices of the U.S. Department of Defense Intelligence Production Program (DoDIPP). This handbook has been published as a joint effort within the Department of Defense (DoD). This product reflects the coordinated U.S. Defense Intelligence Production Community position on Uzbekistan.

3. Dissemination and use of this publication is restricted to official military and government personnel from the United States of America, United Kingdom, Canada, and Australia.



5. All questions and comments concerning this handbook should be sent to:
   PHONE: (703) 784-6126 or (DSN) 278-6126
   INTELINK: <<www.mcia.ic.gov/feedback.htm>>

## Contents

## Appendices

## Illustrations


KAZAKHSTAN
Lake Balkhash
Aral Sea
Muynak
Kungrad
Khodzheyli
Nukus
Amu Darya
Syrdar'ya
Uchkuduk
Urgench
Zarafshan
Chatkal
Naryn
KYRGYZSTAN
TASHKENT
Namangan
Andizhan
Fergana
Gulistan
Navoi
Dzhizak
Bukhara
Samarkand
Zeravshan
Kyzylsu
TADZHIKISTAN
DUSHANBE
Pyandzh
Murgab
TURKMENISTAN
ASHKHABAD
Karshi
Oktyabr'skiy
Amu Darya
Termez
PAK.
AFGHANISTAN
Morghab
Indus
KABUL
IRAN
UZBEKISTAN
National capital
Oblast center
City
International border
0 100 200 km
0 50 100 150 mi
60°
66°
72°
42°
36°

**Uzbekistan**

## KEY FACTS

**Country Names**

*Conventional long form*. Republic of Uzbekistan
*Conventional short form*. Uzbekistan
*Local long form*. Uzbekiston Respublikasi
*Former*. Uzbek Soviet Socialist Republic

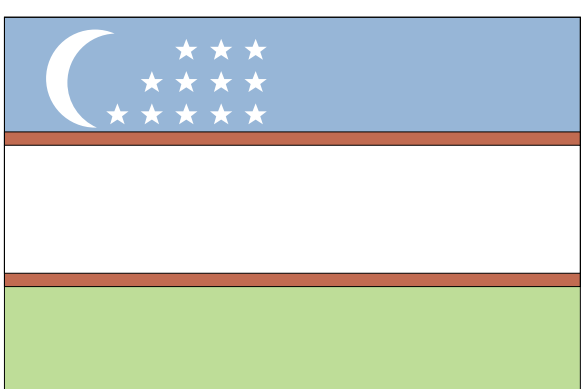
**National Flag**. The flag of Uzbekistan has three broad, horizontal stripes of light blue (top), white, and light green. Thin red stripes separate the three stripes. In the upper hoist corner are a white crescent and 12 white stars. The crescent stands for the rebirth, the stars represent the 12 zodiac signs. White symbolizes peace; green, nature; red, life force; and blue, water and eternal night.

**Head of State.** President Islam Karimov

**Capital.** Tashkent

**Time Zone.** GMT+5 October through March;
GMT+6 April through September

**Population.** 25,155,064 (July 2001 est.)



National Flag

**Languages.** Uzbek is the national language; however, Tajik is spoken in the Samarkand and Bukhara regions. There is a small Russian-speaking minority.

**Currency.** In 1994, Uzbekistan introduced the som. 1 som = 100 tyn. Notes are in denominations of 20, 5, and 1 som, and 50, 10, and 1 tyn. There are no coins. As of September 2001, the exchange rate is 424 som per US$1.

**President Islam Karimov**

In general, Uzbekistan is a cash-only economy. Travelers' checks are generally not accepted; only the National Bank of Uzbekistan cashes travelers' checks into local currency. Credit cards are only accepted at major hotels and a few shops and restaurants.

The government's monetary policy to strengthen the som has involved: strict control on the value of bills of exchange and withdrawals from bank deposits, reductions in credit to state enterprises, and a decline in government spending.

## U.S. MISSION

### U.S. Embassy

| | |
|---|---|
| *Address* | 82 Chilanzarskaya St<br>Tashkent, Uzbekistan 700115 |
| *Phone* | (998-71) 120-5450 |
| *Fax* | (998-71) 120-6335 |

*Hours* The U.S. Embassy in Uzbekistan is open Monday through Friday from 0900 to 1600 for services to American Citizens. The Embassy offices close for holidays.

## Travel Advisories

Current advisories are available at *www.usembassy.uz*, the Embassy's website. Personnel should leave a detailed itinerary with their commander. All official visitors are obliged to register with the Embassy.

The 11 September terrorist attacks in the United States raised concerns for Americans' safety worldwide. Uzbekistan's proximity to Afghanistan, a harbor for international terrorist Usama bin Ladin, heightens concerns for those in Uzbekistan. The U.S. Embassy in Tashkent has limited travel for Embassy personnel.

**U.S. Embassy**

U.S. citizens in Uzbekistan are urged to maintain heightened awareness to ensure their well being. While the government of Uzbekistan has been helpful in ensuring the safety of U.S. citizens, the rising tensions in the region require that all Americans in or traveling through Uzbekistan use great caution.

## Entry Requirements

A passport and visa are required for entry into Uzbekistan. Visitors can obtain a visa at an Uzbekistan Embassy abroad. Visas issued at the airport are rare exceptions. In the past, visitors could stay in Uzbekistan up to 72 hours without a visa if passing through, but this is no longer permitted. Additional information is available from the Uzbekistan Embassy at 1746 Massachusetts Ave. NW, Washington D.C. 20036, or telephone (202) 887-5300.

Travelers to Uzbekistan must also register with the Office of Entry, Exit, and Citizenship. Those staying in hotels are automatically registered; all others must register themselves; the Embassy's consular office can assist in registration.

## Customs Restrictions

The following goods may by imported into Uzbekistan by passengers 18 years and older without incurring customs duty: 400 cigarettes or 100 cigars or 500 grams of tobacco products; 2 liters of alcoholic beverages; perfume sufficient for personal use; other personal goods valued up to US$5,000. All valuable items such as jewelry, cameras, and computers should be declared on arrival.

Prohibited imports are firearms, ammunition, and drugs. Prohibited exports are items more than 100 years-old and those of cultural importance — such items require special permission to export. Those buying antiquities should request a certificate stating the age of the item(s).

The import of foreign currency is unlimited but should be declared on arrival. Export of foreign currency is permitted up to the amount declared on arrival. The import and export of local currency is prohibited.

Uzbekistani law requires visitors to carry a medical certificate stating that they are free of HIV infection. There are no other required vaccinations.

### Criminal Penalties

U.S. citizens in Uzbekistan are subject to Uzbekistani laws and regulations. The laws in Uzbekistan are different from those in the U.S., and punishment for breaking a law in Uzbekistan can be harsher than in the U.S. for a similar offense. Those caught breaking a law, even unknowingly, may be expelled, arrested, or imprisoned. In Uzbekistan, penalties for possession, use, or trafficking of illegal drugs are strict. Convicted drug offenders can expect jail sentences and heavy fines.

## GEOGRAPHY AND CLIMATE

### Geography

Uzbekistan is in central Asia. It is landlocked, 447,400 square kilometers (174,330 square miles) in area, and slightly larger than California. Two-thirds of the country is desert, the rest is either mountains or semiarid grassland. Uzbekistan's elevation ranges from sea level to 4,400 meters (14,430 feet). Seismic activity is abundant in Uzbekistan. Tashkent was nearly destroyed by an earthquake in 1966 and there have been many earthquakes since.

#### *Boundaries*

Uzbekistan is bordered to the north and west by Kazakhstan, to the southwest by Turkmenistan, to the south by Afghanistan, and to the east by Tajikistan and Kyrgyzstan.

Uzbekistan has a total boundary of 6,221 kilometers (3,857 miles) with the following countries:

| | | |
|---|---|---|
| Afghanistan | 137 kilometers | (85 miles) |
| Tajikistan | 1,161 kilometers | (720 miles) |
| Kazakhstan | 2,203 kilometers | (1,366 miles) |
| Turkmenistan | 1,621 kilometers | (1,005 miles) |
| Kyrgyzstan | 1,099 kilometers | (682 miles) |


**Location of Uzbekistan**

**Landscape**

## *Bodies of Water*

Uzbekistan is landlocked. The two major waterways in the country are the Syr-Darya and the Amu-Darya rivers; the former feeds the large Fergana Valley. Uzbekistan has a 420-kilometer (260-mile) shoreline on the southern portion of the Aral Sea. The Aral Sea, which is fed by the Amu-Darya and Syr-Darya rivers, is shrinking rapidly due to continued over-irrigation.

## *Topography*

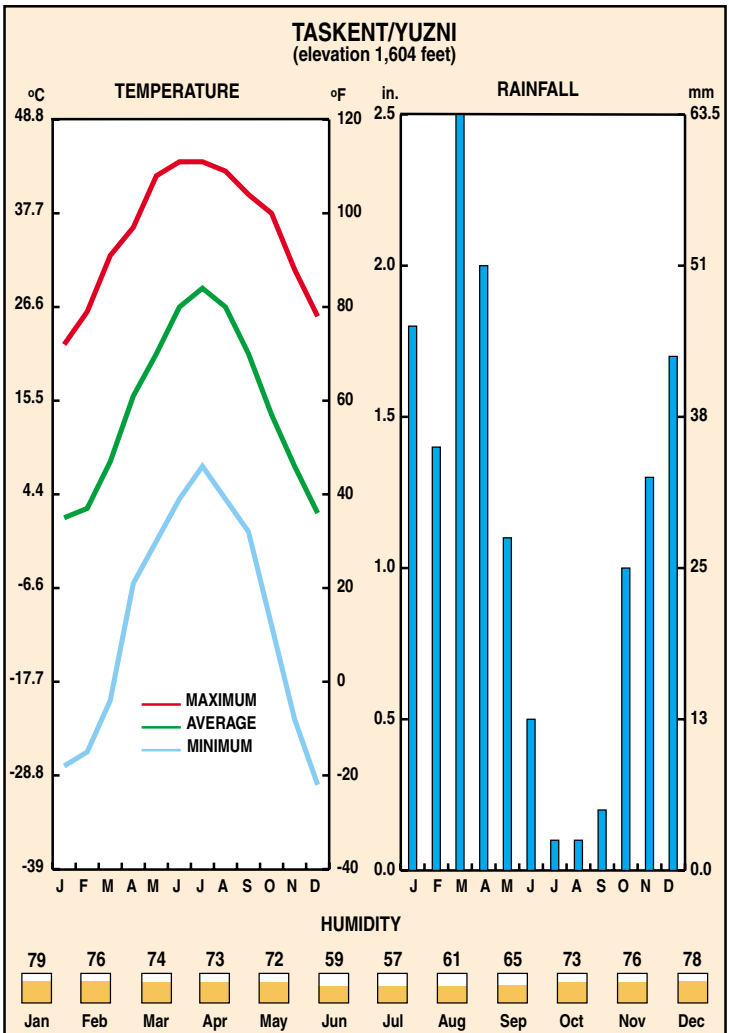
The country lying between the Amu-Darya and Syr-Darya rivers is dominated by desert. Two-thirds of Uzbekistan's land area is desert; the largest desert is the northern Kyzyl Kum. The Pamir Alay and Tien Shan mountains are in the south, although some eastern regions are of semiarid grassland.


## Topography

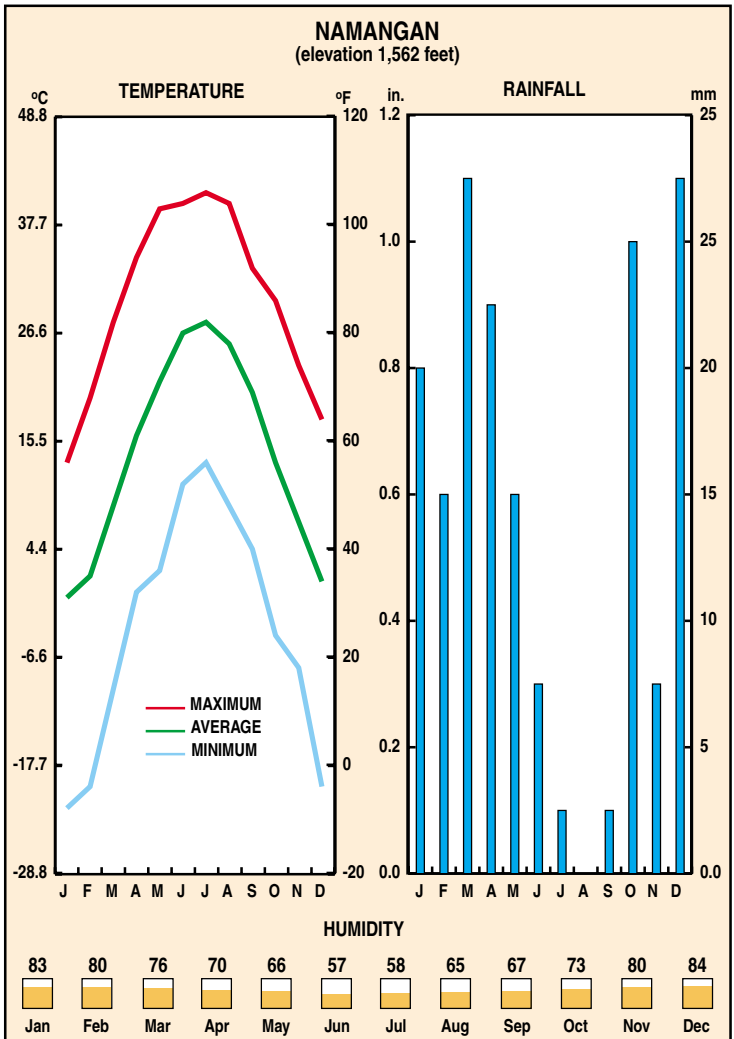
The Aral Sea is in the west. The dominant feature of the terrain is flat-to-rolling sandy desert, with dunes breaking the otherwise featureless landscape. The mountains of Kyrgyzstan and Tajikistan surround the Fergana valley in the east.

## Climate

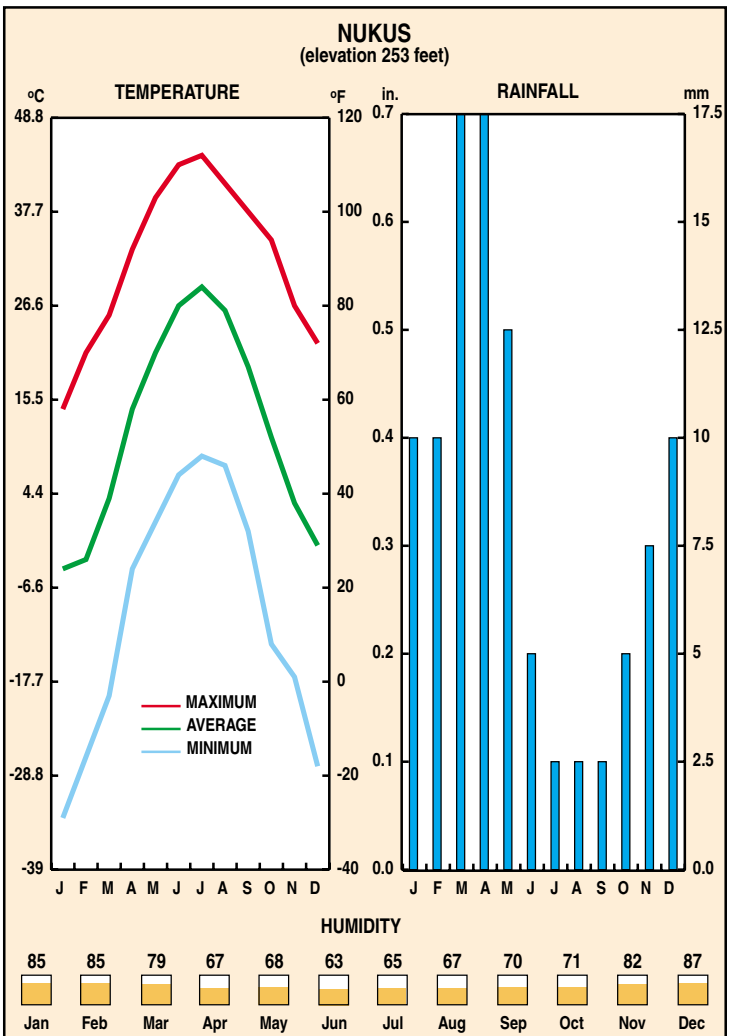
Uzbekistan has an extreme continental climate. It is generally warmest in the south and coldest in the north. Temperatures vary widely, with 20°C (68°F)




Taskent/Yuzhny Weather




Namangan Weather




Nukus Weather

drops at night and dramatic differences between the deserts and mountains. Rain is minimal except at higher altitudes. Rainfall is generally limited to March and April and October and November; terrain becomes impassably muddy at times. The lowlands' weather is comfortable from May to early June and September to early October. Midsummer is uncomfortably hot, with temperatures up to 40°C (104°F) in Tashkent and 50 °C (122 °F) in southern Uzbekistan. In winter (January to February), daytime temperatures hover between –5 to 10°C (23 to 50°F).

## Environment

Uzbekistan lacks sufficient water to irrigate the land. Years of irrigation projects, intended to increase agricultural production, have seriously degraded Uzbekistan's environment. The Aral Sea has lost 75 percent of its volume, much of the land that was irrigated is now contaminated, and air and water pollution levels are extremely high. The Uzbek government has acknowledged the problem but is having trouble reversing the effects of pollution and contamination.

| Land Use | Percent of total area | Land Use | Percent of total area |
|---|---|---|---|
| Permanent pastures | 46 | Permanent crops | 1 |
| Arable land | 9 | Other | 41 |
| Forests and woodlands | 3 | | |

There are 40,000 square kilometers (15,600 square miles) of irrigated land.

### *Natural Resources*

Uzbekistan's natural resources are natural gas, petroleum, coal, gold, uranium, silver, copper, lead and zinc, tungsten, and molybdenum. Natural gas is an important resource in Uzbekistan; the country is among the top 10 largest international gas exporters.

There are three gas pipelines in operation extending from Djaikak to Tashkent, Kokand to Fergana, and Bukhara to the Urals. In 1997, Uzbekistan produced more than 51,200 million cubic meters of gas.

Investment in infrastructure, including gas pipelines and refineries, will be required for the industry to grow. Uzbekistan has nearly 4 percent of the Commonwealth of Independent States' (CIS) total gas reserves and exports gas to neighboring states. Neighboring countries that cannot make regular payments for gas have had their supplies interrupted.

Uzbekistan is the world's eighth largest producer of gold and copper. Close to 70 metric tons of gold were extracted annually in the mid-1990s. There are also significant deposits of silver, wolfram, tungsten, lead, and zinc. Uzbekistan invited investors to develop five uranium deposits (all in the Kyzyl Kum desert). However, given Uzbek laws, these deposits would have to be developed under joint ventures.

Metals production in Uzbekistan rose steadily from the mid-1990s, particularly in the gold sector. Other metal production, such as copper and silver, increased. The export of metals emerged as a critical element of Uzbekistan trade with the rest of the world, second only to cotton production.

## TRANSPORTATION AND COMMUNICATION

### Transportation

By central Asian standards, Uzbekistan's transport system is extensive, though some of the more traveled corridors require modernization and repair. The World Bank approved a US$29 million loan in May 2000 to be used for the improvement of urban transportation systems in Samarkand, Namangan, Bukhara, Nukus, and Almalyk.

**Cross-Country Mobility**
**Level of Difficulty**

| | |
|---|---|
| **Central** | Tactical four-wheel drive vehicle, tactical tracked vehicle or foot must be used in this terrain. |

| | |
|---|---|
| **West** | Tactical four-wheel drive vehicle, tactical tracked vehicle or foot must be used in this terrain. |
| **Southeast** | Vehicles will have difficulty operating in this area. The terrain is mostly industrial and built-up or is heavy forest area. |

## *Public Transportation*

Tashkent's public transportation system includes buses, trolleybuses, trams, taxis, and a metro system. Buses, taxis, and rental cars can be found in all major cities. City bus service is inexpensive but not recommended


**Transportation Network**

for use because of crowding and petty crime. There are bus services to neighboring countries although occasional border closures to Tajikistan make this unreliable. The main thoroughfare is called the Great Uzbek Highway; it is more than 50 years-old.

The underground metro system is inexpensive and reliable. Crowds can be intense at rush hour, but it is the easiest way to traverse Tashkent. The wait for trains is rarely more than 5 minutes and the stations are clean and safe. There are two lines (the red-mapped Chilanzor and blue-mapped Uzbekistan lines) with a crowded pedestrian interchange between them at Pakhtakor and Alisher Navoi stations. A new line (green-mapped Yunusabad line) has been under construction for years.

Taxis are available during daylight hours. They are marked with a checkerboard stamp on their side. Accepting rides from "private taxis" late at night is discouraged. If the taxi is not equipped with a meter, the fare should be determined before the ride.

### *Roads*

Uzbekistan's road infrastructure is deteriorating. Compared to other central Asian states, however, Uzbekistan's road network is good. Uzbekistan's roads total 81,600 kilometers, of which 87 percent is paved. Although roads in Tashkent are relatively well maintained, many roads outside Tashkent are in poor condition and may be passable only with four-wheel-drive vehicles. Uzbekistan has road connections to all of its neighboring states.

Only main roads are lighted. Livestock, farm equipment, and animal-drawn carts are found on both urban and rural roadways day and night. Pedestrians may cross the streets without regard for oncoming traffic.

| Road Travel Times from Tashkent to: | Hours | Road Travel Times from Tashkent to: | Hours |
|---|---|---|---|
| Ashgabat | 24.0 | Almaty | 15.0 |
| Bishkek | 10.0 | Khojand | 3.5 |

All-weather roads connect larger cities and points of interest, but most of these roads are in poor repair. Highway driving at night is dangerous; there are often pedestrians and unlit, parked or moving vehicles. Cars can be hired by the trip, hour, day, or week. An international driver's license is required to drive in Uzbekistan.

### *Railways*

Uzbekistan railways are broad gauge (4.98 feet / 1.52 meters), with a maximum axle load of 22 standard tons (20 metric tons). There are 3,640 kilometers (2,257 miles) of railway in Uzbekistan's common carrier service, not including its industrial lines. Tashkent is the hub for all central Asian rail services. Uzbekistan has domestic rail links from Tashkent to Termez,

**ram**

Samarkand, Bukhara, Nukus, and the Fergana Valley. There are two stations in Tashkent, North and South.

From Tashkent to Moscow, rail travel time is 2.5 days. It is possible to connect to China through Almaty and there is an extension of the line to Iran for access to the Middle East. Rail fare is inexpensive compared to Western standards, but trains are crowded and petty crime is common.

In late 1999, the European Bank of Reconstruction and Development (EBRD) allocated US$15 million to Uzbek Railway joint stock company to reconstruct train stations.

### *Air*

Uzbekistan relies heavily on air travel. Most airfields, however, lack the lighting, instrument landing equipment, and fuel availability that would sustain operations. Twenty-nine airfields are able to accommodate strategic lift aircraft. Four airfields have been assessed as being suitable for C-5 and KC-135 aircraft: Tashkent South, Tashkent, Samarkand, and Bukhara. Two airfields, Namangan and Nukus, are suitable for C-141 aircraft.

The major airport of Uzbekistan is the Yuzhny International Airport, located 6 kilometers (3.7 miles) from the center of Tashkent. Uzbekistan is upgrading the airport using international aid funds. The national carrier is Uzbekistan Airways; it conducts all domestic air travel within Uzbekistan, and has several international flights, including daily flights to Kiev, London, New York City, and Bangkok. In addition, there are daily flights to major cities in country and to Moscow, T'bilisi, Minsk, and Kiev. The main aircraft of the civilian fleet include two leased Airbus A310s and two Boeing 767 aircraft. In addition to Uzbekistan Airways, Tashkent Airport has service from Lufthansa, Turkish Airlines, Aseana Airlines, Transaero, Pakistan International Airlines (PIA).

| Uzbekistan Major Airfields | | | | | | |
|---|---|---|---|---|---|---|
| Airfield Name | Latitude | Longitude | RW Length (m) | RW Width (m) | Aircraft Suitability | Special Conditions |
| Namangan | 40.59 N | 71.34 E | 3010 | 50 | C-141B/ C-130 | Day Ops VFR Only |
| Nukus | 42.29 N | 59.37 E | 3010 | 50 | C-141B/ C-130/ C-17/KC-10/ KC-135 | Day OpsVFR Only |
| Samarkand | 39.42 N | 66.58 E | 3100 | 45 | C-130 | None |
| Tashkent | 41.15 N | 69.16 E | 4000 | 60 | C-141B/ C-130/ C-17/ KC-10/ KC-135 | Day Ops Only |
| Termez | 37.17 N | 67.19 E | 3300 | 42 | C-130 | None |

Uzbekistan has 10 airports with paved runways. Three of those are more than 3,047 meters-long; three are between 2,438 and 3,047 meters; and five are less than 914 meters. There are also 257 airports with unpaved runways.

