Paraguay Country Handbook

This handbook provides basic reference information on Paraguay, 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 Paraguay.

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

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Paraguay
National Capital
Department Capital
International Border
Primary Road
0
50
100
150 km
0
50
100 mi

Paraguay

KEY FACTS

Country Name. Paraguay
Official Name. Republica del Paraguay

Head of State. President Nicanor Duarte Frutos (August 2003)

Capital. Asunción.

Paraguay's Seal

National Flag. The flag of Paraguay has three equal, horizontal bands of red, white, and blue with a round emblem centered in the white band. This emblem is different on each side of the flag. On the front (hoist side at the left), it is the national coat of arms (a yellow, 5-pointed star surrounded by a green wreath and capped by the words *Republica del Paraguay*. The emblem on the back of the flag is the seal of the treasury (a lion under a red Cap of Liberty and the words *Paz y Justicia* (Peace and Justice), capped by the words *Republica del Paraguay*.

Time Zone. UTC (formerly GMT) minus 4.

National Flag

Telephone Country Code. 595

Population. 6, 669,000 (July 2007)

Languages. Spanish, and Guaraní (both official)

Currency. Guaraní (PYG)

Exchange Rate. US$1=PYG4690 (January 2007)

Calendar. The fiscal year is the same as the calendar year.

U.S. MISSION

U.S. Embassy

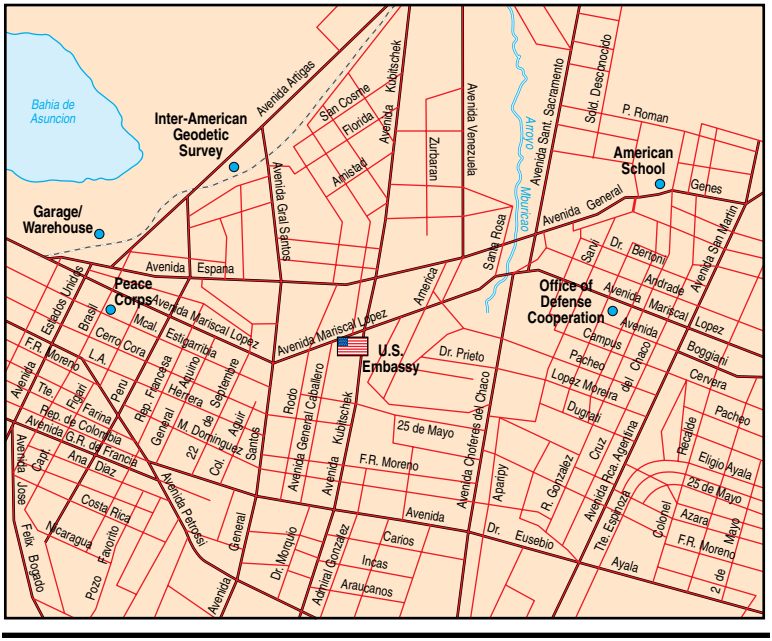
Location	1776 Mariscal Lopez Avenue, Asunción, Paraguay
Mailing Address	From the United States: Unit 4711/ APO AA 34036-0001/ Local: Casilla Postal 402 Asunción, Paraguay
Telephone	[595] (21) 213-715
Fax	[595] (21) 213-728
E-mail	Paraguayusembassy@state.gov

Entry Requirements

Passport/Visa Requirements

A passport and Visa are required. U.S. Citizens traveling to Paraguay must submit completed visa applications in person or by secure messenger to the Paraguayan Embassy or one of the consulates and they must pay a fee.

Travelers entering and/or departing Paraguay through the Silvio Pettirossi Airport (Asunción), Guaraní Airport and the Friendship Bridge (both located in Cuidad del Este), Puerto Falcon (land bor-



U.S. Embassy, Asunción

der Argentina/Paraguay) and Encarnacion may be required to provide a biometric fingerprint.

There is an airport international departure tax of US$25, payable in either U.S. or local currency (no credit cards or checks accepted).

Immunization Requirements

Travelers should check with a health-care provider to determine which vaccines are needed. There is a risk of Malaria in the departments of Alto Paraná, Caaguazú, and Canendiyú. All travelers to malaria-risk areas of Paraguay should take chloroquine as an antimalarial drug. Yellow fever vaccine entry

requirements are necessary for travelers arriving from an endemic zone. Visit the Center for Disease and Control website for a list of endemic countries.

Customs Restrictions

Paraguay customs authority may enforce strict regulations concerning temporary importation or export of items such as firearms, medication, toys resembling weapons, or protected species. A reasonable quantity of tobacco for personal use may be imported without incurring customs duty, as may one bottle of liquor. There are no restrictions on cameras, a reasonable amount of film for personal use, or a reasonable amount of perfume for personal use.

GEOGRAPHY AND CLIMATE

Geography

Land Statistics

Total Area	406,750 square kilometers (157,047 square miles)
Land	397,300 square kilometers (153,398 square miles)
Water	9,450 square kilometers (5,871 square miles)

Boundaries

The following countries border Paraguay:

Argentina	To the south	1,880 kilometers/725 miles
Bolivia	Northwest	750 kilometers/289 miles
Brazil	Northeast	1,365 kilometers/848 miles

Bodies of Water

Rivers have greatly influenced the character of the country. The Paraguay and Paraná rivers and their tributaries define most of

the country's borders, provide all its drainage, and serve as transportation routes.

One of South America's major rivers is the Paraguay River. It covers a distance of 2,600 kilometers (1,612 miles) from its head waters in the Brazilian state of Mato Grosso to its confluence with the Paraná River north of Corrientes. The Paraguay River has not been dammed for hydroelectric power generation, unlike many of the other rivers of the Paraná Basin. This makes the river navigable for a considerable distance. The winding course and shifting sandbars make the transit down this river difficult at times, however, during most years, vessels with 21-meter drafts can reach Concepcion without difficulty and medium-sized ocean vessels can sometimes reach Asunción. The river is a significant shipping and trade corridor, providing a much needed link to the Atlantic Ocean for this otherwise land locked country.

The second major river in the country is the Paraná River. It is 4,700 kilometers (2,921 miles) long and is part of a river system that reaches to Brasilia, Brazil. The river enters Paraguay at Salto del Guaira and forms the country's southeastern and southern borders with Brazil and Argentina. Most of the river is navigable and is a primary waterway linking inland cities to the ocean, providing

Paraguay River near Asunción

Paraná River from Encarnación

deep water ports in many of the cities. Massive hydroelectric dams along the rivers block its use as a shipping corridor to cities further upstream, but the economic impact of those dams is considered to offset this. The Paraná and its tributaries are a source of income and daily sustenance for fishermen who live along its banks.

The third largest river is the Pilcomayo. It begins in the foothills of the Andes Mountains, between the southwestern Bolivian departments of Oruro and Potosi, and flows south through Chuquisaca and Tarija departments, passing through the Argentine province of Formosa, and into the Paraguay River near Asunción. Although travelling on the river is sluggish, as it is generally filled with silt, small craft can navigate on its waters. When the river floods it feeds the Estero Patino (the nation's largest swamp, located in the lower Chaco).

Hidrovia Project

The Hidrovia project was established in 1997. It was seen as a measure that would develop the Paraguay river into an industrial waterway system that would help reduce the costs of exporting goods from the area. However, studies indicate that rechanneling

Pilcomayo River

the Paraguay would lower water levels by several feet and devastate the Pantanal wetlands. The final plan is still uncertain. Controversy continues over the project's potential for having a disastrous effect on the ecology, as well as its potential for economic gains.

Topography

The Paraguay River separates the country into two distinct topographic regions. To the east is the subtropical Paraneña region, which makes up about 40 percent of the country's territory and is home to most of Paraguay's population. The Paraneña covers 159,800 square kilometers (61,700 square miles). It has rolling farmland; grasslands; forests; and patches of jungle near the border with Brazil. The Paraná plateau, part of the Paraneña region, receives more rainfall than any other area of the country.

The Gran Chaco region, the western portion of the country, is largely arid, flat, and unsuitable for agriculture. The extreme northwestern region is mostly desert. It covers 246,827 square

kilometers (95,300 square miles), nearly two-thirds of Paraguay's total land area. Apart from a few settlements, the region is sparsely populated. A lack of roads and navigable rivers makes much of this region inaccessible.

Paraguay has only modest mountain ranges, located in the southeast. The highest, Cerro Pero, has an elevation of 842 meters (2,762 feet).

Topography

Paraguay

National Capital
Secondary City
International Border
Paraguay Plains
Rio Paraguay Valley
Eastern Paraguay

Topographic Slope

Climate

Temperatures

During the winter months (roughly May through August), temperatures generally range from 16° to 21°C (60° to 70°F). During

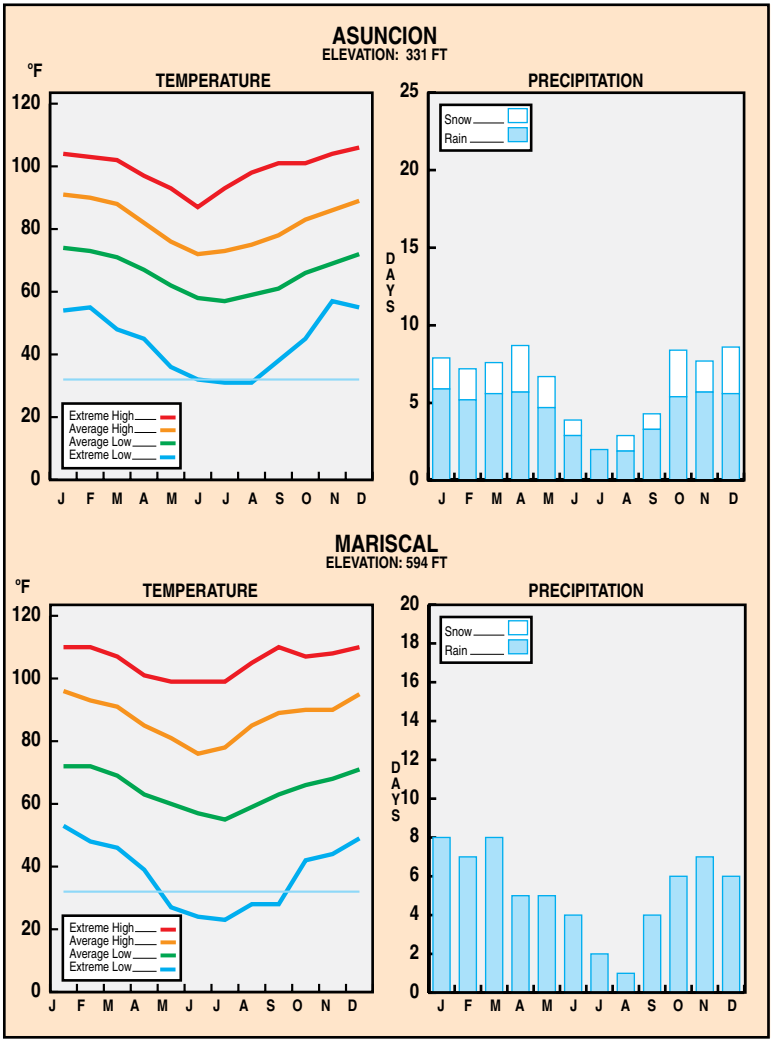
Landscape of the Gran Chaco

the summer (October through March), temperatures range from about 25° to 38°C (77° to 100°F), with extremes of 43°C (109°F) and above in the west. Paraguay is open to dry, cold polar winds from the south and to hot, humid north winds from southwestern Brazil; sudden sharp drops in temperatures are not uncommon.

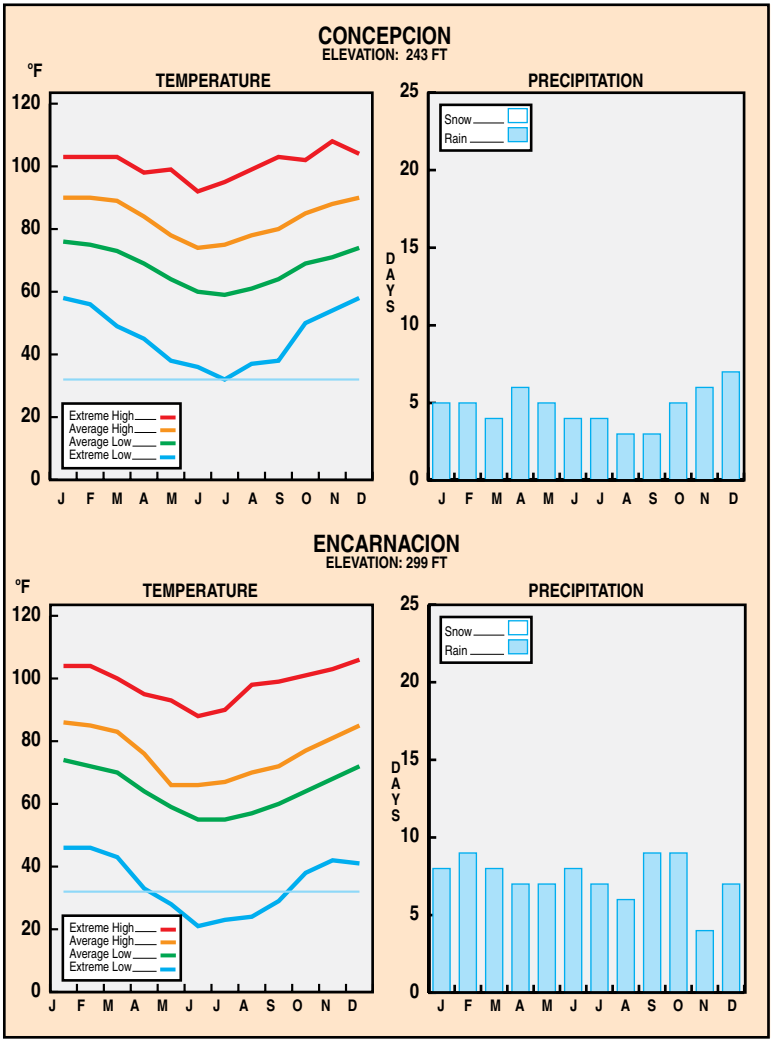
Precipitation

Rainfall in the Paraneña region is fairly evenly distributed. Rain usually falls when tropical air masses are dominant. The least amount of precipitation is in August, when averages in various parts of the region range from two to ten centimeters. The most amount of precipitation falls during the months of March through May and October to November.

For the region as a whole, the annual average rainfall is 127 centimeters (50 inches) although the average on the Paraná Plateau is 25 centimeters (9.84 inches) to 38 centimeters (14.96 inches) greater. All sub regions may experience considerable variations



Asunción and Mariscal Weather



Concepción and Encarnación Weather

from year to year. Asunción has recorded as much as 208 centimeters and as little as 56 centimeters of annual rainfall; Puerto Bertoni on the Paraná Plateau has recorded as much as 330 centimeters (130 inches) and as little as 79 centimeters (31 inches).

The Chaco region experiences seasons that alternately flood and parch the land. Rainfall is light, varying from 50 to 100 centimeters (20 to 40 inches) annually, except in the higher land to the northwest where it is somewhat greater. Rainfall is concentrated in the summer months, and extensive winter deserts become summer swamps.

Environment

Deforestation is a concern in Paraguay, about a third of the nation's forests and woodlands has been lost. The absence of trees contributes to the loss of soil through erosion. Another environmental issue is water pollution. Many of the country's rivers suffer from toxic dumping. Tanneries are particularly harmful, releasing mercury and chromium into rivers and streams. Runoff from toxic chemicals used by farmers also seeps into Paraguay's waters. Out of the nations 94 cu km of renewable water resources 78 percent is to support farming, and 7 percent is used for industrial purposes. About 93 percent of the city dwellers and 59 percent of the rural people have access to pure drinking water.

TRANSPORTATION AND COMMUNICATION

Transportation

Paraguay's has a network of roads, railroads, rivers, and airports, but significant infrastructure and regulation improvements are needed. Transportation systems range from adequate to poor, largely depending on the region of the country.

Roads

Paraguay has about 15,000 kilometers (9,320 miles) of paved, major feeder roads. The core network connects Asunción, Encarnación, and Ciudad del Este. The Trans-Chaco highway is only partially finished. Bolivia's portion of the highway is entirely

Transportation Network

paved. The paved road from Ciudad del Este to the Brazilian port of Paranágua is particularly important for trade purposes. Most urban streets consist of cobblestones over dirt. Some roads in Asunción and other large cities are paved. However, these roads frequently develop potholes that often remain unrepaired. Nearly all rural roads are unpaved, and during rainy periods and the rainy season (November-March/April) they may be impassable. Road signs indicating hazards, such as sharp curves or major intersections, are lacking in many areas.

The number of automobiles has increased in recent years. Approximately 600,000 cars were in use in 2000, about half of which were stolen. Only minimal standards must be met to obtain a driver's license, and driver education before licensing is not common. drivers throughout Paraguay often ignore traffic regulations. Vehicle insurance is not required; many Paraguayans drive without any insurance coverage. Public transportation is readily available for urban and inter-city travel. Buses vary in maintenance conditions and may not meet U.S. safety standards. Taxis are available and may be called using telephone numbers listed in the newspapers.

Rail

The government owns the country's only railroad company. A very small section of the line is still open. As of 2006, all traffic has been suspended except weekly tourist steam trains that run between Asunción Jardin Botanico and Aregua, and cross-border freight trains that run between Posadas (Argentina) and Encarnacion. The former main station in Asunción has been converted into a railway museum.

Former Asunción Station, now a Museum

Air

Paraguay has 899 airports, 11 which are paved, and only two that can receive four-engine commercial airplanes. Silvio Pettirossi (located in Asunción), is the country's major airport for international and domestic flights. The Guaraní International Airport, located near Ciudad del Este and the Brazilian border, is the second major international airport in the country. Paraguayan Air Lines (Líneas Aéreas Paraguayas—LAP) provides both domestic and international service. Improvements in technology are needed to bring Paraguay's airports up to international standards.

The U.S. Federal Aviation Administration (FAA) has assessed Paraguay's civil aviation authority as category 2 – not in compliance with international aviation safety standards for the oversight of Paraguay's air carrier operations. The U.S. Department of De-

fense does not permit its personnel to use air carriers from category 2 countries for official business except for flights originating from or terminating in the United States.

