Indonesia Country Handbook

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

2. This product is published under the auspices of the U.S. Department of Defense Intelligence Production Program (DoDIPP) with the Marine Corps Intelligence Activity designated as the community coordinator for the Country Handbook Program. This product reflects the coordinated U.S. Defense Intelligence Community position on Indonesia.

3. Dissemination and use of this publication is restricted to official military and government personnel from the United States of America, United Kingdom, Canada, Australia, NATO member countries, and other countries as required and designated for support of coalition operations.

Contents

Appendices

List of Illustrations


INDONESIA
National capital
Provincial capital
Secondary city
International border
Primary road
0 200 400 600 km
0 200 400 mi
YANGON (Rangoon)
BURMA
THAILAND
Nakhon Ratchathani
BANGKOK
LAOS
CAMBODIA
PHNOM PENH
VIETNAM
Da Nang
Qui Nhon
Cam Ranh
Ho Chi Minh City
Mekong
Andaman Sea
Gulf of Thailand
South China Sea
Philippine Sea
MANILLA
PHILIPPINES
Luzon
Mindoro
Legazpi
Samar
Panay
Iloilo
Bacolod
Cebu
Negros
Butuan
Palawan
Sulu Sea
Zamboanga
Davao
Mindanao
Palau Islands
Federated States of Micronesia
Pacific Ocean
Celebes Sea
Nakhon Si Thammarat
Phuket
Kota Baharu
Banda Aceh
George Town
MALAYSIA
Strait of Malacca
Medan
KUALA LUMPUR
SINGAPORE
Simeulue
Nias
Dumai
Pekanbaru
Padang
Rengat
Jambi
Belinyu
Siberut
Sumatra
Palembang
Bangka
Belitung
Lubuklinggau
Bengkulu
Toboali
Tanjungkarang-Telukbetung
Kandawangan
Banjarmasin
Greater Sunda Islands
Java Sea
JAKARTA
Selat Sunda
Indian Ocean
Bandung
Semarang
Java
Yogyakarta
Madura
Surabaya
Banyuwangi
Denpasar
Lombok
Mataram
Sumbawa
Raba
Flores
Larantuka
Labuhanbajo
Lady Balat
Waingapu
Sumba
Lesser Sunda Islands
Christmas Island (Austl.)
Ashmore and Cartier Islands (Austl.)
AUSTRALIA
Darwin
Timor
Timor Sea
Arafura Sea
Banda Sea
Ceram
Buru
Ambon
Moluccas
Kepulauan Sula
Kepulauan Tanimbar
Kepulauan Aru
New Guinea
Irian Jaya
Jayapura
Sarmi
Sorong
Manado
Kolamobagu
Ternate
Halmahera
Luwuk
Palu
Kepulauan Sula
Sulawesi
Kolonodale
Malili
Kendari
Kolaka
Majene
Ujungpandang
Makassar Strait
Borneo
Kalimantan
Pontianak
Sintang
Samarinda
Palangkaraya
Paloh
Kuching
Sibu
Bintulu
Kudat
Kota Kinabalu
Sandakan
BANDAR SERI BEGAWAN
BRUNEI
Melalap
Natuna Besar
MALAYSIA
10
0
10
100
110
120
130
140

Country Map

KEY FACTS

Conventional Name (long form): Republic of Indonesia
Conventional Name (short form): Indonesia
Local Name (long form): Republik Indonesia
Local Name (short form): Indonesia

Flag: Red horizontal stripe above a white stripe; adopted in 1949.

National Anthem: *Indonesian Raya* (Greater Indonesia)

Emblem: The Garuda, a mythical golden eagle. Its shield symbolizes the ideological foundation of the state, Pancasila, a formulation of five principles, stressing belief in one God, humanitarianism, national unity, democracy, and social justice.

Head of State: President Susilo Bambang Yudhoyono (since 2004)

Capital: Jakarta

Population: 238,452,900 (July 2004 est)

Time Zones: Spans three time zones:
UTC (formerly GMT) +7: Java, West and Central Kalimantan, Madura, and Sumatra
UTC +8: Bali, Flores, South and East Kalimantan, Lombok, Sulawesi, Sumba, Sumbawa, and Timor
UTC +9: Irian Jaya, Kai, Moluccas, and Tanimbar

National Flag and Emblem

Languages: Bahasa Indonesia (official, modified form of Malay), English, Dutch, local dialects (most common is Javanese)

Currency: Indonesian Rupiah (Rp); 100 send = 1 Rupiah. Coins are in denominations of 500, 100, 50 and 25. Notes are in denominations of 50,000, 20,000, 20,000, 5,000, 500 and 100.
Conversion: 8,996.46 IDR=US$1 (Nov 2004)

U.S. MISSION

U.S. Embassy

Address: U.S. Chancery (Jakarta)
Jalan Medan Merdaka Selatan 3-5
FPO AP 96520-8135, Jakarta, Indonesia 10110

Hours: 0730-1600 (Monday to Friday)
Telephone: (62-021) 34435-9000
Fax: (62) (21) 386-2259
Website: http://www.usembassyjakarta.org

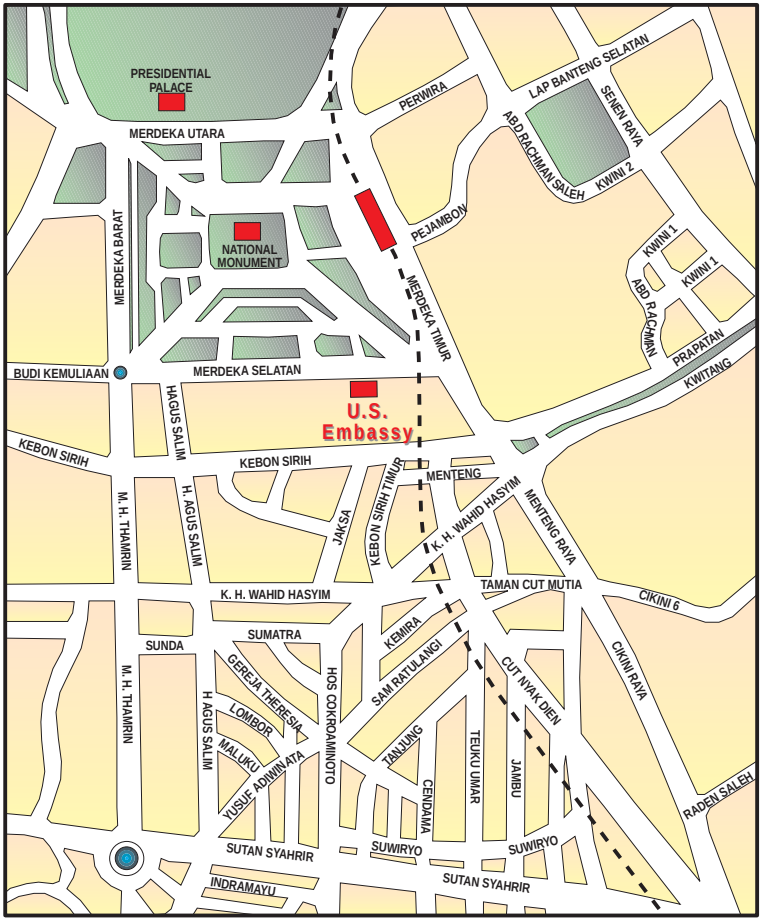
U.S. Consulate, Surabaya

Address: U.S. Consular Agency
Jalan Raya Drive, Sutomo 33
FPO AP 9620-0002,
Surabaya East Java, Indonesia 60264
Telephone:(62)(31) 567-2287/8
Fax: (62) (31) 568-2287

U.S. Consulate, Bali

Address: U.S. Consular Agency
Jalan Hayam Wuruk 188, Denpasar
Bali, Indonesia 80235, FPO AP 96534-2900

Telephone: (62-361) 233-605
Fax: (62) (31) 222-426



Location of U.S. Embassy, Jakarta

Entry Requirements

Passport and Visa Requirements

A passport valid for 6 months and an onward/return ticket are required. All American visitors to Indonesia must obtain a visa, either through the Indonesian Embassy in Washington, DC or at the airport upon arrival.