### *Maritime*

Uzbekistan has no coastal ports, but does have three riverine ports. All of the riverine ports are on the Amu-Darya River, but none is suitable for moving military cargo. Limited humanitarian supplies could be transported on the river by barge. The riverine ports are Termez, Nukus Landing, and Takhi-Tash.

## Communication

The telephone system is inadequate and antiquated. The domestic telephone system is undergoing modernization, particularly in Tashkent and Samarkand. The country code for Uzbekistan is 998; the area code for Tashkent is 712 for 6-digit numbers and 71 for 7-digit numbers. By


## Rivers

1998, six cellular networks were operational — four of the GSM type (Global System for Mobile Communication), one D-AMPS type (Digital Advanced Mobile Phone System), and one AMPS type (Advanced Mobile Phone System).

Internationally, landline and microwave link the country with other CIS republics, while the Moscow international gateway switch allows contact with other countries. After the completion of the Uzbek link to the Trans-Asia-Europe (TAE) fiber-optic cable, Uzbekistan will be independent of Russian

facilities for international communications. Orbita and Intelsat provide Uzbekistan with TV reception. A new Turkish satellite was put into orbit in 1995, relaying communications to Azerbaijan and the central Asian states.

Uzbekistan announced plans for a communications satellite. The US$250 million project started at the end of 2000 and is expected to take 5 years to complete. Prices for ground-based equipment were being negotiated with American, Israeli, Japanese, and Russian technical firms.

### Radio and Television

There are four television stations plus two repeaters that relay programs from Russia, Kazakhstan, Egypt, Turkey, and India. The state-run television station is Uzbek Television. Uzbek Radio and Radio Tashkent are the two state-run radio stations. There are 20 AM, 7 FM, and 10 short-wave radio stations. The short-wave broadcasts include BBC, Radio Free Europe, and Voice of America. The Uzbeks have more than 6.4 million television sets and 10 million radios.

### Internet

The Internet is available to all in Uzbekistan through privately owned Internet service providers; service is generally slow. The government monitors most Internet companies. Internet usage by Uzbek citizens is low, only 7,500 users were reported in 2000. Internet cafes are available in Tashkent and other urban areas. There are many informational web sites in English about Uzbekistan, including:

- *www.uzbekworld.com*
- *www.uzreport.com*
- *www.uzbekdaily.com*
- *www.uzbekistannews.net*
- *www.uzland.com*

### Newspapers and Magazines

Newspapers and periodicals in Uzbek, Russian, Kazakh, Tajik, Korean, Arabic, and English are available. The government monitors

many news publications; main editions are published in Tashkent and include:

| PUBLICATION | LANGUAGE | FREQUENCY |
|---|---|---|
| *Narodnoe Slovo* | Uzbek and Russian | Daily |
| *Halk Suzi* | Uzbek and Russian | 5 per week |
| *Ma'rifat* | Uzbek | 1 per week |
| *Menejer* | Uzbek and Russian | Weekly |
| *Biznes-vestnik Vostoka* | Russian | Weekly |
| *Pravda Vostoka* | Russian | 5 per week |
| *Toshkent Khakikati* | Uzbek | 2 per week |

Topics for Uzbek periodicals include science and life, health, women's interests, children's fiction, arts, and economics. Most magazines are published monthly in the Uzbek language.

## *Postal Service*

Post office hours in Uzbekistan are 0900 to 1800, Monday to Friday. The main post office is in Tashkent on Prospekt Navoi. Mail service to the U.S. and Europe is slow, with a letter taking between 2 weeks and 2 months to arrive at its destination. Envelopes should be addressed in the following order:

Country
Zip code, City
Street, House Number
Name

## *Satellites*

Uzbekistan receives relays from a Turkish satellite. Orbita and INTELSAT are used for TV reception. Uzbekistan plans to put its own satellite into space. The government monitors official media resources.

## CULTURE

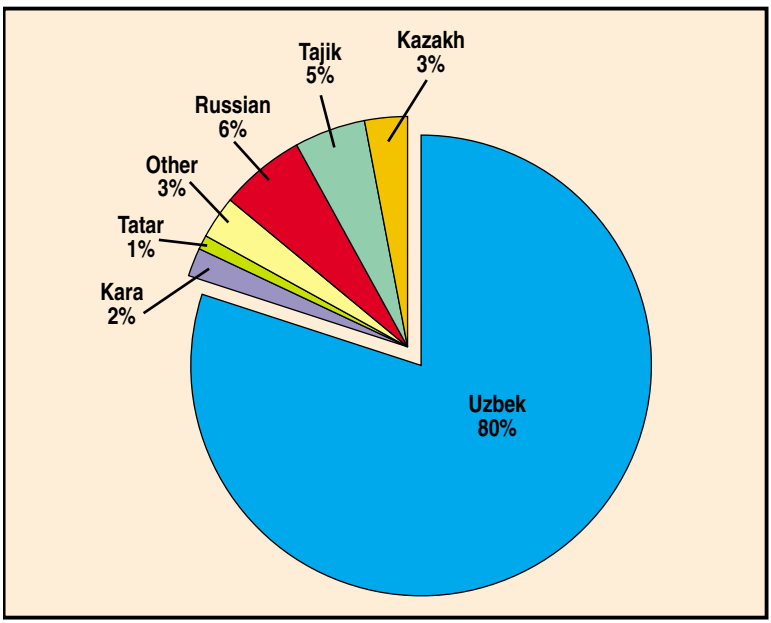
### Statistics

| | |
|---|---|
| **Population** | 25,155,064 |
| Growth rate | 1.6% |
| Birth rate | 26.1/1,000 population |
| Death rate | 8/1,000 population |
| Migration rate | -2.06/1,000 population |
| **Life expectancy at birth** | 63.81 |
| Male | 60.24 |
| Female | 67.56 |
| **Total fertility rate** | 3.06 children per woman |
| **Age/Sex Distribution** | |
| 0-14 years | 36.2% |
| Male | 4,646,341 |
| Female | 4,489,265 |
| 15-64 years | 59.06% |
| Male | 7,351,908 |
| Female | 7,504,625 |
| 65+ years | 4.62% |
| Male | 466,029 |
| Female | 696,895 |
| **HIV/AIDS – adults** | less than 0.01% (1999 est.) |

*(July 2001 est. unless otherwise noted)*

### Population Patterns

Uzbeks comprise the majority of the population, but Russians, Tajiks, Kazaks, Tatars, Karakalpaks, and a small number of Koreans live in Uzbekistan. Forty-one percent of the population lives in urban areas. Two million people live in Tashkent, and another 4 million in the sur-




**Ethnic Composition**

rounding area. Six million people live in the Fergana Valley. Other large cities include Samarkand, Bukhara, Namangan, and Andizhan.

## Society

Central Asians are characteristically wary of strangers. However, tradition dictates that guests in the home be treated with respect and hospitality. Even unexpected visitors are greeted warmly with "*Hush Kalipsis!*" ("Welcome!").

Uzbeks have syntax distinctions to describe different relationships. The word for friend (*dost* in Uzbek, *droog* in Russian) indicates a very close relationship. Most Uzbeks have only three or four close friends, for whom they will do anything, and a large network of acquaintances.

**Family**

In Uzbekistan, a person's ethnicity is important to his or her identity. If a person's great-great-grandparents were born in Tatarstan, even though the person has never been outside of Uzbekistan, he or she is, first and foremost, Tatar. In addition to strong ethnic ties, Uzbeks are generally patriotic. They are reverent of their monuments, historical figures, traditions, holidays, and cuisine.

Uzbek family relationships are very close. The average family has 4 children, but in rural areas families with 10 children are more common. Most families live in private, one-story houses with a *hovli* (courtyard) where family members spend much of their time together. In summer months, families have their meals in the *hovli*, and many sleep there.

Traditionally, Uzbek customs have been oriented toward a reserved patriarchal system. The Uzbeks maintain a strong sense of duty to the

elderly and to the community. Dignity has an important role in Uzbek society. Someone who talks or laughs or demands too much attention is considered undignified.

Children are expected to help with household chores; the girls are responsible for the cleanliness of the courtyard, while boys tend the trees and flowers. Young women usually marry between the ages of 19 and 22. It is customary for married women to live with the husband's parents. If there are several sons in a family, the oldest son and his family may move out when his next younger brother gets married.

The *chaikhana* (teahouse) is traditional in Uzbek society. Always shaded, preferably situated near streams, the *chaikhana* is a gathering place. Palov, kebab, and tea are served on low tables to Uzbek men. While foreign women are allowed in, the *chaikhanas* are mainly for men; local women do not frequent the teahouses. When there are large social gatherings of mixed company, the women and men usually sit in separate groupings, though exceptions are made for honored foreign guests.

## *Language*

Most people speak Uzbek; the president, constitutionally, must speak Uzbek. The language is similar to Osmanli and Azerbaijani Turkish. The government seeks to phase out the Cyrillic alphabet, which was introduced for Uzbek by the Soviets, in favor of the Latin alphabet.

Minority peoples speak their own ethnic languages. Tajik is spoken particularly in the Samarkand and Bukhara regions, although the government has been trying to suppress Tajik cultural identity. There is no Tajik instruction in schools, even in Tajik-speaking areas, and the Tajik-language university has been closed. Russian remains the language of interethnic communication.

## *Education*

All education is under the Ministry of Higher Education or the Ministry of Public Education. No private schools are accredited, although a few

private academies exist, particularly to teach business subjects. Tashkent has an extensive system of specialized high schools for students gifted in the sciences, the arts, and languages. The four major universities in Tashkent included the University of World Economy and Diplomacy, Tashkent State Economics University, Tashkent State University, and the University of World Languages.

All children are required to begin school at age 6, although some attend kindergarten at 5. After completing 9 mandatory years of school, students may choose to go to a trade school, enter a profession, or continue for 2 more years in preparation for university. Most degree programs last 5 years. Uzbekistan's literacy rate is 99 percent.

## *Religion*

The majority of people in Uzbekistan are Sunni Muslims (88 percent). While Uzbek Muslims honor Islamic principles, many do not strictly adhere to some practices. For instance, most do not pray five times a day or abstain from drinking alcohol, as is dictated by *shar'ia*, or Islamic law. Those in the Fergana Valley are more religious than the rest of the country. President Karimov supports a division between the state and Islam, in contrast to many Islamic leaders.

The constitution provides for freedom of religion and the separation of religion and state. However, government control is exercised through the State Committee for Religious Affairs. Religious worship has proliferated since independence and, although religious education is not taught in state schools, it is increasingly prevalent. The government, however, maintains tight control on Islamic bodies; *mullahs (*religious leaders, literally, "givers of knowledge") objecting to the government's interpretation of Islam have been harassed and arrested. All religious political parties are banned, most notably the Islamic Renaissance Party.

### *Recreation*

Soccer is the most popular sport and almost every town has a field. Wrestling, boxing, and karate are also common. Basketball is well liked by youngsters who idolize U.S. basketball stars. Boys and girls play sports in school; women do not participate in organized sports. Men sometimes play *koopkari* (sheep polo).

Many Uzbeks like to watch television. Mexican and American soap operas, musicals, and action movies are most popular. Young people enjoy going to movies, eating ice cream at outdoor cafes, and evening walks along the streets. Men go to bars to meet their friends, but women do not.

Uzbek, Turkic, Indian, and Western pop music are popular. Traditional musical instruments include a *doira* (drum-like tambourine) and a *rubab* (two-stringed guitar). Many children learn to play instruments, sing, or dance at an early age.

## Customs and Courtesies

### *Greetings*

Uzbek greetings are time consuming. Uzbeks generally greet each other with questions about family and health. Men shake hands with vigor and women sometimes hug or kiss cheeks. Men often place their left hand over their heart during a handshake to express sincerity. Most Uzbekistanis appreciate the effort a foreigner makes to learn a few Uzbek words.

Men generally do not make physical contact with women they are greeting. A woman, however, may offer a handshake. Uzbek women normally do not shake hands, and well-behaved men do not presume to greet unknown women.

A formal greeting is *"Assalaam alaikum"* ("Peace be unto you"). The proper response is *"Vaalaikum assalaam"* ("And peace also unto you"). Informally, greeters may exchange the shorter *"Salaam"* ("Peace").

**reeting**

*"Yakshimisiz?"* (Are you well?) and *"Kandaisiz?"* (How are you?) are other common Uzbek greetings. Russians are more likely to simply shake hands and state their name.

Uzbeks address strangers as *aka* (big brother) or *opa* (big sister). *Ota* and *ona* (grandfather and grandmother) are used for the elderly. Friends and acquaintances add these terms to a persons first name. For example, a woman named Gulnora is Gulnora Opa to her friends. Russians address each other by first name and a patronymic (father's first name with the suffix *ovich* or *ovna*, for son or daughter). Many Uzbeks who used this form of address during the Soviet era are dropping the suffixes but retaining their father's first name as a middle name. Young people

use first names only. Full names are used only in the media or in very formal situations.

### *Gestures*

Uzbeks avoid public displays of affection, as well as eye contact during conversation. Women often hook arms or hold hands in public, and men may drape their arms around each other. Uzbeks point with the whole hand rather than just a finger. Showing or pointing the sole of the foot is impolite. It is considered unclean to eat or drink with the left hand.

### *Visiting*

Uzbeks often invite people to their homes. On such occasions, small gifts, especially for children, are appreciated but not expected. Hosts often give their foreign guests small gifts or souvenirs.

Visiting in Uzbekistan is frequent and not necessarily planned; friends may drop in any time of day. Upon entering a home, guests remove their shoes and might be provided with house slippers. *Choi* (tea) is always served, usually with a snack of *nan* (flat bread), fruits, and nuts.

Visitors arriving at mealtime are invited to stay and eat. The end of the meal is near when the *palov* (national dish of rice with some vegetables and sheep meat) is served. *Palov* is traditionally eaten from a communal plate using the right hand as a scoop. Tea usually is served before and after the meal. Long, elaborate toasts accompany the drinking of alcohol. Men and women socialize together, but if a man's friends come over, the women usually dine separately and serve the men.

The drinking of *choi* has cultural significance. Ceremony accompanies pouring. The host brings the teapot to the table and pours one cup. He pours it back and repeats this process two more times. These three rounds signify *loi* (mud), *moi* (butter), and *choi* (tea). The host then serves *choi* to guests, pouring it into small cups with the right hand and gently supporting the right elbow with the left hand. Uzbeks fill their tea bowls only halfway, so guests know they are not expected to leave

immediately upon finishing. Hosts usually accompany departing guests part or all of the way home.

## *Eating*

Meals are usually eaten with family. Most businesses and government offices close from 1300 to 1500 so people can go home to eat the day's main meal. Uzbeks serve dishes on common platters set in the middle of a low table. Individuals sit on patterned *korpacha* (mats) and lean against pillows. They eat with spoons or sometimes, particularly when eating *palov,* with the right hand. Russian and some urban Uzbek homes have Western-style tables. Tradition dictates that hosts repeatedly encourage guests to eat more, urging *"Oling, oling"* ("Take, take"). Compliments on the food are extended.

*Nan* (round bread) is a sacred symbol and is never thrown away or put on the ground. Placing *nan* facedown on the table is considered bad luck. Uzbeks do not drink cold drinks or use ice cubes; cold liquids are thought to cause sore throats and stomach disorders.

Central Asian food resembles that of the Middle East or the Mediterranean in its use of rice, savory seasonings, vegetables and legumes, yogurt, and grilled meats. Tea is a staple and usually served without milk. Despite their Muslim heritage, most Uzbeks drink alcohol, at least with guests. In northern Uzbekistan, meals often consist of pilafs, kebabs, noodles and pasta, stews, elaborate breads, and pastries. Subtle seasonings and ambitious desserts distinguish the cuisine of southern Uzbekistan. Summer bazaars are full of vegetables (eggplant, squash, cucumbers) and fruits (berries, melons, quinces, apples, pears, plums, apricots, peaches, grapes, and tomatoes). Fruits and vegetables are preserved for the winter; many families grow their own produce in gardens or on plots of land outside town.

## *Dress Standards*

While Tashkent is a relatively cosmopolitan city, most of the rest of Uzbekistan reflects a more conservative, Muslim-oriented culture. Men typically wear European-style clothes or mixed outfits of European and traditional Uzbek clothing. Young men prefer slacks, jeans, or running suits. Older men may wear the traditional *chapon* (long, open quilted robes) with a bright-colored sash. Many men wear a *dopy* (a black, four-sided skullcap embroidered in white). Modest dress is required even in hot weather.

**Men's Hats (top) and Girl with Braids (bottom)**

Although many Uzbek women wear European clothes in Tashkent, there is a more conservative style outside the capital. Uzbek women are fond of dresses in sparkling cloth, often worn as a knee-length gown with pants of the same material underneath. Women do not need to cover their heads, as is the case in most Muslim countries. For those women who choose to wear headscarves in the summer, they dress in white head coverings or brightly colored kerchiefs. During winter, they wear

large woolen shawls for warmth. For holidays, women also wear small caps embroidered with sequins and gold thread. Married women wear their hair in two braids and single women wear their hair in numerous small braids.

## HISTORY

The region now known as Uzbekistan was once a part of ancient Persian states. During a brief period of Buddhism under the Kushan empire, Uzbekistan became a stop on the Silk Road and had contact with the rest of the world. In the 6th century BC, the Turks rode east and brought Islam and the alphabet to Uzbekistan. Persia took control again in the 9th and 10th centuries AD. Ghengis Kahn and the Mongols conquered the region in the 13th century AD.

The name Uzbek came from a ruler descended from Ghengis Kahn named Özbeg, or Uzbek, who ruled from 1313 to 1340. The Uzbeks migrated into the region between the Amu-Darya and the Syr-Darya Rivers by 1510, the land they still occupy today. Rule of the Uzbeks was solidified during the reign of Abdullah II, who ruled from 1538 until 1598. The next three centuries were characterized by loose rule, fragmented city-states, and feuding.

After several failed attempts, Uzbekistan was incorporated into the Russian Empire between 1865 and 1876, as Russia desired a staging post for trade with India and the East. In 1924, the Soviet Union renamed Uzbekistan the Uzbekistan Soviet Socialist Republic and carved its borders along with those of the rest of central Asia based on ethnic group. Through the 1970s, the borders of central Asia, including Uzbekistan, changed as it suited the USSR.

Soviet rule did not significantly change the Uzbek character or lifestyle. The Soviet Union strictly instituted collective agriculture and a widespread shift to cotton farming. Much of the intelligentsia of Uzbekistan

**Registon Square in Samarkand**

was purged under Stalin. The USSR also forced thousands of Slavic peoples to emigrate to Uzbekistan.

By 1989, the Uzbeks wanted their own culture and language again. The movement, combined with the Soviet Union's demise, allowed President Islam Karimov to declare independence from the Soviet Union in August 1991. Free elections were held in 1991, and President Karimov was overwhelmingly reelected. Since then, Uzbekistan has been dealing with establishing democratic norms, accepting Islam into a society where religion was suppressed for many years, instituting economic modernization, and controlling opposition to the government.

## Chronology

| | |
|---|---|
| 1917 | Soviet power established in Tashkent. |
| 1918 | Turkestan Autonomous Soviet Socialist Republic (ASSR), incorporating present day Uzbekistan, proclaimed. |
| 1923-41 | Language changes four times, from Arabic alphabet to Latin, then based on Iranized Tashkent, and ultimately replaced by Cyrillic. |
| 1924 | Basmachi rebels who resist Soviet rule are crushed. Uzbek SSR founded (which, until 1929 included the Tajik ASSR). |
| 1925 | Repressive campaign against Islamic religion. All Muslim schools and mosques are forced to close. Retains autonomous status. |
| 1936 | Karakalpak ASSR (formerly part of the Russian Soviet Federative Socialist Republic) is incorporated into the Uzbek SSR. |
| 1937 | Stalin purges Akmal Ikramov, first secretary of the Uzbek Communist Party (CPUZ), and Prime Minister Faizulla Khodzhaev. |
| 1941-45 | Industry and Slavs evacuate to Uzbekistan from war zone in eastern USSR during World War II. Leads to considerable economic growth. |
| 1959 | Sharaf Rashidov becomes first secretary of CPUZ. Retains position until 1983. |
| 1983 | Yuri Andropov becomes president in Moscow. Begins campaign to expel corruption in government. CPUZ is targeted. Corruption is uncovered in cotton procurement industry. The USSR's anticorruption purge results in the replacement of 40 of 65 party secretaries. |
| 1989 | First non-communist political movement, Unity Party (Birlik), forms but does not officially register. Interethnic fighting in the Fergana Valley, 100 dead. Birlik campaign leads to Uzbek being declared the official language. |

| | |
|---|---|
| 1990 | Islam Karimov becomes executive president of the new Uzbek Supreme Soviet. Sovereignty is declared. Further interethnic fighting in Fergana Valley, 320 are killed. |
| 1991 | Independence proclaimed. Republic of Uzbekistan is adopted as official name. Uzbekistan signs treaty establishing economic community with seven other former Soviet republics. Communist Party of Uzbekistan is restructured as the Peoples Democratic Party of Uzbekistan (PDPU). Karimov remains as leader and is confirmed as president with 86 percent of votes. Joins CIS. |
| 1992 | Price liberalization provokes student riots in Tashkent. Post-Soviet constitution adopted that reflects Western democratic influence. All religious parties are banned. Uzbekistan sends troops to Tajikistan to suppress violence and strengthens border controls. |
| 1992-93 | Government suppresses internal dissent; instructs media to register with the Committee for the Press; political opposition groups such as Birlik, Erk, and Adolat are banned or denied registration as legal political parties; Islamic groups repressed widely. |
| 1995 | Parliament (Oly Majlis) referendum extends President Karimov's term in office by 3 years. |
| 1997 | Violence erupts in eastern Uzbekistan; government attributes unrest to Islamic activists from the Wahhabi sect. Government troops are dispatched to the area and hundreds of people are arrested. |
| 1998 | New laws against terrorism are passed. |
| 1999 | A series of six car bomb explosions in Tashkent kills 16 persons and injures 130 others; Government reports that nearly 250 people participated in the attack. Nineteen of those are executed,128 others are jailed, the remainder not yet caught; Parliamentary elections in December 1999. |
| 2000 | President Islam Karimov wins re-election with 92 percent of the vote. |

## GOVERNMENT AND POLITICS

### Government

Uzbekistan's government is a republic with a strong executive presidency. The constitution, adopted on 8 December 1992, appeared to allow for the development of multiparty politics. However, it also strengthened the president's powers. Karimov banned a number of opposition parties, including the nationalist Birlik (Unity) movement and the Islamic Renaissance Party.

#### *National Level*

**Executive Branch.** The chief of state is President Islam KARIMOV (since 24 March 1990, when he was elected president by the then

**Legislative Branch**

Supreme Soviet). Uzbekistan is effectively under authoritarian presidential rule — other branches have little power.

The president is elected by popular vote for a 5-year term. The last election was held 9 January 2000; the next is scheduled for January 2005. An extension of President Karimov's original term of 5 years was overwhelmingly approved — 99.6 percent of the total vote favored it.

The head of government is Prime Minister Otkir SULTONOV (since 21 December 1995). The prime minister is appointed by the president, as are deputy ministers.


**Administrative Divisions**

The Cabinet of Ministers is appointed by the president with approval of the Supreme Assembly.

**Legislative Branch.** The legislative branch is a unicameral Supreme Assembly, Oliy Majlis. It has 250 seats. Members are elected by popular vote to serve 5-year terms. Elections were last held 5 and 19 December 1999; the next are scheduled for December 2004.

**Judicial Branch.** Supreme Court judges are nominated by the president and confirmed by the Supreme Assembly.

## *Local Level*

Local government is divided into administrative divisions, or *wiloyatlar.* There are 12 *wiloyatlar*: Andijon Wiloyati, Bukhoro Wiloyati, Farghona Wiloyati, Jizzakh Wiloyati, Khorazm Wiloyati (Urganch), Namangan Wiloyati, Nawoiy Wiloyati, Qashqadaryo Wiloyati (Qarshi), Samarkand Wiloyati, Sirdaryo Wiloyati (Guliston), Surkhondaryo Wiloyati (Termiz), and Toshkent Wiloyati. There is one autonomous republic, Qoraqalpoghiston Nukus, and one city, Toshkent Shahri. [NOTE: Those names in parentheses are administrative center names.]