Primary Airports

Airport Name, Coordinates	Elevation m (ft)	Runway	
		Dimensions, m (ft)	Surface
Carlos Miguel Gimenez 2652S 05919W	76 (249)	1,500 x 19 (4,920 x 62)	Concrete
Dr Augusto Roberto Fuster Intl 2238S 05549W	571 (1873)	1,801 x 30 (5,908 x 98)	Asphalt
Dr Juan Plate, 2209S 05756W	85 (280)	1,205 x 18 (3,955 x 60)	Concrete
Dr Luis Maria Argana Intl 2202S 06037W	169 (553)	3,500 x 40 (1,1483 x 131)	Concrete
Estancia Pai Quara 2313S 05556W	217 (712)	1,450 x 18 (4,757 x 60)	Asphalt
Guaraní Intl (Ciudad del Este) 2527S 05450W	258 (846)	3,400 x 45 (11,154 x 148)	Asphalt
Itaipu, 2524S 05437W	232 (762)	1,520 x 23 (4,987 x 75)	Asphalt
Juan De Ayolas, 2722S 05651W	68 (223)	1,850 x 45 (6,070 x 148)	Asphalt
Santa Teresa, 2237S 05638W	177 (582)	1,797 x 20 (5,895 x 65)	Asphalt
Silvio Pettirossi Intl (Asunción) 2514S 05731W	89 (292)	3,353 x 46 (11,001 x 151)	Asphalt
Teniente Col Carmelo Peralta 2326S 05725W	77 (253)	1,850 x 45 (6,070 x 148)	Asphalt

Maritime

Paraguay has 3,100 kilometers (1,922 miles) of inland waterways, which connect the country with Bolivia, Brazil, and the Pacific Ocean. All Paraguay's major cities are port cities, Asunción, Cui-

dad del Este, Encarnacion, and Concepcion. Villeta, Casado, Villa Elisa, Calera Cue, and Vallemi have minor port facilities and may be served by small vessels.

To reach Paraguay's major cities from the Atlantic Ocean, Vessels must pass through approximately 1,500 kilometers (930 miles) of Argentine territory. The Paraguay and Paraná River systems facilitate the movement of barges in and out of the country to seaports in neighboring countries. During most of the year, the Paraguay River is navigable as far as Asunción by vessels of up to 11 meters draught, and over almost its total length by smaller craft. Because high and low water levels negatively affect navigability, most commercial river traffic is limited to barges. During the winter months (August through May), Vessels weighing more than 5,000 tons traveling on the Paraguay River cannot reach Asunción.

Primary Ports

The Port of Asunción (2516S 05741W) lies 1,600 kilometers (992 miles) upstream along the Paraguay River. It primarily receives imports. Repairs can be made at the port. There are two tanker terminals downstream from the main complex. The port handles oil, machinery, electrical equipment, and grain.

The Port of Encarnación (2715S 05550W) is located on the Paraná River directly across from Posadas, Argentina. In general, large ships can go no further on the Paraná than Encarnacion, but smaller boats may go somewhat further.

The Port of Puerto Villeta (2530S 05736W) is located downstream from the larger Port of Asunción. Puerto Villeta handles most of Paraguay's agricultural and industrial exports. Private warehouses are available for commodities such as cotton, tobacco, and macoya. Cranes must be borrowed from Asunción.

Port of Asunción

The Port of San Antonio 2538S 05763W) is a privately owned port and also lies downstream from Asunción.

Communication

Radio and Television

Broadcasts air a wide range of views, including those of the opposition. Newspaper and radio journalists often risk intimidation when they investigate corruption, or cover strikes and protests. Unlicensed radio stations in the tri-border area have flourished. *Radio Nacional del Paraguay* is a state-run station. The primary news and talk radio stations are Radio Cardinal and Radio Nanduti.

Major Stations	City	Programming
Radio Cardinal AM 730 AM	Asunción	News, Talk
780 AM Radio	Asunción	News, Talk
Radio Nanduti 1020 AM	Asunción	News, Talk
Radio Cardinal FM 92.3 FM	Asunción	News, Talk

Paraguay uses the Phase Alternating Line Video System (PAL) (a color encoding system used in broadcast television systems.) The three primary commercial television stations are Canal 2, El Trece, and Sistema Nacional de Television.

Telecommunication

Paraguay's telephone system is meager at best. International direct dialing is available in most areas. internal network beyond the main cities is moderate. The primary switching system is in Asunción. Domestic service is provided using a fair microwave radio relay network. International service is provided using a satellite earth station; one Intelsat satellite is positioned over the Atlantic Ocean. Mobile telephone service is available. International mobile phone companies have roaming agreements. However, coverage is limited to the urban areas.

Asunción is one of few cities in Paraguay serving more than 10,000 telephone subscribers. Fiber-optic cables and a microwave network connect these cities. Urban areas are expanding their domestic and mobile telephone networks, upgrading to digital switching, and installing Signaling System Number 7. Smaller towns have been left behind. Telephone circuits connecting small cities have used VHF wireless systems. The VHF systems can only handle a small amount of low quality circuits. The VSAT system has been temporarily introduced as the most appropriate method of improving the number and quality of telephone circuits connecting large cities and rural areas.

Paraguay Telecommunication Statistics

Total telephone subscribers (2005)	2,207.3
Telephone subscribers per 100 inhabitants	35.89
Main telephone lines	320,300
Mobile Users	1.887 million

Internet

There were 200,000 estimated internet users as of September 2006, this makes up 3.6 percent of the population. Internet cafes are available in main urban areas. Internet service providers in Paraguay include: *Centro Nacional de Computacion*, Planet Internet S.A., Conexion, Rieder Internet, PARNET, ITACOM, SuperNet, and GrupoAventura.com. Paraguay's internet suffix is .PY.

Paraguay Internet Statistics 2005

Total Internet Hosts	8,418
Hosts per 10,000 inhabitants	14
Internet Users	200,000
Users per 100 inhabitants	3
Total number of personal computers (PCs)	460,000
PCs per 100 inhabitants	7
Internet broadband per 100 inhabitants	N/A

Newspapers and Magazines

Newspaper articles consist of a wide range of views, including those of the opposition. Journalists are often intimidated when they investigate corruption, or cover strikes or protests. Media outlets are sometimes subjected to legal harassment. The main newspapers include *ABC Color*, *La Nacion*, and *Ultima Hora*. However, U.S. newspapers are available.

Primary Spanish Daily Newspapers

- *ABC Color* (www.abc.com.py)
- *La Nacion* (www.lanacion.com.py)
- *Ultima Hora* (www.ultimahora.com.py)

Postal Service

The national postal operator, which had come to offer slow, unreliable and expensive postal services, was running at a loss, unable to respond to market needs, and at a competitive disadvantage. Between 1999 and 2003, mail volume fell by 50 percent. In 2004, the public operator was faced with an operating deficit of more than US$1.5 million. The Paraguay postal sector has no legal or regulatory framework, and State obligations regarding the universal service are not defined. This means the public operator lacks the commercial flexibility to stand up to competition, and investment in postal technology is clearly inadequate. The government is committed to reviving the postal sector, reforming it from top to bottom through an integrated postal reform and development plan (IPDP) prepared by the Universal Postal Union, in conjunction with the Postal Union of the Americas, Spain and Portugal . UPS, FedEX, and DHL are available in Paraguay

Satellites

Paraguay uses the INTELSAT system for international telecommunications. ANTELCO operates a satellite station at Aregua located approximately 40 kilometers (25 miles) northeast of Asunción.

CULTURE

Paraguayan culture revolves around theater, art, and music. The culture is a mix of various foreign influences, primarily European influence. A popular medium in Paraguay is theater, which is occasionally offered in both Spanish and Guaraní. Although most the people in Paraguay speak the native tongue, the music is oddly European with almost no evidence of Black, Brazilian, or Argentinean influence.

Popular musical instruments include the guitar and harp, and songs are generally lachrymose and slow. However, the Guarani language is used for church music. The galleries of Paraguay contain unconventional visual art. Embroidery and lace-making are significant art forms, as is poetry. Roque Vallejos, Jose Ricardo Mazo, and Augusto Roa Bastos are some of Paraguay's popular novelists and poets.

Statistics

Population	6,506,464 (July 2006 estimates)
Growth Rate	2.45 percent
Birth Rate	29.1 births/1,000 population
Death Rate	4.49 deaths/1,000 population
Life Expectancy At Birth	
Total Population	75.1 years
Female	77.78 Years
Male	72.56 Years
Age Structure	
0-14 Years	37.7% (male 1,245,149/female 1,204,970)
15-64 Years	57.5% (male 1,878,761/female 1,862,266)
65 and older	4.8% (male 145,899/female 169,419)

Population Patterns

Paraguay has one of the lowest population densities in the world. Fewer than 5 percent of the population live west of the Paraguay River in the Chaco. About 51 percent live in rural areas, and the remaining 49 percent in urban areas. Much of Paraguay is sparsely populated; most inhabitants live within a 160-kilometer (100-mile) radius of the capital city Asunción. Asunción has a population of approximately 1,900,000. About 95 percent of the population is

of Hispanic-Guaraní descent and 50 percent are less than 18 years old. Many Brazilians live in Paraguay along the Brazil-Paraguay border. Paraguay has traditionally welcomed immigrants and there are communities or colonies of Arabs, Germans, Koreans, Chinese, Taiwanese, and Japanese. Approximately 2,000 Americans live in Paraguay, most in Asunción.

Population

Ethnic Density

The Mestizo comprises about 95 percent of the population while other ethnic groups share the remaining five percent. Despite assimilation of the indigenous Indian population by the early Spanish explorers, some Indians prevailed in maintaining their traditional manner apart from the national culture. Today, the Indian population is roughly estimated between 1.5 and 3 percent of the total population. Paraguay's indigenous population comprised 17 tribal groups representing six language families. There are four tribes represented in Eastern Paraguay who speak varieties of Guaraní. The Chaco regions of Paraguay contain 13 tribes and represent the other five language families.

Society

People

Paraguayan society is unlike other Latin American societies, due to the unique synthesis of cultures. Paraguay is the only country on the continent where the white settlers and native Indians coexisted peacefully enough to eventually fuse and form a single nation. Thus, unlike many other countries of the region, Paraguay's white minority does not form separate elite. While society's basic structure and institutions are Hispanic, the dominant language is Guaraní. Most Paraguayans speak both Spanish and Guaraní , with the former viewed as the national language, and the latter revered as "the language of the heart." European immigrants to Paraguay are expected to learn Guaraní as a sign of their becoming truly Paraguayan, and efforts by visitors to say even a few words in this difficult language are deeply appreciated. The nation's elite is centered in Asunción and connected by ties of kinship and family affiliation with the political parties. Those considered powerful at-

tribute their success to extended family ties with military officers, businessmen, landowners, and others in political positions.

Family

Paraguayan society centers on the extended family. Three or four generations might live in one home or on one farm. Most children are well behaved and polite. Adult children expect to care for their aging parents. The father heads the family and the mother takes care of the household. Most rural women, like the men, are involved in agriculture. As much as 40 percent of the urban labor force is female.

Many rural families have electricity, televisions, and radios but do not have other modern conveniences such as plumbing. They live in wooden or brick homes with dirt floors and straw or tin roofs. Urban homes are made of concrete and have tile roofs. Nearly all homes in Asunción have running water and electricity.

Asunción

Education and Literacy

Public education is provided tuition-free, but students must buy uniforms and are asked to help buy supplies. Schools tend to be crowded. Instruction is usually in Spanish, which can be difficult on children from rural communities who only speak Guaraní. Most children begin school, but fewer than half complete 6 years of primary school. About a third of eligible children attend secondary school. Opportunities for those who finish school are limited, and many either work in the fields or migrate to other countries to find work. There are some institutions of higher learning, but only one percent of the population attends college. The official literacy rate does not reflect reality in rural areas, where the literacy rate is substantially lower.

Language

Both Spanish and Guaraní are official languages of Paraguay. Spanish is known as the language of government, urban commerce, and most schooling, but Guaraní is the common language. In some rural areas, some people speak only Guaraní, although many adults cannot read or write it. Most people also speak or understand Spanish. Portuguese is spoken along the Brazilian border. Paraguay's Spanish is called Castellano, not español. Paraguayans mix many Guaraní words with Spanish, and many of their vocabulary words differ from those of other Spanish speaking countries.

Religion

The Roman Catholic Church is the center of religious life in Paraguay. Ninety percent of the population is Roman Catholic, including most of the mestizo population. The remaining 10 percent consist of mainline Protestant, evangelical Christian, Jewish, Mormon, Muslim, and Baha'i groups. There is also a sizable Men-

Asunción Cathedral

nonite community in the western department of Boquerón. This community comprises mainly German immigrants.

The constitution provides for freedom of conscience and recognizes no official religion. All religious groups must register with the government. Paraguay maintains a secular state even though most members of the government are Roman Catholic and the government observes Roman Catholic Holidays.

Recreation

Soccer is the most popular sport in Paraguay, but volleyball and soccer are both common participation sports. Urban men often play sports in the evenings. Many enjoy tennis and basketball. Women generally have not played sports in the past, but recently

have increased in participation. Urban people may go to the theater, movies, or other cultural events. Most households have televisions and enjoy watching it with their family. Rural and urban people often relax by drinking *terere* and mate (*Terere* is a drink made with Yerba tea leaves. When served cold with juice or soda the drink is called *terere*, and when served hot it is called *mate*) and visiting with friends.

Cultural Considerations

Males take pride in having *machismo*, a demonstration of personal honor and virility considered essential. Devotion to family and feminine behavior are considered important for females.

Latin Americans generally exercise more formality in public.

Gestures

The most common gesture is the thumbs up to express something positive or encouraging. One calls someone over by waving all fingers of the hand with the palm facing out or down. Winking has romantic, even sexual, connotations; it is not used as a casual gesture. Yelling is also used minimally; to garner someone attention one may whistle or run after an individual.

Personal Appearance

Western style clothing is worn throughout Paraguay. Cleanliness is emphasized; even the poorest people have clean clothing and clean shoes. Adults do not wear shorts in public. Men generally wear slacks and a presentable shirt for work instead of suits.

Women generally pay particular attention to their appearance, regardless of economic conditions, wearing styled hair, manicured nails, jewelry, and makeup. Rural women nearly always wear dresses. Society generally considers beauty an important quality.

Greetings

When meeting a stranger, it is polite to speak to the individual in the formal *usted* (you) form and not the *tu* (your or you) form in most countries. Always bring a small gift or memento for any formal visits to military or governmental installations.

Common greetings include *¡Mucho Gusto!* (Pleased to meet you!) or with just acquaintances *¡Hola! Como estas?* (Hi. How are you?)

With exception to the work place men and women often shake hands when greeting. Friends greeting for the first time in a day will kiss each other on the cheek as well as shake hands. Rural women are more likely to pat the other's arm than kiss.

Urban men are addressed respectfully by their last names, often accompanied by "*Don*." For women, "*Dona*" customarily accompanies the first name. However, younger people often refer to each other by first names.

Paraguayans are friendly and very informal; courteous behavior is valued higher than strict observance of protocol. When eating out informally, it is considered rude to split the tab for food. Either offer to pay for the entire meal or let the other person do it. Latin Americans are extremely rank conscious. There is a wide gap between officers and non-commissioned officers. Paraguayans are not as class conscious as some Latin Americans. All share a pride in their ethnic heritage and a fierce patriotism born of two devastating wars with neighboring countries (Argentina, Brazil, and Bolivia.)

Visiting and Etiquette

Paraguayans visit one another often. Unannounced visits are common and welcomed. Most Paraguayans enjoy hosting friends and new acquaintances. Guests don't need to worry about being punctual; lateness is accepted and more comfortable for all involved.

When attending a dinner party, remember the following customs:

- Children often eat before guests arrive.
- Guests usually receive plates of food fully served.
- Not finishing one's food is considered an insult to the cook.
- Hosts often insist on a second helping.
- In a formal setting hands are not placed on one's lap; they rest on the table edge until the host has begun eating.
- Few people in rural areas drink during meals
- Rural women often eat after the men, or at separate tables.

Food

Breakfast usually consists of *cocido* (a hot drink of mate, cooked with sugar and milk) or coffee, bread and butter, and rolls or pastries. Lunch is the main meal and is often served midday. Dinner is served after dark when work is finished. Foods commonly served throughout Paraguay include cornbread baked with cheese, onions, and sometimes meat, chipa (hard cheese bread), tortillas, and *empanadas* (deep-fried meat or vegetable pockets).

MEDICAL ASSESSMENT

Disease Risks to Deployed Personnel

The Armed Forces Medical Intelligence Center (AFMIC) assesses Paraguay as INTERMEDIATE RISK for infectious diseases, with an overall disease risk that will adversely impact mission effectiveness unless force health protection measures are implemented.

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

Food- or Waterborne Diseases

Sanitation is poor throughout the country, including major urban areas. Local food and water sources (including ice) are heavily contaminated with pathogenic bacteria, parasites, and viruses to which most U.S. service members have little or no natural immunity. If local food, water, or ice from unapproved sources is consumed, diarrheal diseases can be expected to temporarily incapacitate a very high percentage of personnel within days. Hepatitis A and typhoid fever can cause prolonged illness in a smaller percentage of unvaccinated personnel. Consuming unpasteurized dairy products or raw animal products increases the risk of many diseases, including brucellosis and Q fever. In addition, viral gastroenteritis (e.g., Norwalk, Norwalk-like virus) and food poisoning (e.g., *Bacillus cereus, Clostridium perfringens, Staphylococcus* spp.) may cause significant outbreaks.

Vector-borne Diseases

Ecological conditions support populations of arthropod vectors, including mosquitoes and sand flies, with variable rates of transmission. Dengue fever is the major vector-borne risk in Paraguay, capable of debilitating a high percentage of personnel for up to a week, particularly under favorable conditions. Malaria occurs at significant levels in some rural areas, though urban areas are risk-free. More than 90 percent of all cutaneous leishmaniasis cases are reported from rural areas of the eastern Departments of Alto Parana, Amambay, Canindeyu, and San Pedro. Foci also occur in rural areas of Caaguazu, Caazapa, and Guaira Departments.

Sexually Transmitted and Blood-borne Diseases

Sexually transmitted diseases, including gonorrhea, chlamydia, hepatitis B, and HIV, are present in the country. Though the im-

mediate impact of HIV/AIDS and hepatitis B on an operation is limited, the long-term health impact on individuals is substantial. A variety of other sexually transmitted diseases, including chancroid, herpes, syphilis, and venereal warts, are present and may cause symptomatic infection.

Water-contact Diseases

Leptospirosis is a risk year-round for personnel directly exposed to bodies of water such as lakes, streams, or irrigated fields. In groups with prolonged exposure to heavily contaminated foci, attack rates can be high. Activities such as wading or swimming may result in exposures to enteric diseases such as diarrhea and hepatitis via incidental ingestion of water. Prolonged water contact may also lead to the development of a variety of potentially debilitating skin conditions such as bacterial or fungal dermatitis.

Respiratory-borne Diseases

Acute respiratory infections such as colds, bronchitis, influenza, pharyngitis, and pneumonia are a risk, particularly in crowded living conditions. In addition, tuberculosis (TB) skin test conversions among personnel who have contact with the local population could be elevated over U.S. military baseline.

Soil-contact Diseases

Hantavirus Pulmonary Syndrome is the primary risk in personnel exposed to dust or aerosols in rodent-infected areas. Rates could be high in small groups exposed to areas with heavy rodent infestation.

Animal-associated Diseases

Anthrax, Q Fever, and rabies are present in Paraguay. Anthrax is associated with close animal contact while Q fever can be spread by the wind. There are human rabies cases in Paraguay.

Medical Capabilities

The quality of Paraguay's civilian health care infrastructure is well below U.S. standards. In 1989, the country began the difficult transition from military dictatorship to a modern democracy. It has endured a weak economy, political turmoil, significant social problems, and an ineffective government, all of which severely hamper health care reform efforts. The health care system cannot effectively provide for the population's medical needs. Approximately 27 percent of the population, mostly in rural areas, has no access to health care. Much of Paraguay is sparsely populated. Nearly 35 percent of the population lives in Asunción, the capital, where public and private health services are largely concentrated. Approximately two-thirds of hospital beds are in the public sector. Private health care services have grown significantly in the past decade but cover only 15 percent of the population.