Location of U.S. Consulate, Surabaya

Visitors may be granted a 3-day visa for US$3 or a 30-day visa for US$25. Both are non-extendable; departing travelers must remain outside the country for at least 2 weeks before they can return. Indonesia strictly enforces its immigration/visa requirements. Several Westerners, including Americans, have been jailed or fined for visa violations. For up-to-date information, contact the Embassy of the Republic of Indonesia: 2020 Massachusetts Ave., NW, Washington, DC 20036; (202) 775-5200; internet www.embassyofindonesia.org.

Customs Restrictions

Indonesian customs authorities have strict regulations concerning temporary importing or export from Indonesia of items such as prescription medicines and foreign material or videotapes. Americans are encouraged to contact the Embassy of Indonesia in Washington or one of Indonesia's consulates in the United States for specific information about customs requirements. Transactions involving counterfeit and pirated goods are illegal; bringing these goods back to the United States may result in forfeitures and/or fines.

GEOGRAPHY AND CLIMATE

Geography

Land Statistics

The Republic of Indonesia is the world's largest archipelago, stretching from just north of Australia in the South Pacific Ocean to the southwest of Malaysia in the Indian Ocean.

The Indonesian Islands are divided into four major groups:

- The larger islands compose the first group, known as the greater Sunda complex: Sumatra, Java, Borneo, and Sulawesi.
- The second group lies east of Java from Bali to Timor, known as the Lesser Sunda Islands.

- The third group contains the Maluku Islands between Sulawesi and the Lesser Sunda Islands.
- The fourth group is Irian Jaya, the western part of the islands of New Guinea.

Border Disputes

Indonesia and East Timor disagree over the sovereignty of the uninhabited coral island of Palau Batek/Fatu Sinai. Such disagreement has prevented any final delineation of Indonesia's southern maritime border. The International Court of Justice awarded the Sipadan and Ligitan islands to Malaysia in 2002, prompting Indonesia to establish a presence on its smaller outer islands.

Southeast Asia

Topography

Indonesia's a total land area exceeds 1,826,400 square kilometers (705,170 square miles) on 13,667 islands, and is about three times the size of Texas. Of the 6,000 inhabited islands, five (Sumatra, Java, the Kalimantan portion of Borneo Island, Sulawesi, and the Irian Jaya portion of New Guinea Island) account for 90 percent of the land area.

Most islands consist of rugged volcanic mountains covered by dense tropical forests. With more than 100 active volcanoes, the islands from Sumatra through the Lesser Sundaes are the world's most volcanically active region and are subject to numerous earthquakes. Peak elevations exceed 3,800 meters (12,470 feet) on Sumatra; and 5,000 meters (16,400 feet) on Irian Jaya.

Much of the land area in eastern Sumatra, southern Kalimantan, and Irian Jaya consists of swamps and plains. The predominant terrain features include coastal lowlands near the shoreline with a dramatic increase in topographic elevation occurring in the larger islands with mountains. The terrain is highly varied, with mountain peaks reaching up to 15,000 feet on some of the larger islands.

Landscape

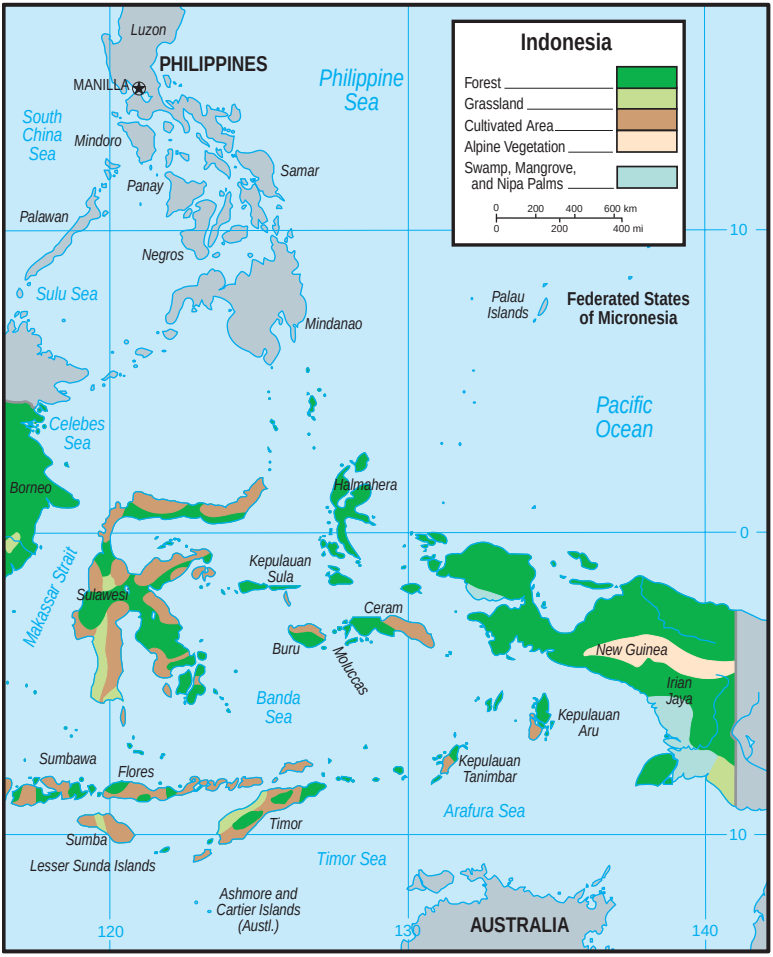
Indonesia is also heavily forested and contains many rivers and swamps. Triple canopy jungle can be found from sea level to an

Western Indonesia Topography

altitude of 3,000 feet. Above 3,000 feet the jungle begins to give way to scrub brush.