## *Key Officials*

| | |
|---|---|
| President | Islam Karimov |
| Chairman, Supreme Assembly | Erkin Halilov |
| Prime Minister | Utkur Sultanov |
| Deputy Prime Ministers | Bakhtiyor Alimjanov<br>Anotoliy Isayev<br>Dilbar Ghulomova<br>Bakhtiyor Hamidov<br>Hamidalla Karamatov<br>Oktam Ismailov<br>Valeriy Otayev<br>Mirabror Usmonov<br>Rustam Yunosov |

| | |
|---|---|
| Minister of Agriculture and Water Utilization | Anatoliy Isayev |
| Minister of Communications | Fahtullah Abdullaev |
| Minister of Defense | Major General Kadir Gulomov |
| Deputy Minister of Defense | Alisher Islamov |
| Minister of Education | Dzhurah Yuldashev |
| Minister of Emergency Situations | Major General Bahodir Kasymov |
| Minister of Energy and Electricity | Valeriy Otayev |
| Minister of Finance | Rustam Azimov |
| Minister of Foreign Affairs | Abdulaziz Kamilov |
| Minister of Foreign Economic Relations | Elyor Ghaniyev |
| Minister of Health | Feruz Nazirov |
| Minister of the Interior | Major General Zakirzhon Almatov |
| Minister of Justice | Abdusamad Polvon-zoda |
| Minister of Labor | Shavkatbek Ibrohimov |
| Minister of Municipal Economy | Ghofurjon Mukhamedov |
| Minister of National Security | Mirakbar Rakhmonkulov |
| Minister of Social Security | Oqilijon Obidov |

## Politics

### *Elections*

Elections are held every 5 years; the most recent were in December 1999. Those 18 or older may vote.

### *Parties and Pressure Groups*

Karimov has curtailed activities of opposition political parties; he banned some parties. The Communist Party was renamed the People's Democratic Party (*Chalk Birliki*). Abdulhafiz Jalolov is its chairman.

All parties based on ethnic or religious lines are banned by the constitution. Another party, the National Progress Party, is legally registered. It

**Renovation of Communist Monument**

was established by a presidential adviser and supports the president in most of his policies, as does the People's Unity Movement.

The five parties that participated in the December 1999 elections and those permitted to contest the parliamentary elections include:

- The ruling People's Democratic Party (*Halq Demokratik Partiyasi*),
- The Homeland Progress Party (*Watan Tarakkiyoti Partiyasi*),
- The Justice Social Democratic Party (*Adolat Sotsiyal Demokratik Partiyasi*),
- The Self-Sacrificers' Party (*Fidokorlar Demokratik Partiyasi*), and
- The National Renaissance Party (*Milliy Tiklanish Partiyasi*).

Other parties representing a challenge to the ruling party have been banned.

**The People's Democratic Party.** The PDPU was the first party to be registered in independent Uzbekistan. It remains the biggest party and the favorite in elections. Chairman Abdulhafiz Jalalov claims the party has 500,000 members, more than 3,000 of whom are officials on local councils. In the 150-member parliament, the party holds 48 seats. The party's platform is based on reaching a degree of economic freedom for Uzbekistan that parallels states with a developed market economy. It also seeks to free manufacturers from state interference in economic activities, improve tax policy, and expedite economic restructuring to orient Uzbekistan toward its domestic market.

**The Homeland Progress Party.** Registered in 1992, this party draws the intellectuals in Uzbekistan. Its leader is Akhtam Tursunov. The party has established centers where young people can meet with officials; more than half of Uzbekistan's population is under 30 years-old. The party's platform focuses on furthering economic development, deepening reforms in the field of entrepreneurship, strengthening the institution of private ownership, and improving the taxation system.

**The Justice Social Democratic Party.** Turgunpulat Daminov is the leader of the Justice Social Democratic Party, created just after the 1994 elections. Much of the group's platform is based on plans prepared by current President Islam Karimov. It focuses on industrial development and the expansion of export-oriented branches of the industrial sector.

**The Self-Sacrificers' Party.** Created in late 1998 and led by Erkin Norbutayevit, this party targets the youth vote. It endeavors to arrange loans and access to higher education for young people who show business potential. The party has also spoken with tax authorities and banks to set up programs to help talented young people.

**The National Renaissance Party.** Ibrohim Ghafurov is the head of this party. It has not publicized an ideological platform.

**The United Party.** Exiled leaders of Uzbek opposition parties met in February 2000 to discuss uniting in the future into a single movement

that would be called the United Uzbek Opposition. Parties including Erk, Birlik, and Hezb-e Tahrir were represented at the meeting that took place in Afghanistan. They agreed to follow the tactics of the United Tajik Opposition to fight power and unleash a civil war.

**Fidorkorlar.** Non-opposition parties Fidorkorlar and Vatan Tarakkieti announced in April 2000 that they would merge. Under the leadership of Erkin Norbutaev, this merged party has a combined membership of 50,000 and 54 parliamentary deputies. It is the second largest parliamentary faction.

Political pressure groups and leaders that have been banned include:

- **Birlik (Unity) Movement.** Led by Abdurakhim Pulat.
- **Erk (Freedom) Democratic Party.** Led by Muhammad SOLIH, banned 9 December 1992.

There is also the Human Rights Society of Uzbekistan, led by Abdumanob Pulat, and the Independent Human Rights Society of Uzbekistan, led by Mikhail Ardzinov.

## *Diplomatic Missions*

| | |
|---|---|
| Embassy of Germany<br>Sharaf-Rashidov-Kuchasi 15<br>Tashkent, Uzbekistan<br>Telephone: (+7 3712) 34 66 96<br>Facsimile: (+7 3712) 39 43 59 | Embassy of Israel<br>Lachuti St. 16A<br>Tashkent, Uzbekistan<br>Telephone: (+7 3712) 56 78 23<br>Facsimile: (+7 3712) 54 57 19 |
| Embassy of Italy<br>59 Ulitsa Amir Timur<br>Tashkent, Uzbekistan<br>Telephone: (+7 3712) 35 42 72;<br>35 20 09<br>Facsimile: (+7 3712) 89 15 14 | Embassy of Japan<br>Azimov 52/1<br>700047 Tashkent, Uzbekistan<br>Telephone: (+7 3712) 33 51 42<br>Facsimile: (+7 3712) 89 15 14 |

| | |
|---|---|
| Embassy of Latvia<br>6 Ulitsa Murtozeava<br>Tashkent, Uzbekistan<br>Telephone: (+7 3712) 34 92 13; 34 24 89 (consular)<br>Facsimile: (+7 3712) 34 92 13<br>Email: *latvemb@bcc.com.uz* | Embassy of the Russian Federation<br>83 Ulitsa Nukusskaya<br>Tashkent, Uzbekistan<br>Telephone: (+7 3712) 54 36 41; 55 91 57<br>Facsimile: (+7 3712) 55 87 74 |
| Embassy of the United Kingdom<br>6 Ulitsa Mutaseva<br>Flat 84, 85<br>700100 Tashkent, Uzbekistan<br>Telephone: (+7 3712) 34 65 52; 34 76 58; 89 12 88<br>Facsimile: (+7 3712) 34 04 65; 89 15 49 | Embassy of the United States of America<br>82 Chelanzanskaya<br>Tashkent 700115,Uzbekistan<br>Telephone: (+7 3712) 77 14 07; 77 11 32<br>Facsimile: (+7 3712) 77 69 53 |
| Diplomatic representation in the US:<br>Chief of mission, Ambassador Shavkat HAMRAKULOV<br><br>Chancery: 1746 Massachusetts Avenue NW, Washington, DC 20036<br>Telephone: [1] (202) 887-5300<br>FAX: [1] (202) 293-6804<br>Consulate(s) general: New York | |

## *Foreign Relations*

**United States.** The U.S. recognized the independence of Uzbekistan on 25 December 1991 and opened an Embassy in Tashkent in March 1992. The U.S. believes that its own interests will best be served by development of an independent, stable, prosperous, and democratic central Asia. As the most populous country in central Asia and the only one that borders all the others, Uzbekistan is regionally pivotal. The United States has developed a broad relationship covering political, military, nonproliferation, economic, trade, assistance, and related issues. This has been institutionalized through the establishment of the U.S.-Uzbekistan joint commission, which held its first meeting in February 1998.

The U.S.-Uzbek joint commission met in Tashkent in May 1999 and signed several agreements, most notably on security issues. Uzbekistan sees the U.S. as a major ally and has publicly supported the U.S. position on matters as wide ranging as the embargo against Cuba and attacks on Iraq and the former Yugoslavia. The future of U.S.-Uzbek relations is promising. There have been meetings to develop plans for military cooperation and US$10 million was pledged to aid counterterrorism measures.

In 1997, a U.S. Presidential Determination was signed, making Uzbekistan the first CIS eligible for foreign military financing.

Uzbekistan has been a strong partner of the United States on foreign policy and security issues. It has sought participation in Western security initiatives under the Partnership for Peace (PfP) program, OSCE, and the Euro-Atlantic Partnership Council. Uzbekistan views its American ties as balancing regional influences, helping Uzbekistan assert its own region, a market for U.S. exports, a producer of important resources (gold, uranium, natural gas), and a regional hub for pipelines, transportation, communications, and other infrastructure in which U.S. firms seek a leading role.

**Neighbors.** In 2000, the defense ministers of the CIS promised to assist Uzbekistan in its battle to ensure stability and security along its borders. As these actions posed a threat to all of the CIS, an allied force was established, and included military from Russia and central Asian states. In additional meetings in 2000, the defense ministers of the CIS signed a program to combat terrorism, organized crime, religious extremism, and drug trafficking. However, Uzbekistan suspended an agreement on mutual recognition of visas issued by the CIS states. This was done because of the increasing law violations by aliens entering Uzbekistan.

**Other Major Countries.** Uzbekistan has expressed interest in joining the Shanghai Five alliance in Asia. This alliance consists of China, Russia, Tajikistan, Kazakhstan, and Kyrgyzstan. Since 1996, this group has built up its economic, military, and diplomatic ties. A statement was issued after their 2000 summit in Dushanbe describing their consensus on international security. In the statement, the five countries express


**Commonwealth of Independent States (CIS)**

their desire to jointly fight liberation movements, terrorism, and religious extremism within their borders.

The Shanghai Five has had some impressive achievements. It has settled some of its border disputes and worked together to combat terrorism and drug smuggling. But members disagree over important issues, like the best way to use the resources of central Asia and relations with India, Pakistan, and Afghanistan.

Uzbekistan and China have agreements in law enforcement, telecommunications, property rights, and education. Uzbekistan is particularly interested in constructing an international highway connecting central Asia with Chinese ports. Japan has invested over US$1 billion in Uzbekistan between 1995 and 1999. Japan loaned the country funds for telecommunications and airport projects. South Korea is one of the leading foreign investors in Uzbekistan, focusing primarily on the automobile and textile industries.

Russia and Uzbekistan appear interested in a long-term partnership and have signed more than 130 bilateral agreements since 1992. The Uzbek government sees Russia as a power and supporter with the military potential to fight terrorism and assist Uzbekistan in countering drug trafficking.

Uzbekistan participates in the following organizations:

Asian Development Bank (AsDB)
Commonwealth of Independent States (CIS)
Customs Cooperation Council (CCC)
Economic and Social Commission for Asia and the Pacific (ESCAP)
Economic Commission for Europe (ECE)
Economic Cooperation Organization (ECO)
Euro-Atlantic Partnership Council (EAPC)
European Bank for Reconstruction and Development (EBRD)
International Atomic Energy Agency (IAEA)
International Bank for Reconstruction and Development (IBRD)
International Civil Aviation Organization (ICAO)

International Development Association (IDA)
International Finance Corporation (IFC)
International Labor Organization (ILO)
International Monetary Fund (IMF)
International Olympic Committee (IOC)
International Telecommunication Union (ITU)
NATO Partnership for Peace (PfP)
Non-Aligned Movement (NAM)
Organization for Security and Cooperation in Europe (OSCE - formerly the CSCE)
Shanghai Cooperation Organization (SCO)
United Nations (UN)
United Nations Conference on Trade and Development (UNCTAD)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
United Nations Industrial Development Organization (UNIDO)
Universal Postal Union (UPU)
World Health Organization (WHO)
World Intellectual Property Organization (WIPO)
World Meteorological Organization (WMO)
World Trade Organization (WTO, applicant)

## ECONOMY

Uzbekistan is a dry, landlocked country of which 10 percent is cultivated, irrigated river valley. More than 60 percent of its population lives in densely populated rural communities. Uzbekistan is the world's third largest cotton exporter, a producer of gold and oil, and a regionally significant producer of chemicals and machinery. Following independence in December 1991, the government sought to bolster its Soviet-style command economy with subsidies and tight controls on production and prices. Faced with high rates of inflation, however, the government began to reform in mid-1994 by introducing tighter monetary policies, expanding

**Samarkand Market**

privatization, slightly reducing the role of the state in the economy, and improving the environment for foreign investors.

The state continues to dominate the economy and has been unable to effect drastic changes. The IMF suspended Uzbekistan's US$185 million standby arrangement in late 1996 because of governmental policies that made fulfilling fund conditions impossible. Uzbekistan has responded to the negative external conditions generated by the Asian and Russian financial crises by tightening export and currency controls. Economic policies that have discouraged foreign investment are a major factor in the economy's stagnation. A growing debt burden and persistent inflation led to little growth in 2000; improvement is not anticipated for 2001.

## Statistics

| | |
|---|---|
| **Gross domestic product (GDP)** | |
| Purchasing power parity | $60 billion (2000 est.) |
| Real growth rate | 2.1% (2000 est.) |
| Purchasing power parity (per capita) | $2,400 (2000 est.) |
| Composition by sector | agriculture, 28%; industry, 21%; services, 51% (1999 est.) |
| Inflation rate (consumer prices) | 40% (2000 est.) |
| **Labor force** | |
| By occupation | 11.9 million (1998 est.) agriculture, 44%; industry, 20%; services 36% (1995) |
| Unemployment rate | 10% plus another 20% underemployed (1999 est.) |
| **Budget** | |
| Revenues | $4 billion; |
| Expenditures | $4.1 billion |
| **Industries** | textiles, food processing, machine building, metallurgy, natural gas, chemicals |
| Production growth rate | 6.4% (2000 est.) |
| Electricity | Production, by source: fossil fuel, 86.4%; hydro, 13.6%; other, 0% (1999) Exports, 3.92 billion kWh; Production: 42.876 billion kWh; Consumption: 43.455 billion kWh |
| Agriculture (products) | cotton, vegetables, fruits, grain; livestock |
| **Exports** | $2.9 billion (f.o.b., 2000 est.) |
| Commodities | cotton, gold, natural gas, mineral fertilizers, ferrous metals, textiles, food products, automobiles |

| | |
|---|---|
| Key Partners | Russia, 13%; Switzerland, 10%; UK, 10%; Belgium, 3%; Kazakhstan, 4%; Tajikistan, 4% (1999) |
| **Imports** | $2.6 billion (f.o.b., 2000 est.) |
| Commodities | machinery and equipment, chemicals, metals; foodstuffs |
| Key Partners | Russia, 14%; South Korea 14%, Germany 11%, U.S. 8%, Turkey 4%, Kazakhstan 4% (1999) |
| **Debt (external)** | $3.3 billion (1999 est.) |
| **Economic aid (recipient)** | $276.6 million (1995) |
| **Currency** | Uzbekistani som (UZS) |
| **Exchange rates** | UZS:US$=325.0 (Jan 2001); 141.4 (Jan 2000); 111.9 (Feb 1999); 110.95 (Dec 1998); 75.8 (Sep 1997); 41.1 (1996) |

## *Resources*

**Oil.** Uzbekistan is the only country in the former Soviet Union to have increased substantially its oil production since independence. From 66,000 barrels per day in 1992, Uzbekistan boosted its total oil production to 162,000 barrels per day in 1999. The country's increase in oil production over the past decade has allowed Uzbekistan to produce all the oil it needs and sell the surplus.

Oil reserves in Uzbekistan are estimated at 600 million barrels, with 171 discovered oil and gas fields in the country. Among these, oil is produced at 51, natural gas at 27, and condensate at 17. The Bukhara-Khiva region contains more than 60 percent of Uzbekistan's known oil fields, including the Kikdumalak field, which accounts for 70 percent of the country's oil production. In addition, the Fergana region contains another 20 percent of the country's oilfields, and the Ustyurt plateau and the Aral Sea have been targeted for further exploration. At present, oil

and gas deposits in Kokdumalak, Shurtan, Olan, Urgin, and south-Tandirchi (all in southwestern Uzbekistan) are being developed rapidly, and oil tanks are being constructed in Angren (Tashkent Region) and in Pap (eastern Namangan Region).

**Water.** The Aral Sea is in northwestern portion of Uzbekistan and overlaps into southwestern Kazakhstan. It used to be the world's fourth largest lake, covering 66,000 square kilometers and holding 1,000 cubic kilometers of water. Today the amount of water in the sea has been drastically reduced by extraction of irrigation water.

The Soviet Union began large scale agricultural development of the region surrounding the Aral Sea in 1960. By 1980, seven million hectares of farmland was irrigated with Aral Sea water sources. The local population almost doubled from 14 to 27 million, and annual water withdrawal amounted to 120 cubic kilometers. This development seriously disrupted the fresh water replenishment of the sea, and the waterline fell. By 1990, 95 percent of the marshes and wetlands had dried to sand deserts and the sea had reduced in area by half and in volume by three-quarters.

The water supply in the Aral Sea has quadrupled in mineral content and has been contaminated with fertilizer and pesticide runoff from the surrounding farms. The dried lake bed has the pollutants in abundance and dust storms redistribute them through the region 90 days of the year. The climate has changed with the water depletion; the summers are shorter but hotter and rainless. The winters are longer, colder, and snowless. The water supply around the Aral Sea is highly polluted. The people who live around the sea have experienced high rates of cancer, kidney and liver disease, and chronic bronchitis. Arthritic diseases are 6,000 percent higher than normal. The infant mortality rate is among the highest in the world.

It has been estimated that an additional 73 cubic kilometers of fresh water would have to be discharged into the Aral Sea each year for 20 years to restore the lake to its 1960 level. The amount of withdrawal from the lake has been stabilized to around 110 cubic kilometers per

year. Efforts are underway both locally and internationally to stabilize and replenish the Aral Sea.

**Gold.** Uzbekistan has the fourth largest amount of known gold deposits in the world. There are 40 known deposit sites around the country. Gold reserves total 5,300 tons. Known gold reserves are concentrated in the central Kyzyl Kum, which accounts for 3,200 tons. Uzbekistan's Muruntau open pit mine is the largest in the world. Ninety-five percent of Uzbekistan's gold is mined from this deposit.

**Agriculture.** Cotton is the major crop in Uzbekistan and has accounted for as much as 40 percent of all national exports in the past. The government has attempted to diversify and grow wheat to decrease dependence on other countries for food. The state owns all the farmland and produces all cotton on state farms. The state also determines cotton area, sets production targets and prices, supplies all inputs, and purchases the bulk of the crop.

**Selling Medicine**

## THREAT

### Crime

When compared to other former Soviet countries, Uzbekistan has a relatively small crime problem. Crime rates are rising, however, and should be taken seriously by all visitors. There have been attacks on foreigners, including American citizens. Organized crime and drug trafficking occur in Uzbekistan.

### Travel Security

Reports indicate that Uzbekistan placed an unknown number of antipersonnel mines (types unknown) along its border with Tajikistan. The antipersonnel mines are in unmarked border areas.

Uzbekistan has a relatively low rate of violent crime, but attacks against foreigners, including American citizens, indicate that it is increasing. Also, street crime is increasing. Visitors should maintain a high level of awareness, particularly at night. In urban areas, travelers are urged to take the same precautions against crime that they would take in a large American city. Travelers should only use taxi cabs that are clearly marked as taxi cabs.

### Terrorism

Foreigners should be aware of an increased threat of terrorist violence in Uzbekistan. An insurgent group, called the Islamic Movement of Uzbekistan (IMU), declared *jihad*, or holy war, against the Uzbek government in August 2000 and conducted terrorist attacks and hostage-taking incidents as part of its antigovernment warfare. Although some leaders of the group were caught and executed, the group is still active. The IMU has also adopted another name, the Islamic Party of Turkestan (IPT).

Established in 1997, military commander, Juma Namangani and political spokesman, Tohir Yuldash lead the IMU. With an estimated 4,000 to

5,000 men serving in the armed wing, the group primarily consists of militants for hire — a combination of Uzbek, Kyrgyz, Tajik, Afghan, and Pakistani fighters. Following the initial series of attacks on an Uzbek border post in the Surkhandarya region, the IMU's subsequent operations suggest that it has become a formidable force, capable of creating instability at will.

The IMU obtains financial support from two major sources: international Muslim rebels and criminal activity. Although not confirmed, it appears that the IMU has been accepting money from a combination of individuals and groups in Afghanistan, Pakistan, Saudi Arabia, and Turkey. Reports from the region suggest, for example, that Islamic militant, Usama bin Ladin, gave Namangani US$20 million. The majority of the IMU's financial base is generated from criminal activity. In addition to sporadic hostage-taking, it is heavily involved in the drug trade. It controls most of the illicit narcotics traffic that ravels through Tajikistan into Kyrgyzstan, collecting a considerable and steady supply of money.

The most common reason given to explain the existence and activities of the IMU is its desire to establish an Islamic caliphate in central Asia and, on a smaller scale, to force the release of Muslims it believes have been wrongly imprisoned in Uzbekistan. Based on its activity, three motivational forces can be ascertained:

- The desire to create an Islamic state,
- A direct response to a Taliban (radical Afghan leadership) directive, and
- Illicit narcotics trafficking.

President Karimov has taken steps to counter extremist Islamic groups. An amnesty was offered in April 1999 calling on young men studying "non-traditional" Islam abroad to return and admit their guilt. Those who responded to the appeal would not be punished, but any who failed to do so would be held accountable, as would their fathers.

The propensity of these militants to encroach upon the territory of surrounding states increased in September 2000, leading the U.S. to place

the IMU on its list of foreign terrorist organizations. President Karimov has refused to enter into talks with IMU leaders Namangani and Yuldash, and rejected the offer of mediation by Nuri (the leader of the Islamic Renaissance Party), accusing Nuri of assisting the IMU.

## Drug Trafficking

Political instability and economic depression have made Uzbekistan attractive to the drug industry. Uzbekistan has a large drug production, processing, and smuggling industry. Tashkent has become a major smuggling center. Drugs produced in Uzbekistan are marketed and distributed in Russia and in the West. Uzbekistan produces extensive amounts of opium poppy and cannabis, mainly in the mountainous regions. Since 1999, more than 25 metric tons of hashish have been seized en route to the Netherlands. Uzbek authorities indicate that Azeri, Georgian, and Russian criminal groups are all active in the country. The poor economic and political conditions in Uzbekistan have caused the government to be unable to handle the rising drug crisis.

## Major Intelligence Services

The Uzbek National Security Service (SNB) was formed in 1991. The SNB is mainly composed of former KGB personnel. In late 1993, Russia and Uzbekistan reached an accord on intelligence cooperation. The SNB has now taken over control of the frontier guard and the National Guard based in Tashkent.

## Opposition Forces

The Islamic Movement of Uzbekistan is a coalition of Islamic fundamentalist militants from Uzbekistan and other central Asian states opposed to the secular regime of President Karimov. Its goal is the overthrow of Karimov and the establishment of an Islamic state in Uzbekistan. The structure of the group is unknown, and there are perhaps thousands of members. Their bases of operations are in Afghanistan and Tajikistan, and the IMU conducts its campaign in Uzbekistan, Tajiki-

stan, Kyrgystan, and Afghanistan. The IMU receives support from other Islamic extremist groups in central Asia, such as Usama bin Ladin's group, and the Taliban regime in Afghanistan.

## ARMED FORCES

Uzbekistan's military is slowly becoming more independent from Russia. The government has made an effort to integrate Uzbek senior officers, modernize the armed forces, and reexamine national strategy and doctrine. Following a purely defensive, non-nuclear military doctrine, Uzbekistan embarked on two phases of military reform. The first phase, completed in 1999, imposed military cuts, established military districts, and created new staff structures. In January 2000, Uzbekistan entered its second phase of reforms; these reforms included battle training, command structure improvements, and military hardware upgrading.