Medical training ranges from good (trained to U.S. standards) to poor. The National University of Asunción trains most health professionals. Smaller health facilities in less populated rural areas employ personnel who generally lack academic credentials and formal training. Significant shortages of qualified nurses exist.

Private hospitals and clinics in Asunción provide the country's best care, though no medical facility meets U.S. standards. Most medical facilities are poorly equipped and lack qualified staff, especially nursing personnel. Adequate emergency medical care is available in Asunción, but persons requiring sophisticated diagnosis and anything other than minor surgery normally should be evacuated to the U.S. Most of the private health care infrastructure is located in Asunción. The four best health facilities for emergency, routine-medical, and surgical care are the Baptist Medical Center, French Private Hospital, Migone Hospital, and the San Roque Hospital. As one moves away from large urban areas, the

quality of care declines rapidly. Auxiliary nurses represent the majority of the staff at health posts and centers. Rural health posts lack medical supplies and pharmaceuticals, and their buildings are decaying. Many publicly funded facilities lack basic support services such as clean water and reliable electricity.

Equipment and supply shortages occur throughout the public medical infrastructure, especially in remote areas. Available equipment generally is old and poorly maintained, and does not meet U.S. standards. Medical equipment manufactured in Paraguay tends to be on the lower end of the technological scale, such as furniture, hospital beds, wheel chairs, and electric lighting devices.

The quality of the blood supply and the integrity of the civilian blood acquisition, testing, storage, and delivery systems do not meet U.S. standards. A risk of transfusion-related endemic diseases exists. Blood is tested for hepatitis B and C, HIV, malaria, and syphilis. Family members often must donate blood for their relatives.

Emergency medical care is available at the better private hospitals in Asunción. Ambulance service offering care en route to hospitals is generally not available. Typically, ambulance services are provided on a subscription basis, requiring prepayment similar to an insurance program. Larger hospitals have ambulances for routine transportation of non-emergency patients.

Key Medical Facilities

Baptist Medical Center (*Centro Medico Bautista*)

Location	Republica Argentina and Campos Cervera Street, Asunción
Telephone	(595-21) 600-171, 600-172, 607-944 Fax: 602-212
Type	Private

Capacity	84 beds
Capabilities	Medical – general, internal, preventive, cardiology, emergency, radiology, toxicology; surgical – general, cardiovascular, ear/nose/throat (ENT), obstetrics/gynecology (OB/GYN), ophthalmology, orthopedic, thoracic, urology; ancillary – 6-bed intensive care unit (ICU), 24-hour emergency room (full-time physician), x-ray, laboratory, physical therapy.
Comments	Level of care does not meet U.S. standards. U.S. Embassy recommends facility only for minor medical and surgical care.

French Private Hospital (*Hospital Privado Frances*)

Location	Corner of Brasilia and TTE, Insaurralde, Asunción
Telephone	295-250, 295-252 Fax: 295-255
Type	Private
Capacity	53 beds
Capabilities	Medical – general, internal, preventive, cardiology, emergency, radiology, toxicology; surgical – general, cardiovascular, ENT, OB/GYN, ophthalmology, orthopedic, thoracic, urology; ancillary – ICU, emergency room, x-ray, laboratory.
Comments	Level of care does not meet U.S. standards. U.S. Embassy recommends only for minor medical and surgical care.

Migone Hospital (*Sanatorio Migone*)

Location	Eligio Ayala, Curupayty, Asunción
Telephone	(595-21) 498-200, (595-21) 607-117
Type	Private
Capacity	71 beds
Capabilities	Medical – general, internal, preventive, cardiology, emergency, radiology, toxicology; surgical – general, cardiovascular, ENT, OB/GYN, ophthalmology, orthopedic, thoracic, urology; ancillary – 6-bed ICU, 24-hour emergency room (full-time physician), x-ray, laboratory.
Comments	Level of care does not meet U.S. standards. U.S. Embassy recommends only for minor medical and surgical care.

San Roque Hospital (*Sanatorio San Roque*)

Location	Eligio Ayala No. 1383, Asunción
Telephone	22-211, 22-212, (595-21) 212-499
Type	Private
Capacity	57 beds
Capabilities	Medical – general, internal, preventive, cardiology, emergency, radiology, toxicology; surgical – general, cardiovascular, ENT, OB/GYN, ophthalmology, orthopedic, thoracic, urology; ancillary – adult and pediatric ICU, emergency room, x-ray, laboratory.
Comments	Level of care does not meet U.S. standards. U.S. Embassy recommends only for minor medical and surgical care.

University Hospital (*Hospital de Clinica*)

Location	Ave. Dr. Montero and Capitan Miranda, Asunción
Telephone	80-891
Type	Public
Capacity	615 beds
Capabilities	Medical – general, internal, preventive, cardiology, emergency, radiology, toxicology; surgical – general, cardiovascular, ENT, OB/GYN, ophthalmology, orthopedic, thoracic, urology; ancillary – ICU, x-ray.
Comments	Large university teaching hospital. Level of care does not meet U.S. standards.

HISTORY

The original inhabitants of Paraguay were the semi–nomadic Guaraní Indians, who where known for their ferocity in battle. Paraguay was inhabited by several hundred thousand Guaraní Indians and a handful of Spanish settlers in the 16th and 17th centuries, when the Jesuit Order was given permission to convert the Indians by the power of faith alone. The result was a unique experiment in communal living that saw the Guaraní group together under Jesuit leadership in virtual theocracies, called *reducciones*, which significantly raised their standard of living. The *reducciones* eventually formed their own militias, and raised and exported cotton, linen, hides, tobacco, lumber, and yerba mate (the popular, but bitter Paraguayan tea.) In 1767, The Spanish Crown expelled the Jesuits from Latin America, thereby terminating *reducciones*.

The Spanish explorer Juan de Salazar came to Paraguay, and founded Asunción on 15 August 1537, The Feast Day of the As-

sumption. The city became the center of the Spanish colonial province, which encompassed most of South America. Paraguay declared its independence by overthrowing the local Spanish authorities in May 1811.

The country's early years were dominated by three strong leaders: Jose Gaspar Rodriguez de Francia (1814-40), Carlos Antonia Lopez (1841-62), and his son Francisco Solano Lopez. The latter waged a disastrous war against Argentina, Uruguay, Brazil (the War of the Triple Alliance [1864-70], which resulted in the decimation of the Paraguayan male population [90 percent loss]). Paraguay also lost more than 150,000 square kilometers of national territory and suffered the virtual destruction of its economy. The war and subsequent occupation by Brazilian troops (1870-74) helped shape a highly nationalistic character which still persists today. The war produced conditions that blocked Paraguay's industrialization and social progress for years. The period following the war was characterized by political instability (21 governments in 30 years), the formation of the powerful Colorado Party, periodic political violence, and Liberal Party rule for 30 years.

During the 1930s and 1940s, Paraguay politics was characterized by the Chaco War, more civil war, dictatorships, and periods of extreme political instability. Paraguay's history is peppered with dictatorships rather than national heroes. Even those who acted with heroism took advantage of their popularity and subsequently ruled the country as totalitarians.

The best known example is *Mariscal* (Marshall) Jose Felix Estigarribia. In 1931, as deputy commander of the Paraguayan army, he ordered his troops into action against the Bolivian army during the Chaco War, against the wishes of his government. Little is known of his military accomplishments other than his aggressive-

ness and determination, which led the Paraguayan military to victory over the Bolivians.

Estigarribia's popularity was the instrument that positioned him as leader of the government in 1939. Paraguayans expected him to save the country from the "anarchy" created by the previous government (a typical response in Paraguay). Estigarribia assumed dictatorial powers in February 1940. He began a land reform program, reopened the university, balanced the budget, financed the public debt, increased the capital of the Central Bank, implemented monetary and municipal reforms, and drew up plans to build highways and public works.

An August 1940 plebiscite endorsed Estigarribia's constitution, which remained in force until 1967. The constitution of 1940 promised a "strong, but not despotic" president and a new state empowered to deal directly with social and economic problems. Nevertheless, by greatly expanding the power of the executive branch, the constitution served to legitimize open dictatorship. The Estigarribia Era ended in September 1940, when he died in an airplane crash.

The Chaco War (1932-35) was fought over the potentially oil-rich Chaco wilderness, which was part of Paraguay but claimed by Bolivia. The Paraguayan army succeeded in driving the Bolivian army out of the Chaco. However, the war disillusioned many Paraguayans, who felt that the Liberal Party had both governed ineptly and prosecuted the war poorly. The Liberal Party was turned out of office, to return briefly only once.

The next 20 years were characterized by the rise of the Colorado Party, the power of the military as the arbiter of national politics, and the struggle between Paraguayan reformists and fascists. The last major conflict was the 6-month civil war of 1947.

On 3 February 1989, a coup d'etat overthrew 34 years of authoritarian rule. In may 1989, under the new president, Paraguay began the long process of transition from authoritarianism to democracy. In 1991, the nation held municipal elections, and a new constitution took effect in June 1992. On 9 May 1993, the nation held its first freely contested democratic elections in many decades. The progress made by the government so far has gained it admission as a founding member of the Southern Cone Common Market group (MERCOSUR), a common market in the southern Latin American continent including Brazil and Argentina. The inaugural ceremony for the group was held in Asunción in March 1991.

In 1995, however, there were signs of serious unrest in the army. President Wasmosy instituted a reorganization of the military high command to forestall any attempted coup. In late April 1996, a standoff occurred between President Wasmosy and popular General Lino Cesar Oviedo Silva over Wasmosy's plan to restructure the military. Oviedo demanded Wasmosy's resignation, and forced him to seek temporary asylum in the U.S. Embassy. Oviedo attempted to run as Colorado Party candidate in the 1998 presidential election, but was forced out and confined by the Supreme Court, which upheld his conviction for participating in the 1996 coup attempt. Raul Cubas Grau became the Colorado Party candidate and was elected president.

In 1999, Vice President Luis Maria Argana Ferraro, leader of the conservative faction of the Colorado Party, was assassinated. Many felt that President Cubas Grau wasn't an active participant, but an instigator in the assassination. Protesters demanded Cubas Grau's resignation. Cubas Grau resigned in March 1999 and sought political asylum in Brazil.

Corruption and harsh divisions have continued to characterize the Paraguayan government. They have yet to settle into an extended

period of functional democratic governance, even though elections have become more democratic. In 2002 farmers, trade union members, and leftist organizations denounced free-market economics and called for the government to restore state control of the economy. In early 2003 Gonzalez Macchi, whose administration was widely regarded as corrupt, was tried for corruption and mismanagement and found not guilty in a Senate impeachment trial. In April 2003 Oscar Nicanor Duarte Frutos of the Colorado Party was elected president. Since he took office he has restored Paraguay's relationship with the International Monetary Fund (IMF) and partially stabilized the economy. His efforts to cut corruption have won widespread public support. However, continued rumors of assassination plots suggest that Paraguay's legacy of political instability may persist.

Chronology of Significant Events

Date	Event
1525	Portuguese explorer Alejo Garcia visits Paraguay.
1526	Sebastian Cabot explores Paraguay's rivers.
1537	Spanish begin colonizing the interior plains.
1609	Spanish Jesuits begin converting the local population to Roman Catholicism.
1776	Paraguay transferred from the Vice-royalty of Peru to the Vice-royalty of La Plata, which has its capital at Buenos Aires in Argentina.
1808	Vice-royalty of La Plata gains autonomy when Napoleon Bonaparte overthrows the Spanish monarchy, but Paraguayans revolt against Buenos Aires.
1811	Paraguay becomes independent.
1865-70	Paraguay loses more than half of its population and large tracts of land in wars with Argentina, Brazil and Uruguay over sea access.

1932-35 Paraguay wins territory in the west from Bolivia during Chaco war.

1954 General Alfredo Stroessner seizes power in coup, ushering in more than 30 years of ruthless dictatorship.

1989 Stroessner deposed in coup led by Gen. Andres Rodriguez, who is elected president. However, Stroessner's centre-right, military-backed National Republican Association-Colorado Party wins parliamentary elections.

1992 New democratic constitution promulgated.

1993 Colorado Party wins simple majority of seats in first free multiparty elections, while its candidate, Juan Carlos Wasmosy, wins first free presidential elections.

1998 Colorado Party candidate Raul Cubas elected president amid allegations of fraud.

1999 Cubas resigns in wake of assassination of Vice-President Luis Maria Argana. Luis Gonzalez Macchi appointed caretaker president, forms government of national unity.

2000 October – An army major and two other men are sentenced to long prison terms for their roles in Argana's murder. May - Coup attempt foiled.

2001 Head of central bank resigns over alleged involvement in fraudulent transfer of US$16 million to U.S. bank account.

2002 July – State of emergency declared after violent street protests. Protesters demand President Macchi's resignation and an end to free-market policies.

December – Congress votes to impeach Macchi on charges that include corruption. Macchi survives a vote to remove him from office.

2003 August – Nicanor Duarte Frutos, from ruling Colorado Party, sworn in as president after winning April poll.

2003 (cont.) Macchi barred from leaving country and tried on corruption charges.

2004 April - Peasants stage series of land invasions and other protests, demanding redistribution of agricultural land.

June – Former military commander General Oviedo returns from exile in Brazil and is arrested at airport.

August – More than 420 people are killed in a blaze at a shopping center in Asunción. Three days of national mourning are declared.

2005 February – President Nicanor Duarte promises to crack down on organized crime following the kidnapping and murder of former president Raul Cubas' daughter.

June – Lower house rejects government proposals to privatize public utilities.

August – Paraguay hosts the first conference of landlocked nations. More than 30 states take part and demand preferential treatment in world trade talks.

2006 June – Macchi is sentenced to 6 years in jail over illegal bank transfers.

August – Former military ruler Alfredo Stroessner, 93, dies in exile in Brazil.

GOVERNMENT AND POLITICS

Government

Paraguay is a constitutional democracy whose Constitution was ratified on 22 June 1992. Article 1 establishes that Paraguay is an independent and free Republic and its government system a representative democracy. The Constitution recognizes the three pillars of the Paraguayan state: the legislative, executive, and judicial branches. It also establishes a set of civic, political and social

rights, including citizen's guarantees. Paraguay has a presidential and bicameral parliamentary system.

National Level

Executive Branch

The president is the chief of state and the head of government. The president and vice president are elected on the same ticket by popular vote for a single, 5-year term. The president nominates the Council of Ministers (Cabinet). The most recent election was held in April 2003, and President Nicanor Duarte Frutos was elected with 37.1 percent of the vote. The next election is to be held in April 2008.

Legislative Branch

The legislative branch is represented by a bicameral *Congreso* (Congress) consisting of the Senate — 45 members elected by popular vote to serve a 5-year term — and the Chamber of Deputies — 80 members elected through a departmental vote to serve 5-year terms.

Legislative elections coincide with the presidential election. Seats in both the Senate and the Chambers of Deputies are allocated according to the percentage of the vote received by each party.

President Nicanor Duarte Frutos

Judicial Branch

Paraguay has an independent judiciary. The Supreme Court of Justice serves as the country's highest court. The nine supreme court justices are appointed by the Senate and executive. They are appointed for a 5-years term. Below the Supreme Court, there are five appellate courts: civil and commercial, criminal, labor, administrative, and juvenile. Paraguay's judicial branch was designed to operate free from political considerations.

Local Level

Paraguay is divided into 17 departments, 14 in the east and 3 in the Chaco. Each department is divided into districts, which, in turn, comprise municipalities (the minimum requirement for a municipality is 3,000 persons) and rural districts. A governor runs each department, and is elected by popular vote. Municipal government is exercised through a municipal board, chosen by direct election, and an executive department. In the principal cities and capitals, the executive department is headed by a mayor appointed by the minister of the interior; in other localities, the mayor is appointed by the presidents of the municipal boards. Police chiefs are appointed by the central government.

Politics

The *Asociacion Nacional Republicana-Partido Colorado* (National Republican Association – Colorado Party or ANR-PC) has dominated modern politics in Paraguay since 1946. The ANR-PC was organized into a highly effective political machine under the Stroessner regime. It continues to have a strong presence at the local and national level.

The *Partido Liberal Radical Autentico* (Authentic Radical Liberal Party or PLRA) serves as the leading opposition party. This party

has resisted many of the economic liberalization plans fostered by Nicanor Duarte Frutos. The lingering public resentment over the corrupt administration of the previous Colorado president, might have removed them from power if opposition parties agreed on a compromise platform and candidate in 2003.

Administrative Map

Political Parties

Party Name	Description
ANR-PC	The longest running political party in the world, originally conservative; however, President Duarte has adopted leftist policies.
Nacional Union of Ethical Citizens (UNACE)	Conservative party. Won 14.7 percent of the popular vote, 10 of 80 seats in the Chamber of Deputies, and 7 of 45 Senate seats in the most recent election.
Patria Querida (Beloved Fatherland Party) (PQ)	Populist movement. Won 15.3 percent of the popular vote, 10 seats in the Chamber of Deputies, and 7 Senate seats in the most recent election.
National Encounter Party (PEN)	An alliance of several smaller parties and civic organizations that appeals to the urban middle class.
PLRA	Liberal party. Member of Liberal International. The leading opposition to the dominant ANR-PC.
Country in Solidarity Party (PPS)	Left-wing party. Won 3.3 percent of the popular vote, 2 seats in the Chamber of Deputies, and 2 in the Senate in the most recent election.

Foreign Relations

Paraguay is a member of the UN and several of its specialized agencies. It also belongs to the Organization of American States, the Latin American Integration Association (ALADI), the Rio Group, and MERCOSUR. Paraguay is closely aligned with its MERCOSUR partners on many political, economic, and social issues.

United States

The United States has an extensive relationship with Paraguay at the government, business, and personal levels. Paraguay is a partner in hemispheric initiatives to improve counternarcotics cooperation; combat money laundering, trafficking in persons, and other illicit cross-border activities; and adequately protect intellectual property rights. The U.S. DoD provides technical assistance and training to help modernize, professionalize, and democratize the military. The Peace Corps has about 160 volunteers working throughout Paraguay on projects ranging from agriculture and natural resources to education, rural health, and urban youth development. The Office of Public Diplomacy is active in Paraguay, providing information on the United States to the press and public, and helping to arrange educational and citizen exchanges to promote democracy.

Paraguay is in the early stages of a transformation that is aligned with U.S. priorities. Intent on transforming Paraguay into a serious country by fighting corruption, restoring the rule of law, and creating an environment conducive to trade, investment, and economic growth. U.S. assistance plays a critical role in the success of government reform and includes:

- Funds to combat drug trafficking, money laundering, trafficking in persons and intellectual property rights violations; and
- AID programs aiming to inject greater transparency and responsibility into the administration of justice and local government; and U.S. Treasury and Justice Departments supporting government reform efforts and drafting new legislation against money laundering and terrorism.

European Union

EU-Paraguay relations are based on the 1991 Framework Co-operation Agreement and on the 1995 EU-MERCOSUR

Framework Agreement on Cooperation. The EU adopted its country strategy paper European Community-Paraguay in August 2002, which provided a multi-year strategy for 2001-2006 with an indicative allocation for assistance of US$69.25 million. The priorities agreed on by the EU and Paraguay are modernization of the state, productive development, competitiveness and investments, and poverty reduction.