Eastern Indonesia Topography

Western Indonesia Vegetation



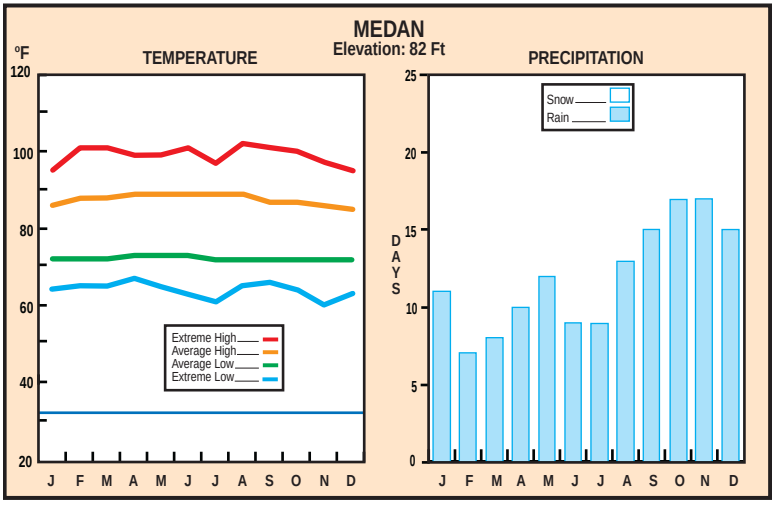
Eastern Indonesia Vegetation

Climate

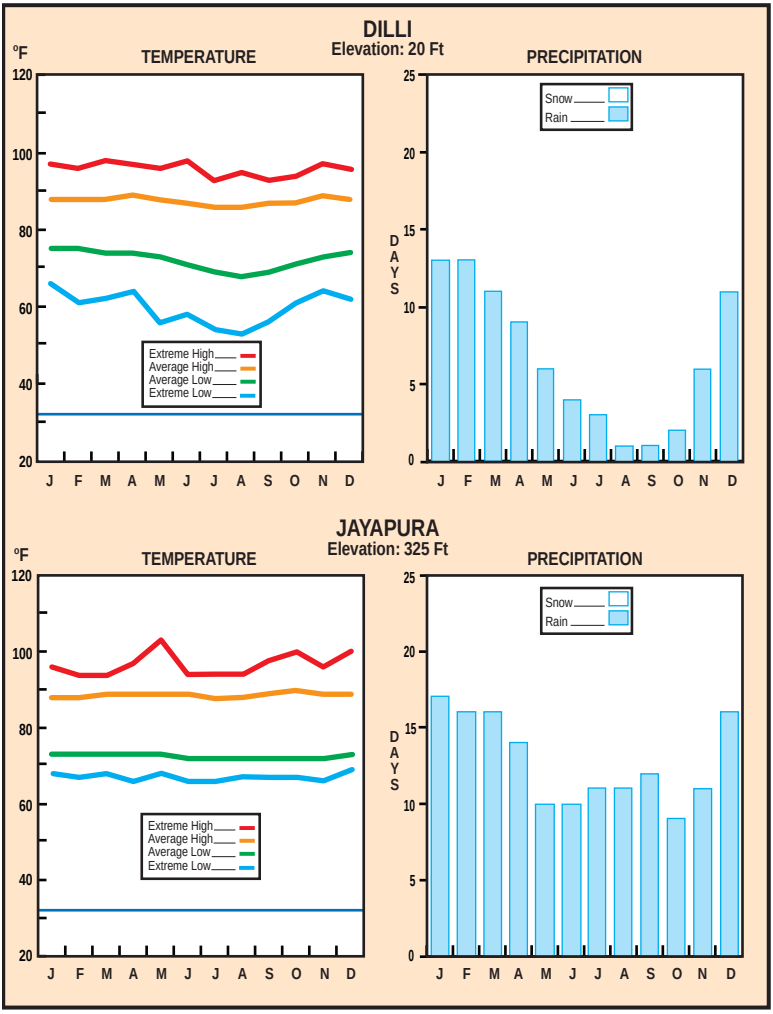
Indonesia lies along the equatorial zone, making it one of the few countries with little to no seasonal changes in weather. In general, the islands in the west tend to be lush and well watered, while those east of Bali tend to be drier. High temperatures and humidity are common.

Virtually the entire archipelago receives some rainfall, although frequency and amounts vary greatly. This is due to three factors: the monsoon seasons (which alternate from winter to summer), the altitude, and the orientation of particular islands to the prevailing winds.

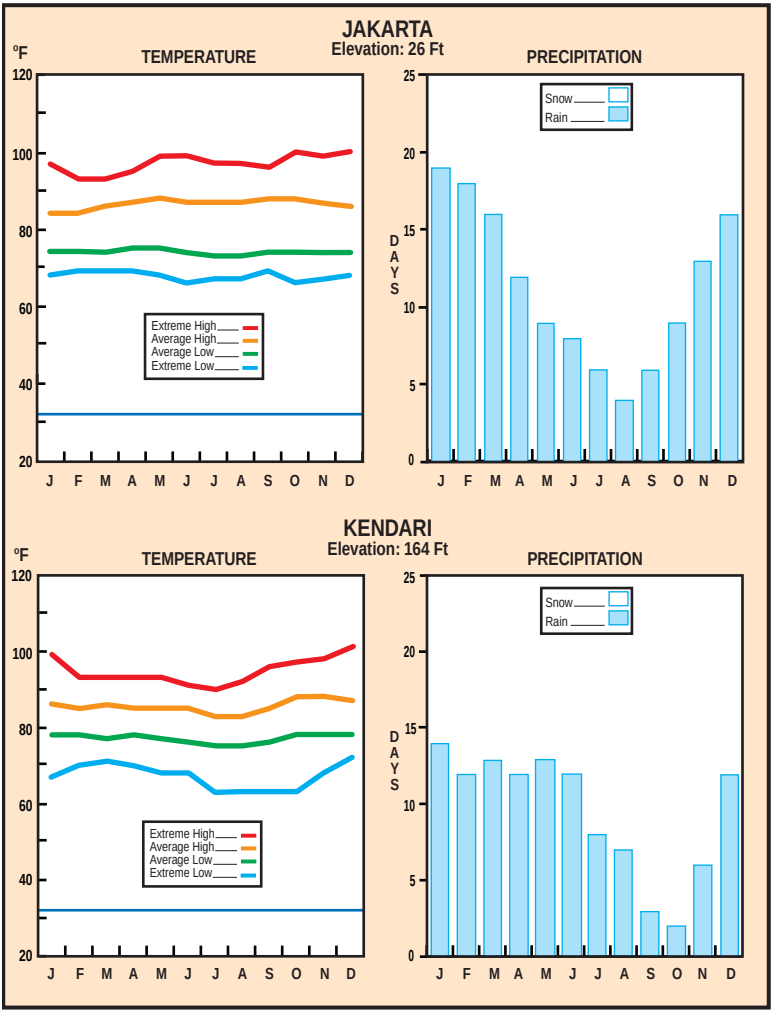
Indonesia's wet season occurs from November through March, and its dry season extends from April through October. Annual rainfall averages 1,020 to 1,980 millimeters (40 to 78 inches). Extensive cloudiness, precipitation, and the uniformly high temperatures and humidity



Medan Weather



Dilli and Jayapura Weather



Jakarta and Kendari Weather

characterize Indonesia's tropical monsoon climate. In lowland areas, mean daily temperatures vary from 21° C to 32° C (70° F to 90° F), with a relative humidity of 80 to 90 percent. Temperatures below freezing occur at elevations above 3,000 meters (9,800 feet). The mountains on Irian Jaya receive snow. Wildfires are also a persistent threat in the expansive jungles.

Environment

Indonesia has rich petroleum and natural gas reserves. Metals include gold, silver, tin, nickel, and copper. Other natural resources include coal, bauxite, timber, and marine resources. The tropical climate, coupled with rich fertile soil, is ideal for agriculture, but rainfall varies greatly, heavily impacting overall agricultural capability. There is excellent, though relatively undeveloped, hydroelectric potential.

TRANSPORTATION AND COMMUNICATION

Transportation

Roads

Road travel is the most important form of travel for both passengers and freight and is given priority for government transportation expenditures. Indonesia has approximately 342,700 kilometers of highway (158,670 kilometers are paved, 184,030 kilometers unpaved). Java has the most capable road network, followed by Sumatra. On most smaller and more rural islands, roads are generally unimproved.