Military reform continued throughout 2000. The most publicized change came with the appointment of a civilian defense minister. Under the new regime, the defense minister is expected to have an administrative function; senior army commanders would be responsible for military operations. Uzbekistan's primary goal for 2000 was to establish mobile, self-sufficient, well-equipped and well-trained border and internal troop unit and formations. Additionally, the National Security Council noted the need to develop stronger ties between all state power wielding structures, Further, the Council stressed the need for cooperation among regions, individuals, and non-governmental organizations.

### Organization

The president is commander-in-chief of the country's armed forces. He appoints and dismisses all senior commanders. The defense minister and chief of the Main Staff exercise operational and administrative control of the armed forces. The National Security Council, established by presidential decree in 1995, elaborates on and coordinates state policy

regarding questions of national security. President Karimov is the leader of the National Security Council, whose members include Secretary of the National Security Council and the Ministries of Defense, Foreign Affairs, and Interior, and the Border Service.

Uzbekistan's armed forces are divided into the Army, Air Force, National Guard, and Border Guards. The Army and Air Force are subordinate to Ministry of Defense; the National Guard and the Border Guards are subordinate to the National Security Service. In addition, there are two Russian air defense regiments in Uzbekistan.

### Capability

Regardless of military discipline and training challenges, the Uzbek military is regarded as an efficient, dedicated, and formidable force among the post-Soviet central Asian states.

The country is creating mobile forces. It is also procuring and manufacturing modern armament, aircraft, communication equipment, and military transport. The intention is for the forces to use a single caliber, preferably locally manufactured, firearm; rebuild the helicopter fleet; and purchase modern artillery pieces and tactical radios.

### Strategic, Nuclear, Chemical, and Biological Weapons

Uzbekistan's military doctrine does not allow for strategic weapons to be maintained in the country's inventory. Policy regarding the presence of weapons from the CIS or the Russian Federation is not clear. All battlefield chemical weapons have been returned to Russian control.

It is unknown if all stocks of chemical agents have been removed from Uzbek territory, though it is claimed that the only remaining stocks are of non-persistent anti-riot gases. In mid-August 1999, a team from the U.S. Department of Defense toured the Nukus chemical plant in northeastern Uzbekistan; the plant had, until 1993, served as a testing ground for Soviet and Russian chemical weapons. The U.S. team was to decontaminate the test laboratories and attempt to locate and neutralize hun-

dreds of tons of germ-warfare cultures, including pulmonary anthrax. This program was established in a U.S.-Uzbek agreement in May 1999 and is ongoing.

## Mission

The president of Uzbekistan has repeatedly stated that no Uzbek soldiers will ever fight outside of their country. The main threats to Uzbekistan faces that the military is trying to combat are drug smuggling and terrorism.

## Strategy

The Uzbek military strategy had been to defend against a conventional assault by a neighbor. In February 2000, however, the National Security Council approved a new military doctrine that was formulated to respond to central Asia's prevalent criminal organizations and extremist forces. Uzbekistan now prepares to combat incursions made by Islamic fundamentalist groups that move relatively freely along the borders with Tajikistan, Afghanistan, and locally in the Fergana Valley. The country's change in military strategy will likely cause greater dependence on security forces: Police, Border Guards, and the National Guard.

**Defense Spending**

| | | | |
|---|---|---|---|
| 1995 | US$350 million | 1999 | US$615 million |
| 1996 | US$430 million | 2000 | unknown |
| 1997 | US$446 million | 2001 | unknown |
| 1998 | US$420 million | | |

## Personnel

Uzbekistan's estimated total force strength is 75,000 personnel. This includes an Army of 50,000, an Air Force of 5,000, and paramilitary forces numbering between 18,000 and 20,000 (comprising a 1,000-strong National Guard attached to the Ministry of Defense and 17,000 to 19,000 troops attached to the Ministry of Internal Affairs). In case of war or other

national emergencies, the Uzbekistani Ministry of Defense plans to augment its active duty ground force with former service personnel. The country's change in military strategy will most likely reduce the size of the military. However, the president has stated that he wishes to maintain a well-equipped, well-trained military that is mobile and flexible. He has also stated that he wishes to expand the military reserve system.

Military service for conscripts in Uzbekistan lasts for 18 months. As of mid-2000, military volunteers, including women, served 3 to 5 years depending on specialty, training, and education level.

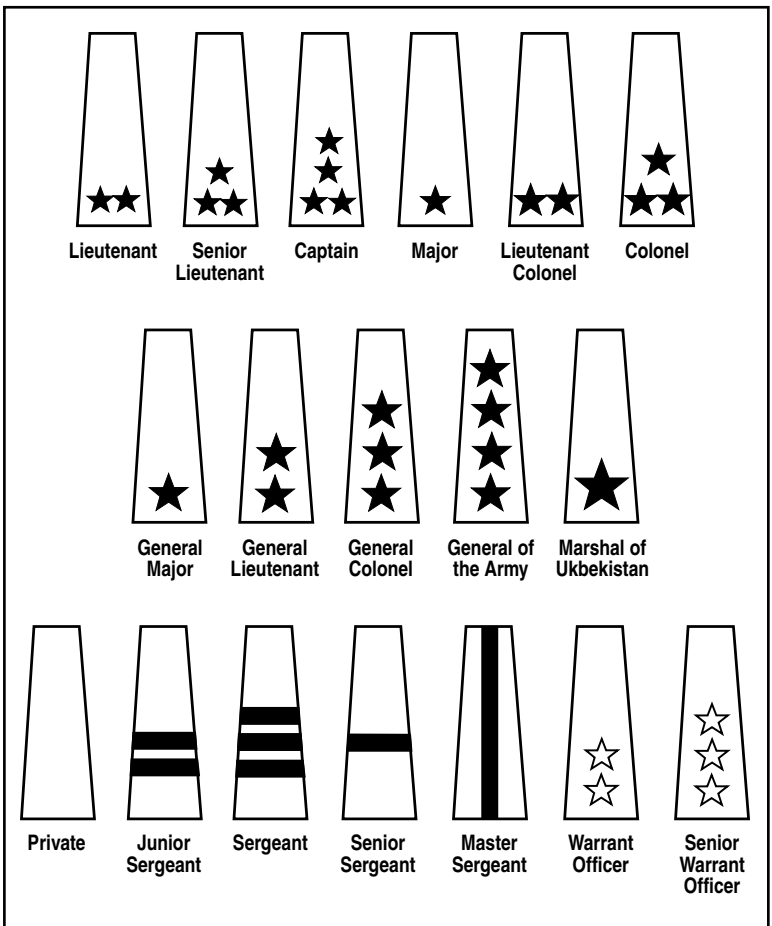
The rank structure is similar to that of the former Soviet system. Age limits, likewise, are based on those that were used in the Soviet armed forces: private solders and NCOs – 35; SNCOs and junior officers – 43; major/lieutenant colonel – 45; colonel – 50; major general/lieutenant general – 55; colonel general – 60; army general – 65; Marshal of the Republic of Uzbekistan - for life.

For the first 2 years of the Uzbek armed forces' existence, Slavs dominated the higher echelons of command. Of the 15 generals on the active list in 1992, only 5 were Uzbek; 85 percent of the officer corps was reported to be Slav. The ratio of Uzbeks to Slavs at the rank of general serving in the Defense Ministry was significantly modified during late 1994 and early 1995, with the promotion of a further 10 Uzbek officers to the rank of major general.

## Training

Following the dissolution of the Soviet Army in early 1992, three former Soviet military schools remained on Uzbek territory. A presidential decree in April 1993 nationalized the schools; they are the Tashkent Higher All-Arms Command School; Chirchik (former Tashkent) Higher Tank Engineer Command School; and Samarkand Higher Military Automobile Engineer Command School. Many of the cadets at these three institutions are from other central Asian states.

The latest additions to the Uzbek military education system are the Academy of the Armed Forces of the Republic of Uzbekistan and the Dzhizak




**Rank and Insignia**

Higher Military Aviation School. Additionally, Uzbekistan has plans to increase its military training facilities with a focus on communications.

Reacting to new military doctrine, the Uzbek military is being trained for rapid-reaction with other security services. Antiterrorism training has already been conducted in the Khorezm region, and in Termez along the border with Afghanistan. These exercises include methods of border control, disarming armed criminals, detaining terrorists, and freeing hostages. National exercises were also conducted in the Tashkent and Syrdarya regions. These training operations focused on improving skills required to repel attacks at strategic installations and eliminating terrorists in crowded areas without harming civilians. Uzbekistan is reforming and training its armed forces and law enforcement agencies to effectively counter nontraditional security threats by becoming compact and highly mobile.

The Uzbeks rely on both Russia and Turkey to help train their military, and there are agreements for personnel to receive training in both countries. Russia and Turkey have experience in combating Muslim separatist rebels, the prime security threat to Uzbekistan. The armed forces closely studied the conflicts in Chechnya, Afghanistan, and the 1999 events in southern Kyrgyzstan. As recently as June 2001, the army and border guards trained to conduct operations in difficult mountain terrain, in anticipation of fighting IMU guerrillas. Further training agreements are expected with other countries.

Four military lyceums were established in 1993 to provide pre-military training and education to Uzbek youth. Located in Tashkent, Samarkand, Fergana and Urgench, each lyceum is headed by a director and consists of three training companies commanded by a captain or major.

### Key Defense Personnel

| | |
|---|---|
| **President** | Islam Karimov |
| **Prime Minister** | Otkhur Soltanov |
| **Foreign Minister** | Abdulaziz Kamilov |

| | |
|---|---|
| **Minister of Defense** | Kadyr Gafurovich Gulamov |
| **Chairman, JCS** | Lieutenant General Tulkun Yuldashevich Kasymov |
| **Air Force Commander** | Major General Takhir Yusupov |
| **Border Troops Commander** | Major General Rafail Kazymdzhan |
| **Air Defense Force Commander** | Major General E. Novinsky |
| **Minister for Internal Affairs** | Major General Zakirzhon Almatov |
| **Chairman, National Security Committee** | Rustam Inoyatov |
| **Chief, Civil Defense** | Colonel Sharabirdin Nasridin |
| **Chief, Military Intelligence Directorate** | Colonel Kabul Berdiev |
| **Commander, 65th Special Operations Battalion** | Lieutenant Colonel Batyr Ganishevich Abdullaev |

## Army

### *Organization*

The ground forces consist of:

- two army corps headquarters,
- four motor rifle brigades,
- one light mountain brigade,
- two tank brigades,
- one mechanized infantry brigade,
- two air assault brigades,
- one airmobile brigade,
- one special forces brigade,
- three artillery brigades,
- one artillery regiment, and
- one MRL brigade.

Garrison bases are in Bukhara, Fergana, Samarkand, Tashkent, Termez, and Urgench. The ground forces are trained for a rapid reaction role and are deployed as follows:

| | |
|---|---|
| **Combined Headquarters** | Tashkent |
| **Special Forces Bn** | Fergana |
| **Artillery Regiment** | Tashkent |
| **Motor Rifle Brigade** | Bukhara |
| **Motor Rifle Brigade** | Samarkand |
| **Motor Rifle Brigade** | Termez |
| **Airmobile Brigade** | Fergana |
| **Airmobile Regiment** | Fergana |
| **Tank Regiment** | Tashkent |

**zbek Special Operations Forces**

## *Personnel*

With a strength of around 50,000 men, the ground defense forces are the largest of the Army, Air Force, National Guard, and Border Services. President Karimov as the Commander-in-Chief. Subordinate to the commander-in-chief are the minister of defense, and first deputy minister of defense, and chief of the general staff.

## *Equipment*

**Air Defense Weapons**

400 Strela-2/2M (SA-7)
150 Strela-3 (SA-14)
50 23-mm ZSU-23-4 Quad

**Infantry Weapons**

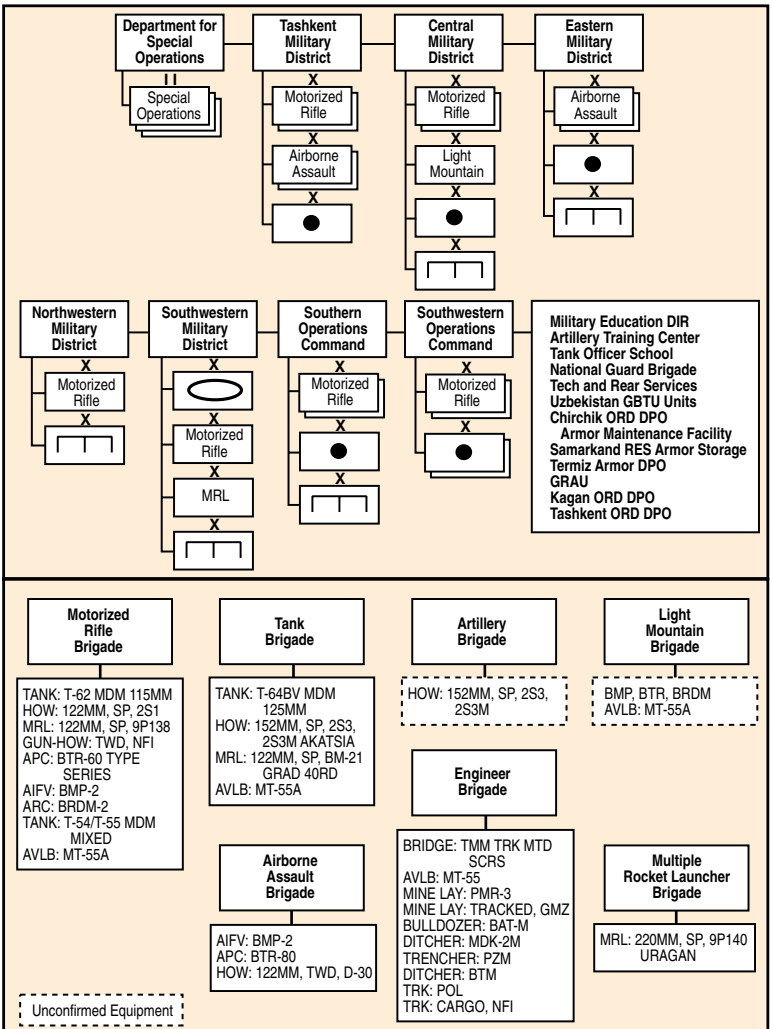
9-mm Makarov Pistol
7.62-mm Tokarev Pistol
5.45-mm PSM Pistol
5.45-mmAK74 Assault Rifle
7.62-mm AKM Assault Rifle
7.62-mm Dragunov Sniper Rifle
5.45-mm AKSU-74 Machinegun
5.45-mm RPK-74 Light Machinegun
7.62-mm PKS Heavy Machinegun Fire Support
12.7-mm DShK Heavy Machinegun

**Army Aviation**

7 Mi-2U Utility Helicopter
15 Mi-8P/T Support Helicopter
40 Mi-24D/V Attack Helicopter

**Armor**

150 T-62 MBT
150 T-64 MBT
200 T-72 MBT




## MOD Unit Subordination and Generic Equipment

273 BMP-2 IFV
130 BMD-1 IFV
300 MT-LB Multipurpose tracked vehicle
36 BTR-70 APC
290 BTR-80 APC
145 BTR-D APC

**Artillery**

48 203-mm 2S7M SP Gun
49 152-mm D-20 Gun-Howitzer
28 152-mm D-1 Howitzer
32 152-mm 2A36 Gun
17 152-mm 2S3M SP Howitzer
48 122-mm D-30/D-30A Howitzer
18 122-mm 2S1 SP Howitzer
33 122-mm BM-21 Multiple Rocket System
36 220-mm 9P140 Multiple Rocket System
69 120-mm 2S9 SP Combination Gun
120 82-mm M-37 Mortar
6 544-mm 9K52 (FROG-7) Battlefield Rocket

## Air Force

Uzbekistan has claimed ownership of about 300 former-Soviet aircraft and helicopters, of which two-thirds is reportedly airworthy. However, operational control of some combat resources stationed on Uzbekistan territory may still be vested in the Russian Federation and Associated States (RFAS), to which Uzbekistan allied itself in May 1992 with a collective security agreement.

One of the first former-Soviet units taken over by the Uzbekistan Defense Ministry in July 1992 was the Chirchik Fighter Bomber Regiment. Since 1992, Uzbekistan's air and air defense forces have relied

heavily on Russian assistance, and the two countries have a treaty of cooperation with regard to training, airfield use, and communications.

Uzbekistan is cutting the number of aircraft it maintains, including the MiG-21, MiG-27, and Su-17 tactical aircraft, support helicopters, and An-12 turboprop transports. The country seeks to procure more modern aircraft; most are likely to come from Russia.Uzbekistan may have low readiness at times due to maintenance and money shortfalls.

## *Organization*

The Air Force is subordinate to the Ministry of Defense and is the force provider to Military District Commanders. The Air Force is responsible for the following units: the 65th Helicopter Regiment (Regt) at Kagan; the 60th Bomber Brigade (Bde) at Khanabad, 61st Fighter Bde at Kakaydy, the 66th Helicopter Bde and 59th Fighter-Bomber Bde at Chirchik; and the 62d Fighter Regt at Andizhan.

Operational Uzbek air bases are:

| | | |
|---|---|---|
| Andizhan | Kagan | Tashkent |
| Chirchik | Kakaydy | Tashkent South |
| Fergana | Khanabad | Verkhnekomsomlosk |

Though minimally maintained, bases that could be made available for operational use at short notice include:

| | | |
|---|---|---|
| Bukhara | Karshi South | Muynak |
| Chinaz | Kokand SE | Namangan |
| Chinaz Highway Strip | Kungrad | Navoi |
| Karshi/Khanabad | Maymanak | Nukus |
| Pakhtakor | Shakhrisyabz | Uchkuduk |
| Samarkand | Termez | Urgench |
| Sariasiva | Turtkul | Zarafshan |
| Syrdarya Highway Strip SW | | |

**hanabad Air Base**

## *Chain of Command*

| | |
|---|---|
| *Air Force* | |
| Commander | Major General Takhir Yusupov |
| Commander, Fighter–Bomber Regiment (Chirchik) | Colonel Sergei German |
| Commandant, Dzhizak Higher Command Aviation School | Major General of Aviation Georgy Abdurakhmanov |
| *Air Defense Force* | |
| Commander | Major General E Novinsky |
| Deputy Commander | Colonel Musalim Nuriddinov |

## *Training*

There are believed to be training variants of SU-17, SU-27, and MiG-29 in the Uzbek inventory. Students in cadet pilot programs receive 180 hours of flight instruction.

## *Personnel*

There are an estimated 5,000 air force personnel.

## Operating Unit Locations

| *Unit* | *Type* | *Location* |
|---|---|---|
| 59 APIB (Aviatsion'nyi Polk Istrebitelei-Bombardirovchikov/ Aviation Regiment Fighter-Bomber) | Su-25<br>Su-17M3<br>Su-17UM3 | Chirchik |
| 60 BAP (Bombardirovch'nyi Aviatsion'nyi Polk/Bomber Aviation Regiment) | Su-24<br>Su-24MR | Khanabad |
| 61 IAP (Istrebitel'nyi Aviatsion'nyi Polk/ Fighter Aviation Regiment) | MiG-29<br>MiG-29UB | Kakaydy |
| *Unit* | *Type* | *Location* |
| 62 IAP | Su-27<br>Su-27UB | Andizhan |
| 65 OVP (Otdel'naya Smeshan'naya Aviatsion'naya Eskadrilya/Independent Mixed Aviation Squadron) | Mi-6<br>Mi-6AYa<br>Mi-8 | Kagan |
| 66 OVP | Mi-24<br>Mi-8<br>Mi-26 | Verkhneko-msomolsk |
| OSAP (Otdel'nyi Smeshan'nyi Aviatsion'nyi Polk/Independent Mixed Aviation Regiment) | An-12<br>An-12PP<br>An-26<br>An-26RKR | Fergana |
| OSAE (Otdel'naya Smeshan'naya Aviatsion'naya Eskadrilya / Independent Mixed Aviation Squadron) | Tu-134A<br>An-24 | Tashkent |
| *Note:* Some of these resources may be under Russian operational control. It is thought that this is the case with the Su-27 aircraft. | | |

## Equipment

**Fixed-wing Aircraft**

| *Type* | *Role* | *Quantity* | *In Service* |
|---|---|---|---|
| MiG-29 | Multirole Fighter | 33 | 33 |
| Su-27[1] | Multirole Fighter | 25 | 25 |
| Su-24 | Bomber | 23 | 23 |

**Fixed-wing Aircraft (Cont.)**

| *Type* | *Role* | *Quantity* | *In Service* |
|---|---|---|---|
| Su-17 | Attack | 24 | 24 |
| Su-25 | Attack | 20 | 20 |
| Su-24MR | Reconnaissance | 11 | 11 |
| An-12PP | ELINT | 10 | 5 |
| An-26RKR | ELINT | 3 | 3 |
| An-12 | Transport | 20 | 20 |
| An-26 | Transport | 10 | 10 |
| An-24 | Communications | 1 | 1 |
| *Type* | *Role* | *Quantity* | *In Service* |
| Tu-154 | Communications | 1[1] | 1 |
| Su-27UB | Trainer | 6 | 6 |
| Su-17UM3 | Trainer | 6 | 6 |
| MiG-29UB | Trainer | 6 | 6 |
| *Note:* Su-27 aircraft may be Russian PVO aircraft.<br>1. Civil-registered; government-owned. | | | |

**Rotary-wing Aircraft**

| *Type* | *Role* | *Quantity* | *In Service* |
|---|---|---|---|
| Mi-24 | Combat | 45 | 45 |
| Mi-8/Mi-17 | Assault | 65 | 65 |
| Mi-6 | Transport | 27 | 27 |
| Mi-26 | Transport | 1 | 1 |
| Mi-17 | Communications | 1 | 1 |
| Mi-24K | Recce | 6 | 6 |
| Mi-R | Recce | 2 | 2 |
| Mi-6AYa | Command Post | 2+ | 2 |
| *Note:* It is still unclear if all helicopter assets are under ground forces or air control.<br>1. Civil-registered; government-owned. | | | |

**Air Defense Systems**

| *Type* | *Role* | *Quantity* | *In Service* |
|---|---|---|---|
| S-75 Dvina (SA-2) | Low/High-Altitude SAM | 20 | 20 |
| Almaz S-125 (SA-3) | Low/ Medium-Altitude SAM | 15 | 15 |
| Antey S-200 (SA-5) | Low/High-Altitude SAM | 10 | 10 |
| *Note:* SAMs are under the control of Russian troops. | | | |

**Air Launched Missiles**

| | |
|---|---|
| R-60 (AA-8 Aphid) | Kh-25MR (AS-10 Karen) |
| R-27 (AA-10 Alamo) | Kh-58 (AS-11 Kilter) |
| R-73 (AA-11 Archer) | Kh-25MP (As-12 Kegler) |
| Kh-23 Grom (AS-7 Kerry) | 9M14 Malyutka (AT-3 Sagger) |
| KH-28 (AS-9 Kyle) | 9M114Kokol (AT-6 Spiral) |

## Navy

Although it has a border on the Aral Sea, Uzbekistan is landlocked. It therefore has no navy.

## National Police

The police force of 25,000 is based on the structure of the former-Soviet militia. It is equipped with various small arms. The police and related Ministry of the Interior (MVD) forces are responsible for most normal internal police functions. Like other former Soviet republics, the Uzbek police controls a paramilitary arm, the Otryad Militsii Osobennogo Naznacheniya (OMON) Russia Special Forces. There are police based in all urban areas and settlements. Responsibility for fighting crime is shared between the MVD and the SNB (the ex-KGB), which has responsibility for serious, political, and drug-related crimes.

Training is based on former-Soviet structures and procedures. In February 2000, field exercises were held in Khorezm region to ensure that all law enforcement bodies could act in a coordinated manner in the event of a crisis.

### Border Guards

The Uzbek Border Troops Command was established on 24 March 1992. It is tasked with external defense and stabilization of national borders. Uzbek Border Troops are not routinely used in internal disturbances. The Deputy Chairman of the National Security Service (SNB) commands the border troops. The Border Command has close ties with the Russian Border Troops Command and has a total strength of 900. Although striving for autonomous control, the increased terrorist and insurgent activity in Uzbekistan made it clear to Uzbek leaders that Russian border patrol support was necessary. In December 1999, Uzbekistan signed an agreement with Russia to quell terrorist and extremist violence in central Asia. Uzbekistan is also strengthening its border control by adding personnel and equipment to the task. Uzbek forces recently took part in Operation ANTITERROR in the Tashkent Region, placing additional roadblocks in areas close to the borders and coordinating interservice activity. In addition to the official force, 7,000 citizens in the region volunteered to form local militias that guard mountain paths and check suspicious persons for documentation. The operation was estimated to have prevented 6,000 crimes. There are reports that Uzbekistan placed antipersonnel mines along its border with Tajikistan to prevent future incursions, though there is no further information available. The antipersonnel mines are in unmarked border areas.