As of 1 May 2002, a delegation of the European Commission has been operating in Asunción. Additionally, the sixth European Community-Paraguay Joint Committee was held in Asunción on 10 November 2005.

Brazil, Argentina, and Uruguay

As a member of MERCOSUR, Paraguay has adopted an active regional integration policy with Brazil, Argentina, and Uruguay. The MERCOSUR Common Council on 18 February 2002 decided to create a permanent legal tribunal in Asunción. As a member of MERCOSUR, Paraguay is party to ongoing negotiations for an EU-MERCOSUR association agreement. The main objective is the liberalization of trade in goods and services, aiming at free trade, in conformity with WTO rules, as well as enhanced cooperation and strengthened political dialogue. Paraguay also supports regional trade integration in the Western Hemisphere, notably by negotiating to establish a free-trade area of the Americas.

International Organizations

Paraguay belongs to the UN and many of its specialized agencies. Paraguay is also a member of MERCOSUR, International Criminal Police Organization (Interpol), International Labour Organization, IMF, Latin American Economic System, Latin American Integration Association, Organization of American States, Rio Group, and World Bank.

ECONOMY

Statistics 2006

GDP

Official Exchange Rate	US$7.693 billion
Purchasing Power Parity	US$30.64 billion
Growth Rate	3.2 percent
Per Capita	US$4,700
Inflation Rate	9 percent
National Debt	US$3.722 billion
Unemployment Rate	9.4 percent (2005)
Imports	US$4.5 billion
Exports	US$1.69 billion
Labor Force	2.742 million

Paraguay has a market economy characterized by a large informal sector. This sector features thousands of small business enterprises and re-exporting imported consumer goods to neighboring countries. The country has vast hydroelectric resources, including the world's largest hydroelectric generation facility built and operated jointly with Brazil (Itaipu Dam), but it lacks significant mineral or petroleum resources. Reforms in fiscal and monetary policy

Chipa Vendor

have improved Paraguay's economy. Even though inflation has dropped, and the currency has appreciated, urban unemployment and under employment remains a problem in Paraguay. The government welcomes foreign investment; however they are unable to provide a corruption-free environment for businesses. Smuggling and a large black market have deterred foreign investors.

Resources

The primary resources of Paraguay are its fertile soil and its forests. The country has few proven mineral resources, however it does have significant deposits of manganese, limestone, and iron ore. The rivers are well suited for hydroelectric projects, which in turn has created revenue for Paraguay.

Industry

Paraguay produces no oil or gas, but does have an estimated reserve of 56,000 megawatts; it has one of the highest hydroelectric power potentials per head of population in the world. The country produces far more electricity than it consumes, generating massive energy surpluses. Paraguay is among the world's top three electricity exporters. Royalty payments from two bi-national hydroelectric plants, Itaipu, a joint Paraguayan-Brazilian scheme on the Parana River, and Yacyreta, jointly operated with Argentina, are a major source of fiscal revenue. Itaipu supplies 25 percent of Brazil's electricity demand and 95 percent of Paraguay's electricity demand. Brazil purchases 95 percent of Paraguay's total energy production.

Agriculture

Paraguay's economy depends mostly on agriculture, which makes up one-quarter of its economic activity and almost all its exports. Agriculture represents 35 percent of employment and 20 percent of GDP. 5.7 percent of Paraguay's land is cultivated.

The most common areas for cultivation are located outside Asunción and Encarnacion, because the land around these cities is not heavily populated and the people living there depend largely on forestry and livestock for living.

Cassava Harvest

The most cultivated crops are *manioc* (cassava, a potato-like tuber) and corn. The leading money and export crops are cotton, tobacco, and sugarcane. The need for imported wheat was eliminated by a national wheat program. Beans, lentils, sweet potatoes, peanuts, coffee, rice, and fruits are grown for use within the country. Crops that yield edible oils are grown throughout, and plantations produce yerba.

Utilities

Electrical

The *Administracion Nacional de Electriciadad* (ANDE, the state-owned electricity company) is the sole domestic supplier of electricity. Although ANDE has large international debts, its internal management and technical capacity are regarded as better than those at other state-owned enterprises and privatization is strongly opposed. The electricity supply is reliable, as power is abundant

Water

Two state-owned companies provide water supply and treatment services. The *Corporacion de Obras Sanitarias* operates in large urban areas and the *Servicio Nacional de Saneamiento Ambiental* in small urban areas. In addition approximately 600,000 people

living close to urban centers are served by 400 small private water operators. In 2001, 42 percent of Paraguayans had access to running water, an additional 42 percent relied on private wells and 16 percent relied on standpipes and river sources. Just 11 percent of the population has sanitation services.

Outlook

With the upcoming April 2008 presidential and congressional elections, president Frutos will engage in aggressive bargaining negotiations to try to secure a constitutional amendment that would enable him to run for re-election. The real GDP is forecasted to average 3.6 percent in the outlook period. If the Guaraní remains strong and fiscal stance does not become excessively eased, annual inflation will trend downward from 12.5 percent in 2006 to 10.5 percent in 2007 and 8.4 percent in 2008. The nominal exchange rate will remain relatively stable in 2007-08, supported by strong inflows of remittances. The current –account deficit is predicted to decrease from an estimated 3.4 percent of GDP in 2006 to 1.1 percent of GDP in 2007 and 0.1 percent of GDP in 2008

THREAT

Crime

Crime has increased in recent years with criminals often targeting those thought to be wealthy. Most crime is nonviolent. However, U.S. citizens have on occasion been the victims of assault, kidnapping, robbery, or rape. Local authorities frequently lack the training resources to solve these cases.

Armed robbery, car theft, and home invasion are common in both urban and rural areas. Street crime, including pocket picking and mugging, is prevalent in the cities, particularly during in the eve-

ning near hotels and airports. The incidence of pocket-picking and armed assault is also increasing on public buses and in downtown Asunción. Many incidents on public buses involve individuals snatching valuables; passengers should not display jewelry or expensive items. There have been incidents of stealing from checked baggage at airports and bus terminals. Travelers have found it prudent to hide valuables on their person or in carry-on luggage. Unauthorized ticket vendors reportedly operate at the Asunción bus terminal, badgering travelers into buying tickets for substandard or non-existent services.

Although kidnapping remains rare, several high-profile kidnappings-for-ransom have occurred in recent years. Usually, targets are established members of the Paraguayan business community or their family members.

Travel Security

Because of concerns about the lack of security at border areas, the U.S. Embassy in Asunción requires U.S. government personnel and their families to provide advanced notice and a travel itinerary when traveling to Ciudad del Este or Pedro Juan Caballero. As a general precaution, the Embassy also counsels its employees traveling outside the capital to provide an itinerary including dates, contact names, and contact telephone numbers.

Under the circumstances, U.S. citizens traveling to or living in Paraguay should always beware of their surroundings and security situation. They should take common sense precautions including refraining from displaying valuable items. Resistance to armed assailants has often aggravated the situation and therefore is not advised.

U.S. citizens should avoid large gatherings or any other event where crowds have congregated to demonstrate or protest. Such ac-

tivities have resulted in intermittent road closures including some on major routes traveled by tourists and residents. While generally nonviolent, roadblocks have turned violent in the past. Areas where such closures and barricades exist should be avoided.

Terrorism

The U.S. Embassy is not aware of a specific terrorist threat to U.S. citizens in Paraguay. Individuals and organizations providing financial support to extremist groups operate in Ciudad del Este and along the tri-border area between Paraguay, Brazil, and Argentina. Small armed groups have also been reported to be operating in the San Pedro and Concepcion Departments.

Corruption

Under the Stroessner dictatorship, the National Police was part of the repressive apparatus of a police state and was widely implicated in human rights abuses. It was also part of the system of institutionalized corruption within the regime. There have been strenuous efforts to eradicate corruption since the transition to democratic government. Many personnel convicted of either corrupt practices or human-rights abuses have been dismissed and imprisoned. However, the public image of the police force remains low. Off-duty police are routinely involved in highway robberies.

Government and judicial corruption in Paraguay is well documented. Two regions with documented corruption are Alto Parana and Amambay Departments, where drug trafficking organizations and Islamic Radical Groups are known to exist.

Drug Trafficking

Paraguay is not a cocaine-producing country; however, it is a source of quality marijuana that fills the demand in the lucra-

tive markets in Argentina and Brazil. Paraguay is a major conduit for cocaine smuggling from the Andean region to Brazil and beyond. The traditional routes are through the Chaco and the northwest Department of Amambay, where control of the border towns Pedro Juan Caballero and Capitan Bado is disputed between the state and powerful narcotic gangs. New routes have opened in recent years through the southern departments of Ñeembucú and Misiones. Drug trafficking organizations are successful due to Paraguay's geography, lax border security, and uncontrolled airstrips.

In 2001, the government's counterdrug secretariat (SENAD) created a new unit, the Chaco Mobile Enforcement Team (CMET). CMET and its companion unit, the Major Violators Unit, are responsible for disrupting cocaine trafficking in the Chaco region. Both agencies achieved some success in 2001; however, government corruption reduces their effectiveness. As a result, the government is forced to rely on international assistance to strengthen its counter drug capabilities

ARMED FORCES

Army

Mission

The Paraguayan Army is primarily responsible for the security of the nation's territory to deter or defeat internal threats and provide disaster relief missions. In addition, the Army assists other Paraguayan security services, such as the National Police, with law-enforcement support. Lieutenant General Ruben Alberto Alviso-Gonzalez is the Army Chief of Staff.

Organization

In 1991, three army corps were established with the purpose of ground defense; additionally, the Presidential Escort Regiment was replaced with a Presidential Guard Regiment. The three corps (HQ) comprises six military regions, each with the following:

- 9 Infantry regiments (battalion strength)
- 3 Cavalry regiments (horse cavalry)
- 3 Armored cavalry regiment
- 2 Mechanized cavalry regiments
- 20 Frontier garrison detachments
- 3 Artillery groups (battalion strength)
- 1 Air defense artillery group
- 6 Engineer battalions
- 1 Presidential Guard Regiment

Facilities

Corps HQ	Region	Units
I Corps Asunción	1st, 4th, 5th	1st Infantry Div (HQ Asuncion), 1st (HQ Nu Guazu) and 3rd (HQ Curuguaty) Cavalry Divs
II Corps Villarvica	2nd, 3rd	2nd (HQ Villarica) and 3rd (HQ San Juan Bautista de las Misiones) Infantry Divs
III Corps Mariscal Estigarribia	6th	4th (HQ Mariscal Estigarribia), 5th (HQ Camp Jurado), and 6th (HQ Capitan Lagerenza) Infantry Divs

Personnel

The Paraguay Army strength is 7,600.

Training

Despite inadequate, antiquated equipment on almost every level, the Paraguayan Army conducts limited training exercises. All Army officers are trained at the Mariscal Francisco Solano Lopez Military College located in the city of Asunción. Non-commissioned officer training is limited to some specialties, such as infantry and logistics.

Equipment

30 Tanks	96 Mortars	21 Field guns
22 APCs	2 RCLRs	24 LAAGs
42 ARVs	12 AAGs	94 Howitzers

Vehicles:

EE-11 Urutu APCs	EE-9 Cascavel recon
M4A3 MBTs	Sherman Firefly MBTs
M3A1 Light Tanks	M8 (mod) Recon

Air Defense:

40-mm M1 AAG	20-mm Bofors LAAG

Mortars:

107-mm M2	81-mm Brandt
107-mm M30	

Artillery:

152-mm Mk 5 coastal gun	75-mm M116
75-mm/105-mm Schneider M1927 mountain guns	75-mm Bofors M1935 FG

Other:

75-mm RCL M20 (AT)	40-mm M79

Air Force

Mission

The mission of the Paraguayan Air Force (FAP) is the protection of its national airspace, providing tactical and logistic support for the army, and control of Paraguay's internal air services. The Commander-in-chief of the air force is directly subordinate to the Chief of the General Staff of the armed forces.

Organization

The air force consists of five groups: a paratroop regiment; three air defense artillery batteries; and an internal airline, *Trasporte aereo Militar* (TAM), with the additional administrative and management responsibility for the country's airports and its international civilian airline, *Lineas Aereo Paraguayo*. The FAP operates aircraft from Nhu-Guazu Air Force Base and Silvio Pettirossi International Airport in Asunción, Alejo Garcia Military Air Base in Ciudad del Este, and Carmelo Peralta Air Base in Concepcion. However, there are several unimproved airstrips throughout Paraguay.

Tactical Air Group

The Tactical Air Group (GAT) incorporates all the combat fixed-wing assets of the FAP and consists of the Guarani Light Strike Squadron (MB 326 Xavante), Moros Special Operations Squadron (EMB-312 Tucano), and Indios Fighter Squadron (AT-33 Shooting Star). The GAT is based at Silvio Pettirossi International Airport, Asunción, though various elements are intermittently deployed to Alejo Garcia Military Air Base, Ciudad de Este.

Air Transport Group

The Air Transport Group (GTA) primarily provides aircraft for military transport and paratroop training. The GTA has no squad-

Enlisted *Air Force - Blue insignia* *Army - Red insignia*					
	Cabo Seguno	**Cabo Primero**	**Sargento Segundo**	**Vice Saregento Segundo**	**Sargento Primero**
U.S. Equivalent	***Private***	***Private First Class***	***Corporal***	***Sergeant***	***Staff Sergeant***
Enlisted					
	Sargento Ayudante	**Sub-Oficial**	**Sub-Oficial Mayor**	**Ogicial Principal**	
U.S. Equivalent	***Sergeant First Class***	***Master Sergeant***	***Sergeant Major***	***Command Sergeant Major***	

Army and Air Force Enlisted Insignia

Officer *Air Force - Blue insignia* *Army - Red insignia*					
	2nd Lieutenant	**Lieutenant**	**1st Lieutenant**	**Captain**	**Major**
U.S. Equivalent	***2nd Lieutenant***	***No Equivalent***	***1st Lieutenant***	***Captain***	***Major***
Officer					
	Lieutenant Colonel	**Colonel**	**Brigadier General**	**Major General**	**Lieutenant General**
U.S. Equivalent	***Lieutenant Colonel***	***Colonel***	***Brigadier General***	***Major General***	***Lieutenant General***

Army and Air Force Officer Insignia

ron organization but does incorporate the military airline TAM. GTA is based at Silvio Pettirossi International Airport, Asunción.

Special Air Transport Group

The Special Air Transport Group (GATE) operates an assortment of transport and communication type aircraft. GATE is based at Silvio Pettirossi International Airport, Asunción.

Helicopter Group

The helicopter group operates on behalf of the army. Its limited rotary assets are based at Nu Guazu Air Force Base, Asunción.

Silvio Pettirossi Airborne Brigade

This unit acts as the light rapid reaction forces of the Paraguayan Army and provide required airborne training for all the services.

Equipment

Tactical Air Group (GAT)

MB-326 Xavante	5	EMB--312 Tucano	3
AT-33 Shooting Star	4		

Air Transport Group (GTA)

Casa C-212-200 Aviocar	4	Casa C-212-400 Aviocar	1
Douglas C-47A Skytrain	2		

Special Air Transport Group (GATE)

Boeing 707-321B	1	DHC-6 Twin Otter	1
Cessna 206G Stationair	1	Cessna 210 Centurion	1
Cessna 402 Businessliner	2	Piper PA-23 Aztec	1
PZL-104 Wilga 80	1		

Helicopter Group (GAH)

Bell UH-1B/H Iroquois	7	Hellibras HB-350B Esuilo	3

Air Instruction Group (GAI)

ECH-51A/B (T-35) Pillan	8	Nieva T-25 Universal	6

Navy

It may seem unusual that Paraguay, a country that at no point is closer than 1,600 kilometers (994 miles) from an ocean, has a navy larger than some maritime states. It also has a Marine Corps, a naval air arm and a coast guard. Paraguay's river system is extremely important to the nation's daily life and even to its survival. Maintaining significant naval forces is, therefore, a national necessity. Although largely composed of aging vessels, the Paraguayan Navy remains an efficient, compact, and well-balanced force. Its composition is quite well suited to its peculiar circumstances, which justifies its existence.

Personnel

The Paraguayan Navy has about 1,800 personnel. Naval Aviation consists of about 100 personnel. The navy is a river patrol force operating what was, until a few years ago, mostly outdated vessels, in addition to a small air arm and a nucleus of old coastal artillery manning fixed river defenses.

Disposition

The main base is located at Puerto Sajona, Asunción. Minor bases include the following:

- *Base Naval de Bahia Negra* (BNBN) (upper Paraguay river)
- *Base Naval de Saltos del Guaira* (BNSG) (upper Paraná river)
- *Base Naval de Ciudad del Este* (BNCE) (Paraná river)

Officer					
					
	Seaman	Petty Officer 3rd Class	Petty Officer 2nd Class	Petty Officer 1st Class	Chief Petty Officer
U.S. Equivalent	*Seaman*	*Petty Officer 3rd Class*	*Petty Officer 2nd Class*	*Petty Officer 1st Class*	*Chief Petty Officer*
Officer					
	Senior Chief Petty Officer	Master Chief Petty Officer			
U.S. Equivalent	*Senior Chief Petty Officer*	*Master Chief Petty Officer*			

Navy Enlisted Insignia

Officer					
					
	Ensign	Probationary Lieutenant	Lieutenant Junior Grade	Lieutenant	Lieutenant Commander
U.S. Equivalent	*Ensign*	*No Equivalent*	*Lieutenant Junior Grade*	*Lieutenant*	*Lieutenant Commander*
Officer					
	Commander	Captain	Rear Admiral	Vice Admiral	
U.S. Equivalent	*Commander*	*Captain*	*Rear Admiral*	*Vice Admiral*	

Navy Officer Rank Insignia

- *Base Naval de Encarnacion* (BNE) (Paraná river)
- *Base Naval de Ita-Pirú* (BNIP) (Paraná river)

Naval Headquarters are located at Puerto Sajona, Asunción; other bases include Ita-Piru, Ciudad del Este, Encarnacion, Saltos del Guaira, Pozo Hondo, and Bahia Negra.

A fixed-wing naval aviation base is located at Asunción International Airport, and there is a helicopter base in Puerto Sajonia.

Mission

The navy's mission includes riverine border control and port security, antismuggling operations, and assisting the army and police in internal security operations. The naval aviation squadron's missions include river patrol, air transport, and survey operations. The navy also performs hydrographic surveys and maintains navigational aids for Parana River deployments.

The navy responsibilities include surveillance and defense of the country's river system, particularly those parts that coincide with the border frontiers, and managing the merchant marines, which is considered a reserve of the navy, to be mobilized in time of war.

Equipment

Type	Class	Units
AGP (Patrol Craft Tender)	BOUCHARD (P-02, P-04)	2
AK (Cargo Ship)	GUARANÍ	1
AK (Cargo Ship)	PRESIDENTE STROESSNER	1
PM (River Monitor)	CAPITAN CABRAL (P-01)	1
PB (Patrol Boat)	Various	9
PM (River Monitor)	PARAGUAY	1
PM (River Monitor)	RORAIMA (P-05)	1
PM (River Monitor)	SEWART 40-FT	3

Marine Corps

Mission

The Paraguayan Marine Corps' mission is to provide internal security, defend inland waterways, perform counter-smuggling operations, and provide border security.