In general, traffic in Indonesia is congested and chaotic. Vehicular traffic far exceeds the capacity of existing roadways. Conditions vary from good (toll roads and major city roads) to dangerously poor, especially in rural areas. Taxi and bus service is available in large cities. The taxi drivers are required to use meters. The safety of public transportation is poor. Traveling on roadways at night is considered extremely hazardous.

Western Indonesia Transportation Network

Eastern Indonesia Transportation Network

Rail

Trains are used mostly for passenger transportation; however, freight hauling has significantly increased since the 1980s. Passenger trains are unclean and overcrowded by U.S. standards. There are railways on Java, Madura, and Sumatra, totaling 6,458 kilometers (4,014 miles), of which 5,961 kilometers are 1.067-m narrow gauge, 497 kilometers are 0.750-m gauge, and 125 kilometers (78 miles) are electrified (2003). The Jakarta Kota, Gambir, and Pasar Senen train stations serve routes to major destinations throughout Java including Surabaya, Yogyakarta, and Solo. Air-conditioned sleeper trains are available for overnight trips.

Air

The major Sukarno-Hatta International Airport in Cengkareng Subdistrict, West Jakarta (Jakarta Barat), opened in 1985.

International Airport	**Location**
Franz Kaisepot	Irian Jaya
Ngurah Rai	Denpasar (Bali)
Polonia	Medan (North Sumatra)
Juanda	near Surabaya (East Java)
Sam Ratulangi	Manado (North Celebes)
Hasanuddin	Ujung Pandang (South Celebes)

As of 2003, Indonesia had 661 airports, of which 154 were paved and 507 were unpaved. Domestic services link the major cities; international services are provided by the state airline, PT Garuda Indonesia, by its subsidiary, PT Merpati Nusantara Airlines and numerous foreign airlines.

Maritime

Because Indonesia is a nation of islands, maritime commerce and transportation are of great importance. Indonesia depends on its many ports for the import and export of goods. Indonesia's major ports are Cilacap,

Boat Arriving In Port

Cirebon, Jakarta, Kupang, Palembang, Ujungpandang, Semarang, and Surabaya. Within Indonesia, the use of the inland waterways is often the only practical means of transportation and commerce at the regional level. There are 21,579 kilometers of waterways spanning the major islands of the archipelago.

Summation of inland waterways:

Waterway	Kilometers	Waterway	Kilometers
Kalimantan	10,000	Java and Madura	820
Sumatra	5,471	Celebes	241
Irian Jaya	4,587		

Communication

Telephone

Early investment in satellite communications has allowed Indonesia to develop a modern, sophisticated telecommunications network. There are approximately 8 million main telephone lines in use, and more than 12 million cellular phone users. Domestic communication assets include an inter-island microwave system, HF radio police net, and domestic satellite communications systems. International assets include two Intelsat satellite earth stations (one Indian Ocean and one Pacific Ocean).

Radio and Television

Indonesia has a history of state controlled media; however, the media has enjoyed greater freedoms since the late 1990s . There are more than 31.5 million radios and 13.75 million televisions in Indonesia. The television market has expanded to include at least 10 commercial networks, plus several province-owned stations that compete with state-owned Televisi Republik Indonesia.

Private radio stations carry their own news bulletins and foreign programming. The radio dial is crowded, with some 60 stations on the air in Jakarta alone. More than 2,000 television and radio stations operate illegally (without official government licenses).

Internet

Internet use is on the rise, with hundreds of Internet cafes located throughout the country. In 2004 there were more than 10 million Internet subscribers, more than 62,000 Internet hosts, and 24 Internet service providers. The country internet code is .id.

Newspapers and Magazines

Since 2000, there has been a relative increase in freedom of the press. In addition to Antara, Indonesia's national newspaper, Indonesia has the following newspapers: The Jakarta Post (English-language), Kompas (mass-circulation daily), and Pos Kota (mass-circulation daily).

Postal Service

Postal services, including air mail, are reliable and convenient throughout Indonesia.

CULTURE

Indonesia has more than 100 distinct ethnic groups and 300 different languages. These ethnic groups have their own customs, system of values,

and religious beliefs. A little less than half of the Indonesian population is ethnically Javanese, living mostly in the islands of Java, Madura, and part of Sumatra. Javanese dominance, particularly in government administration, has often led to resentment by other ethnic groups.

To outsiders, people will identify themselves first as Indonesians and second as members of a particular ethnic group. The national motto is Bhinneka Tunggal Ika, meaning "they are many, they are one" or "unity in diversity." Through mass education and cultural campaigns — all conveyed through the national language, Bahasa Indonesia — most of the population identifies proudly with the nation, flag, and language, although certain, century-long ethnic conflicts affect relationships in parts of the archipelago, such as Sulawesi and Aceh.

The basis of the Indonesian nationalism is *Pancasila* (pronounced panch-sila). This philosophy was adopted during the war for independence in the mid-1940s, and emphasizes belief in *Kebangsaan* (nationalism), *Kemanusiaan* (humanism or internationalism), *Kerakyatan* (representative government or democracy), *Keadilan Sosial* (social justice), and *Ketuhanan*

Bali Village

(monotheism). These five principles are represented on the shield on the breast of the *Garuda Pancasila* (Eagle of Pancasila), which is the Indonesian national coat of arms. In order, they are represented by images of a banyan tree, a chain, a bull's head, rice and cotton, and a star. These principles are based on the concept of *gotong royong* (working together). These principles and concepts, and their representative images are in widespread use throughout Indonesian society, on government and private publications, advertising, in the media and in the arts.

Society

People

The population distribution is unbalanced in that approximately one-third of Indonesians live in urban areas. Java and Madura islands are by far the most populous of the islands or island groupings. This imbalance has led to a government policy of forced transmigration of Javanese to other areas. The six most populous cities (with more than a million inhabitants) are: Jakarta (8.8 million); Surabaya (3.0 million); Bandung

Jakarta Skyline

(2.5 million plus an additional 3 million in the surrounding area); Medan (2.5 million); Semarang (1.4 million); and Palembang (1.55 million).

Ethnic breakdown is as follows:

Javanese	45%	Madurese	7.5%
Other	26%	Coastal Malays	7.5%
Sundanese	14%		

Education and Literacy Rates

Primary education is provided by the state and is compulsory up to age 12. Private elementary and high schools (both Muslim and Christian) are also available.

Government universities prepare students for highly sought civil service careers; however, students must first endure a rigorous and competitive examination process before they are allowed to attend. Only about 1.6 percent of Indonesian youth attend colleges and universities. Vocational education is available; however, vocational schools are considered less prestigious than academically oriented colleges and universities.

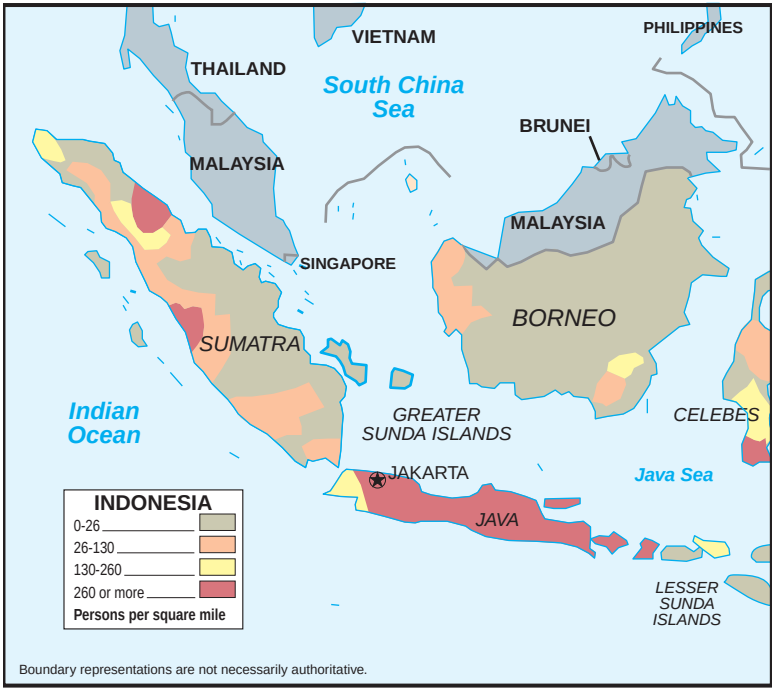
The literacy rate in Indonesia is estimated at 87 percent of the total population. Approximately 92.5 percent of males and 83.4 percent of females can read and write.