### National Guard

The proposal to create a national guard was initiated late August 1991. The force was intended to take the place of former-Soviet internal troops. The force was placed under direct presidential control. With an overall strength of over 1,000 men, the National Guard comprised a cer-

**Uzbek Cavalry**

emonial guard company, a special-purpose detachment, and a motor rifle regiment. Since 1991, changes have been made in the original structure as proposed; to date, reports in the Uzbek press suggest that only one support battalion-sized detachment of the motor rifle regiment has been formed. There is little information available on the National Guard. The National Guard is used in conjunction with the Border Guards and is under the direct control of the SNB. The SNB is the Uzbekistan KGB, mainly composed of ex-KGB agents.

# APPENDIX A:
# Equipment Recognition

## INFANTRY WEAPONS 7.65-mm Tokarev/Type 51

| | |
|---|---|
| **Effective Range** | 40 m |
| **Caliber** | 7.65 x 25-mm |
| **System of Operation** | Recoil, semiautomatic |
| **Overall Length** | 7.68 in. |
| **Feed Device** | 8-round, in-line detachable magazine |
| **Weight** | 1.88 lbs |

**Using the Tokarev pistol: (1)** Load the pistol by inserting a loaded 8-rd magazine into the grip. **(2)** Pull slide firmly to the rear and release it so that it runs home and chambers a cartridge. **(3)** **WEAPON IS READY TO FIRE.** **Note:** This weapon HAS NO SAFETY.

## 9-mm Makarov

| | |
|---|---|
| **Maximum Effective Range** | 40 m |
| **Caliber** | 9 x 18-mm |
| **System of Operation** | Recoil, semiautomatic |
| **Overall Length** | 6.34 in. |
| **Feed Device** | 8-round, in-line detachable magazine |
| **Weight** | 1.56 lbs |

**Using the Makarov pistol: (1)** Insert loaded 8-round magazine into the grip. **(2)** Firmly pull the slide to the rear and release it so that it runs home and chambers a cartridge. **(3)** Release the safety, located on the left side of the pistol slide, by pushing down to **FIRE. (4) WEAPON IS READY TO FIRE. Note:** The Makarov is double action and does not need to be cocked to fire.

## 5.45-mm PSM

| | |
|---|---|
| **Maximum Effective Range** | 40 m |
| **Caliber** | 5.45 x 18-mm |
| **System of Operation** | blowback, double action |
| **Overall Length** | 195 mm |
| **Feed Device** | 8-rd detachable box magazine |
| **Weight** | 854 g |

## PPSH-41/Type 50

PPSh M1941 with 71-round drum magazine.

7.62mm PPSh M1941, field stripped.

| | |
|---|---|
| **Maximum Effective Range** | 200 m |
| **Caliber** | 7.62 x 25-mm |
| **System of Operation** | Blowback, selective fire |
| **Overall Length** | 33.15 in. |
| **Feed Device** | 71-rd drum or 35-rd box |
| **Weight (Loaded)** | 11.99 lbs (drum) 9.26 lbs (box) |

**Using the PPSh-41 SMG: (1)** Insert a loaded magazine (71-rd drum or 35-rd box) into the magazine well forward of the trigger guard. **(2)** Firmly pull the charging handle, located on the right side of the upper receiver, locking the bolt to the rear. **Note: The PPSh-41/43 operate with the bolt in the open position! DO NOT LET THE BOLT GO HOME WITH A LOADED MAGAZINE AS AN ACCIDENTAL DISHARGE WILL OCCUR! (3) WEAPON IS READY TO FIRE.**

## . 7.62-mm SKS/Type 56

| | |
|---|---|
| **Maximum Effective Range** | 400 m |
| **Caliber** | 7.62 x 39-mm |
| **System of Operation** | Gas, semiautomatic |
| **Overall Length** | 40.16 in. |
| **Magazine Capacity** | 10-round, staggered row, non-detachable box magazine |
| **Weight (Loaded)** | 8.7 lbs |

**Using the SKS: (1)** Set weapon on **SAFE** by turning the safety lever up as far as it will go. **(2)** Pull the operating handle, located on the right side of the receiver, to the rear [The bolt will lock in place]. **(3)** Insert one end of the 10-rd charger clip into the charger guide at the forward end of the bolt carrier. **(4)** Strip the rounds down into the magazine and remove empty charger clip. **(5)** Pull back on operating handle, the bolt will unlock and run forward chambering the first round. **(6)** Turn Safety down as far as it will go to **FIRE**. **(7)** **WEAPON IS READY TO FIRE**.

## Field Stripping the SKS

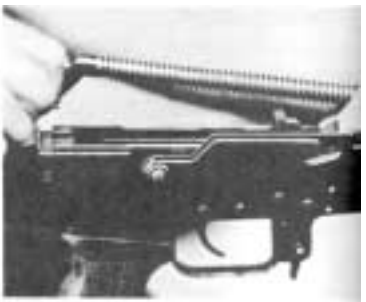
## 7.62-mm AK-47/AKM/Type 56

| | |
|---|---|
| **Maximum Effective Range** | 400 m |
| **Caliber** | 7.62 x 39-mm |
| **System of Operation** | Gas, selective-fire |
| **Overall Length** | 34.25 in. |
| **Magazine Capacity** | 30-rd, staggered row detachable box magazine |
| **Weight (Loaded)** | 8.7 lbs |

**Using the AK-47/AKM: (1)** Insert the 30-rd magazine into the underside of the receiver, forward end first, then draw up the rear end of the magazine until a click is heard or until the magazine catch is felt to engage. **(2)** Pull the operating handle, located on the right side of the receiver, smartly to the rear and release it [the bolt will run home and chamber a round]. **(3)** Push the safety lever from the uppermost position: **SAFE**, to the middle position: **AUTO** or all the way down to **SEMI**. **(4) WEAPON IS READY TO FIRE**.

**Note:** While the AK is a heavy weapon it climbs rapidly during automatic fire.

## Field Stripping the AK-47/AKM



## 5.45-mm AK-74/AKS-74/AKSU-74

| | |
|---|---|
| **Maximum Effective Range** | 600 m |
| **Caliber** | 5.45 x 39-mm |
| **System of Operation** | Gas, selective-fire |
| **Overall Length** | 34.25 in. |
| **Magazine Capacity** | 30-rd, staggered row plastic detachable box magazine |
| **Weight (Loaded)** | 3.6 kg |

**Using the AK-74/AKS-74/AKSU-74 (1)** Insert the 30-rd magazine into the underside of the receiver, forward end first, then draw up the rear end of the magazine until a click is heard or until the magazine cathc is felt to engage. **(2)** Pull the operating handle, located on the right side of the receiver, smartly to the rear and release it [the bolt will run home and chamber a round]. **(3)** Push the safety lever from the uppermost position: **SAFE**, to the middle position: **AUTO** or all the way down to **SEMI**. **(4)** **WEAPON IS READY TO FIRE**.

## AKSU-74

## 40-mm GP-25/30 Grenade Launcher

| | |
|---|---|
| **Maximum Effective Range** | 400 m |
| **Caliber** | 40-mm |
| **System of Operation** | Muzzle-loading, single-shot |
| **Overall Length** | 323-mm |
| **Weight (Loaded)** | 1.5 kg |

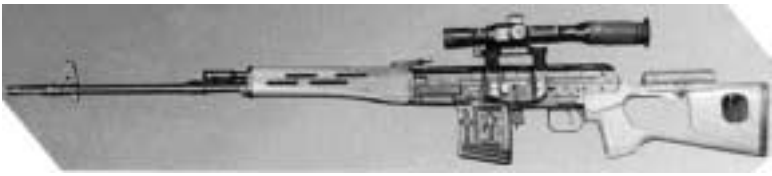
**Using the GP-25/GP-30 grenade launcher: (1)** Insert VOG-25/VOG-25P round, butt first into the muzzle of the weapon. **[WEAPON IS READY TO FIRE] (2)** Aim and squeeze self-cocking trigger.
**Note:** These grenade launchers can be mounted on all unmodified AK series weapons.

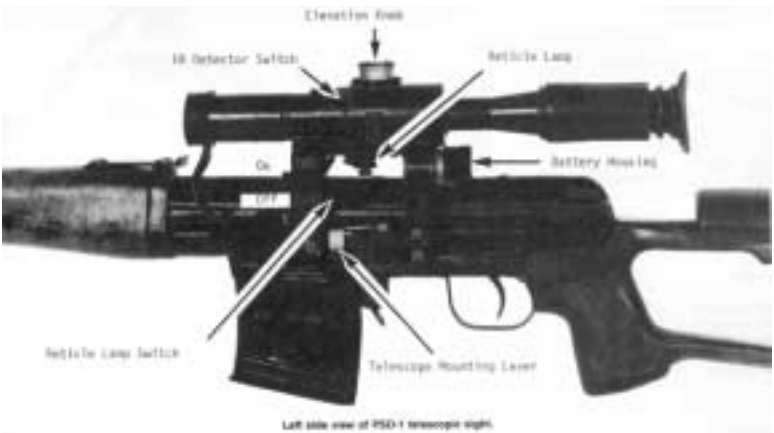
## GP-30 mounted underneath AK-74 barrel

**VOG-25 Round (Anti-personnel)**

**VOG-25P Round (HE air-burst)**

## 7.62-mm Dragunov SVD






Left side view of PSO-1 telescopic sight.

| | |
|---|---|
| **Maximum Effective Range** | 800 m |
| **Caliber** | 7.62 x 54-mm |
| **System of Operation** | Gas, semiautomatic |
| **Overall Length** | 48.2 in. |
| **Magazine Capacity** | 10-rd, staggered row detachable box magazine |
| **Weight (Loaded)** | 9.5 lbs |

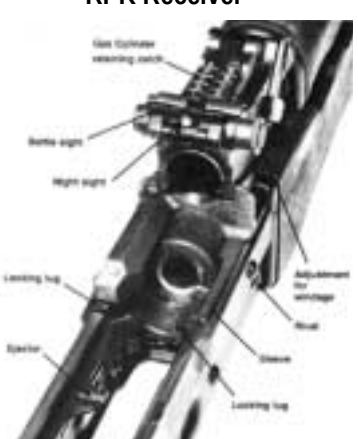
**Using the SVD: (1)** Insert the 10-rd magazine into the underside of the receiver, forward end first, then draw up the rear end of the magazine until a click is heard or until the magazine cathc is felt to engage. **(2)** Pull the operating handle, located on the right side of the receiver, smartly to the rear and release it [the bolt will run home and chamber a round]. **(3)** Push the safety lever from the uppermost position: **SAFE**, or all the way down to **SEMI**. **(4)** **WEAPON IS READY TO FIRE**.

## 7.62-mm RPK

| | |
|---|---|
| **Maximum Effective Range** | 800 m |
| **Caliber** | 7.62 x 39-mm |
| **System of Operation** | Gas, selective fire |
| **Overall Length** | 48.2 in. |
| **Magazine Capacity** | 40-rd, staggered row detachable box magazine or 75-rd drum magazine. Can also use 30-rd AK magazine |
| **Weight (Loaded)** | 1.13 kg (40-rd box) 2.1 kg (75-rd drum) |

**Using the RPK: (1)** Insert the 30-, 40-, or 75-rd magazine or drum into the underside of the receiver, forward end first, then draw up the rear end of the magazine until a click is heard or until the magazine catch is felt to engage. **(2)** Pull the operating handle, located on the right side of the receiver, smartly to the rear and release it [the bolt will run home and chamber a round]. **(3)** Push the safety lever from the uppermost position: **SAFE**, to the middle position: **AUTO** or all the way down to **SEMI**. **(4)** **WEAPON IS READY TO FIRE**.

## RPK Receiver

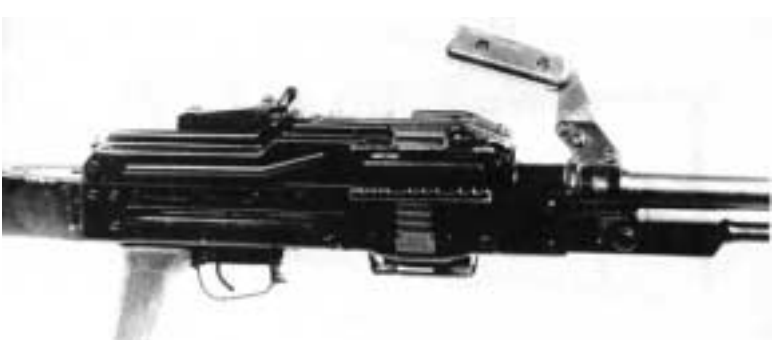


## 7.62-mm PK

| | |
|---|---|
| **Maximum Effective Range** | 800 m |
| **Caliber** | 7.62 x 54-mm |
| **System of Operation** | Gas, automatic |
| **Overall Length** | 47.2 in. |
| **Magazine Capacity** | 100, 200, or 250-rd metallic link belt |
| **Weight** | 19.8 lbs |

**Using the PK: (1)** Open cover by pressing catch at top rear of cover. **(2)** Lay Belt in feedway, first round flush against cartridge stop. **(3)** Close cover, pull operating handle to rear. **WEAPON IS NOW READY TO FIRE. Note:** Safety located on receiver at rear of trigger.

## PK Receiver



## 7.62-mm RPD

| | |
|---|---|
| **Maximum Effective Range** | 800 m |
| **Caliber** | 7.62 x 39-mm |
| **System of Operation** | Gas, automatic |
| **Overall Length** | 40.8 in. |
| **Magazine Capacity** | 100-rd metallic link belt in drum |
| **Weight** | 15.6 lbs |

**Using the RPD: (1)** Fitt the drum by sliding its top dovetail to mating surfaces under receiver. **(2)** Pull operating handle to the rear [Older models will remain in place, on newer models the handle should be pushed forward after cocking]. **(3)** Open cover by pushing forward on cover latch and lifiting cover. **(4)** Lay belt on feedway so lead round lies beside cartridge stop. **WEAPON IS READY TO FIRE** **Note:** Safety is on the right side of the pistol grip: Forward **SAFE...**Rear **FIRE**

## 12.7-mm DShK-38/Model 38/46

| | |
|---|---|
| **Maximum Effective Range** | 1,000 m |
| **Caliber** | 12.7 x 108-mm |
| **System of Operation** | Gas, automatic |
| **Overall Length** | 62.5 in |
| **Magazine Capacity** | 50-rd metallic link belt |
| **Weight w/Mount** | 259 lbs |

**Using the DShK: (1)** Push forward feed latch located at top rear of feed cove and lift cover. **(2)** Place belt on revolving block so first round can be put in the upper recess of feed block. **(3)** Hold free end of belt w/right hand and press feed belt against revolving block. **(3) Rapidly rotate block w/belt as far to the right as possible. (4)** Close cover, Pull operating handle to rear until slide is engaged. **WEAPON IS READY TO FIRE. (5)** Hold both spade grips and depress trigger.

**DShK-38 AA mount (Pakistani)**

**DShK-38 Receiver**

## 30-mm AGS-17 Auto Grenade Launcher

| | |
|---|---|
| **Maximum Effective Range** | 1,700 m |
| **Caliber** | 30-mm |
| **System of Operation** | Gas, selective fire |
| **Overall Length** | 1.1 m |
| **Magazine Capacity** | 29-rd metallic belt |
| **Weight** | 13.7 kg |

**Using the AGS-17: (1)** Open feed cover and feed ammunition belt into the right side of the receiver. **(2)** Close cover. **(3)** Pull operating handle to the rear of the weapon to chamber first round. **WEAPON IS READY TO FIRE. (4)** Trigger is between the grips at the rear of the receiver.

## RPG-7

| | |
|---|---|
| **Maximum Effective Range** | 1,700 m |
| **Caliber** | 30-mm |
| **Overall Length** | 1.1 m |

**Using the RPG: (1)** Insert grenade tail first into the muzzle of the launcher **[Ensure that the small projection mates with the muzzle to line up the percussion cap with the hammer] (2)** Remove nosecap, pull safety pin. **RPG IS READY TO FIRE (3)** Place launcher over shoulder, sight target, squeeze trigger. **WARNING: ENSURE BACKBLAST AREA CLEAR.**

## Loading the RPG-7

## Firing Position

## RPG-18

**Maximum Effective Range** 1,700 m
**Caliber** 30-mm
**Overall Length** 1.1 m

**Using the RPG-18: The RPG-18 is very similar to the LAAW (Middle picture) (1)** Pull safety pin **(2)** Extend weapon [sights will automatically pop up] **WEAPON IS READY TO FIRE (3)** Place launcher on right shoulder, sight target and depress trigger bar located at top of launcher assermbly. **WARNING: ENSURE BACKBLAST AREA IS CLEAR.**

## RG-42 Offensive Hand Grenade

| | |
|---|---|
| **Weight** | 384 g |
| **Fuze Delay** | 3.2 - 4.2 sec |
| **Effective Fragment Radius** | 30 m |

## RGD-5 Offensive Hand Grenade


| | |
|---|---|
| **Weight** | 310 g |
| **Fuze Delay** | 3.2 - 4.2 sec |
| **Effective Fragment Radius** | 20 - 25 m |

## RGN Offensive/Defensive Hand Grenade


| | |
|---|---|
| **Weight** | 290 g |
| **Fuze Delay** | Impact: 1 - 1.8 sec Time: 3.2 - 4.2 sec |
| **Lethal Radius** | 8 - 10 m |

## RGO-78 Defensive Hand Grenade


| | |
|---|---|
| **Weight** | 450 g |
| **Fuze Delay** | 3.2 - 4 sec |
| **Effective Fragment Radius** | 20 m |

## RGO Fragmentation Hand Grenade


| | |
|---|---|
| **Weight** | 520 - 530 g |
| **Fuze Delay** | Impact: 1 - 1.8 sec Time: 3.2 - 4.2 sec |
| **Effective Fragment Radius** | 20 m |

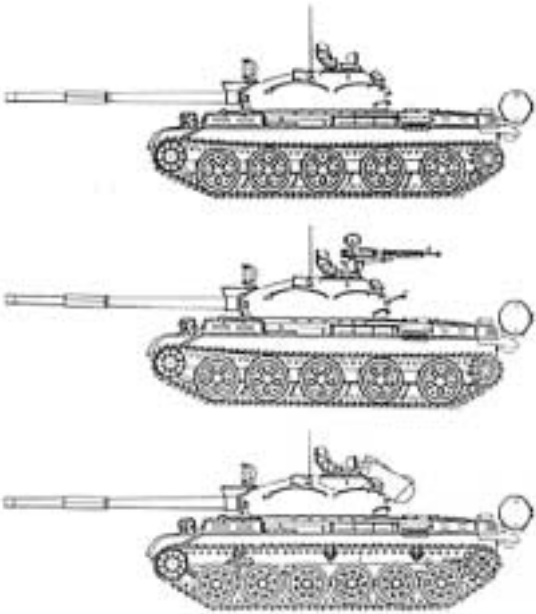
## RKG-3 Antitank Hand Grenade

| | |
|---|---|
| **Weight** | 1.07 kg |
| **Fuze Delay** | Armed in flight by drogue chute, detonates upon impact |
| **Effective Fragment Distance** | 20 m |
| **Penetration** | 125-mm |

## F-1 Anti-personnel Grenade

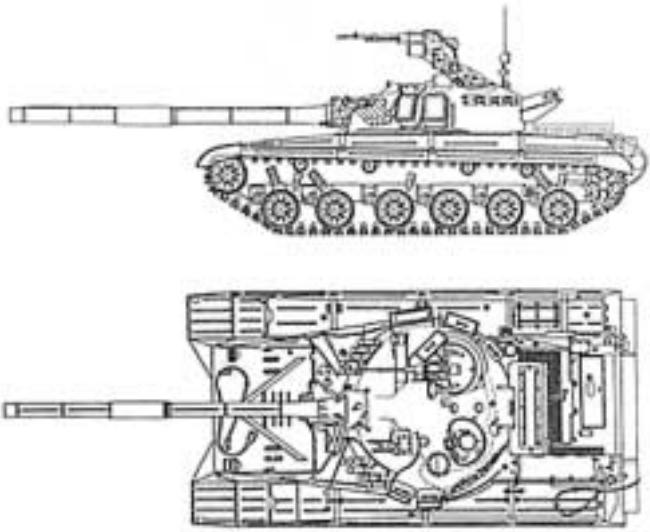
| | |
|---|---|
| **Weight** | 600 g |
| **Fuze Delay** | 3.2 - 4 sec |
| **Effective Fragment Range** | 20 m |

## T-62



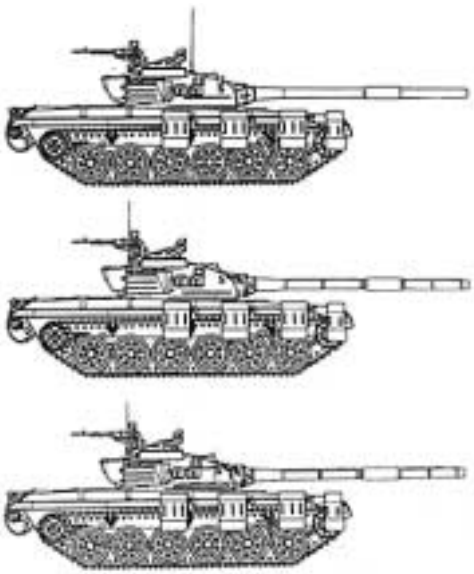
| | |
|---|---|
| **Crew** | 4 |
| **Armament** | 1 x 115-mm 2A20 gun w/40 rds<br>1 x 7.62-mm PKT coaxial MG w/2,500 rds |
| **Maximum Speed** | 45.5 km/h |
| **Maximum Range** | 450 km |
| **Fuel Capacity** | 675 liters |
| **Combat Weight** | 40,000 kg |
| **Length** | 9.33 m |
| **Width** | 3.3 m |
| **Height** | 2.39 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | 1.4 m |
| **Gradient** | 60 % |
| **Vertical Obstacle** | 0.8 m |
| **Trench** | 2.85 m |

## T-64



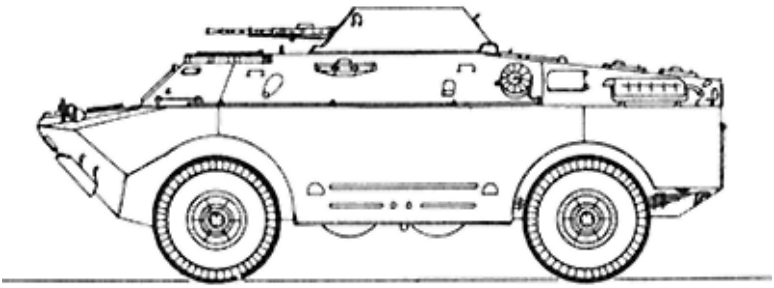
| | |
|---|---|
| **Crew** | 3 |
| **Armament** | 1 x 125-mm 2A26M2 smoothbore gun w/36 rds and 6 ATGW<br>1 x 7.62-mm PKT MG coaxial w/1,250 rds<br>1 x 12.7-mm AA NSVT MG w/300 rds |
| **Maximum Speed** | 75 km/h |
| **Maximum Range** | 400 km |
| **Fuel Capacity** | 1,000 liters |
| **Combat Weight** | 39,500 kg |
| **Length** | 9.9 m (gun fwd) |
| **Width** | 4.64 m |
| **Height** | 2.2 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | 1.8 m |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.8 m |
| **Trench** | 2.28 m |