Organization

The Marine Corps is subordinate to the Naval General Staff. The Naval General Staff is commanded by the Commander in Chief of the Navy, who is directly subordinate to the Chief of the General Staff of the Armed forces. The Paraguayan Marine Corps consists of four active *batalliones infanteria marine* (Marine infantry battalions – BIMs), two reserve BIMs, and a commando BIM.

The commando BIM is likely company-size and is capable of independent or joint operations with other Paraguay special forces.

Personnel and Equipment

The Paraguayan Marine Corps has approximately 500 active duty members and 300 reservists. Their equipment includes riverine patrol and amphibious assault boats. Naval helicopters provide air support.

Training

Service members receive basic training in weapons handling, patrolling, formations, radio procedures, and Paraguay's history. There is little follow-on training after basic training

After a year of service Marine conscripts can attend specific schools such as parachuting, explosive ordinance handling, and

jungle operations. Navy and Marine Corps officers attend schools in Argentina for advanced training and may also attend the Army-run Command and Staff School in Asunción.

Capabilities

The Paraguayan Marine Corps is limited by budgetary constraints, and a lack of training opportunities hampers their efficiency.

Disposition

BIM 1	Puerto Rosario
BIM 2	Puerto Vallemi
BIM 3	Asunción
BIM 5	Bahia Negra
	Detachments at Pozo Hondo and Ita-Pirú
BIM 8	Saltos del Guairá
	Detachments at Ciudad del Este and Encarnación

Paramilitary Forces

The Colorado Party has traditionally maintained a paramilitary arm. Its numbers are difficult to estimate, but probably exceed 100,000. The role of this organization has been to back up the party with force. Elements are located wherever the Colorado Party is active; in effect, in all populated regions of the country. Most male Paraguayans undergo compulsory military service, so most of the party's militia members have at least rudimentary military training and are familiar with handling weapons.

Colorado militias have frequently been crucial either in supporting a friendly regime against an opposing armed threat or in overthrowing a hostile one.

Both the relevance and potential of the militias are difficult to assess in the radically changed circumstances following the overthrow of General Stroessner's 34-year dictatorship. The militia is mainly equipped with obsolete small arms, dating back to the Chaco War and earlier.

National Police

During the Stroessner dictatorship, Paraguayan National Police (PNP) forces were part of the repressive apparatus of a police state and were widely implicated in human-rights abuses. In Paraguay's return to democratic government, there are strenuous efforts to eradicate human rights abuses and endemic corruption within the National Police.

Officer					
	Official Assistant	**Official Second**	**Senior Official**	**Official Inspector**	**Sub-Commissary**
U.S. Equivalent	***None Known***	***None Known***	***None Known***	***None Known***	***None Known***
Officer					
	Commissary	**Commissary Inspector**	**Major Commissary**	**Prinicipal Commissary**	**General Commissary**
U.S. Equivalent	***None Known***	***None Known***	***None Known***	***None Known***	***None Known***

National Police Officer Insignia

Mission

The role of the PNP is primarily the prevention and detection of crime and the maintenance of public order. . Its domestic responsibilities include law enforcement, immigration, customs, intelligence, planning and operations, national identification, and fire fighting.

Organization

The PNP, a paramilitary force, falls under the Ministry of the Interior. Approximately 55 percent of PNP forces are stationed in and around the capital of Asunción. The police detachment in the

Enlisted					
	Agent First	Sergeant Second	Vice-Sergeant Senior	Sergeant Senior	Sergeant Assistant
U.S. Equivalent	*None Known*	*None Known*	*None Known*	*None Known*	*None Known*
Enlisted					
	Sergeant Inspector	Sub-Assistant Official	Sub-Second Official	Sub-Senior Official	Sub-Inspector Official
U.S. Equivalent	*None Known*	*None Known*	*None Known*	*None Known*	*None Known*
Enlisted					
	Sub-Major Official	Sub-Principal Official	Sub-Superior Official		
U.S. Equivalent	*None Known*	*None Known*	*None Known*		

National Police Enlisted Insignia

capital includes the Fire Service. The remaining 45 percent of PNP forces are deployed throughout the Oriental region. Police force responsibility in the Occidental region, an area considered a military zone, is mostly carried out by the army.

The Special Operations Force of the PNP is the country's only counterterrorist force in operation. The unit can also be used against drug traffickers. It appears to be well trained and equipped, having received training and equipment from the United States, Brazil, Israel, and Chile.

Personnel

The Paraguayan National Police number an estimated 10,000 to 12,000 and have stations both in major towns and in rural areas.

Training

Most of the training takes place in Asunción. Basic training is given at the Police College, which offers a 5-year course in modern police techniques. The police also operate a school for NCOs and an in-service training battalion.

Capabilities

The Paraguayan National Police do not have the resources to control protests and riots. Law enforcement personnel are limited in rural areas and often cannot respond to issues in a timely manner. Additionally, police units have turned a blind eye toward human violations due to political pressure.

APPENDIX A:
EQUIPMENT RECOGNITION

INFANTRY WEAPONS

9-mm Browning High-Power Model FN35

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

9-mm H&K P9S Pistol

Cartridge	9- x 19-mm Parabellum
Effective Range	50 m
Single-shot Rate of Fire	35 rounds/minute
Method of Operation	Delayed blowback
Feed Device	13-round box magazine
Weight Unloaded	0.880 kg
Overall Length	193.0 mm

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

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

5.56-mm Assault Rifle SG 540

Cartridge	5.56 x 45.0 mm
Effective Range	300 m
Cyclic Rate of Fire	650 to 800 rounds/minute
Method of Operation	Gas blowback, selective fire (automatic, semiautomatic, 3-round burst)
Feed Device	20- or 30-round detachable box magazine
Weight Unloaded	3.5 kg
Overall Length, Fixed Stock	950 mm

7.62-mm Automatic Rifle Heckler & Koch G3

Type	Assault rifle
Caliber	7.62 x 51 mm
Maximum Effective Range	400 m
System of Operation	Delayed blowback, selective fire
Cyclic Rate of Fire	500 to 600 rounds/minute
Length	1.025 m
Feed	20-rd detachable, staggered-row box magazine
Weight (Empty)	4.4 kg
Overall Length	1,025 mm (fixed butt); 840 mm (retracted butt)

Using the G3: (1) Put selector switch, located on the left side of pistol grip, to the top position: **SAFE**. (2) Pull operating handle to the rear. (3) Insert loaded 20-round magazine into magazine well at bottom of receiver. (4) Allow bolt to go home chambering a round. **G3 IS READY TO FIRE.** (5) Put selector switch to mIddle position: **SEMI** or bottom position: **AUTO**.

7.62-mm Assault Rifle FN FAL

Cartridge	7.62 x 51 mm
Effective Range	800 m
Cyclic Rate of Fire	600 to 700 rounds/minute
Method of Operation	Gas, selective or semiautomatic fire
Feed Device	20-round detachable box magazine
Weight	4.45 to 6 kg, depending on variant
Overall Length	1,090 mm (standard model)

9-mm Uzi

Cartridge	9- x 19-mm Parabellum
Effective Range	200 m
Cyclic Rate of Fire	600 rounds/minute
System of Operation	Blowback, open-bolt, selective fire
Feed Device	20-, 25-, or 32-round detachable box magazine
Weight (Loaded)	3.99 kg
Overall Length	650 mm (stock extended)

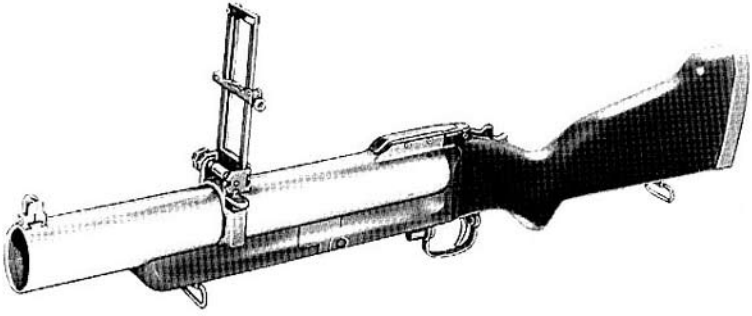
9-mm Submachinegun Madsen Model 53

Cartridge	9- x 19-mm Parabellum
Effective Range	100 m
Cyclic Rate of Fire	550 rounds/minute
System of Operation	Blowback, selective fire (automatic, semi-automatic)
Feed Device	32-round detachable box magazine
Weight Unloaded	3.2 kg
Overall Length, Stock Extended	780 mm

.50-in Heavy Machinegun Browning M2 HB

Cartridge	0.50-in Browning (12.7 x 99 mm)
Maximum Range	6,765 m
Effective Range	Over 1,500 m
Cyclic Rate of Fire	450 to 600 rounds/minute
Method of Operation	Short recoil, selective fire
Feed Device	100-round disintegrating-link belt
Weight Loaded	38 kg
Overall Length	1,656 mm

40-mm M79 Grenade Launcher



Ranges	
Effective, Point Target	150 m
Effective, Area Target	350 m
Maximum	400 m
Method of Operation	Break-open; single shot
Sights	Front, blade; rear, adjustable folding leaf
Weight, Loaded	2.95 kg
Overall Length	737 mm

NOTE: Superseded in U.S. by M203.

ARMOR

Light Tank M3A1 Stuart

Crew	4
Armament	
Main	37-mm rifled gun
Coaxial	7.62-mm light machineguns
Auxiliary	Bow-mounted 7.62-mm machinegun; Pintle-mounted 7.62-mm machinegun
Maximum Speed	56 km/h
Range	120 km
Gradient/Side Slope	60/30 percent
Vertical Step	0.7 m
Trench	1.83 m
Fording	0.9 m
Combat Weight	12,900 kg
Length x Width x Height	4.54 m (gun fwd) x 3.2 x 2.23 m
Fuel Capacity	212 liters

M4A3 Sherman Main Battle Tank

Crew	5 (3 in turret)
Armament	
Main	75-, 76-, or 105-mm rifled gun (75-mm gun is standard)
Coaxial	7.62-mm machinegun
Auxiliary	7.62-mm bow-mounted machinegun
Maximum Speed	48 km/h
Range	161 km
Gradient	60 percent
Vertical Step	0.6 m
Trench	2.26 m
Fording	0.9 m
Combat Weight	31,070 kg
Length x Width x Height	5.9 x 2.7 x 2.7 m
Fuel Capacity	636 liters

M8 Armored Car (modified)

Crew	4
Armament	
Main	37-mm rifled cannon
Auxiliary	12.7-mm heavy machinegun
Maximum Speed	90 km/h
Range	560.0 km
Gradient	60 percent
Vertical Step	0.3 m
Fording	0.61 m
Combat Weight	7,890 kg
Length x Width x Height	5.0 x 2.5 x 2.2 m
Fuel Capacity	212 liters of gasoline

EE-11 Urutu Armored Personnel Carrier

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

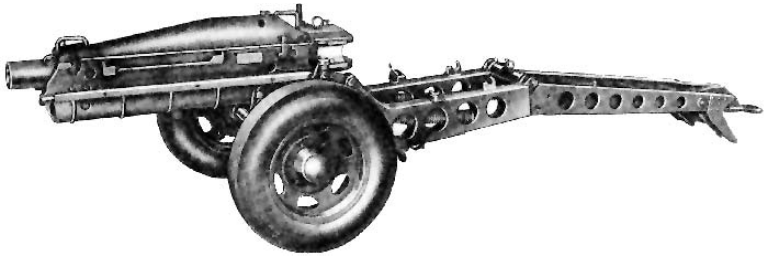
NOTE: The EE-11 can also be fitted with a 7.62-mm machinegun and 60-mm mortar, 20-mm cannon, 25-mm cannon, or 90-mm gun. When used for cargo, the EE-11 can carry a 2,000-kg payload.

EE-9 Cascavel 6x6 Armored Gun System

Crew	3
Armament	
Main	90-mm rifled gun
Coaxial	7.62-mm machinegun
Antiaircraft	7.62-mm or 12.7-mm machinegun (optional)
Maximum Speed	100 km/h
Road Range	880 km
Gradient/Side Slope	60/30 percent
Vertical Step	0.6 m
Fording	1 m
Combat Weight	13,400 kg
Length x Width x Height	5.2 x 2.6 x 2.68 m
Fuel Capacity	390 liters
Smoke Laying	Yes

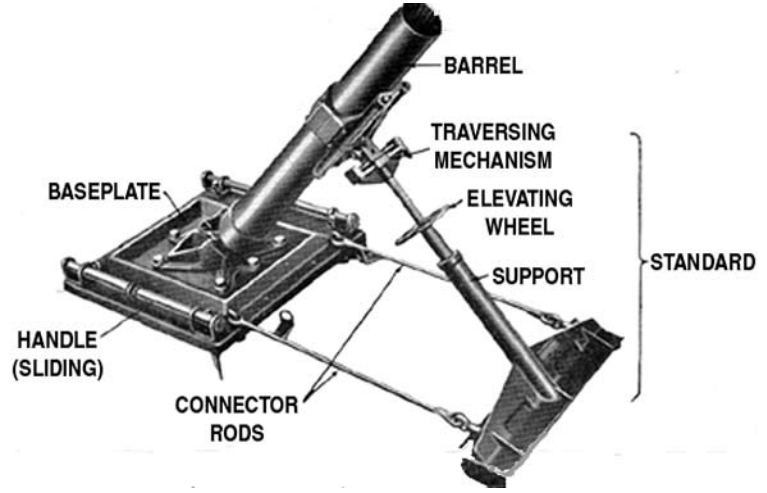
ARTILLERY

75-mm Pack Howitzer M116 (M1A1)



Range	400 (direct fire) to 8,797 m
Rates of Fire	
Burst	16 rounds/minute for 30 seconds
Normal	5 rounds/minute for 10 minutes
Sustained	150 rounds/hour
Elevation Limits	–5 to +45 degrees
Traverse Limits	3.0 degrees left or right
Combat Weight	537 kg
Travel Length x Width	3.20 x 1.27 m

4.2-in (107-mm) Mortar M2



Range	618 to 4,020 m
Rates of Fire	
Sustained	5 rounds/minute
Burst	20 rounds/minute
Elevation Limits	+44.94 to +59.83 degrees
Traverse Limits	7.02 degrees left or right
Weight Empty	154 kg
Barrel Length	1,219.2 mm

4.2-in (107-mm) Mortar M30

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

81-mm Mortar MO-81-61

Crew; Section Size	3; 5
Range	120 to 5,000 m
Rates of Fire	
Sustained	8 rounds/minute
Normal	10 rounds/minute
Burst	15 rounds/minute
Elevation Limits	+30.0 to +85.0 degrees
Ammunition Types	HE, HE-Frag, Smoke, Illumination
Weight Empty	42 kg
Barrel Length	1,450 mm
Prime Mover	Manportable

ANTIARMOR

75-mm Recoilless Rifle M20

Effective Range	640 m
Rate of Fire	10 rounds/minute
Armor Penetration	230 mm
Weight with Tripod	85.0 kg
Length of Launcher	2,130 mm

AIR DEFENSE

40-mm Towed Anti-aircraft Gun M1

Crew	4 to 6
Ranges	
Tactical Antiaircraft	2,742 m
Maximum Vertical	4,661 m
Maximum Horizontal	4,753 m
Maximum Rate of Fire	60 rounds/minute
Ammunition	APT, HE-T, HEI-T, TP-T
Elevation Limits	–11to +90 degrees
Traverse Limit	360 degrees
Weight	2,656 kg
Length x Width x Height	5.7 x 1.8 x 2.0 m
Platform	4-wheel carriage with outriggers
Prime Mover	2½-ton 6x6 truck

AIRCRAFT

Aermacchi MB 326GB Xavante

Type	Advanced trainer
Role	Counterinisurgency
Crew	2
Armament	Six underwing attachment points for various rocket or gun (up to 30 mm) pods, bombs, missiles or fuel tanks (total 1,814 kg)
Never-Exceed Speed	419 kn
Combat Radius	495 nmi, maximum takeoff weight and fuel
Service Ceiling	11,900 m
Maximum Takeoff Weight, Max Fuel	4,447 kg
Basic Operating Weight	2,558 kg
Length x Wingspan x Height	10.67 x 10.85 x 3.72 m

Embraer EMB-312 Tucano

Type	Armed Trainer
Role	Counterinsurgency
Crew	2, tandem
Armament	Two hardpoints under each wing for 0.30-in machineguns, bombs, or rockets
Maximum Cruising Speed	222 kn
Ferry Range	1,798 nmi
Service Ceiling	9,150 m
Maximum External Stores Load	1,000 kg
Maximum Takeoff Weight	
Clean	2,550 kg
With External Stores	2,800 kg
Basic Weight Empty	1,870 kg
Length x Wingspan x Height	9.86 x 11.14 x 3.40 m

Boeing 707-321B

Role	Communications
Passengers	Up to 219
Maximum Level Speed	545 kn
Range with Max Fuel	5,000 nmi (standard passenger load)
Service Ceiling	11,885 m
Maximum Payload	40,324 kg (cargo)
Maximum Takeoff Weight	151,315 kg
Basic Operating Weight Empty	64,000 kg (cargo configuration)
Length x Wingspan x Height	46.61 x 44.42 x 12.93 m

Douglas C-47B, DC-3

Type	Transport
Crew; Passengers	2; 21
Cruising Speed	178 kn
Normal Range with Maximum Fuel	1,306 nmi
Service Ceiling	7,076 m
Weight Loaded	11,441 kg
Weight Empty	7,657 kg
Length x Wingspan x Height	19.63 x 28.9 x 5.20 m

EADS CASA C-212-200 Aviocar

Type	Twin-turboprop STOL utility aircraft
Crew; Passengers	2; 26
Armament	2x machinegun pods; 2x rocket launchers or 1x launcher and 1x machinegun pod; and hardpoinits on sides of fuselage (250-kg capacity, each)
Maximum Cruising Speed	365 km/h
Range, Maximum Payload and Fuel	408 km/1,750 km
Service Ceiling	8,535 kg
Maximum Payload	2,700 kg
Maximum Takeoff Weight	7,700 kg
Operating Weight Empty	4,400 kg
Length x Wingspan x Height	15.15 x 19.00 x 6.30 m

EADS CASA C-212-400 Aviocar

Type	Twin-turboprop STOL utility aircraft
Crew; Passengers	2; 25 troops
Maximum Cruising Speed	195 kn
Range with Maximum Payload	408 km/1,750 km
Service Ceiling	7,925 kg
Maximum Payload	2,950 kg
Maximum Takeoff Weight	8,100 kg
Operating Weight Empty	4,550 kg
Length x Wingspan x Height	16.15 x 20.27 x 6.60 m

NOTE: delivered to Paraguay on 21 FEB 2004 with ambulance conversion kit.