Language

Bahasa Indonesian is the official language. Similar to Malay, it also contains many words from other Indonesian languages and dialects, as well as from Dutch, English, Arabic, and Sanskrit. More than half the population use it as a secondary language. English is widely used in industry and commerce.

Religion

Even though Indonesia has the largest population of Muslims in the world, it is a secular state. In the past, freedom of religion was guaranteed, but only as long as religious groups remained apolitical. The dom-

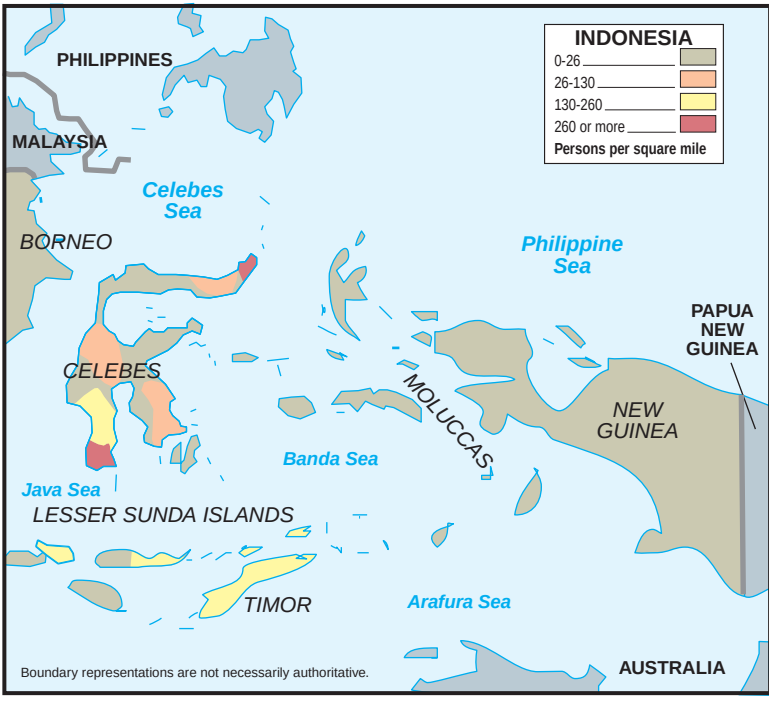


Western Indonesia Population

inant religious groups in Indonesia are Muslims (88 percent), Hindus (2 percent), Protestants (5 percent), Roman Catholics (3 percent), and Buddhists (1 percent). The dominant religious groups have blended traditional religious teachings with regional customs, rituals, and beliefs.

Islam

Islam is the dominant religion in Indonesia, with 210 million followers, or 88 percent of the population. Despite this fact, Indonesia is not an Islamic country; most Indonesians are offended when Indonesia is referred to as the largest Islamic country.



Eastern Indonesia Population

A large portion of the rural Muslims in Indonesia can be classified as *abangan*, or blending Islam with past tribal or religious practices. Blending Islam, the Hindu-Buddhist tradition, and animism, *abangan* Islam manifests little concern with religious doctrine and stresses more the aspect of ritual and mysticism, along with a high tolerance of outside influences. Religious practice is centered on the observation of rituals as a means to prevent possible harm by the supernatural and to preserve cosmic harmony.

Christianity

Although Christianity — Roman Catholicism and Protestantism — was the most rapidly growing religion in Indonesia in the 1980s, its numbers are still small compared to Islam. Most Christians in Indonesia are Protestants, with particularly large concentrations in Sumatra Utara, Irian Jaya, Maluku, Kalimantan Tengah, Sulawesi Tengah, and Sulawesi Utara. Catholic congregations grew less rapidly than Protestant in the 1980s, in part because of the church's heavy reliance on European missionaries. These Europeans experienced increasing restrictions on their missionary activities imposed by the Muslim-dominated Department of Religious Affairs.

Hinduism

Like Islam and Buddhism, Hinduism was greatly modified when adapted to Indonesian society. The caste system, although present in form, was never rigidly applied. The Hindu religious epics, the *Mahabharata* (Great Battle of the Descendants of Bharata) and the *Ramayana* (The Travels of Rama), became enduring traditions among Indonesian believers. These epics are expressed in shadow puppet and dance performances throughout the country. The largest concentration of Hindu believers is on the island of Bali, where adherents make up 93 percent of the population.

Customs and Courtesies

Indonesians maintain a range of customs due to the country's multi-ethnic composition, the variety of cultural/societal groups, and their varying degrees of religious observation. Generally, Indonesian society can be divided into four broad categories: rural, tribal, coastal, and urban.

Most Indonesians (70 percent) are rural. These Indonesians are the most traditional, living in large peasant communities that rely on agriculture and farming for subsistence. Members of this category look to, and are influenced by, the gentry or townspeople.

Rural Villagers

Tribal Indonesians vary in culture. They are characterized by geographic isolation, which separates them from outside influences. Members are most influenced by tribal leaders and family members.

Coastal Indonesians—such as those on Sumatra and Kalimantan; the Javanese of north-central Java; and the Makasarese and the Buginses of Sulawesi—exhibit common cultural features, most notably, an appreciation of commerce and trade. They were most influenced by their exposure to foreigners engaged in the spice trade (14th-18th century). Such exposure brought new ideas, new religions, and new values to the coastal Indonesians.

Urban Indonesians have been heavily influenced by the West, from which they adopted much of their dress and behavior.

Greetings

A handshake is the most common gesture of greeting, with the addition of a slight bow. Specific greetings and other customs depend on ethnicity and age group. While various languages are used for greeting, English is considered acceptable.

Gestures

While Indonesians frequently touch those with whom they are speaking, casual public touching (holding hands) among those of different sexes is inappropriate. Giving or receiving things with the left hand is considered offensive, as is opening a door with the left hand on the handle. Great respect is shown to high-ranking or elderly persons by using both hands to give something to them. Placing hands on one's hips or crossing one's arms over the chest is considered rude and aggressive. Similarly, it is considered offensive to point at a person or object with the fingers; the whole hand should be used. In Javanese culture, lower-ranking persons should not have their heads above their seniors, and will sometimes incline their heads slightly or hunch their shoulders as a sign of respect.

Touching another person's head is impolite. When crossing one's legs, one knee rests upon the other; the ankle should not be placed over the knee as it is impolite for the bottom of the foot to point at a person. Also, feet are not to be used to move objects. A slight bow when entering, leaving or passing a group of people demonstrates courtesy.