## T-72



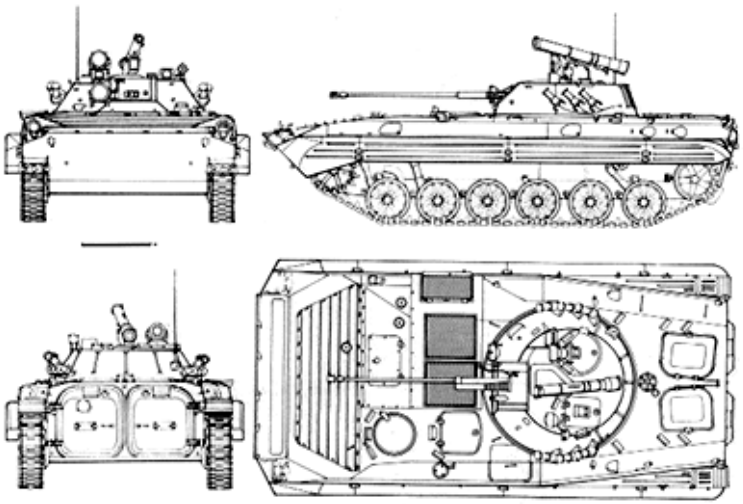
| | |
|---|---|
| **Crew** | 3 |
| **Armament** | 1 x 125-mm 2A46 smoothbore gun w/45 rds and 6 ATGW<br>1 x 7.62-mm PKT MG coaxial w/3,000 rds<br>1 x 12.7-mm NSVT MG w/300 rds |
| **Maximum Speed** | 60 km/h |
| **Maximum Range** | 480 km |
| **Fuel Capacity** | 1,000 liters |
| **Combat Weight** | 46,500 kg |
| **Length** | 9,53 m (gun fwd) |
| **Width** | 3.59 m |
| **Height** | 2.22 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | 1.8 m |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.85 m |
| **Trench** | 2.8 m |

## BRDM-2



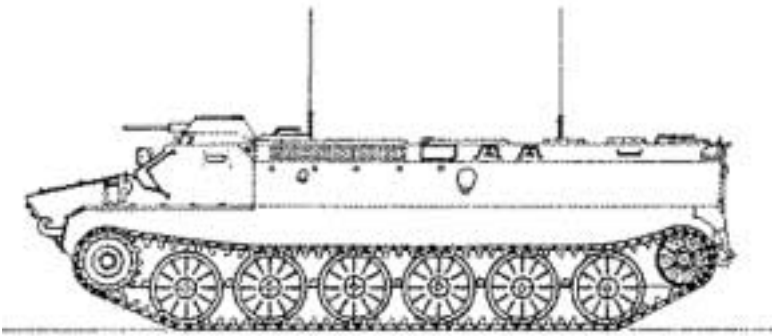
| | |
|---|---|
| **Crew/Passengers** | 4 |
| **Type** | 4 x 4 |
| **Armament** | 1 x 14.5-mm KPVT w/500 rds<br>1 x 7.62-mm PKVT w/2000 rds |
| **Maximum Speed** | 100 km/h |
| **Maximum Range** | 750 km |
| **Fuel Capacity** | 290 liters |
| **Combat Weight** | 7,000 kg |
| **Length** | 5.75 m |
| **Width** | 2.35 m |
| **Height** | 2.31 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | amphibious |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.4 m |
| **Trench** | 1.25 m |

## BMP-2



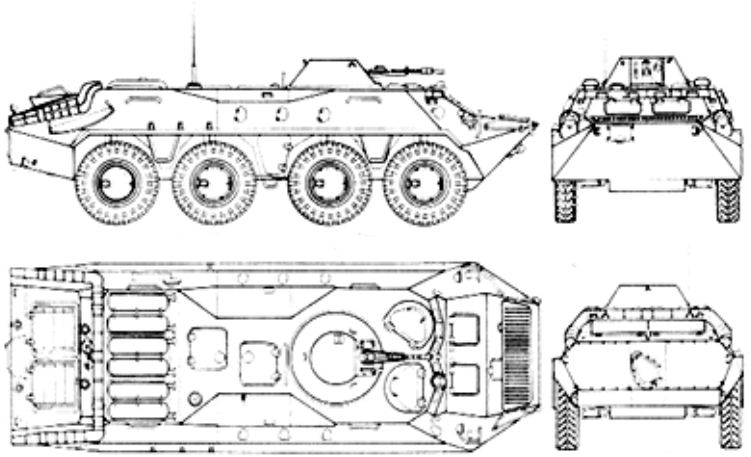
| | |
|---|---|
| **Crew/Passengers** | 3 + 7 |
| **Type** | tracked |
| **Armament** | 1 x 30-mm 2A42 gun w/500 rds<br>1 x 7.62-mm PKT MG w/2,000 rds<br>1 x 30-mm AG-17 grenade launcher w/350 rds<br>1 x AT-5 launcher w/4 rds |
| **Maximum Speed** | 65 km/h |
| **Maximum Range** | 600 km |
| **Fuel Capacity** | 462 liter |
| **Combat Weight** | 14,300 kg |
| **Length** | 6.73 m |
| **Width** | 3.15 m |
| **Height** | 2.45 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | amphibious |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.7 m |
| **Trench** | 2.5 m |

## MT-LB



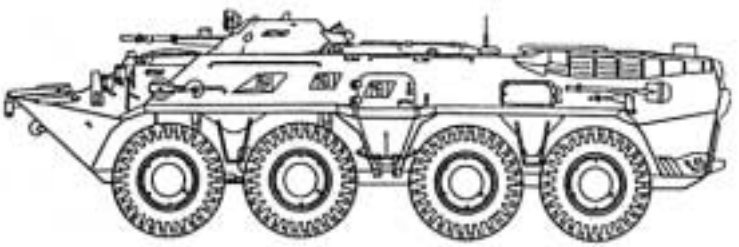
| | |
|---|---|
| **Crew/Passengers** | 2 + 11 |
| **Type** | Tracked |
| **Armament** | 1 x 7.62-mm PKT MG w/2,500 rds |
| **Maximum Speed** | 61.5 km/h |
| **Maximum Range** | 500 km |
| **Fuel Capacity** | 450 liters |
| **Combat Weight** | 11,900 kg |
| **Length** | 6.45 m |
| **Width** | 2.86 m |
| **Height** | 1.865 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | amphibious |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.61 m |
| **Trench** | 2.41 m |

## BTR-70



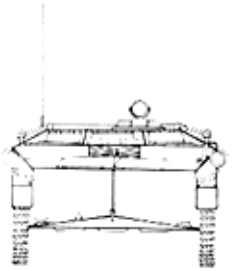
| | |
|---|---|
| **Crew/Passengers** | 2 + 9 |
| **Type** | 8 x 8 |
| **Armament** | 1 x 14.5-mm KPVT w/500 rds<br>1 x 7.62-mm PKVT w/2,000 rds |
| **Maximum Speed** | 80 km/h |
| **Maximum Range** | 600 km |
| **Fuel Capacity** | 350 liters |
| **Combat Weight** | 11,500 kg |
| **Length** | 7.33 m |
| **Width** | 2.8 m |
| **Height** | 2.235 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | amphibious |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.5 m |
| **Trench** | 2 m |

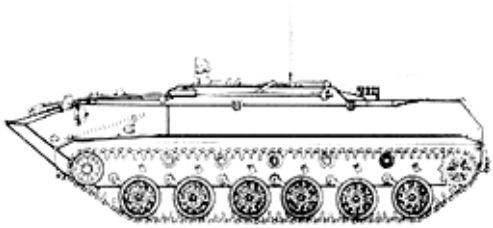
## BTR-80



| | |
|---|---|
| **Crew/Passengers** | 3 + 7 |
| **Type** | 8 x 8 |
| **Armament** | 1 x 14.5-mm KPVT w/500 rds<br>1 x 7.62-mm PKVT w/2,000 rds |
| **Maximum Speed** | 90 km/h |
| **Maximum Range** | 600 km |
| **Fuel Capacity** | 300 liters |
| **Combat Weight** | 13,600 kg |
| **Length** | 7.65 m |
| **Width** | 2.9 m |
| **Height** | 2.46 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | amphibious |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.5 m |
| **Trench** | 2 m |

## BTR-D





| | |
|---|---|
| **Crew/Passengers** | 1 + 12 |
| **Type** | Tracked |
| **Armament** | 2 x 7.62-mm PKT bow-mounted MG w/2,000 rds |
| **Maximum Speed** | 70 km/h |
| **Maximum Range** | 320 km |
| **Fuel Capacity** | 300 liters |
| **Combat Weight** | 7,500 kg |
| **Length** | 5.8 m |
| **Width** | 2.63 m |
| **Height** | 1.62 m |
| **Night Vision** | yes |
| **NBC** | yes |
| **Fording** | amphibious |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.8 m |
| **Trench** | 1.6 m |

## D-30 122-mm

| | |
|---|---|
| **Crew** | 7 |
| **Maximum Range** | 15,300 m |
| **Rate of Fire** | 6 rds/min |
| **Combat Weight** | 3350 kg |
| **Length** | 5.4 m |
| **Width** | 1.95 m |
| **Height** | 1.8 m |
| **Prime Mover** | 6 x 6 truck |

## D-20 152-mm Gun-Howitzer

| | |
|---|---|
| **Crew** | 7 |
| **Maximum Range** | 17,410 m (conventional) 2,0,300 m (RAP) |
| **Rate of Fire** | 6 rds/min |
| **Combat Weight** | 5,650 m |
| **Length** | 8.69 m |
| **Width** | 2.40 m |
| **Height** | 2.5 m |
| **Prime Mover** | 6 x 6 truck |

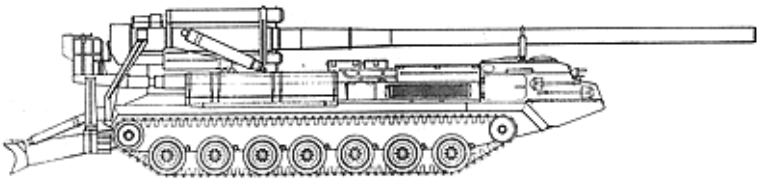
## 2A36 152-mm Gun

| | |
|---|---|
| **Crew** | 7 |
| **Maximum Range** | 28,400 m (conventional) 33,000 (RAP) |
| **Rate of Fire** | 6 rds/min |
| **Combat Weight** | 9,760 kg |
| **Length** | 12.9 m |
| **Width** | 2.79 m |
| **Height** | 2.76 m |
| **Prime Mover** | 6 x 6 |

## 2S9 120-mm SP Combination Gun

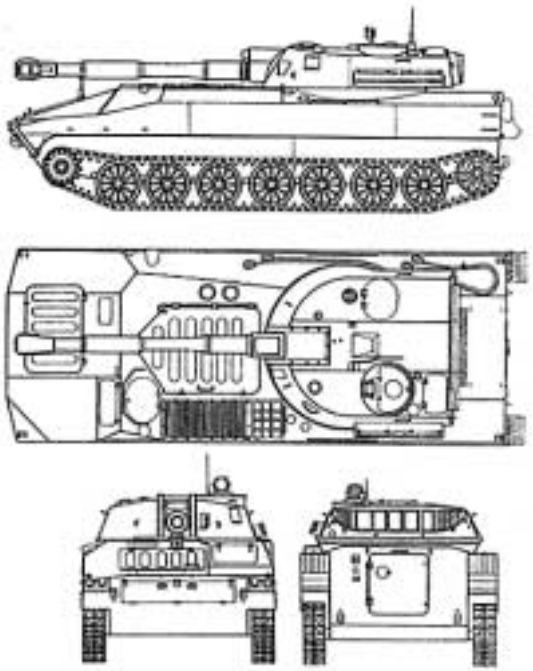
| | |
|---|---|
| **Crew** | 4 |
| **Armament** | 1 x 120-mm 2A51gun<br>Maximum Range: 7.1 km (mortar) 8.8 km (howitzer) 12.8 km (mortar RAP)<br>Rate of Fire: 10 rds/min |
| **Maximum Speed** | 60 km/h |
| **Cruising Range** | 500 km |
| **Combat Weight** | 8,700 kg |
| **Fording** | amphibious |
| **Gradient** | 60% |

## 2S7 203-mm



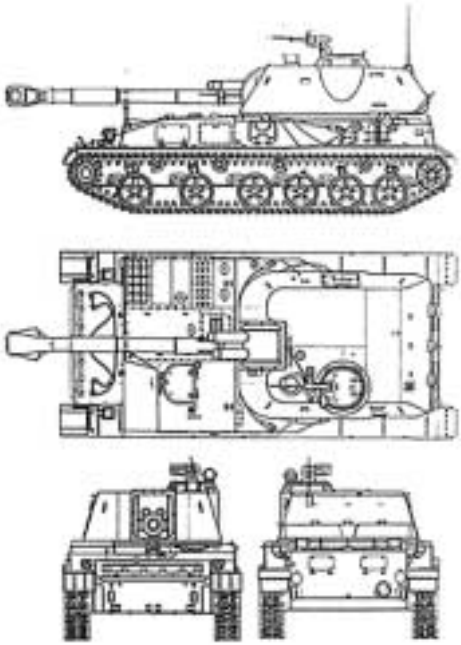
| | |
|---|---|
| **Crew** | 7 |
| **Armament** | 1 x 203-mm 2A44 gun w/4 rds<br>Maximum range: 47,500 m (RAP)<br>Rate of Fire: 1.5 rds/min |
| **Maximum Speed** | 50 km/h |
| **Cruising Range** | 650 km |
| **Combat Weight** | 46,500 kg |
| **Fording** | 1.2 m |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.7 m |
| **Trench** | 2.5 m |
| **NBC** | yes (only while in travel) |
| **Night Vision** | yes (only while in travel) |

## 2S1P 122-mm SPH



| | |
|---|---|
| **Crew** | 4 |
| **Armament** | 1 x 122-mm 2A31 howitzer w/40 rds<br>Maximum range: 15,200 m<br>Rate of Fire: 5 rds/min |
| **Maximum Speed** | 61.5 km/h |
| **Cruising Range** | 500 km |
| **Combat Weight** | 15,700 kg |
| **Length** | 7.26 m |
| **Width** | 2.85 m |
| **Height** | 2.732 m |
| **Fording** | amphibious |
| **Gradient** | 77% |
| **Vertical Obstacle** | 0.7 m |
| **NBC** | yes |
| **Night Vision** | yes (limited range, commander and driver only) |

## 2S3M 152-mm SPH



| | |
|---|---|
| **Crew** | 4 |
| **Armament** | 1 x 152.4-mm 2A33 gun w/46 rounds (42 HE, 4 HEAT)<br>Maximum Range: 17,300 m<br>Rate of Fire: 3 rds/min |
| **Maximum Speed** | 60 km/h |
| **Cruising Range** | 500 km |
| **Combat Weight** | 27,500 kg |
| **Length** | 8.4 m (gun fwd) |
| **Width** | 3.25 m |
| **Height** | 3.05 m |
| **Fording** | amphibious |
| **Gradient** | 60% |
| **Vertical Obstacle** | 0.7 m |
| **Trench** | 3.0 m |
| **NBC** | yes |
| **Night Vision** | yes (limited range, driver and commander only) |

## BM-21 122-mm MRL

| | |
|---|---|
| **Crew** | 5 |
| **Armament** | 40 122-mm rockets<br>Rate of fire: 40 rds/20 sec<br>Max Range: 20,380 m<br>Reload time: 7 min |
| **Maximum Speed** | 80 km/h |
| **Cruising Range** | 525 km |
| **Fuel Capacity** | 340 liters |
| **Combat Weight** | 13,700 kg |
| **Length** | 7.35 m |
| **Width** | 2.4 m |
| **Height** | 3.09 m |

## 9P140 220-mm MRL

| | |
|---|---|
| **Crew** | 4 |
| **Armament** | 16 220-mm rockets<br>Rate of fire: 16 rockets in 20 sec<br>Max Range: 34,000 m |
| **Maximum Speed** | 65 km/h |
| **Cruising Range** | 570 km |
| **Fuel Capacity** | 768 liters |
| **Combat Weight** | 20,000 kg |
| **Length** | 10.83 m (firing) |
| **Width** | 5.34 m (firing) |
| **Height** | 2.48 m |
| **Fording** | 1.2 m |
| **Gradient** | 57% |
| **Vertical Obstacle** | 0.6 m |
| **Trench** | 2.0 m |

## ZPU-2 (Twin) 14.5-mm

| | |
|---|---|
| **Crew** | 5 |
| **Maximum Range** | 5,950 m m (horizontal) 3,700 m (vertical) |
| **Rate of Fire (Per Barrel)** | 150 - 600 rds/min |
| **Combat Weight** | 994 kg |
| **Length** | 3.536 m |
| **Width** | 1.92 m |
| **Height** | 1.83 m |

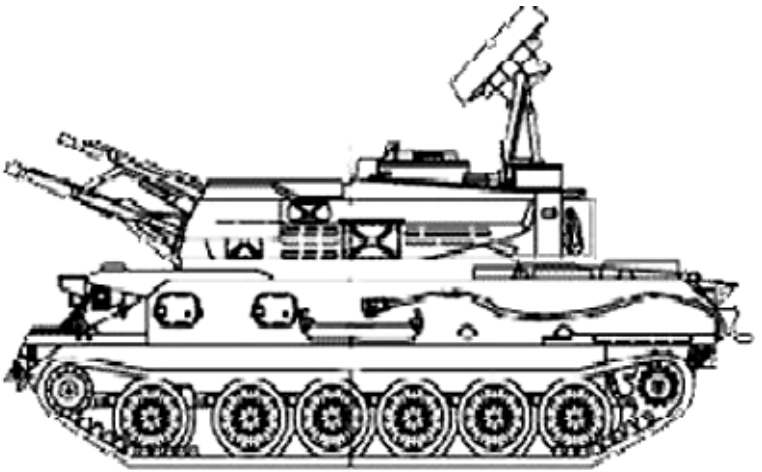
## ZPU-4 (Quad) 14.5-mm

| | |
|---|---|
| **Crew** | 5 |
| **Maximum Range** | 5,950 m (horizontal) 3,700 m (vertical) |
| **Rate of Fire (Per Barrel)** | 550 - 600 rds/min |
| **Combat Weight** | 1,810 kg |
| **Length** | 4.53 m |
| **Width** | 1.72 m |
| **Height** | 2.13 m |

## ZU-23 23-mm

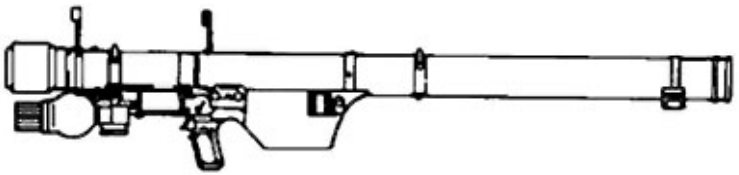
| | |
|---|---|
| **Crew** | 5 |
| **Maximum Range** | 7,000 m (horizontal) 5,100 m (vertical) |
| **Rate of Fire (Per Barrel)** | 800 - 1,000 rds/min |
| **Combat Weight** | 950 kg |
| **Length** | 4.37 m |
| **Width** | 1.83 m |
| **Height** | 1.87 m |

## ZSU-23-4 23-mm SPAAG



| | |
|---|---|
| **Crew** | 4 |
| **Armament** | 4 x 23-mm AZP-23M cannon w/2,000 rds<br>Maximum Range: 7,000 m (horizontal) 5,100 m (vertical)<br>Rate of Fire per Barrel: 200 - 800 rds/min |
| **Maximum Speed** | 50 km/h |
| **Maximum Range** | 450 km |
| **Combat Weight** | 20,500 kg |
| **Length** | 6.53 m |
| **Width** | 3.12 m |
| **Height** | 3.57 m |
| **Fording** | 1.07 m |
| **Gradient** | 60% |
| **Vertical Obstacle** | 1.1 m |
| **Trench** | 2.8 m |
| **NBC** | yes |
| **Night Vision** | yes |

## SA-14



| | |
|---|---|
| **Crew** | 1 |
| **Maximum Range** | 4,500 m |
| **Combat Weight** | 16 kg |
| **Length** | 1.5 m |

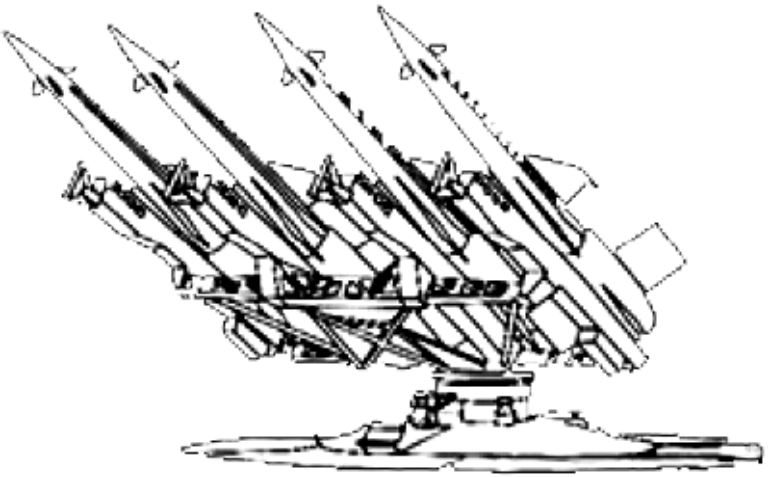
## SA-7

| | |
|---|---|
| **Crew** | 1 |
| **Maximum Range** | 3,200 m |
| **Combat Weight** | 9.15 kg |
| **Length** | 1.49 m |

## S-75 Dvina (SA-2)

| | |
|---|---|
| **Maximum Range** | 30,000 m |
| **Combat Weight** | 2,450 kg |
| **Length** | 10.8 m |

## Almaz S-125 (SA-3)

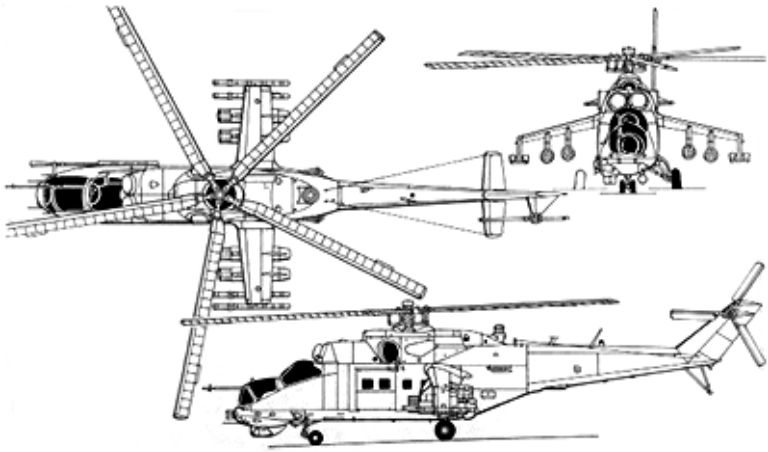


| | |
|---|---|
| **Maximum Range** | 25,000 m |
| **Combat Weight** | 641 kg |
| **Length** | 6.7 m |

## Antey S-200 (SA-5)

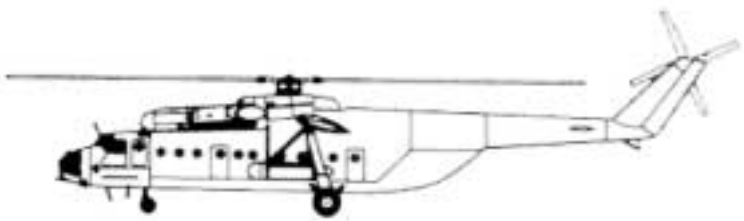
| | |
|---|---|
| **Maximum Range** | 300 km |
| **Combat Weight** | 2,800 kg |
| **Length** | 10.8 m |

## Mi-24



| | |
|---|---|
| **Crew** | 4 |
| **Armament** | 1 x 4-barrel 12.7-mm MG mounted in chin turret<br>Assorted rockets, missiles, gun pods |
| **Maximum Speed** | 172 kts |
| **Maximum Range** | 320 nm |
| **Rotor Diameter** | 17.30 m |
| **Length** | 17.51 m |
| **Height** | 4.39 m |

## Mi-6

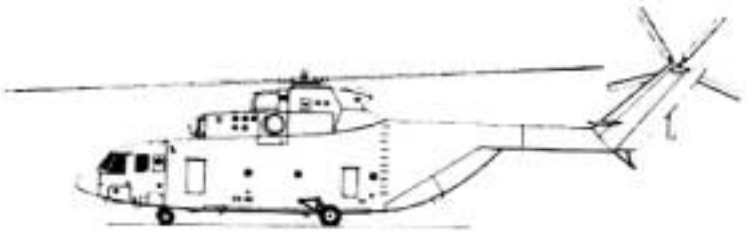


| | |
|---|---|
| **Crew** | 5 |
| **Armament** | 1 x 12.7-mm MG in fuselage nose |
| **Maximum Speed** | 162 kt |
| **Maximum Range** | 335 km |
| **Rotor Diameter** | 35 m |
| **Length** | 33.18 m |
| **Height** | 9.91 m |
| **Payload** | 12,000 kg |