DHC-6 Twin Otter 200

Type	STOL transport
Role	Communications
Crew; Passengers	1 or 2; 20
Maximum Cruising Speed	182 kn
Range	920 nmi at long-range cruising speed
STOL Takeoff/Landing Run	213/157 m
Service Ceiling	8,140 m
Maximum Takeoff Weight	5,670 kg
Typical Operating Weight	3,363 kg
Length x Wingspan x Height	15.77 x 19.81 x 5.94 m

Cessna U206C Stationair

Role	Communications
Seating	6
Maximum Cruising Speed	280 km/h
Range	1,352 km
Service Ceiling	4,785 m
Maximum Takeoff Weight	1,632 kg
Weight Empty	987 kg
Length x Wingspan x Height	8.61 x 10.97 x 2.83 m

210 Centurion Cessna Communications

Role	Communications
Seating	6
Maximum Level Speed	175 kn
Range	1,390 nmi
Service Ceiling	4,875 m
Maximum Takeoff Weight	1,746 kg
Weight Empty	1,007 kg
Length x Wingspan x Height	8.59 x 12.41 x 2.95 m

PZL-104 Wilga 80 General Purpose Light Aircraft

Role	Communications
Crew; Passengers	1; 3
Armament	Possibly one pylon under each wing for a gun or rocket pod.
Cruising Speed for Max. Range	74 kn
Range with Maximum Fuel	275 nmi (with 30-minute reserve fuel)
Service Ceiling	4,040 m
Maximum Takeoff Weight	1,300 kg
Weight Empty, Equipped	870 kg
Length x Wingspan x Height	8.03 x 11.13 x 2.96 m

Bell 205A-1, UH-1H Iroquois

Role	Multirole transport.
Crew; Passengers	1 to 2; 11 to 14 troops
Armament	Possible guns, rockets
Maximum Dash Speed	110 kn
Range	250 nmi
Hover ceiling	OGE 1,220 m; IGE 4,145 m
Engines	Single turboshaft
Basic Weight Empty	2,237 kg
Maximum Takeoff Weight	4,309 kg
Main Rotor	
Number of Blades	2
Diameter	14.7 m
Tail rotor	
Number of Blades	2
Diameter	2.6 m
Fuselage Length x Width x Height	12.6 x 2.6 x 4.2 m

UH-1B Iroquois

Role	Multirole transport.
Crew; Passengers	2; 7 troops or 3 litter patients, 2 sitting casualties, and 1 medical attendant
Armament	Various machineguns, 40-mm grenade launchers, or rockets
Maximum Cruising Speed	117 kn
Range	286 nmi
Hover ceiling	OGE 732 m; IGE 4,175 m
Engines	Single turboshaft
Weight Empty	2,050 kg
Maximum Takeoff Weight	3,856 kg
Main Rotor	
Number of Blades	2
Diameter	13.41 m
Tail rotor	
Number of Blades	2
Diameter	2.6 m
Overall Length x Height	17.4 x 3.9 m

Fennec AS550-AS550A2/AS 350 B/AS350B3/Esquilo/HA-1/UH

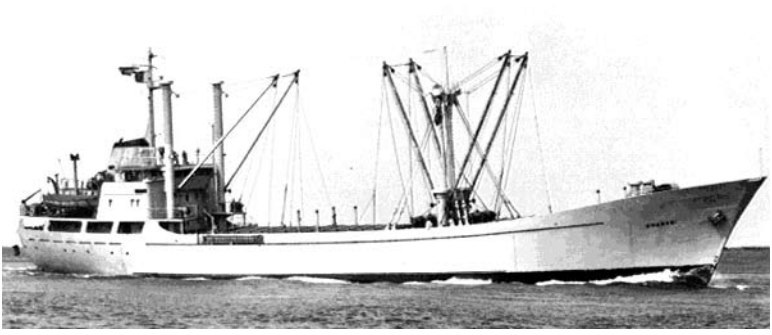
Role	Transport
Crew; Passengers	2; 5
Armament	ATGMs, AAMs, 20-mm gun or 7.62-mm gun pods, rockets
Maximum Speed	155 kn
Range	360 nmi at 122 kn with typical load
Service ceiling	4,800 m
Engines	1 turboshaft
Basic Weight Empty	1,200 kg
Cargo Handling or Sliing Load	905 kg
Maximum Takeoff Weight	2,250 kg
Main Rotor	
Number of Blades	3
Diameter	10.7 m
Tail rotor	
Number of Blades	2
Diameter	1.9 m
Fuselage Length x Width x Height	10.9 x 1.9 x 3.14 m

SHIPS

BOUCHARD Class AGP

Role	Patrol craft tender
LOA x Max. Beam x Max. Draft	59 x 7.3 x 2.6 m
Displacement, Full Load	660,000 kg
Complement	56
Speed, Full Power	16 kn
Range	3,000 nmi at 10 kn
Guns	2x twin 40-mm x 60
Radar System	KH-14/9

GUARANI Class AK



Role	Cargo ship
LOA x Max. Beam x Max. Draft	73.6 x 11.1 x 3.7 m
Displacement, Full Load	1,854,000 kg
Complement	36
Speed, Full Power	12.8 kn
Range	10,000 nmi at 12.8 kn
Cargo	1,000,000 kg; 2,462 m^3
Surface Search Radar System	2 unidentified

PRESIDENTE STROESSNER Class AK

Role	Cargo ship
LOA x Max. Beam x Max. Draft	77.9 x 10 x 1.4 m
Complement	10
Speed, Full Power	12 kn
Equipment	Crane
Cargo	120,000 kg
Embarked Troops	325

CAPITAN CABRAL Class PM

Role	River monitor
LOA x Max. Beam x Max. Draft	34.5 x 7.1 x 1.7 m
Displacement, Full Load	206,000 kg
Complement	50
Speed, Full Power	9 kn
Guns	1x 40-mm x 60; 2x 20-mm; 2x 12.7-mm

P-07 Class PM

Role	River monitor
LOA x Max. Beam x Max. Draft	14.7 x 3.1 x 0.9 m
Displacement, Full Load	15,000 kg
Complement	4
Maximum Sustained Speed,	12 kn
Range	240 nmi at 12 kn
Guns	2x 12.7-mm x 90 machineguns

RORAIMA Class (*Itaipu*) PM

Role	River monitor, hospital ship
LOA x Max. Beam x Mean Draft	46.3 x 1.3 x 0.9
Displacement, Full Load	384,000 kg
Complement	49
Speed, Full Power	14.5 kn
Guns	1x 40-mm x 70; 2x combination 12.7-mm machinegun and 81-mm mortar; 4x 12.7-mm x 90 machinegun
Helicopters	Flight deck for light helicopter
Other Equipment	2x LCVPs
Radar System	2x Decca-series systems

PARAGUAY Class PM

Role	River monitor
LOA x Max. Beam x Max. Draft	70.6 x 10.7 x 2.3 m
Displacement, Full Load	879,000 kg
Complement	50
Speed, Full Power	17 kn
Range	2,400 nmi at 12 kn
Guns	2x twin 120-mm x 50; 3x 76-mm x 50; 2x 40-mm x 60; 2x 20-mm x 70
Radar System	Raytheon 1500

SEWART 40-ft Class (Type 701) PM

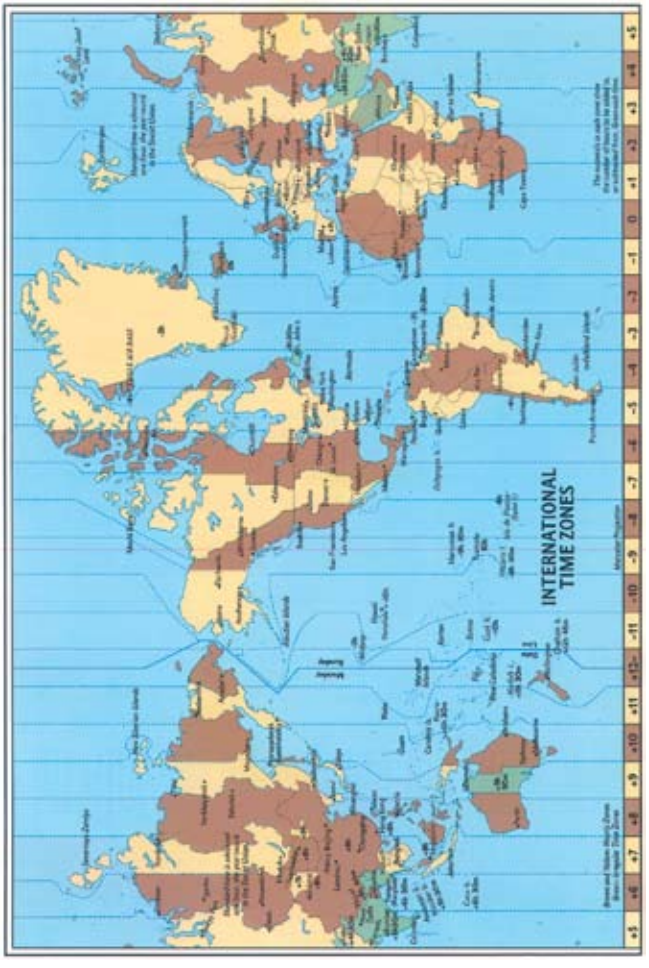
Role	River monitor
LOA x Max. Beam x Max. Draft	12.2 x 3.7 x 0.9 m
Displacement, Full Load	9,400 kg
Complement	7
Speed, Full Power	31 kn
Range	330 nmi at 16.5 kn
Guns	2x 12.7-mm x 90
Navigational Radar System	AN/SPN-11

RODMAN 55 Class PB

LOA x Max. Beam x Max. Draft	16.5 x 3.8 x 0.7 m
Displacement, Full Load	16,200 kg
Complement	6
Speed	25 kn
Guns	1x 7.62-mm machinegun
Radar System	I-band surface-search

NOTE: Spanish colors shown above.

APPENDIX B:
INTERNATIONAL TIME ZONES



Coordinated Universal Time (UTC)

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

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

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

Country	UTC	Eastern	Central	Mountain	Pacific
Ecuador	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Egypt	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
El Salvador	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Equatorial Guinea	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Eritrea	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Estonia	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Ethiopia	+3.0 H	+8.0 H	+9.0 H	+10.0 H	+11.0 H
Falkland Islands	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Fiji Islands	+12.0 H	+17.0 H	+18.0 H	+19.0 H	+20.0 H
Finland	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
France	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
French Antilles	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
French Guinea	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
French Polynesia	-10.0 H	-5.0 H	-4.0 H	-3.0 H	-2.0 H
Gabon Republic	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Gambia	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Georgia	+4.0 H	+9.0 H	+10.0 H	+11.0 H	+12.0 H
Germany	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Ghana	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Gibraltar	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Greece	+2.0 H	+7.0 H	+8.0 H	+9.0 H	+10.0 H
Greenland	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
Grenada	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Guadeloupe	-4.0 H	+1.0 H	+2.0 H	+3.0 H	+4.0 H
Guam	+10.0 H	+15.0 H	+16.0 H	+17.0 H	+18.0 H
Guatemala	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Guinea-Bissau	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Guinea	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
Guyana	-3.0 H	+2.0 H	+3.0 H	+4.0 H	+5.0 H
Haiti	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H
Honduras	-6.0 H	-1.0 H	+0.0 H	+1.0 H	+2.0 H
Hong Kong	+8.0 H	+13.0 H	+14.0 H	+15.0 H	+16.0 H
Hungary	+1.0 H	+6.0 H	+7.0 H	+8.0 H	+9.0 H
Iceland	+0.0 H	+5.0 H	+6.0 H	+7.0 H	+8.0 H
India	+5.5 H	+10.5 H	+11.5 H	+12.5 H	+13.5 H

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

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

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

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

APPENDIX C: CONVERSION CHARTS

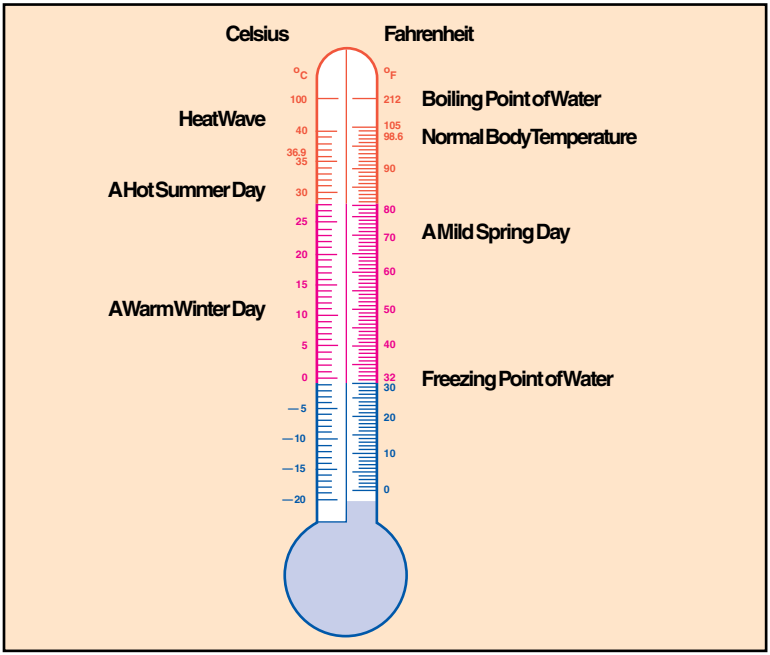
When You Know

Units of Length	Multiply by	To find
Millimeters	0.04	Inches
Centimeters	0.39	Inches
Meters	3.28	Feet
Meters	1.09	Yards
Kilometers	0.62	Miles
Inches	25.40	Millimeters
Inches		Centimeters
Feet	30.48	Centimeters
Yards	0.91	Meters
Miles	.61	Kilometers
Units of Area		
Sq. Centimeters	0.16	Sq. Inches
Sq. Meters	1.20	Sq. Yards
Sq. Kilometers	0.39	Sq. Miles
Hectares	2.47	Acres
Sq. Inches	6.45	Sq. Cm
Sq. Feet	0.09	Sq. Meters
Sq. Yards	0.84	Sq. Meters
Sq. Miles	2.60	Sq. Km
Acres	0.40	Hectares
Units of Mass and Weight		
Grams	0.035	Ounces
Kilograms	2.21	Pounds
Tons (100kg)	1.10	Short Tons
Ounces	28.35	Grams
Pounds	0.45	Kilograms
Short Tons	2.12	Tons

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

Temperature

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



Temperature Chart

APPENDIX D: HOLIDAYS

National Holidays

Local establishments close on national holidays. The U.S. Embassy is closed during these holidays and on U.S.-observed holidays.

1 January	New Year's Day
3 February	San Blaise (National Saint)
1 March	Heroes' Day and Labor Day
15 May	Independence (1811), Flag, and National Day
12 June	Armistice Day of the Chaco War (Peace with Bolivia)
15 August	Founding of Asuncion
16 August	Children's Day
29 September	Battle of Boqueron
25 December	Christmas Day

Major Roman Catholic Observances *(dates vary annually)*

6 January	Epiphany
25 February	Ash Wednesday
5 April	Palm Sunday
9 April	Holy Thursday
10 April	Good Friday
12 April	Easter
13 April	Easter Monday
21 May	Ascension
31 May	Pentecost Sunday
7 June	Trinity Sunday
11 June	Corpus Christi
15 August	Assumption
1 November	All Saints Day
2 November	All Souls Day
29 November	Advent
8 December	Immaculate Conception

APPENDIX E: LANGUAGE

Key Phrases

English	Spanish
Stop.	*alto.*
Danger.	*religro.*
Come here.	*venga aca/aqui.*
Right away.	*pronto.*
Help.	*socorro.*
Bring help.	*tra iga ayuda.*
I am an American.	*soy norte americano.*
Which way is north?	*donde esta el norte?*
Which is the road to _____?	*donde esta cual es el camino para?*
Draw me a map.	*dibu jeme un plano.*
Take me there.	*Lle veme alla.*
Take me to a doctor.	*Lle veme a un medico.*
How far is it?	*a que distancia esta?*
Good morning.	*Buenos dias.*
Good afternoon..	*Buenos tardes.*
Good evening.	*Buenos noches.*
Goodbye.	*Adios.*
I don't understand.	*no comprendo.*
How are you?	*como esta usted?*
Please.	*por favor*
Where is the U.S. Embassy?	*Donde esta la embajada de los? Estados Unidos*
Where is the police station?	*Donde esta la estacion de*

English	Spanish
	policia mas cercana
I am hungry.	*tengo hambre*
I am thirsty.	*tengo sed*
I want:	*Quiero*
bread	*pan*
fruit	*fruta*
bananas	*bananas*
eggs	*huevos*
meat	*carne*
pork	*puerco*
stew	*guisado*
soup	*sopa*
rice	*arroz*
beans	*frijoles*
fish	*pescado*
beer	*cerveza*
a cup of coffee	*una taza de cafe*
How much does this cost?	*cuanto cuesta esto?*
What is the time?	*Que hora es?*
What time (does it) start?	*A que hora empieza?*
The train	*el tren*
The bus	*el autobus*
The car	*el carro*
The aircraft	*el avion*
Sunday	*Domingo*
Monday	*Lunes*
Tuesday	*Martes*
Wednesday	*Miercoles*

English	Spanish
Thursday	*Jueves*
Friday	*Viernes*
Saturday	*Sabado*
Military Phrases	
Academy	*Academia*
Adjutant	*Ayudante*
Admiral	*Almirante*
Aerial	*Aereo*
Air	*Aire*
Aircraft	*Avion*
Air Force	*Fuerza Aerea*
Ammunition/Ammo	*Municion*
Amphibious	*Anfibio*
Antiaircraft	*Antiaerea*
Antitank	*Antitanque; Contracarros*
Armored Personnel Carrier	*Carrier; Blindado Porta-Personal*
Armed Forces	*Fuerzas Armadas*
Armor	*Blindaje*
Armored	*Blindado*
Armored Car	*Blindado Carro*
Army	*Ejercito*
Artillery	*Artilleria*
Assault	*Asalto*
Attack	*Ataque*
Aviation	*Aviacion*
Barracks	*Cuartel*
Base	*Base*
Battle	*Batalla*

English	Spanish
Battery	*Bateria*
Bomber	*Bombardero*
Bombing	*Bombardeo*
Brigade	*Brigada*
Brigadier General	*General de Brigada*
Cadet	*Cadete; Aspirante (a Oficial)*
Cannon	*Canon*
Captain	*Capitan*
Captain (Naval)	*Capitan de Navio*
Cavalry	*Caballeria*
Colonel	*Coronel*
Combat	*Combate*
Commandos	*Comandos*
Command	*Comando, Mando*
Commander	*Comandante*
Commander (Naval)	*Capitan de Fragata*
Commander-in-Chief	*Commandante General*
Communications	*Comunicaciones*
Company	*Compania*
Conscript	*Conscripto*
Corporal	*Cabo*
Corps	*Cuerpo*
Corvette	*Corbeta*
Crew	*Dotacion; Triplacion*
Defense	*Defensa*
Division	*Division*
Drug(s)	*Droga, Drogas*
Engineer	*Ingeniero*