Visiting

Visitors are expected to be punctual to meetings and other events. Compliments are appreciated by hosts, but will be politely denied for modesty's sake. Shoes are removed in religious buildings. Most families also require shoes to be removed before entering the home. When visiting religious facilities during rituals or ceremonies, it is best to ask permission to enter, and to avoid stepping in front of worshippers. In mosques, women may be restricted to designated areas. Some Hindu temples require all visitors to wear a temple sash.

Dress

Dress is typically conservative. Shorts are rarely worn by the middle and upper classes. Women rarely show their legs or shoulders. The more devout Muslims and Hindus wear head coverings.

Certain colors symbolize support for rival political factions, especially red, green and yellow. Green, red, white and black also carry religious connotations. Indonesians take these links seriously and, during elections, will paint and re-paint buildings in support of a particular party. Wearing these colors may be interpreted as party or religious support, as can the use of such colors in publications, media, posters and flyers.

MEDICAL ASSESSMENT

Disease Risks to Deployed Personnel

Indonesia has been assessed as High Risk for infectious diseases. Without force health protection measures, mission effectiveness will be seriously jeopardized.

The following is a summary of the infectious disease risks in Indonesia. Risk varies greatly depending on location, individual exposures, and other factors. Serious diseases may not be recognized or reported due to lack of surveillance and diagnostic capability.

Food- and Water-borne 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. Diarrheal diseases can be expected to temporarily incapacitate a high percentage of personnel within days if local food, water, or ice is consumed. For those not vaccinated, hepatitis A and typhoid fever can cause prolonged illness in a smaller number (1 to 10 percent per month). Viral gastroenteritis (e.g.,

Norovirus) and food poisoning (e.g., Bacillus cereus, Clostridium perfringens, Staphylococcus) may cause significant outbreaks.

Consumption of unpasteurized dairy products or raw animal products increases the risk of diseases such as brucellosis and Q fever.

Vector-borne Diseases

The climate and ecological habitat support large populations of arthropod vectors, particularly mosquitoes. Significant disease transmission is sustained year-round and countrywide. Dengue fever and malaria are the major vector-borne risks in Indonesia, capable of debilitating a high percentage (potentially 11-50 percent per month in the absence of countermeasures) of personnel for a week or more.

Chikungunya, a virus spread by Aedes species of mosquito, may cause rare cases, but could result in attack rates as high as 50 percent per month (in the absence of countermeasures) during epidemics and periods of peak transmission; chikungunya can also debilitate affected personnel for a week or more.

A few cases (less than 1 percent of personnel per month) of symptomatic Japanese encephalitis could occur. Other vector-borne diseases occur at low or unknown levels, and as a group may constitute a serious risk comparable to that of malaria.

Sexually Transmitted Diseases

Gonorrhea, chlamydia, and other infections may affect a high percentage of personnel who have sexual contact, particularly among prostitutes. Some personnel (less than 1 percent per month) having unprotected sexual contact could become infected with hepatitis B (if not vaccinated). Rare cases of HIV could occur among personnel having unprotected sexual contact. Heterosexual contact is the predominant mode of HIV transmission. Though the immediate 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 dis-

eases, are common among prostitutes, and may cause symptomatic infection in personnel having unprotected sexual contact.

Water-contact Diseases

Operations or activities that involve extensive freshwater contact (lakes, rivers, streams, or other surface water) may result in personnel being temporarily debilitated with leptospirosis and schistosomiasis in some locations. In addition, bodies of surface water are likely to be contaminated with human and animal waste. Activities such as wading or swimming may result in exposure 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

Annual incidence of active tuberculosis in 2002 was estimated at 256 per 100,000 (compared to the U.S. rate of approximately 6 per 100,000). Prolonged contact with the local population may result in conversion rates to tuberculosis skin testing (TST/PPD screening) that may be elevated over U.S. military baseline.

In addition, deployed U.S. forces may be exposed to a variety of common respiratory infections in the local population. These include influenza, pertussis, viral upper respiratory infections, viral and bacterial pneumonia, and others. U.S. military populations living in close-quarter conditions are at risk for substantial person-to-person spread of respiratory pathogens.

Animal-contact Diseases

Rabies risk is assessed as well above that in the United States. While records are incomplete, approximately 100 human fatalities are reported annually. Human infection is usually associated with direct animal contact (bites or scratches); bats or wild carnivores should be regarded as rabid unless proven otherwise.

Medical Capabilities

The Ministry of Health and Social Welfare (MOHSW) regulates civilian health care throughout Indonesia's 6,000 widely dispersed inhabited islands. The quality and availability of health care facilities are generally below Western standards. Fees usually are expected to be paid before leaving the hospital. Visitors, expatriates, and affluent Indonesians prefer facilities in Australia or Singapore for medical treatment. Most private and leading public hospitals with specialist services are located in Jakarta or other urban districts of Java.

Religious, ethnic, and separatist issues have resulted in shortages of vital medical supplies and trained medical personnel. Fear for safety has prevented the delivery of medical supplies and caused many health personnel to flee conflict areas. Casualties resulting from the conflicts are unlikely to receive adequate health care.

Indonesia does not have a functioning emergency management system. A limited emergency response capability, supported by 24-hour emergency rooms, ambulances, and helipads at major hospitals, is available only in urban areas. Except for some basic paramedic and emergency-equipped vehicles that are available in main urban and tourist districts, ambulance services are rudimentary or nonexistent. Where available, the telephone number for emergency services is 118.

Care is provided through a system of public, semi-public, and private facilities. Indonesia's 27 provinces are divided into districts which, in turn, are divided into sub-districts. Each sub-district has at least one health center headed by a physician, and is usually supported by two or three sub-centers, the majority of which are headed by nurses. Most health centers are equipped with four-wheel drive vehicles or motorboats to serve as mobile health units and provide services to underserved populations in urban and remote locations. General hospitals serve as referral points for patients in the health centers or sub-centers.

Bahasa Indonesia is the official national language, but there are more than 250 recognized languages spoken by as many distinct ethnic groups. English is the most widely used foreign language for business and tourism. Many physicians have obtained portions of their education abroad and speak English.

Generic pharmaceuticals are readily available, and the quality of domestically produced pharmaceuticals is satisfactory. Access to more expensive, imported medications is limited to private facilities in Bali and Jakarta. Difficulty may be encountered in translating use and dosage labels and package inserts.

The Indonesian Red Cross supplies blood products throughout most of the country, but there is a lack of refrigerators and skilled technicians, particularly in rural areas. Routine blood testing for hepatitis C and venereal disease is not practiced countrywide, and there is no guarantee of a cold chain.

Key Medical Facilities

Sanglah General Hospital

Coordinates:	083900S 1151300E
Location:	Jalan Diponegoro, Denpasar 80114, Bali
Telephone:	62-361-227911 through 15
Type:	Government
Capabilities:	**Medical** – general medicine, cardiology, pediatrics, radiology; **Surgical** – anesthesiology, general surgery, neurology, OB/GYN; **Ancillary** – ambulance, burn unit, emergency services, trauma unit, ICU, laboratory, pharmacy, x-ray, CT scan, ultrasound.
Comments:	Largest and the main provincial public hospital in Bali. Has a hyperbaric chamber.

Dr. Soetomo Hospital

Coordinates:	071601S 1124526
Location:	Jalan Mayjen Prof. Dr. Moestopo 6-8, Surabaya (adjacent to the National Airlangga University)

Telephone: 40-061, 44-093, 44-069
Type: Government
Capabilities: **Medical** – general medicine, cardiology, dentistry, pediatrics, radiology; **Surgical** – general surgery, anesthesiology, OB/GYN orthopedics, ophthalmology; **Ancillary** – ICU, laboratory, blood bank, emergency room.
Comments: Training facility for the National Airlangga University.