## Mi-17

| | |
|---|---|
| **Crew** | 4 |
| **Armament** | Assorted Rockets and Gun Pods |
| **Maximum Speed** | 160 kts |
| **Maximum Range** | 257 nm |
| **Rotor Diameter** | 21.29 m m |
| **Length** | 18.42 m |
| **Height** | 4.75 m |

## Mi-26

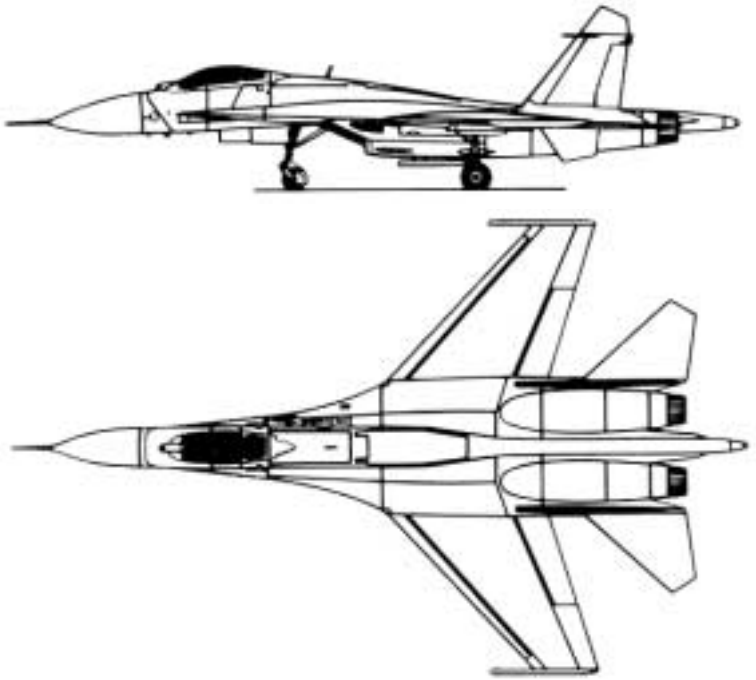


| | |
|---|---|
| **Crew** | 5 |
| **Maximum Speed** | 159 kt |
| **Maximum Range** | 513 nm |
| **Rotor Diameter** | 32 m |
| **Length** | 40.02 m |
| **Height** | 8.14 m |
| **Payload** | 82 troops |

## MIG-29

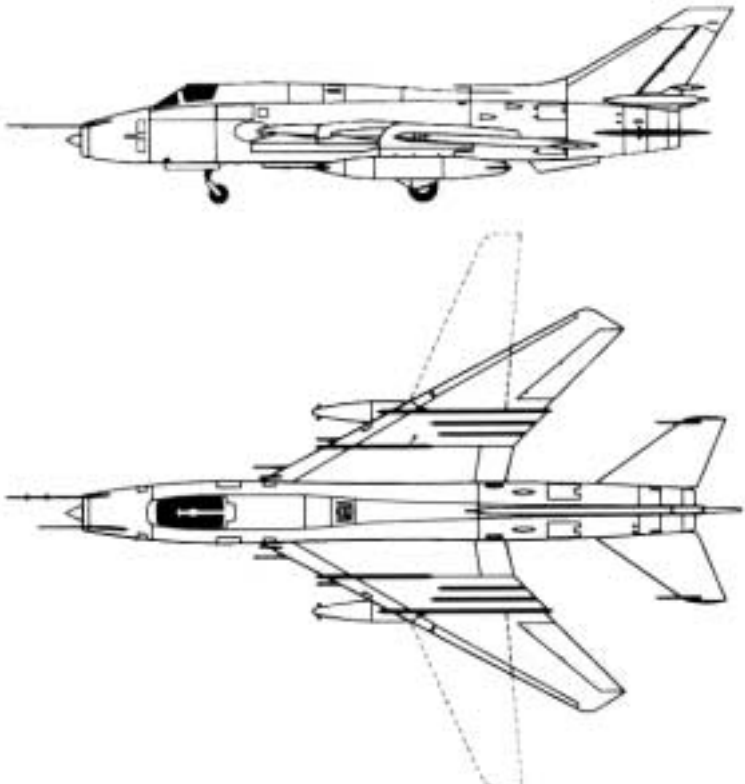
| | |
|---|---|
| **Type** | |
| **Crew** | 1 |
| **Armament** | 1 x 30-mm gun in port wingroot w/150 rds<br>Up to 3,000 kg of assorted ordinance |
| **Maximum Speed** | M2.3 |
| **Maximum Range** | 810 km |
| **Wingspan** | 11.36 m |
| **Length** | 17.32 m |

## SU-27



| | |
|---|---|
| **Type** | All-weather, air-superiority fighter w/150 rds in starboard wingroot extension<br>Up to 40,000 kg of assorted ordinance |
| **Crew** | 1 |
| **Armament** | 1 x 30-mm GSh-30-1 gun |
| **Maximum Speed** | M2.35 |
| **Maximum Range** | 1,985 km |
| **Wingspan** | 14.7 m |
| **Length** | 21.94 m |

## SU-17

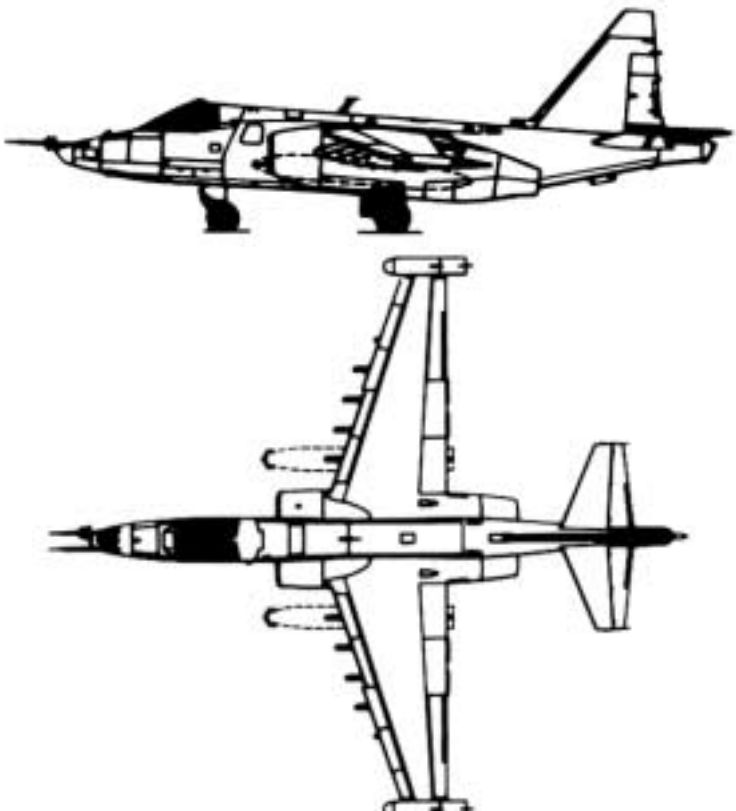


| | |
|---|---|
| **Type** | Single-seat attack aircraft |
| **Crew** | 1 |
| **Armament** | 2 x 30-mm NR-30 guns w/70 rds in each wing root<br>Up to 4,000 kg of assorted ordinance on wing racks |
| **Maximum Speed** | M2.17 |
| **Maximum Combat Radius** | 360 km |
| **Wingspan** | 40.1 m |
| **Length** | 18.75 m |

## SU-24

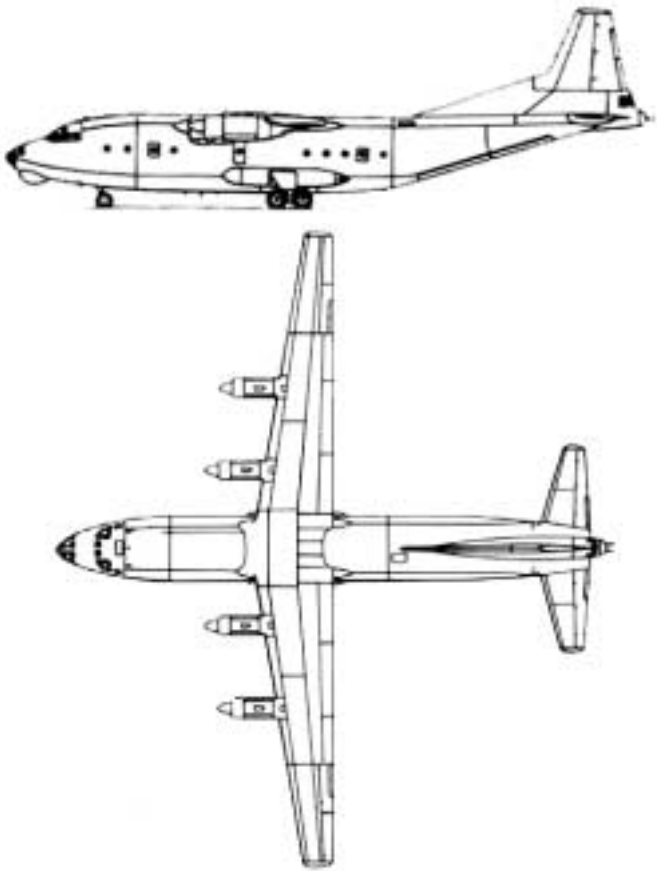
| | |
|---|---|
| **Type** | Battlefield bomber, reconnaissance, and EW aircraft |
| **Crew** | 2 |
| **Armament** | 1 x 6-barrel 23-mm gatling type gun in starboard fuselage<br>Up to 38,000 kg of assorted ordinance arrayed on 9 pylons |
| **Maximum Speed** | M1.35 |
| **Maximum Range** | 1,050 km |
| **Wingspan** | 17.64 m |
| **Length** | 22.67 m |

## SU-25



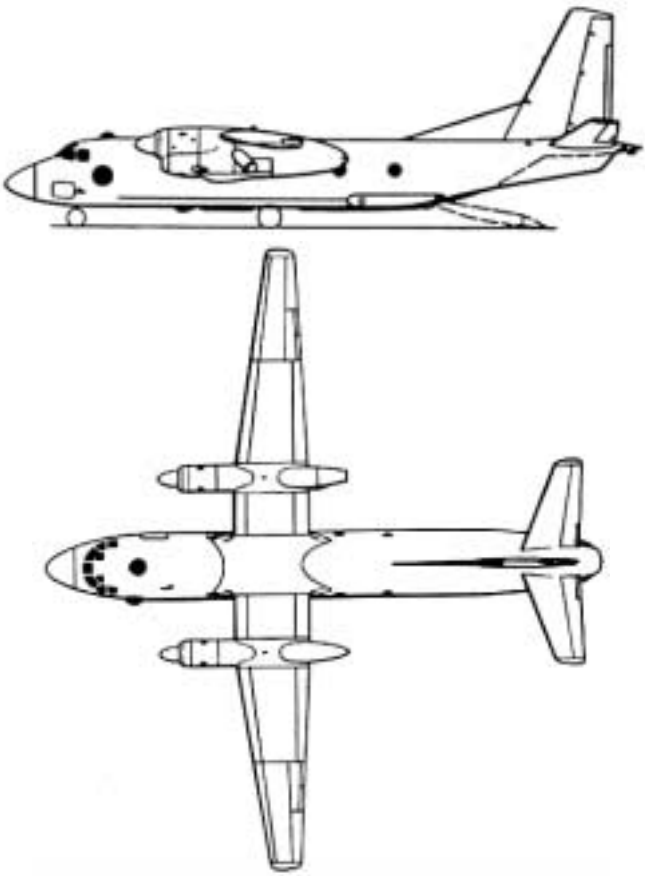
| | |
|---|---|
| **Type** | Ground Attack |
| **Crew** | 1 |
| **Armament** | 1 x twin barrel AO-17A 30-mm gun w/250 rds<br>4,400 kg of assorted air to ground weapons |
| **Maximum Speed** | 526 kt |
| **Maximum Range** | 405 km |
| **Length** | 15.53 m |
| **Wingspan** | 14.36 m |

## An-12



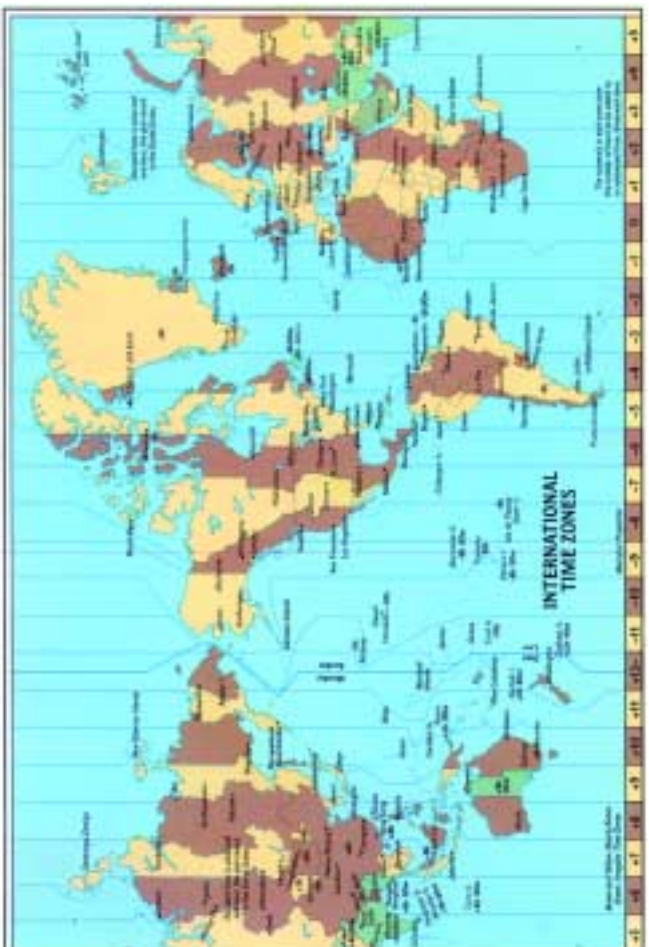
| | |
|---|---|
| **Type** | Transport |
| **Wingspan** | 38 m |
| **Maximun Speed** | 419 kt |
| **Maximum Range** | 3,600 km |
| **Payload** | 20,000 kg |
| **Length** | 33.1 m |

## An-26



| | |
|---|---|
| **Type** | transport |
| **Wingspan** | 29.2 m |
| **Maximum Speed** | 237 kt |
| **Maximum Range** | 1,100 km |
| **Payload** | 5,500 kg |
| **Length** | 23.8 m |

## APPENDIX B:
## International Time Zones



# APPENDIX C:
# Conversion Charts

| When You Know<br>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 |

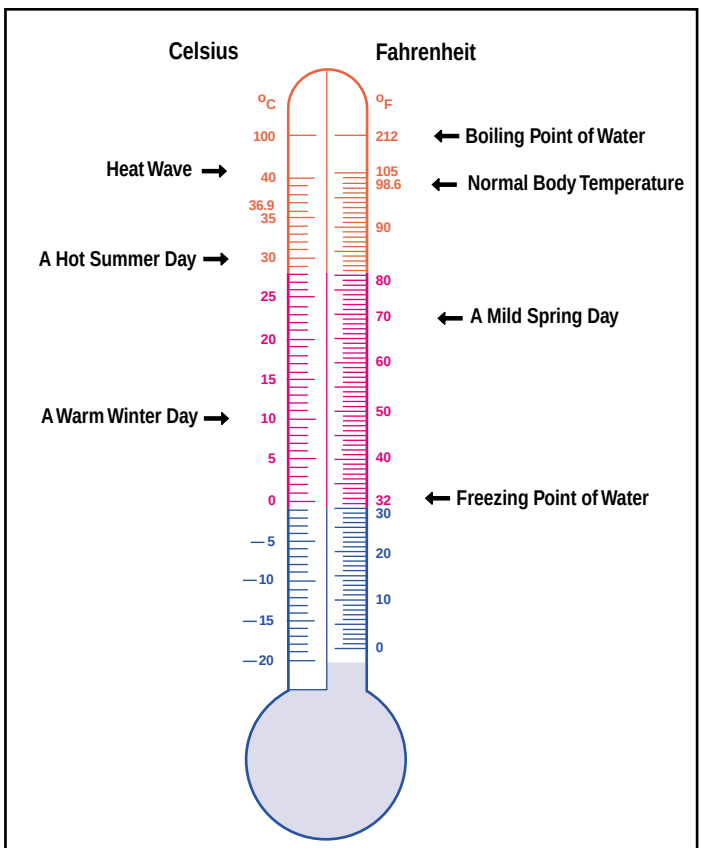
| Units of Volume | Multiply by | To find |
|---|---|---|
| Milliliters | 0.20 | Teaspoons |
| Milliliters | 0.06 | Tablespoons |
| Milliliters | 0.03 | Fluid Ounces |
| Liters | 4.23 | Cups |
| Liters | 2.12 | Pints |
| Liters | 1.06 | Quarts |
| Liters | 0.26 | Gallons |
| Cubic Meters | 35.32 | Cubic 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 | Km 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

| | |
|---|---|
| 1 January | New Year's Day* |
| 7 January | Christmas (Christians only) |
| 8 March | Women's Day* |
| 20-22 March | Noruz (Persian New Year) |
| 1 May | International Labor Day |
| 9 May | Victory Day* |
| 1 September | Independence Day |
| 18 November | Flag Day |
| 8 December | Constitution Day |

*These are former Soviet Era Holidays that may not be celebrated any longer.

### Other Non-fixed Holidays

| | |
|---|---|
| Muslim | Islamic New Year |
| | Prophet's Birthday |
| | Ramadan |
| | Eid Al Fitr |
| | Eid Al Adha |
| Christian | Good Friday |
| | Easter |

# APPENDIX E:
# Language

The three major languages of Uzbekistan are Uzbek, Russian, and Tajik. Uzbek is the official and most widely spoken language in the country. There has been an extensive campaign to rid the country of the Russian language and remove it from public view in favor of Uzbek language. In the past, Uzbek was written in Roman letters, but since then has been written in Cyrillic script that is only slightly different than the Russian script. Uzbekistan is currently attempting to go back to the Roman letters to align itself more closely with the West.

## Basic Words and Phrases

| **English** | **Uzbek** |
|---|---|
| Peace be with you | asalom u alaykhum |
| Hello | salom |
| Good morning | Hayrli erta |
| Good afternoon | Hayrli kun |
| Good evening | Hayrli kech |
| How are things? | Ishlar qalay? |
| How are you? | Yahshimisiz? |
| Goodbye | hayr |
| Thank You | rakhmat |
| Yes/No | Kha/yuk |
| How are you? | Qanday siz? |
| Do you speak English? | Inglizcha bila sizmi? |
| Police | militsia |
| Doctor | tabib |
| Hospital | ksalhona |
| Bus station | avtobeket |
| Train station | temir yul vokzali |
| Airport | tayyorgokh |
| Toilet | hojat'hona |
| Friend | urmoq/doost |

| English | Uzbek |
|---|---|
| Good | yakhshi |
| Bad | yomon |
| Where is…? | … qayerda? |
| How much? | Qancha?/nichpul? |
| Hotel | mehmon'hona |
| Restaurant | restoran |
| Tea | choy |
| Expensive | qimmat |
| Bread | non |
| Boiled water | qaynatilgan suv |
| Rice | guruch |
| Meat | gusht |
| Monday | dushanba |
| Tuesday | seyshanba |
| Wednesday | chorshanba |
| Thursday | payshanba |
| Friday | juma |
| Saturday | shanba |
| Sunday | yakshanba |

## Numbers

| | |
|---|---|
| 1,000 | bir |
| 1,001 | ikki |
| 1,002 | uch |
| 1,003 | turt |
| 1,004 | besh |
| 1,005 | olti |
| 1,006 | etti |
| 1,007 | sakkiz |
| 1,008 | tuqqiz |
| 1,009 | un |
| 1,010 | yuz |
| 1,011 | ming |

## APPENDIX F:
## International Road Signs

Crossroads


Maximum speed

No through road

Road narrows

Fallen/falling rock

No entry for vehicular traffic

Motorway


Stop and give way

Low flying aircraft or sudden aircraft noise

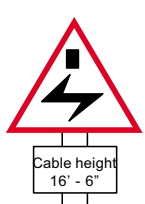
No left turn


One way street


Tourist information point

Traffic signals

No u-turn




Overhead cables, Maximum height

Failure of traffic light signals

Sharp deviation

## 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 will reduce 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 (such as 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 prior to 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; and
- 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-can method (reapply after sixth laundering) or with the 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 method (treating two bed nets) or the unit's 2-gallon sprayer. All personnel should sleep under mosquito nets, regardless of time of day, ensure netting 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 sudden 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 ($^{O}$ F)** | **Work / Rest** | **Water Intake (Qt/Hr)** | **Work / Rest** | **Water Intake (Qt/Hr)** | **Work / Rest** | **Water Intake (Qt/Hr)** |
| **1** | 78 – 81.9 | NL | 1/2 | NL | 3/4 | 40/20 min | 3/4 |
| **2** | 82 – 84.9 | NL | 1/2 | 50/10 min | 3/4 | 30/30 min | 1 |
| **3** | 85 – 87.9 | NL | 3/4 | 40/20 min | 3/4 | 30/30 min | 1 |
| **4** | 88 – 89.9 | NL | 3/4 | 30/30 min | 3/4 | 20/40 min | 1 |
| **5** | > 90 | 50/10 min | 1 | 20/40 min | 1 | 10/50 min | 1 |

The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hours of work in the specific heat category. Individual water needs will vary +/- (plus/minus) 1/4 qt/hr.
NL = no limit to work time per hour. Rest means minimal physical activity (sitting or standing) and should be accomplished in shade if possible.
**Caution:** Hourly fluid intake should not exceed 1 ½ quarts. Daily fluid intake should not exceed 12 quarts. Note: MOPP gear adds $10^{O}$ to WBGT Index.

**Food**

High risk food items such as fresh eggs, unpasteurized dairy products, lettuce or 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;
- 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; and
- Remember that loss of sensitivity in any body part requires immediate medical attention.

| 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 | 36 | 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 | -85 | -95 |
| 11 - 15 | 15 | 25 | 15 | 10 | 0 | -5 | -10 | -20 | -25 | -30 | -40 | -45 | -50 | -60 | -65 | -70 | -80 | -85 | -90 | -100 | -105 | -115 |
| 16 - 19 | 20 | 20 | 10 | 5 | 0 | -10 | -15 | -25 | -30 | -35 | -45 | -50 | -60 | -60 | -75 | -80 | -85 | -95 | -100 | -110 | -115 | -125 |
| 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 | -50 | -60 | -70 | -75 | -85 | -90 | -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 | | | | | | | | |

## 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, and
- 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.
  - Organs that have been displaced 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, clothing should be removed from injured area.
- Rings should be removed from fingers.
- Pulse should be checked below injury to determine blood flow restrictions.

### Spinal, Neck, Head Injury

Symptom:

- Lack of feeling and/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 Injuries

**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).
- Medical attention should be sought immediately; heat stroke can result in death.

### Burns

Burns may be caused by heat (thermal), electricity, chemicals, or radiation. Treatment is based on depth, size, and severity (termed 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 which people take to guard themselves against physical harm. These measures can involve simple acts such as locking your car and avoiding areas where crime is rampant. 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 your vulnerability to the security threats overseas (foreign intelligence, security services, and terrorist organizations). If you are detained or taken hostage, following the measures listed in these checklists may influence or improve your treatment.

### *Foreign Intelligence and Security Services*

- Avoid any actions or activities that are illegal, improper, or indiscreet.
- Guard your conversation and keep sensitive papers in your custody at all times.
- Take it for granted that you are under surveillance by both technical and physical means, including:
  - Communications monitoring (telephone, telex, mail, and radio)
  - Photography
  - Search
  - 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 in religious literature for distribution. (You may bring one Bible, Koran, or other religious material for your own 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 or terrorist/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, vulnerability, 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 hijacking suggest some simple precautions:

- You should not travel on commercial aircraft outside the continental U.S. in uniform.
- Prior to traveling by commercial aircraft, you should screen your wallet and other personal items, removing any documents (that is, credit cards, club membership cards, etc.) which would reveal your military affiliation.

  **NOTE:** Current USMC policy requires service members to wear two I.D. tags with metal necklaces when on official business. Also, the current I.D. card must be in possession at all times. These requirements include travel to or through terrorist areas. In view of these requirements, the service member must be prepared to remove and

conceal these and any other items which would identify them as military personnel in the event of a skyjacking.

- 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 it 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 profile you present, the less likely you will become a victim or bargaining chip for the terrorists, and your survivability increases.