English	Spanish
Enlisted Man	*Alistado Soldado Raso*
Ensign (Naval Rank)	*Alferez de Fragata (Navio); Subteniente*
Entrench	*Atrincherar*
Equipment	*Masterial*
Escort	*Escolta*
Fighter (Aircraft)	*(Avion de) Caza*
English	*Spanish*
Fighter-Bomber	*Caza-Bombardero*
Fire Control	*Direccion de Tiro*
Fleet	*Flota; Escuadra*
Flight	*Vuelo*
Footbridge	*Puente para Peatones*
Ford	*Vado; Vadear*
Fordability	*Capacidad de Vadeo*
Formation	*Formacion*
Fortification	*Fortificacion*
Fortify	*Forificar*
Forward Observer	*Observador Avanzado*
Foxhole	*Hoya de tirador*
Front	*Frente*
Fuze	*Espoleta*
Garrison	*Guarnicion, Cuartel*
Gas Mask	*Mascara antigas*
Grenade	*Grenada*
Grenade Launcher	*Lanzagranada*
Grid Azimuth	*Acimut de cuadriculado*
Grid Coordinates	*Coordenadas de cuadriculado*

English	Spanish
Grid Magnetic Angle	*Anglo magnetica de cuadriculado*
Grid North	*Norte de cuadriculado*
Grid Square	*Cuadricula*
Guerrilla	*Guerrillero*
Gunner	*Apintador de la pieza*
Gunship	*Helicoptero armado*
Halt	*Alto*
Hasty Defense	*Defensa improvisada*
Heat Exhaustion	*Aqotamiento por el salor*
Heatstroke	*Insolacion*
Heavy Machinegun	*Ametrailladora Pesada*
Helicopter	*Helicoptero*
Helmet	*Casco*
High Ground	*Terreno elevado*
Hill	*Colina*
Howitzer	*Obus*
Hydrographic Chart	*Carta Hidrografica*
Identification (ID) Card	*Tarjeta de Idential*
Immobilize	*Immovilizar*
Indirect Fire	*Fuego indirecto*
Infantry	*Infanteria*
Infiltrate	*Infiltrarse*
Information	*Informacion*
Installation	*Instalacion*
Insurgent	*Insurgente*
Intelligence	*Inteligencia*
Intelligence Officer	*Oficial de Inteligencia*
Intelligence Report	*Informe de Inteligencia*

English	Spanish
Internal Defense	*Defensa Interna*
Interrogate	*Interrogar*
Issue	*Distribuir*
Joint	*Conjunto(a)*
Joint Exercise	*Ejercico Conjunto*
Joint Force	*Fuerza Conjunto*
Joint Operation	*Operacion Conjunto*
Joint Training	*Adiestramiento Conjunto*
Junior Leader	*Jefe Subordinado*
Key Terrain	*Terreno Clave*
Killed in Action (KIA)	*Muerto en accion*
Killing Zone	*Zona de Aniquilamiento*
Knapsack/Pack	*Mochila*
Landmine	*Mina terrestre*
Lay	*Apuntar*
Leadership	*Don de Mando*
Liaison	*Enlace*
Liaison Officer	*Oficial de enalce*
Lieutenant	*Teniente*
Light Data	*Datos sobre la claridad*
Line of Sight	*Linea de Mira*
Listening Post	*Puesto de Escucha*
Live Ammo	*Municion Activa*
Logistics	*Logisticia*
Long Range	*Largo Alcance*
Machinegun	*Ametralla dora/dor*
Master Sergeant	*Sargento Maestro*
Maximum Effective Range	*Alcance Eficaz Maximo*

English	Spanish
Maximum Rate of Fire	*Cadencia Maxima de tiro*
Maximum Speed	*Velocidad Maxima*
Mean	*Media*
Mechanized	*Mecanizado*
Mechanized Unit	*Unidad Mecanizada*
Medical Officer	*Oficial de Sanidad*
Messenger	*Mensajero*
Mess Hall	*Comedor*
Meteorological	*Meteorologicos*
Military Attache	*Agregado Militar*
Militia	*Milicia*
Mine	*Mina*
Minefield	*Campo Minado*
Minimum	*Minimo*
Misfire	*Fallar el Tiro*
Mission	*Mision*
Mobile	*Movil*
Mobility	*Movilidad*
Mobilization	*Movilizacion*
Mortar	*Mortero*
Motorized	*Motorizado*
Motor Pool	*Centro de Vehiculos Motorizados*
Mountain Range	*Cordillera*
Mounted Patrol	*Patrulla Motorizado*
Multiple Rocket Launcher (MRL)	*Lanzacohetes de tubos Multiples*
Munitions	*Municions*
Muzzle	*Boca*

English	Spanish
Night	*Nocturno*
Noncommissioned Officer (NCO)	*Clase de Tropa*
Objective	*Objectivo*
Observation	*Observacion*
Observation Post	*Puesto de Observacion*
Obstacle	*Obstaculo*
Offensive	*Ofensiva*
Officer	*Oficial*
Off-Limits	*Zona Vedada*
On Leave	*De Licencia*
On Site	*on Posicion*
Open Fire	*Abrir Fuego*
Open Terrain	*Terreno Abierto*
Operational	*Operacional*
Operations	*Operacions*
Order	*Orden*
Organizational	*Organico(a)*
Overwatch	*Vigilar o Vigilancia*
Parachute	*Paracaidad*
Paramilitary	*Paramilitar*
Patrol	*Patrulla*
Patrolling	*Patrullaje*
Penetration	*Penetracion*
Perimeter	*Perimetro*
Photograph	*Fotograff*
Physical Security	*Seguridad Fisica*
Pistol	*Pistola*

English	Spanish
Platoon	*Peloton*
Pontoon	*Pontones*
Port	*Puerto*
Preplanned	*Planeado de Antemano*
Prisoner of War (POW	*Prisonero de Guerra*
Private	*Soldado Raso*
Private First Class (PFC	*Soldado de Primera Clase*
Provost Marshal	*Capitan Preboste*
Public Affairs	*Asuntos Publicos*
Pursuit	*Persecucion*
Quadrant	*Cuadrante*
Quartermaster	*Intendencia*
Rear Sight	*Alza*
Recoil	*Retroceso*
Reconnaissance	*Reconcimeinto*
Recruit	*Recluta*
Reference	*Referencia*
Refugee	*Refugiado*
Regiment	*Regimiento*
Regulations	*Reglamentos*
English	*Spanish*
Reinforce	*Reforzar*
Relief	*Relieve*
Replacement	*Remplazo*
Rescue	*Rescatar*
Reserve	*Reserva*
Restricted	*Restringida*
Resupply	*Reabastecimiento*

English	Spanish
Retrograde	*Retrogado*
Rifle	*Fusil*
Rifleman	*Fusillero*
Roadblock	*Barricada*
Rocket	*Cohete*
Rocky	*Rocoso*
Rough	*Escabroso*
Round (Ammo)	*Tiro*
Sabotage	*Sabotaje*
Safety (Weapon)	*Sequro*
Sailor	*Marinero*
Sand Table	*Cajon de Arena*
Searchlight	*Proyector*
Secondary	*Secundarios*
Secret	*Secreto*
Sector	*Sector*
Security	*Seguridad*
Self-propelled	*Autopropulsado*
Semiautomatic	*Semiautomatico(a)*
Sensor	*Sensor*
Sentry	*Centinela*
Sergeant	*Sargento*
Serviceability	*Utilidad*
Shore Line	*Litoral*
Shotgun	*Escopeta*
Signal	*Senales*
Situation	*Situacion*
Sketch	*Croquis*

English	Spanish
Small	*Pequeno*
Smoke	*Fumigena*
Sniper	*Francotirador*
Soldier	*Soldado*
Sortie	*Vuelo o Salida*
Special	*Especial*
Spot	*Observacion del Tiro*
Squad	*Escuadra*
Staff Sergeant	*Sargento de Segunda Clase*
Starboard	*Estribor*
Stick (Helo)	*Grupo de Salto*
Supply	*Abastecimientos*
Support	*Apoyo*
Supporting	*de Apoyo*
Surveillance	*Vigilancia*
Tactical	*Tactica(o)*
Tank	*Tanque*
Target	*Blanco*
Task	*Tarea*
Tear Gas	*Gas Lacrimogeno*
Telecommunication	*Telecomunicacion*
Temporary Duty	*Servicio Interino*
Tent	*Tienda de Campana*
Terrain	*Terreno*
Time Bomb	*Bomba de Tiempos*
Topographic	*Topografico*
Top Secret	*Ultrasecreto, Muy Secreto*
Tracer	*Trazadora*

English	Spanish
Trafficability	*Transitabilidad*
Training	*Instruccion, adiestramiento*
Transportation	*Transporte*
Trench	*Trinchera*
Trigger	*Disparador; Gatillo*
Trip Flare	*Bengala de Disparo*
Troops	*Tropas*
True	*Verdad*
Upstream	*Corriente arriba*
Upwind	*Contra elViento*
Vehicle	*Vehiculo*
Visibility	*Visibilidad*
Warrant Officer	*Suboficial*
War Zone	*Zona de Guerra*
Water	*Aqua*
Windage	*Correccion-Viento*
Withdrawal	*Repligue*
Wounded in ACtion (WIA)	*Herido en Accion*
Zero	*Cero*
Zone	*Zona*

Guaraní Key Phrases

English	Guarani
Hello	Mba'eichapa
Goodbye	Ahama
Thank You	Aguije
Please	Ikatu piko
Ammunition	Mboka ra'yi

English	Guarani
Armed Vehicle	Mba'yru mboka reheve
Checkpoint	Control renda
Day	Ara
Danger	Jekyhyjeha
Desert	Yvyku'ity
East	Kuarahyrese
Evening	Ka'aru
Food	Tembi'u
Good	Marangatu
Bad	Nana
Here	Ape
Hour	Aravo
Kilometer	Kilometro
Knife	Kyse
Leader	Tendota
Medicine	Poha
Men	Kuimba'e kuera
Women	Kuna kuera
Minute	Aravo'i
Morning	Pyhareve
Mountain	Yvyty
Night	*Pyhare*
North	*Yvate*
Pass	*Pa u jehasaha*
Pistol	*Mboka mbyky*
Radio	*Ne'e mombyry*
River	*Ysyry*
Road	*Tape hu*

English	Guarani
Shelter	*Nekanyha*
South	*Yvygotyo*
There	*Amo*
Valley	*Yvype*
Village	*Tava*
Water	*Y*
Weapon	*Mboka*
West	*Kuarahyreike*
Yes	*Nei*
No	*Nahaniri*
Is there someone who speaks English?	*Oi piko ko'arupi aipo tekove one'e kuaava ingles pe?*
May I have some water?	*Hay'se hina?*
May I have some food?	*Aipota tembiu hina?*
I am very tired. Is there a place I can sleep?	*Che kane'o iteri. Moo pa ake kuaa?*
I am injured. Is there someone who can help me?	*Aje japi hina. Oi piko ko'arupi che pytyvo kuaa va?*
Can you show me my location on a map?	*Ikatu pa re hechauka cheve teta ra'anga pe moo pa aime hina?*
How far is it to friendly territory?	*Agui piko oime che iru kuera?*
Is it safe to travel now?	*Ndaipori jakyhyje hagua ahasero ko aga?*
What type of troops are in the area?	*Mba'eichagua i mbokava aty piko oi ko arupi?*
I greatly appreciate your assistance.	*Che ro aguijevete nde che pytyvohaguere.*

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

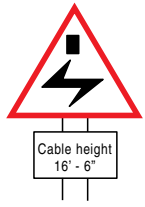
No left turn

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. 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; and
- 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 (˚F)**	**Work/ Rest (min.)**	**Water Intake (Qt/Hr)**	**Work/ Rest (min.)**	**Water Intake (Qt/Hr)**	**Work/ Rest (min.)**	**Water Intake (Qt/Hr)**
1	78 – 81.9	NL	1/2	NL	3/4	40/20	3/4
2	82 – 84.9	NL	1/2	50/10	3/4	30/30	1
3	85 – 87.9	NL	3/4	40/20	3/4	30/30	1
4	88 – 89.9	NL	3/4	30/30	3/4	20/40	1
5	> 90	50/10	1	20/40	1	10/50	1

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

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

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

Note: MOPP gear adds 10˚ to WBGT Index.

Food

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

Human Waste

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

Cold Weather

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

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

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

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

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

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

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

- Port complexes
- Airports

Detention

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

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

pecially 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 hijackings suggest some simple precautions:

- You should not travel in uniform outside the continental U.S. on commercial aircraft.
- Before traveling by commercial aircraft, you should screen your wallet and other personal items, remov-

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

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

Hostage Situation

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

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

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

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

APPENDIX I:
DANGEROUS PLANTS AND ANIMALS

Snakes

Jararaca

Description:
Adult length usually 0.8 to 1.6 meters; a relatively slender snake. The background color can vary from yellow or tan to nearly maroon (usually darker at the ends). The body pattern is extremely variable.

Habitat:
Most commonly found in open regions near vegetation cover at low to intermediate elevations.

Activity and behavioral patterns:
Terrestrial; abundant in many parts of its range.

Venom's effects:
There is little specific data available. Snake is reportedly a primary cause of bites in its region. Venom is considered primarily hemotoxic and cytotoxic; bite can cause systemic internal bleeding and local tissue destruction.

Jararacussu

Description:
Adult length usually 1 to 2.2 meters; a heavy-bodied snake. Background color and patterns of head and body are extremely variable -- can vary from tan or yellow to nearly black. However, the

pattern of dark and pale scales on many specimens results in the appearance of prominent inverted pale V-shaped markings along the upper sides.

Habitat:
Found at elevations up to 700 meters in a wide variety of habitats, including tropical rainforest, tropical semideciduous forest, broadleaf evergreen forest, and Paraná pine forest in swampy, low-lying areas and along river banks.

Activity and behavioral patterns:
Terrestrial, nocturnal.

Venom's effects:
There is little specific data; snake has an exceptionally large venom capacity and is a primary cause of snakebite in its region. Venom is considered primarily hemotoxic and cytotoxic; bite can result in systemic internal bleeding and local tissue destruction.

Brazil's Lancehead

No Photograph Available.

Description:
Adult length usually 0.7 to 0.9 meter; can exceed 1.4 meters; a moderately stout snake. Background color usually varies from coppery brown to pale gray; body usually paired dorsolateral pale-bordered, darker blotches that may meet dorsally forming irregular bands. The upper surface of the head usually is a uniform pink-tan to pink-gray; the dark stripe extending from the eyes to the corners of the mouth, typical of most Latin American vipers, usually is indistinct or absent. Reportedly greatly feared by Amerindians in southern Colombia.

Habitat:
Most commonly found in Amazonian primary forests at elevations up to 500 meters; also seems to prefer humid, leaf-litter habitat.

Activity and behavioral patterns:
Nocturnal; can be aggressive and will strike if disturbed.

Venom's effects:
There is little specific data; venom is primarily hemotoxic and cytotoxic; bite can result in systemic internal bleeding and local tissue destruction.

Neotropical Rattlesnake

Description:
Adult length usually 1 to 1.8 meters; a relatively stout rattlesnake with a prominent spinal ridge along the body, most evident on the front part of the body. Both the background color and body pattern are extremely variable; however, in nearly all specimens, the frontmost dorsolateral dark (darker than the background color) blotches on the body are extended rearward into prominent stripes.

Habitat:
Primarily found in semiarid regions and drier openings in more humid environments. Not found in rainforest. Most often found at elevations of less than 700 meters, but has been found at elevations up to 1,000 meters in Costa Rica, 2,000 meters in Mexico and Colombia, 2,300 meters in Peru and 2,800 meters in Venezuela.

Activity and behavioral patterns:
Most active during twilight and early morning hours. Will move away from humans if allowed to do so, but it will assume a defensive coil and strike if cornered or startled. In the defensive posi-

tion, it will raise its head and front third of its body high off the ground, neck and head bent, and face its antagonist.

Venom's effects:

Reportedly the most dangerous snake in the region. Has both hemotoxic and neurotoxic components, varying among the subspecies. Primarily hemotoxic in Mexican and Central American races, the venom of South American species has myotoxic and neurotoxic components; bites have a relatively high fatality rate. Local tissue damage and swelling is minimal, but the myotoxic component causes extensive skeletal muscle necrosis.

Cotiara

No Photograph Available.

Description:

Adult length usually 0.7 to 1.0 meters; a moderately heavy-bodied snake. Background color usually tan to pale olive brown; body usually has a series of large pale-edged darker brown rounded trapezoidal to triangular blotches on either side of the midline dorsally, with a series of similar but smaller blotches laterally. Head usually has a dark brown spear-shaped marking on the upper surface.

Habitat:

Most common in humid, temperate Araucaria (monkey-puzzle) forest and associated savanna at elevations up to 1,800 meters.

Activity and behavioral patterns:

No specific data available.

Venom's effects:

There is little specific data. Venom is considered primarily hemotoxic and cytotoxic; bite can cause systemic internal bleeding and local tissue destruction.

Neuwied's Lancehead

Description:
Adult length usually 0.6 to 0.7 meter, maximum of 1.2 meters; a moderately slender snake. Background color and pattern are extremely variable, not only among the 12 recognized subspecies, but within individual populations. No general description could characterize this species.

Habitat:
Most commonly found in dry or semiarid, rocky regions at elevations up to 600 meters; some inhabit humid or marshy regions.

Activity and behavioral patterns:
Terrestrial. Can be aggressive and will defend itself.

Venom's effects:
Hemotoxic and cytotoxic; venom produces extensive tissue destruction. Necrosis can be expected in 10 to 15 percent and abscesses in 15-20 percent of all cases. Incoagulable blood and bleeding occur in majority of cases. A major cause of snakebite in southern South America.

Sao Paulo Lancehead

No Photograph Available.

Description:
Adult length usually 0.3 to 0.5 meter; a relatively stocky snake. Background color usually pale or dark brown with red, pink, or orange overtones; usually with a series of white-edged, dark, narrow, transversely oval blotches, narrowly separated both dorsally and

laterally. Top of head usually pale or dark brown with red, pink, or orange overtones; sides of snout usually white to very pale tan.

Habitat:
Primarily found in open fields and bushy areas at elevations up to 1,500 meters

Activity and behavioral patterns:
Terrestrial.

Venom's effects:
There is little specific data available. Snake is reportedly a primary cause of bites in its region. Venom is considered primarily hemotoxic and cytotoxic; bite can cause systemic internal bleeding and local tissue destruction.

Painted Coral Snake

No Photograph Available.

Description:
Adult length usually 0.5 to 0.7 meter. Head black, with a posterior yellow or white band that narrows strongly dorsally (may be incomplete). Body pattern of broad red rings separated by a series of moderately wide black rings narrowly bordered with white or yellow (rwbwr); some of the white/black/white rings may be incomplete.

Habitat:
Found in tropical deciduous and evergreen forest at low to intermediate elevations.

Activity and behavioral patterns:
No data; believed responsible for many coral snake bites in South America. Coral snakes are usually nonaggressive; most bites occur during attempts to capture the snake.

Venom's effects:
Coral snake venom is primarily neurotoxic.

South American Coral Snake

No Photograph Available.

Description:
Adult length usually 0.6 to 0.9 meter; maximum of 1.5 meters. Front of head black, with a narrow white ring in front of the eyes; remainder of head is red. Body pattern consists of moderately broad red rings separated by a series of three black and two white (or yellow) rings (rbwbwbr); the width of the black rings is quite variable, that of the white rings less so.