Gatot Subroto Armed Forces Medical Center

Coordinates: 061035S 1065015E
Location: Jalan Dr. A. Rahman Saleh 24, Jakarta (Java)
Telephone: 351-8562, 350-1317
Type: Military, 1,060 beds
Capabilities: **Medical** – general medicine; **Surgical** – general surgery, orthopedic surgery; **Ancillary** – blood bank, burn unit, emergency room, helipad, ICU, laboratory, operating room, pharmacy, x-ray
Comments: Emergency services are limited but are the best in the country. Services provided to military, dependents, and VIPs; they also treat civilians for a fee.

HISTORY

Indonesia's earliest inhabitants probably came from southern India or Burma, with other migrants arriving from China and Indochina beginning around 3000 BC. Until the 16th century, the various islands were ruled by mainly Hindu and Buddhist kings; Islam arrived in the 13th century, and over the next 200 years, swept through most of the archipelago (Bali remained Hindu). British, Spanish and Portuguese explorers came in the 16th and 17th centuries, but it was the Dutch East India Company that became the dominant colonial power, gaining control of Java and the Moluccas in the 17th and 18th centuries and establishing a

spice monopoly. After the spice company was nationalized in 1799, the Dutch gradually took over most of Indonesia.

Nationalist movements began to appear in the early 20th century, the most significant of which were the Indonesian Communist Party and the Indonesian Nationalist Party (PNI, founded in 1927). With Indonesia under Japanese occupation from 1942 to 1945, the independence movement gathered strength. Sukarno, the PNI's leader who had earlier been exiled by the Dutch, declared the Republic of Indonesia in August 1945. In 1949 Indonesia, under the supervision of the United Nations, received its full independence.

Ahmed Sukarno (a former independence movement leader) became Indonesia's first president. Under Sukarno, Indonesian forces conducted a campaign of terrorism, insurgency, sabotage and information warfare against the Federation of Malaysia (present day Malaysia and Singapore). This campaign, known as the Konfrontasi, lasted until a coup unseated Sukarno and replaced him with the former Armed Forces Chief of Staff, General Suharto, who established authoritarian rule over Indonesia from 1967 to 1998.

Dutch Colonial Headquarters in Old Batavia

Under Suharto's rule, Indonesians experienced an increase in the standard of living, however, Suharto often used his position to enrich himself and his family. Suharto also restricted the freedom of speech and expression, often crushing political opponents with violence and oppression. From 1997 to 1998, the Asian economic crisis led to economic upheaval. On 21 May 1998, widespread rioting and protests led to Suharto's resignation. After 32 years in power, Suharto handed the presidency to his vice president, BJ Habibie.

Habibie began the reform process by releasing many political prisoners and promising to hold democratic elections by the end of 1999; however most Indonesian's remained suspicious of Habibie's ties to the former president. Such suspicions eventually led to Habibie's removal from office. Abdurrahman Wahid was then elected president.

Ethnic conflict and separatist violence escalated under Wahid's rule. In 1999, East Timor held a UN-supervised referendum, and won its independence from Indonesia. In 2001, the parliament removed Wahid from power (based on allegations of corruption and incompetence), making Vice President Megawati Sukarnoputri the new president of Indonesia. Megawati remained in office until 2004, when she was defeated in Indonesia's first direct presidential elections by General Suslio Bambang Yudhoyono. Since taking office, Yudhoyono has demonstrated a commitment to several goals including: economic recovery; preserving the unity of the archipelago (despite ethnic and religious tensions); defeating terrorism and insurgency; and enacting democratic reforms (including removing the political influence traditionally held by military officials).

Chronology of Key Events

Date	Event
1670-1900	Dutch colonists bring Indonesia under one government as the Dutch East Indies
1942	Japan invades Dutch East Indies
1945	Japan helps independence leader Ahmed Sukarno return from internal exile to declare independence

1949	The Dutch recognize Indonesian independence after 4 years of guerrilla warfare.
1950s	Maluku (Moluccas) declares independence from Indonesia and fights an unsuccessful separatist war.
1962	The Dutch agree to transfer West Papua to Indonesia after a period of UN administration.
1965	Hundreds of thousands of suspected Communists are killed in the aftermath of a failed coup when a purge of leftists descends into vigilantism
1966	Sukarno hands over emergency powers to General Suharto, who becomes president in March 1967
1969	West Papua, formally incorporated into Indonesia, becomes Irian Jaya Province
1975	Portugal grants East Timor independence
1976	Indonesia invades and incorporates East Timor
1997	Asian economic crisis begins; rupiah plummets in value
1998	Widespread protests and rioting lead to fall of Suharto; BJ Habibie becomes president.
1999	Ethnic violence breaks out in Maluku. Free elections are held in Indonesia. East Timor votes for independence in UN-sponsored referendum, after which anti-independence militia go on the rampage. East Timor comes under UN administration. Abdurrahman Wahid (Gus Dur) becomes president.
2001	Parliament dismisses President Wahid over allegations of corruption and incompetence. Vice-President Megawati Sukarnoputri is sworn in as his replacement.
Feb 2002	East Timor, Indonesia sign agreements to ease relations before East Timor becomes fully independent in May.
Oct 2002	Bomb attack on the Kuta Beach nightclub district on Bali kills 202 people, mostly tourists. Another explodes near the U.S. consulate in Sanur near Kuta: no injuries. Muslim Cleric Abu Bakar Ba'asyir (a senior leader with Jemaah Islamiah, the group thought to be behind the Bali bombing) is arrested and accused of plotting to overthrow the government.

2004	Nation holds its first direct presidential elections (July); second round of presidential elections (September) - victory for former general Susilo Bambang Yudhoyono

GOVERNMENT AND POLITICS

Government

Indonesia is governed by a constitution drawn in 1945 and based on five principles: monotheism, humanitarianism, national unity, representative democracy by consensus, and social justice. These principles are embodied in the state ideology, Pancasila (a Sanskrit term originally referring to a Buddhist code of ethics). The constitution also provides for six principal organs of state: the People's Consultative Assembly (MPR); the presidency and vice-presidency; the House of People's Representatives (DPR, the lower house); the Supreme Advisory Council (DPA); the State Audit Board (BPK); and the Supreme Court. Under Suharto's rule these institutions were subordinate to the presidency, the country's highest executive office. A governor heads each of the 32 provinces. Each governor represents the central government in his province, and is responsible to the president through the Minister of Home Affairs.

National Level

Executive

The president, elected for a 5-year term, is the dominant government and political figure. A committee set up during the 1999 general session of the MPR made substantial amendments to the chapters of the constitution dealing with the powers of the presidency, including limiting a president's tenure to two, 5-year terms and reducing the president's legislative powers. All new laws now have to be approved by the DPR, although the president retains the right to select the cabinet (in consultation with the DPR). Further constitutional amendments, passed at the 2002 annual session of the MPR, paved the way for the

president and vice-president to be elected by popular vote in 2004. Previously, the MPR selected Indonesia's president.

Legislative

The MPR used to consist of a 500-strong DPR (including 38 non-elected members of the military and police forces) and 200 regional and interest group representatives. With the post-2004 election changes, it now comprises a 550-seat DPR, with no appointments from the security forces, and the DPD (consisting of 128 directly elected regional representatives). Elections to the DPR and DPD are to be held every 5 years. Elected seats are contested under a complicated system of proportional representation, which gives a disproportionately large number of seats to Indonesia's outer islands.