### *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, alertness, and introducing order into each day of captivity will 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; consequently, you should take measures to protect yourself during such an action. Drop to the floor immediately, remain still and avoiding any 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 Animals and Plants

## Dangerous Snakes

### *Siberian Pit Viper*

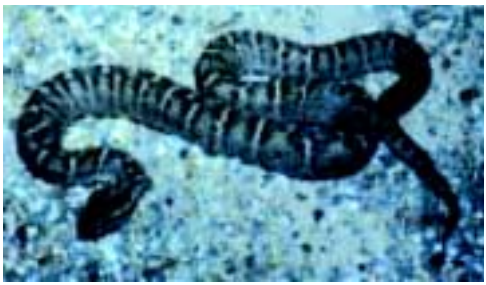
**Description:**
Adult length usually 0.6 to 0.7 meters; maximum of 0.9 meters. Moderately stout snake. Background color pale gray, olive, or dark brown; dark cross-bands with light olive or pale yellowish intervals between them. Belly moderately dark with indistinct spots and flecks of brown or gray. Dark postocular stripe with white line above. Head narrow, flattened on top; distinct from neck. Upturned snout.

**Habitat:**
Variety of habitats from desert shrub to short grass or wooded steppes, coniferous forests, and mountainous areas up to elevations of 4,000 meters. Primarily in dry, rocky areas.

**Activity and behavioral patterns:**
Mainly nocturnal. During warmer months, emerges only after sunset. Reports vary as to aggressiveness. Some say it usually will not strike unless continuously disturbed or hurt; others say that it will bite with only minor provocation.

**Venom characteristics:**
Primarily hemotoxic with some neurotoxic activity. Envenomation generally causes sharp pain at site, followed by edema and necrosis. May develop blood-filled blisters at site, followed by edema and necrosis. May develop blood-filled blisters at site of bite. Heart rate and blood pressure usually increase. Deaths, usually from respiratory failure, recorded.

### *Central Asian Pit Viper*



**Description:**
Maximum length about 0.8 meters; relatively stout snake. Background color whitish, grayish, brownish, reddish, or olive; pale dorsal cross-bands with dark edges which may be in two halves not meeting exactly at vertebral line. Belly may be heavily or lightly speckled with gray. Dark cheek stripe, outlined above with light line, extends from eye across jaw.

**Habitat:**
Grasslands and scrublands in mountainous areas.

**Activity and behavioral patterns:**
No information available.

**Venom characteristics:**
Little information available. Likely hemotoxic and neurotoxic. Clinical symptoms may include pain and slight bleeding at site, swelling, and rapid tender enlargement of local lymph nodes. Systemic symptoms may include double vision, neck rigidity, general achiness, difficulty breathing, and suppression of urine.

### *Orsini's Viper*

**Other Name:**
Steppe Viper

**Description:**
Adult length usually 0.4 to 0.5 meters; maximum of 0.65 meters. Background color gray, yellowish, greenish, or light

brown. Belly usually light or dark gray, sometimes with yellow markings. Completely black specimens reported. Dark, wavy, zig-zag line with black edges down center of back from head to tail; may be discontinuous. Head oval, narrower than that of other vipers; distinct from neck. Snout rounded, slightly upturned. Dark line extending from each eye to corner of mouth.

**Habitat:**
Dry plains, flatlands with few trees or bushes; more common at somewhat higher elevations. Also found on wooded hillsides in mountainous regions. Generally seeks open areas near dry clay or loamy soil. Hides in rodent dens and small animal burrows.

**Activity and behavioral patterns:**
Primarily diurnal, but may be nocturnal during hot summer months. More active than other vipers; can move rapidly. Hibernates during winter months. Not aggressive; avoids human confrontation. Seldom bites, even when bothered, but will bite if continuously disturbed, stepped on, or handled roughly.

**Venom characteristics:**

Mildly hemotoxic. Envenomation causes local pain and swelling, followed by dizziness. Recovery usually relatively rapid.

### *Transcapian Cobra*

**Photo not available.**

**Alternate Names:**
Oxus Cobra

**Description:**
Adult length about 1.8 meters. Background color uniform yellowish, brownish, grayish, or black; may have traces of wide dark crossbands. Belly pale, with two dark bands on neck. Hood mark not present.

**Habitat:**
Stony, rocky, shrub-covered foothills. In some areas, found at elevations above 3,000 meters.

**Activity and behavioral patterns:**
Diurnal; most active during evening and early morning. Not generally aggressive. When threatened or cornered, lifts upper body and spreads hood. When biting, holds on and chews savagely. Quick-moving and agile. Lives in holes in embankments, hollows of trees, old termite mounds, ruined buildings, and rock piles. Fond of water. Does not "spit" venom at aggressor.

**Venom characteristics:**
Primarily neurotoxic. May cause severe local pain and swelling immediately following bite. Symptoms such as weakness, drowsiness, and paralysis of throat may appear less than 1 hour after bite and rapidly progress to respiratory failure and death.

### *Central Asian Saw-scaled Viper*

**Photo not available.**

**Description:**
Adult length usually 0.4 to 0.6 meters, maximum of 0.85 meters. Background color grayish, greenish, or yellowish-brown; belly white, speckled with brown or black. Well defined pale continuous undulating line along flanks. Distinctive cruciform white marking on top of head appears like imprint of bird's foot.

**Habitat:**
Inhabits open scrubby, dry, sandy, and rocky areas.

**Activity and behavioral patterns:**
Mainly nocturnal in hot weather; sometimes diurnal in cool weather. When alarmed, throws itself into double coil somewhat like figure eight and rubs sides of body together, producing violent rustling sound. Very

nervous; quick to strike at slightest provocation. Often climbs shrubs and low-lying trees during rainy season.

**Venom characteristics:**

Little known about venom. Likely hemotoxic. Fangs relatively large compared to size of snake. Local symptoms likely include pain, swelling, and enlarged tender lymph glands. Fatalities recorded.

### *Common Adder*

**Other Name:**

European Viper

**Description:**

Adult length usually 0.5 to 0.6 meters; maximum of 0.9 meters. Fairly stout snake with slightly flattened body. Background color varies by geographic location. Dorsal color varies from gray through copper to brown or uniformly black with dark, heavy zig-zag stripe pattern on back. Belly gray, gray brown, or black; sometimes marked with white spots. Tip of tail yellow, orange, or reddish orange. Snout broadly rounded, but not clearly upturned as in some other European vipers. May have X-shaped or inverted V-shaped mark on head.

**Habitat:**

Diverse habitats. Found in rocky or bushy hillsides, open fields, woods, shady areas, moors, swamps, marshes, and bogs. In northern parts of range, found mainly at sea level; may be found up to 2,700 meters elevation in southern portion of range. Good swimmer; may be found in lakes and rivers. Can tolerate coldest environment of any viper species.

**Activity and behavioral patterns:**

Active during day in colder months; largely nocturnal during warmer months. Generally timid disposition; not vicious or aggressive. Tends to

freeze when danger present; however, easily alarmed and bites if threatened or stepped on. Usually occurs in colonies near suitable hibernation site.

**Venom characteristics:**

Hemotoxic; also some neurotoxic activity. Envenomation causes sharp pain or severe burning at site of bite, followed by swelling and inflammation of lymph system. Victim usually develops nausea, headaches, vomiting, chest pains, and labored breathing. Fatalities reported.

### *Sand Viper*

**Other Names:**
Horned Viper, Macrovipera ammodytes.

**Country:**
Turkmenistan

**Description:**
Adult length usually 0.6 to 0.7 meters, maximum of 0.9 meters. Background color usually ash gray in males and gray-brown in females, but much variation. Belly yellow, brownish, or pinkish with small dark spots or blotches. Body stout, usually with prominent black or brown zigzag dorsal stripe. Tip of tail pink or red. Distinctive snout, terminating in strongly upturned, horn-like appendage.

**Habitat:**
Found in various habitats from lower plains to elevations up to 2,500 meters, most often at moderately high elevations in dry terrain with scattered bushes. Seeks gravelly, rocky hills with slopes facing sun. Frequently found in open areas with few trees and bushes or in rock formations near cultivated fields.

**Activity and behavioral patterns:**
Primarily terrestrial, although occasionally climbs into bushes. Most active in evening, except during colder weather. Generally sluggish and

slow-moving. Not very aggressive. When annoyed, hisses loudly, but usually does not bite unless disturbance continues, then will strike and bite quickly.

**Venom characteristics:**
Extremely potent hemotoxin. Symptoms may include ecchymosis, progressive swelling, lymphedema, shortness of breath, marked limb stiffness, nausea, local hemorrhage, and internal bleeding. Fatalities recorded. Fangs unusually long; may be up to 12 millimeters.

### *Ottoman Viper*

**Country:**
Tajikistan

**Description:**
Adult length usually 0.7 to 1.0 meters, 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 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 characteristics:**

Moderately potent hemotoxin and neurotoxin. Envenomations causes sharp pain and local swelling, which may spread. Discoloration, blisters, and puss-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.

### *Blunt-nosed Viper*

**Alternate Name:**

Levantine Viper

**Description:**

Adult length usually 0.7 to 1.0 meters, maximum of 1.5 meters. 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. 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 characteristics:**

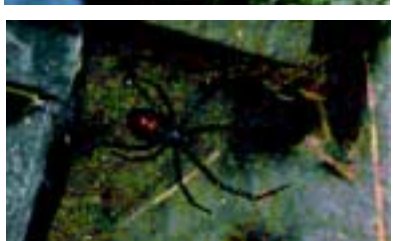
Venom primarily hemotoxic. Envenomation causes sharp pain at site of bite, followed by local swelling and necrosis. Deaths reported.

## Arthropods

### *Scorpions*

Although scorpions capable of inflicting a painful sting occur, none of them are known to be life-threatening.

### *Spiders*



Although several species of spiders capable of inflicting a painful bite occur, no specific information on life-threatening species is available. However, widow spiders likely occur, based on regional data.

### *Insects*

Specific information on insects of medical importance is lacking. However, nearly all countries have at least one species of moth having venomous/urticating hairs and/or whose larva (caterpillar) has venomous spines. Usually, the caterpillars either are very hairy (for example, puss moths/flannel moths) and almost unrecognizable as caterpillars, with long silky hairs

completely covering the shorter venomous spines, or bear prominent clumps of stiff, venomous spines on an otherwise smooth body. Contact with these caterpillars can be very painful. Some, but not all, of these caterpillars are brightly colored.

Adults (moths) and larvae (caterpillars) of most of these species have venomous spines or venomous/urticating hairs. Tussock moths occur regionally.

Paederus spp. are small (usually 4 to 7 millimeters), slender rove beetles that do not look like typical beetles; they have very short wing covers that expose most of their very flexible abdomen. When crushed, their body fluid contains a contact vesicant that will blister skin. The lesions take about a week to heal and the area remains painful for 2 weeks. The vesicant is extremely irritating if it gets into the eyes; temporary blindness has been reported.

### *Centipedes*

Centipedes capable of inflicting a painful bite exist, however, none of them 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 millimeters long) secrete a very noxious fluid that can cause severe blistering upon contact with tender skin; a few are capable of squirting this fluid a distance of at least 2 feet.

## *Monkshood*

**Other Names:**
Wolfsbane, aconite, bihk, badger's bane.

**Mechanism(s) of toxicity/injury:**
Toxic (whole plant) by ingestion or percutaneous absorption. Aconite is a medicinal made from the dried root containing "an extremely toxic: polycyclic diterpenoid alkaloid known as aconitine (a steroid alkaloid); may also have quinoline alkaloids. Root has been fatally mistaken as horseradish. Can cause instantaneous death in high doses. Fatal cardiac dysrhythmias have occurred after ingestion of one teaspooful of dried root. Quickly fatal potential. Percutaneous absorption has resulted in paresthesias (burning, prickling, itching, or tingling) of the lips followed by cardiac toxicity. Ingestion is followed almost immediately by oropharyngeal pain and burning. Can cause dermatitis but this is NOT the main concern. Extracts have been used in arrow poisons.

**Comments:**
Genus includes 100 northern temperate species. Presumably all contain alkaloids. Monkshood is a northern European species; a perennial herb, 2 to 6 feet in height, with thick, black, tuberous rootstock; bears blue flowers. Found in fields, woods, and roadsides and cultivated in gardens. Seed pods with numerous tiny seeds. Bihk, known in northern India, is very toxic. Badger's bane is an herb with tuberous roots known in subtropical and temperate areas of China, where it is used as a medicinal despite the toxicity.

### *Cow Parsnip*

**Other Names:**
Wild rhubarb, giant hogweed, hogweed.

**Mechanism(s) of toxicity/injury:**
Many species within this genus contain furocoumarins; roots and rind have phototoxic sap resulting in acute bullous (characterized by blisters) dermatitis a few hours to two days after contact if then exposed to the sun, followed by pigmentation (may take months to years to disappear).

**Comments:**
None.

### *Spurge Laurel*

**Other Names:**
February Daphne, Merezon, Mezereon.

**Mechanism(s) of toxicity/injury:**
Diterpene alcohols and coumarin glycosides in the bark, leaves, and fruit are the toxic agents. Has a yellow dye (umbelliferone), malic acid, oil wax, gum, and mezerein resin. Whole plant is toxic. Resin is acrid; has been used in the past

as pepper substitute, with fatal consequences. Vesicular dermatitis when skin contact is made.

**Comments:**
A very dangerous ornamental. A folk remedy for many symptoms ("dropsy," "neuralgia," snakebite, etc.).

## *Croton*

**Other Name(s):**
Ciega-vista, purging croton.

**Mechanism(s) of toxicity/injury:**
Long-lasting vesicular dermatitis results from contact with the toxic resin. The cathartic and purgative properties of the toxins (croton oil, a "phorbol," in leaves, stems, and seeds) causes severe gastroenteritis, even death; 20 drops potentially lethal (the oil applied externally will blister the skin). Many members covered with hundreds of sticky hairs that cling to the skin if contacted. Contact with the eyes can be very serious.

**Comments:**
Purging croton is a woolly-haired annual herb, or evergreen bush, or small tree with smooth ash-colored bark, yellowish-green leaves, small flowers, and fruit.

## *Gomboge Tree*

**Photo not available.**

**Mechanism(s) of toxicity/injury:**
The bark exudate is a drastic purgative. Can be fatal.

**Comments:**
The gum resin is called gomboge; used in lacquers, metal finishes, and watercolors in China since the 13th century.

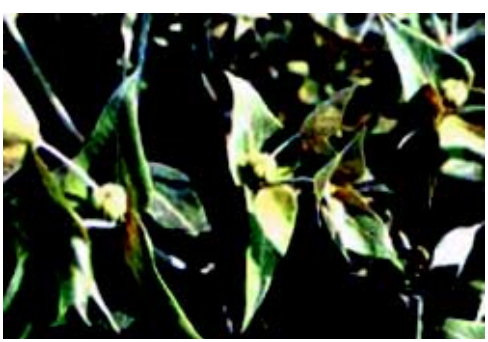
## *Jimsonweed*

**Other Name(s):**
Thorn-apple, stinkweed, Devil's trumpet.

**Mechanism(s) of toxicity/injury:**
The whole plant is toxic. Fragrance from the flowers may cause respiratory irritation, and the sap can cause contact dermatitis. People have been poisoned through consumption of crushed seeds accidentally included in flour; also through attempting to experience the hallucinogenic "high." Has a quickly fatal potential.

**Comments:**
Originally called Jamestown weed because of the historic mass poisoning of soldiers sent to quell "Bacon's rebellion" in 1666; they ate the seeds because of a severe food shortage.

## *Mole Plant*



**Other Name(s):**
Caper spurge, Mexican fire plant, milkweed; red spurge, poison spurge, cat's milk, wartwort, sun spurge; candelabra cactus; Indian spurge tree, milkweed, pencil tree, pencil cactus, rubber euphorbia.

**Mechanism(s) of toxicity/injury:**
Herbs, often with colored or milky sap, irritate the eyes, mouth, and gastrointestinal tract, and many cause dermatitis by direct irritation. In some cases, rain water dripping from the plant will contain enough toxic principle to produce dermatitis and keratoconjunctivitis; can blind. Some contain urticating hairs (skin contact breaks off ends and toxic chemicals are injected). The caper spurge has killed those who mistook the fruit for capers. The Mexican fire plant was known for medicinal properties in the first century and has killed children. Red spurge causes dermatitis. The pencil cactus has an abundant, white, acrid sap extremely irritating to the skin; has caused temporary blindness when accidentally splashed in the eyes, and has killed as a result of severe gastroenteritis after ingestion.

**Comments:**
Genus contains 2,000 species of extremely variable form; may appear as herbs, shrubs or trees — many are cactus-like. Fruit is usually a capsule opening in three parts, each one seeded; sometimes a drupe.

## *Heliotrope*

**Other Name(s):**
Cherry pie, scorpion's tail, Indian heliotrope.

**Mechanism(s) of toxicity/injury:**
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).

### *Rattlepod*

**Other Name(s):**
Rattlebox, rattleweed, chillagoe, horse poison

**Mechanism(s) of toxicity/injury:**
Can kill. Low-level ingestions can cause lung damage; high levels will damage the liver. Some species have caused toxicity through the contamination of flour or when incorporated in teas.

**Comments:**
The fruits are inflated pods with parchment-like walls; the ripe seeds come loose within the pods and rattle when shaken. The flowers are pea-like. Found in open woods, roadsides, margins, sandy soils, and fields.

### *Digitalis*

**Photo not available.**

**Other Names:**
Digitalis purpurea, foxglove, fairy bells, lady's thimbles, lion's mouth.

**Mechanism(s) of toxicity/injury:**
The entire plant contains irritant saponins and numerous digitalis glycosides.

**Comments:**
A tall-growing evergreen with hairy leaves and trumpet-shaped flowers. Sucking the base of the flowers for the sweet taste or drinking water from vase in which they were placed has caused many poisonings. Fatalities have also occurred from mistaking the plant for other herbs for tea.

### *Coffeeberry*

**Other Name(s):**
Alder buckthorn, common buckthorn, cascara.

**Mechanism(s) of toxicity/injury:**
The bark of the common buckthorn are recognized as a particularly strong laxative. There are reports of deaths in children after ingesting buckthorn berries.

**Comments:**
Cascara bark is source of American cascara. Of low relative toxicity, requires chronic use to result in chronic diarrhea and/or melanin pigmentation of the mucous membranes of the colon. Freshly prepared cascara products contain anthrones and can lead to severe vomiting and intestinal cramping. The bark should be stored for at least a year before use or detoxified by heating (in air) to reduce the presence of anthrones.

### *Lily-of-the-Valley*

**Photo not available.**

**Mechanism(s) of toxicity/injury:**
Contain more than 20 cardiac glycosides (e.g., convallatoxin). Quickly fatal potential. Has caused death; children are attracted to the pretty flowers and bright berries, have been poisoned from drinking water

from a vase in which flowers were kept. Has been mistaken for wild garlic and made into soup. Used as an arrow poison in Africa.

**Comments:**
Dried roots used in many medicinals, especially in Russia.

### *Fetid Nightshade*

**Other Name(s):**
Black henbane, insane root.

**Mechanism(s) of toxicity/injury:**
Old well-known medicinal and deadly poison (hyoscyamine, atropine) with many uses in many cultures. tropane alkaloids in the seeds (in a pod); has resulted in death; dermatitis (low risk); has killed.

**Comments:**
Erect, hairy annual with coarse, hairy stems 1-5 feet tall, native to Europe. Found in "weed communities" along roadsides on nutrient-rich sandy soils and loam. Dirty yellow flowers with violet veins. Fruits are a capsule with many black seeds (can be confused with the poppy plant seeds).

### *English Yew*

**Other Name(s):**
Ground hemlock, American yew, Japanese yew.

**Mechanism(s) of toxicity/injury:**
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 known as the "tree of death" in antiquity.

### *Stinging Nettle*

**Other Names:**
Roman Nettle, Dog, Small, or Stinging Nettle.

**Mechanism(s) of toxicity/injury:**
Brushing against the plant shears off a protective cap from specialized silicaceous stinging hairs, allowing skin puncture. After puncture, an irritant liquid is released that can contain several pro-inflammatory mediators including alkaloids, histamine, acetylcholine, and 5 hydroxytryptamine. These stinging nettle substances cause the immediate reaction after a nettle sting. The term "urticaria," describing the characteristic skin eruption, is

derived from the genus name. Thought to be a defense against browsing animals; usually does not involve a hypersensitivity reaction. Stinging can persist at the site for more than 12 hours after clinical features of urticaria have disappeared. This persistence of symptoms is due to secondary release of inflammatory mediators, or persistence of implanted hairs.

**Comments:**
Genus of 30 species, usually perennial, single-stalked herbs less than 0.3 meter (1 foot) in height, found mainly in northern temperate areas. The tender tips are used as a leafy vegetable in some locales; simmering in water renders the stingers ineffective.

### *Buckeye*

**Other Names:**
Horse chestnut.

**Mechanism(s) of toxicity/injury:**

A saponin, aesculin, (a hydroxy derivative of coumarin) is found in leaves, bark, and seeds. Some groups have eaten the ripe nuts after roasting and treatment in lime water (absorption of the toxins is inefficient), but children have died after ingesting the nuts or drinking tea made from the leaves. Bruised branches used as a fish intoxicant. Honey made from the flowers is toxic.

**Comments:**

There are 13 species of buckeye; large trees with showy flowers and seed pods, which may be smooth and leathery, or warty. Small to medium trees or shrubs. The brown nuts are held in a spiny green capsule. Bark has been used as a yellow dye.

### *Spindle Tree*

**Other Names:**
Burning bush, wahoo.

**Mechanism(s) of toxicity/injury:**
Spindle tree is the most toxic member of the genus. The flowers are yellowish-green; the attractive pink (or orange-red) drupes are enticing but have phyllorhodin, several cardiac glycosides, and other unknown substances as the toxic principles, which result in symptoms 10-12 hours after ingestion — bloody diarrhea, nausea and vomiting, fever, hallucinations, somnolence, eventual coma and seizures.

**Comments:**
Deciduous or evergreen shrubs or trees; fruit a three- to five- valved, brightly colored capsule splits open to expose bird-dispersed scarlet to orange seeds. Until further data is available, the other species of this group should be considered toxic.

### *Snake's Head*

**Photo not available.**

**Other Names:**
F. melagris, snake's head, guinea flower; F. imperialis, crown imperial.

**Mechanism(s) of toxicity/injury:**
Many contain veratrum alkaloids, used in some areas as medicinals.

**Comments:**
This genus has 100 species from western Europe and the Mediterranean to eastern Asia, but only a few have been clearly implicated as etiology of dermatitis.

### *Deadly Nightshade*

**Other Names:**
Black nightshade, common nightshade, horse nettle, bittersweet, Jerusalem cherry, nipple fruit, quena, potato bush, wild tomato, apple of Sodom, white-edged nightshade.

**Mechanism(s) of toxicity/injury:**
The fruit of the Jerusalem cherry is a black berry; the fully ripe berries are eaten; unripe berries contain solanine alkaloids, which can cause gastroenteritis, weakness, circulatory depression. Can kill.

**Comments:**
Approaching 2,000 species of herbs, vines, or shrubs covered with small star-shaped hairs. Perfect white, yellow, or blue flowers. Berries have dry or juicy pulp and several seeds. Genus includes a number of food staples (potatoes, tomatoes, and eggplant).

### *Burn Bean*

**Photo not available.**

**Other Names:**
Colorines, mescal bean, red hots, necklacepod sophora, silverbush, pagoda tree.

**Mechanism(s) of toxicity/injury:**
Dark to bright red beans in woody pods are hallucinogenci; used by American Indians before peyote was discovered. Seeds and flowers are very poisonous, causing convulsions; has caused death. One seed can kill a child. Cytisine (a quinolizidine alkaloid) acts much like a nicotinic ganglionic stimulating agent.

**Comments:**
Fruit is source of a yellow dye. Dried flowers are sold as medicinal in Indonesia (Java); used in bleeding problems.

### *Kamyuye*

**Photo not available.**

**Mechanism(s) of toxicity/injury:**
Contains latex with a mixture of sequiterpene (see terpene in glossary) alcohols. Has long been used as medicinal. Used in Africa to commit homicide. Accidental fatalities have occurred when the bark was used to prepare a medicine for stomach problems.

**Comments:**
Tropical African aromatic shrub. Source of vanilla-scented oil.

# APPENDIX J:
# International Telephone Codes

**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<br>or 0030-911 | On-base | 550-HOME or<br>550-2USA |

## Notes

## Notes

## Notes

## Notes

## Notes

## Notes

## Notes

## Notes