Habitat:
Most commonly found in savannas, forested areas, rocky regions, and lowland flood plains, including cleared areas and near human habitations. Also found at elevations up to 1,000 meters.

Activity and behavioral patterns:
Will bite if disturbed. Coral snakes are usually not aggressive; most bites occur during attempts to capture the snake.

Venom's effects:
Venom has strong neurotoxic activity with postsynaptic effect. Bites have caused human fatalities in Brazil and Colombia.

Southern Coral Snake

Description:
Adult length usually 0.7 to 0.9 meter; maximum of 1.4 meters. Head coloration variable, with considerable white pigment on the top of the snout. Body pattern usually consists of moderately broad red bands separated by a series of narrower three black and two white (or

yellowish) rings (rbwbwbr); the white and red rings often heavily stippled with black.

Habitat:
Found in lower montane wet forest, tropical and subtropical deciduous forest, and savannas, temperate forest, sandy or rocky areas, and secondary growth, such as pastures or farm lands; often found near swamps and streams. Most common in lowlands; has been found at elevations up to 1,350 meters.

Activity and behavioral patterns:
Quiet and mainly nocturnal; responsible for many coral snake bites in southern South America. Coral snakes are usually nonaggressive; most bites occur during attempts to capture the snake.

Venom's effects:
Primarily toxic; venom has myonecrotic toxins, and a neurotoxin with postsynaptic effect.

Urutu

Description:
Adult length usually 1-1.7 meters; a relatively heavy-bodied snake. Background color variable; may be brown, tan, or gray, sometimes with an olive cast. Body usually has a series of dark, C-shaped markings boldly outlined with paler scales.

Habitat:
Found primarily in low-lying swampy areas, river banks, marshes, and other humid habitats at elevations up to 700 meters. Also found in open fields and rocky areas of Argentina.

Activity and behavioral patterns:
Terrestrial; easily riled; it can be aggressive and will defend itself vigorously. Has an tendency to move close to civilized areas and the majority of bites occur near household areas or to field workers.

Venom's effects:
Primarily hemotoxic and cytotoxic; bite can cause systemic internal bleeding and local tissue destruction. A primary cause of snakebite throughout its region, most bites are to lower limbs. Although seldom fatal, bites often result in severe local damage.

Arthropods

Scorpions

Although scorpions in the region are capable of inflicting a painful sting, only the *tityus trivittatus* is capable of inflicting a life-threatening sting.

Insects

There is little specific information of medical importance regarding insects. However, nearly all countries have at least one species of moth having venomous/urticating hairs and/or whose larva (caterpillar) has venomous spines. Some caterpillars are very hairy (such as puss moths and flannel moths) and almost unrecognizable as caterpillars, with long silky hairs completely covering the shorter venomous spines. Others bear prominent clumps of still, venomous spines on an otherwise smooth body. Contact with these caterpillars can be very painful. Some are brightly colored.

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

Centipedes

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

Millipedes

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

Spiders

There are several spider species found in the region that are capable of inflicting a painful bite, including some very large and physically imposing tarantulas. The widow, recluse, and bola spiders are capable of inflicting a life-threatening bite.

Plants

Agave

Common Names:
Century plant, agave, maguey.

Mechanisms of toxicity:
American species are not edible; some contain saponins, oxalic acid, and others calcium oxalate crystals called raphides. Sap is irritating.

Comments:
Many species (family has 650 species of tropical and subtropical regions—widely cultivated, thick-stemmed plants with confusing, controversial taxonomy.) Leaves are long and narrow with spiny edges. Uses include cultured ornamentals, medicinals, food sources (cooked in tortillas; heart (bud) is edible, source of pulque (a fermented beverage) or mexal (a type of brandy), used as fiber source (papermaking).

Black Nightshade

Other names:
Deadly nightshade, common nightshade, horse nettle, bittersweet, Jerusalem cherry, nipple fruit, quena, wild tomato, apple of Sodom, white-edged nightshade.

Mechanisms of toxicity:
The fruit of the Jerusalem cherry is a black berry; the fully ripe berries are eaten; unripe berries contain solanine alkaloids, which can cause gastroeritis, weakness, circulatory depression. Can kill

Comments:
Approximately 2,000 species of herbs, vines, shrubs covered with small star-shaped hairs. Perfect white, yellow, or blue flowers. Berries have dry or juicy pulp and several seeds.

Bulb Yam

Other Name:
Air potato, wild yam.

Mechanisms of Toxicity:
Bulb yam, air potato, and wild yam have tubers that contain diosgenin, a steroidal saponin, the alkaloid dioscorine, and a norditerpene lactone (diosbulbine). They and some other yams are poisonous when eaten raw. Causes gastroenteritis (nausea, bloody diarrhea). Some individuals eat them after special preparation. Has been used to commit murder. Found mainly in the lowlands.

Comments:
A prickly climber with a cluster of tubers just below the soil surface. Considered the chief "famine-food" of the tropical East. Poisonous unless properly prepared. Other species of this genus are good to eat with no special preparation, such as goa yam and buck yam.

Cashew

Mechanisms of toxicity:
The red or yellow fruit has a shell that contains a brown, oily juice. Will blister skin on contact (oils used to mark up skin for tribal rituals), and on ingestion will cause severe gastroenteritis. Fumes resulting from the roasting process are irritating to eyes and face. Tar from the bark causes blistering and is used in poison arrows in Africa.

Comments:
The toxin is removed in a heating process before the nuts are released. Yellow-to-purple fruit is edible.

Castor Oil Plant

Other Name:
Castorbean

Mechanisms of toxicity:
Used to make a feed supplement; a lecithin, which is a highly toxic chemical, and some low-molecular weight glycoproteins with allerenic activity have resulted in serious poisoning. Factors making this a high-risk plant threat are its attractive nuts with a hazelnut-like taste; the highly toxic ricin present in high concentration (2-6 seeds can be fatal); and stability of ricin in the presence of

gastric enzymes. The seeds are used to make necklaces, requiring boring a hole through the seed, and breaking the otherwise impermeable coat, allowing the possibility of toxin to reach the skin and enter the body through minor abrasions. Poisoning becomes evident after several hours.

Comments:
The seeds of this ancient plant have been found in Egyptian graves dating as far back as 4000 B.C. Cultivated worldwide for 6,000 years for producing castor oil.

Cowitch Cherry

Mechanism of toxicity:
Genus is found in tropical America, especially in the Caribbean. Can be a tree or shrub, and sometimes has stinging hairs.

Comments:
With careful handling, many parts are cooked and eaten.

Croton

Other names:
Ciega-vista, purging croton.

Mechanisms of toxicity:
Long-lasting inflammation of the skin results from contact with the toxic resin. The laxative and purgative properties of the toxins (croton oil, a "phorbol," in leaves, stems, and

seeds) causes severe inflammation of the mucous membrane of the stomach and intestines, even death; 20 drops are 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:
Croton is a woolly-haired annual herb, or evergreen bush, or small tree with smooth ash-colored bark, yellow-green leaves, small flowers, fruit, and a three-seeded capsule. Ciega-vista is a 3-foot high bush found in the underbrush of arid areas. Small light green flowers, leaves, and stems are covered with nearly-white hairs.

Crownflower

Other Name:
Milkweed

Mechanisms of toxicity:
Sap has extremely irritant effect on the eyes; also causes an allergic type contact vesicant skin reaction. The active principles include calcium oxalate, a proteolytic enzyme, digitalis-like glycosides, and an unidentified allergen.

Comments:
Flowers are candied by Chinese in Java. Poisonings have resulted in death. In Africa, the plant has been used to make arrow poison, and the roots have been used as chew-sticks.

Dalechampia

No Photograph Available.

Mechanisms of toxicity:
Some species with stinging glands cause an irritant skin inflammation.

Comments:
A member of the Euphorbeacea family. Common in Mexico.

English Yew

Other names:
Ground hemlock, American yew, Japanese yew.

Mechanisms of toxicity:
Taxine A and B, classed as steroid alkaloids, are present in all plant parts except the aril. A single chewed seed is deadly. An hour after ingestion, nausea, dizziness, and abdominal pain begin. This is followed by reddening of the lips, dilatation of the pupils, shallow breathing, tachycardia, and coma. Then the pulse slows, blood pressure drops, and death occurs through respiratory paralysis. No proven treatment exists. Emptying the stomach hours after ingestion may be helpful as leaves may not pass through the GI tract expeditiously. Various clinical measures (circulatory stimulants, artificial respiration, cardiac pacemaker) have not prevented death in suicide cases.

Comments:
An evergreen shrub or small tree bearing a characteristic fleshy, red, sweet-tasting aril with a single green to black, partly exposed, hard-shelled seed within. In North America, the Japanese yew, the toxicity of which may exceed that of the English yew, has repeat-

edly caused fatal animal poisonings. Was once known as the "tree of death."

Guao

Mechanisms of toxicity:
Several species cause contact dermatitis. A member of the Anacardiaceae family with potential allergic manifestations similar to its relatives, marking nut tree, poison ivy, and cashew.

Comments:
Approximately 20 tropical American species of shrubs or small trees with long-leaf stems and few or no branches. Often the leaves are spiny and clustered at the ends of the branches; flowers are small and green.

Heliotrope

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

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

slowly over years. Chronic copper poisoning has occurred associated with this plant.

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

Indian Laurel

Other names:
Mastwood, domba oil, pinnay oil.

Mechanisms of toxicity:
Cream-colored, resinous sap irritating to the skin and eyes; globose fruit contains one large, poisonous seed. Sap is toxic. Leaves contain cyanide and a saponin.

Comments:
Erect, dense, low-branched tree having leathery smooth leaves (to 15 centimeters) and white flowers with 4 petals. Native to tropical Asia -- originally from India (a common shade tree in Malaysia) and the Pacific islands. Seeds are dispersed by bats and the sea.

Jaborandi Plant

No Photograph Available.

Mechanisms of toxicity:
Twenty-two tropical American species containing alkaloids (mainly pilocarpine), that cause miosis, increased salivation, diaphoresis, bronchospasm (increased airway resistance, bronchial smooth

muscle tone, and increased secretions), pulmonary edema, cardiovascular instability and increased intraocular pressure.

Comments:
None.

Jimsonweed

Other names:
Thorn-apple, stinkweed, Devil's trumpet.

Mechanisms of toxicity:
The entire plant is toxic because of tropane alkaloids. 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." Can kill. In particular, jimsonweed has a quickly fatal potential.

Mole Plant

Other names:
Caper spurge, Mexican fire plant, milkweed, red spurge, poison spurge, mala mujer, cypress spurge, cat's milk, wartwort, sun spurge, candelabra cactus, Indian spurge tree, milkwood, pencil tree, pencil cactus, rubber euphorbia.

Mechanisms of toxicity:
Herbs, often with colored or milky sap, containing complex terpenes; irritate the eyes, mouth, and gastrointestinal tract, and many cause skin inflammation by direct contact. In some cases rain water dripping from the plant will contain enough toxic principle to produce skin inflammation 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 having medicinal properties in the first century and has killed children. Red spurge causes skin inflammation. 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.

Nettle Tree

Other names:
Ortiga brava, pringamoza.

Mechanisms of toxicity:
Trees and shrubs with powerful stinging hairs. The intensity of sting delivered by these plants is species-variable. The bushy, tree-like varieties tend to be more irritating. Any contact between leaves or branches and skin can result in profound burn-

ing pain that can last for more than 24 hours. There is no permanent damage.

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

Oleander

Other name:
Rosebay.

Mechanism of toxicity:
All parts are extremely toxic (two cardiac glycosides have been identified). Quickly fatal potential; a single leaf can kill. Toxicity has occurred by cooking fish or meat on oleander branches or from eating honey made from oleander nectar. Symptoms include severe gastroenteritis beginning several hours after ingestion; petechaie occur in various organs. Eventually coma and digitalis-like toxic signs precede death.

Comments:
Ornamental, evergreen shrub native to Europe or Asia. Leaves are stiff or leathery and the funnel-shaped flowers are pink or white in clusters. Fruit are in pods about 15 centimeters long.

Peppertree

Other names:
Peruvian mastic tree, Brazilian peppertree, Christmas berry, Florida Holly, broadleafed peppertree.

Mechanisms of toxicity:
All parts contain urushiol triterpene. Volatile resin on skin or in eyes as a result of simply cutting branches has caused severe skin inflammation, facial swelling, and keratoconjunctivitis. Used for medicinal purposes and as an additive in pepper. Very strong gastrointestinal irritant.

Comments:
Used in many medicinal decoctions and as treatment for skin disorders (e.g. warts). Many children have been poisoned from eating the fruits.

Panama Tree

Other names:
Castano, tartargum.

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

Comments:
There are 200 tropical species.

Physic Nut

Other names:
Purging nut, pinon, tempate, Barbados nut.

Mechanisms of toxicity:
Quickly fatal potential. Fruit has two or three black, oily, pleasant tasting, poisonous seeds (also toxic roots and leaves) containing a plant lecithin (a toxalbumin called curcin) which, in contrast to many of the toxic lecithins, causes toxicity rapidly (has caused death — severe toxicity can follow ingestion of a single seed); also has intensely cathartic oils (some have used the oil for lamps, etc.); has caused fatal intoxication. Bark has been used as a fish poison. Also a skin irritant (hairs), as are all euphorbs.

Comments:
170 species of warm and tropical northern American trees or shrubs, usually with red flowers. Naturalized worldwide. Fruit is a three-sided capsule in many species.

Pigeonberry

Other name:
Golden dewdrop.

Mechanisms of toxicity:
Underground parts contain dioscorine (an alkaloid), diosgenin (a steroidal saponin), diosbulbine (a diterpene lactone). Berries and leaves have a saponin that causes sleepiness, fever, and seizures; child deaths have been recorded. Skin inflammation can result through handling.

Comments:
Tree or shrub with many yellow to orange globular juicy fruits with few seeds. Small flowers are light blue or white. Native to tropical America. Grown as an ornamental shrub in tropical and subtropical areas.

Poison Hemlock

Other names:
Spotted hemlock, fool's parsley

Mechanisms of toxicity:
Quickly fatal potential. The leaves and unripe fruits have the piperide alkaloids coniine and coniceine with highest concentrations in the seeds and roots. Drying of the plant results in decreased toxicity. One mouthful of the root has caused death after a period of nervousness (within 30 minutes), nausea and vomiting, diarrhea, and respiratory failure.

Comments:
A biennial herb that resembles a carrot; smooth, spotted stems; foul odor. Naturalized in waste and marshy areas; native in temperate Eurasia. C. chaerophyllum appears to be an unspotted version of the former; noted in South Africa.

Pokeweed

Other names:
Pokeberry, poke salet.

Mechanisms of toxicity:
Mature stems, roots, and berries are poison (sa-

ponins mostly in foliage and roots). Death possible when not prepared properly.

Comments:
Young shoot tips, less than 6 inches, are eaten in many cultures, including Canada; requires proper preparation (boiled with water changes; water contains toxic substances — kills snails that carry bilharzia). Dye from berries used to color ink, wine, sweets.

Popcorn Tree

Other names:
Chinese tallow tree; hinchahuevos

Mechanisms of toxicity:
The latex is poison and has been used as arrow poison in Central America; causes contact dermatitis. Unripe berries can cause nausea and vomiting.

Comments:
Native to China and Japan but cultivated widely in warm areas. The fruit is a 3-lobed capsule that falls away, leaving white seeds.

Scarlet Wisteria

Other names:
Corkwood tree, bagpod, purple sesbane, false poinciana, rattlebush

Mechanisms of toxicity:
All parts are poisonous; most poisonings due to use in herbal teas. Causes Budd-Chiari syndrome. Seeds contain saponins. Up to 24 hours after

ingestion, nausea and vomiting occur, with abdominal pain, abnormal accumulation of serous fluid in the abdominal cavity, abnormal enlargement of the spleen, severe diarrhea, hemolysis (red blood cell destruction), respiratory failure, and death.

Comments:
Deciduous shrub or small tree with drooping, red-orange flowers in axillary clusters; June-September. Fruit is a legume with partitions between seeds. Native to South America.

Rattlepod

Other names:
Rattlebox, rattleweed, chillagoe, horse poison.

Mechanisms of toxicity:
Contains pyrrolizidine alkaloids (monocrotaline, heliotrine, retrosine); 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 dehiscent legumes (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.

Shanshi

Mechanisms of toxicity:
Contains a number of alkaloids. Causes hallucinogenic effects due to glycosides that have not yet been identified. Has caused death.

Comments:
This is a group of deciduous shrubs or small trees with red, yellow, or purple/black berry-like fruit. Has five one-seeded nutlets. Bark used for tanning, crushed fruit as a fly poison. Used in folk remedies.

Spurge Laurel

Other names:
February daphne, merezon, mezereon.

Mechanisms of toxicity:
Bark, leaves, and fruit contain toxic agents called diterpene alcohols and coumarin glycosides. Has a yellow dye (umbelliferone), mallic acid, oil wax, gum, and mezerein resin. Entire 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 (extract used by beggars to induce skin lesions to arouse pity).

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

Strychnine

Other names:
Nuxvomica tree, Snakewood tree

Mechanisms of toxicity:
The entire plant, including the seeds, contains the powerfully acting indole alkaloid strychnine, which can kill.

Comments:
Genus of 190 different species of trees, shrubs and vines with berry-like fruits, found in most tropical regions. Some have the reputation of having edible fruit despite dangerous seeds. It is a source of curare obtained by stripping and macerating its bark. Curare, now used as a muscle relaxant, was formerly used as an arrow poison by South American Indians.

Tapioca

Other names:
Manioc, cassava, yuca

Mechanisms of toxicity:
Several varieties contain a toxin that breaks down in heat. Bitter or sweet casava cannot be distinguished other than by taste. Bitter casava is poisonous when

eaten raw. Cooking (with several changes of water) eliminates the toxic principle (requires special preparation).

Comments:
Genus includes almost 100 species (trees, shrubs, and herbs) of tropical and warm Americas; some varieties are very important as a food source. Same subfamily as Croton. Shrubby tree 3-5 feet high. Widely cultivated. Large tuberous roots rich in starch.

Trumpet Plant

Other name:
Chalice vine.

Mechanisms of toxicity:
The entire plant is toxic with tropane alkaloids.

Comments:
Climbing or erect woody vines with large showy yellow or cream-yellow flowers in a trumpet shape. Fruit is a fleshy elongated berry. Source of sacred hallucinogens in Mexico.

Yellow Oleander

Other names:
Peruviana, lucky nut, be-still tree.

Mechanisms of toxicity:
Contains cardiac glycosides in all parts; seeds have particularly high concentrations. Signs and symptoms of toxicity be-

gin with numbness and burning in the mouth, dry throat, dilated pupils, abdominal pain, nausea, vomiting, diarrhea, slow irregular heartbeat, hypertension, seizures, coma and death. The sap can cause skin and eye irritation.

Comments:

A shrub, usually 1 meter tall, or sometimes a small tree up to 10 meters. Native to tropical America but has been imported as an ornamental to tropical and sub-tropical regions. Its leaves and flowers resemble those of nerium oleander, except peruviana flowers are yellow with a pink tinge, as opposed to nerium, which are white, pink and cream. Seeds have been used in India to murder.

APPENDIX J:
INTERNATIONAL TELEPHONE CODES

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

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

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