The DPD's formal powers are limited. It cannot pass or veto legislation, but can only propose bills to the DPR, discuss the bills and then monitor their implementation if they are passed. Furthermore, these roles are limited to legislation on specific topics related to the regions.

Judiciary

The Supreme Court (or Mahkamah Agung) consists of justices appointed by the president from a list of candidates approved by the legislature. A separate Constitutional Court was created by the president on 16 August 2003. In March 2004, the Supreme Court assumed administrative and financial responsibility for the lower court system from the Ministry of Justice and Human Rights.

Military Influence

The Indonesian military (TNI) has been under intense pressure to end its political role. Although it no longer has parliamentary representation, it retains a powerful influence over the government and currently holds four important posts in the cabinet. The need for tighter security (in the wake of the Bali bombings) and the assault launched on separatist insurgents in the province of Aceh in May 2003 have bolstered the military's political leverage.

At the end of September 2004 a revised military bill was passed, requiring the TNI to cease its involvement in business activity within 5 years. Also, military officers must now resign from the armed forces before taking civilian government positions. The original bill, largely drafted from TNI inputs, sought to increase the military's power and influence. However, the bill that passed represented a setback for the military. Although the withdrawal of the TNI involvement in Indonesia's business affairs will be economically beneficial, the government will have to supplant the TNI's operational funding, at a cost of 1 to 3 percent of the nation's GDP.

Local Level

Indonesia is divided into 32 provinces. Three are special territories; namely, the Capital, Jakarta, the special territories of Yogyakarta, and Aceh. Each province is administered by a governor.

Key Government Officials (2004)

President	Susilo Bambang Yudhoyono
Vice President	Yusuf Kalla
Minister of Home Affairs	Mochammad Ma'ruf
Minister of Foreign Affairs	Noer Hassan Wirajuda
Minister of Defense	Juwono Sudarsono
Minister of Law and Human Rights	Hamid Awaludin
Ambassador to the United States	Soemadi Moerdjono Brotodiningrat
Ambassador to the UN	Rezlan Izhar Jeni

Politics

Elections

The president and vice-president are elected by direct vote of the citizenry. The number of seats won in the DPR does not always follow the number of votes received by parties, as the percentage of seats in the DPR is balanced with regard to provincial populations.


INDONESIA
National capital
Provincial capital
International border
Province border
0 200 400 600 km
0 200 400 mi
YANGON (Rangoon)
BURMA
THAILAND
LAOS
VIETNAM
CAMBODIA
PHNOM PENH
BANGKOK
Andaman Sea
Gulf of Thailand
Mekong
South China Sea
PHILIPPINES
MANILLA
Philippine Sea
Sulu Sea
Celebes Sea
Federated States of Micronesia
Pacific Ocean
Banda Aceh
Aceh
Medan
Sumatera Utara
MALAYSIA
KUALA LUMPUR
SINGAPORE
Riau
Pekanbaru
Padang
Sumatera Barat
Jambi
Palembang
Sumatera Selatan
Bengkulu
Tanjungkarang-Telukbetung
Lampung
Selat Sunda
Indian Ocean
JAKARTA
Jawa Barat
Bandung
Jawa Tengah
Semarang
Yogyakarta
Yagyakarta
Jawa Timur
Surabaya
Bali
Denpasar
Nusa Tenggara Barat
Mataram
Nusa Tenggara Timur
Kupang
Dili
Timor Timur
Timor Sea
Arafura Sea
AUSTRALIA
BANDAR SERI BEGAWAN
BRUNEI
MALAYSIA
Kalimantan Barat
Pontianak
Kalimantan Tengah
Palangkaraya
Kalimantan Timur
Samarinda
Kalimantan Selatan
Banjarmasin
Java Sea
Makassar Strait
Sulawesi Utara
Manado
Sulawesi Tengah
Palu
Sulawesi Selatan
Ujungpandang
Sulawesi Tenggara
Kendari
Banda Sea
Maluku
Ambon
Jayapura
Irian Jaya
10
0
10
100
110
120
130
140

Provinces

Voting

All Indonesians 18 years or older may vote, as can married citizens, regardless of age.

Parties and Pressure Groups

On 10 July 2003, the Indonesian Parliament passed the Law on the Structure and Composition of State Institutions, the last of four political laws responding to constitutional amendments of 2002. The law details the membership and leadership structure, as well as the powers, privileges and obligations of each of Indonesia's legislative bodies.

The changes have altered the political landscape, creating a more powerful lower house and greater opportunities for party formation and political involvement. These developments have greatly increased the level of political debate within the community, but have also led to greater activism on the part of radical groups. Political parties are very influential in Indonesian politics. Coalitions are often formed (and broken) based on political, rather than ideological objectives. The primary political parties are as follows:

- Crescent Moon and Star Party (PBB)
- Democratic Party (PD)
- Functional Groups (or Golkar)
- Indonesia Democratic Party-Struggle (PDI-P)
- National Awakening Party (PKB)
- National Mandate Party (PAN)
- Prosperous Justice Party (PKS)
- United Development Party (PPP)

Foreign Relations

Since independence, Indonesia has espoused a "free and active" foreign policy, which emphasizes limited regional engagement, while avoiding conflict with major powers. A strong sense of nationalism, and the

belief that Indonesia has the potential to be a regional leader, guides Indonesia's relations with the rest of the world.

United States

The United States severed all military links with the Indonesian armed forces (TNI) following the 1999 violence in East Timor. Refusal by Indonesian authorities to cooperate in an investigation into the murder of two U.S. teachers killed in Papua (August 2002) has been another source of tension. While Indonesia has expressed support for the U.S.-led Global War on Terror, its objections to U.S. actions in Iraq have created a rift in U.S.-Indonesian relations. Despite such tensions, overall relations between the United States and Indonesia are generally favorable (although fragile).

Australia

Australia has been Indonesia's closet Western ally. Strong economic and military ties have created the foundation for a strong relationship. Australia's leadership of the UN East Timor Peace-Keeping Force (which facilitated East Timor's independence from Indonesia in 1999) created resentment that continues to plague bi-lateral relations. Other sensitive issues include Australia's support for the U.S.- led War in Iraq, and the treatment of refugees using Indonesia as a base for entry into Australia. However, cooperation on the investigation into the Bali bombing (2002), demonstrate that both governments appear committed to maintaining amicable relations despite current disputes.

Malaysia and Singapore

As regional competitors, Malaysia, Singapore, and Indonesia have historically distrusted one another. However, regional organizations (such as ASEAN) have encouraged bi-lateral cooperation regarding anti-money laundering, counter-terrorism, and maritime security/anti-piracy efforts.

China

China is considered a good neighbor and a major economic partner. The Chinese minority in Indonesia creates the basis of the business community. Maritime disputes are only a minor source of tension.

ECONOMY

Indonesia faces economic development problems stemming from recent acts of terrorism, unequal resource distribution, endemic corruption, lack of reliable legal recourse in contract disputes, a weak banking system, and a generally poor climate for foreign investment. Indonesia withdrew from its IMF program at the end of 2003, but remains committed to the government to the fundamentally sound macroeconomic policies previously established under IMF guidelines. Investors, however, are hampered by microeconomic problems and an inadequate judicial system.

Resources

Natural resources form the backbone of Indonesia's subsistence and formal economies. Millions depend on subsistence farming, fishing, and cash-crop cultivation. The country also has vast oceanic resources. Large industrial concerns have interests in the plantation sector and in the country's once vast forests, which have been decimated by commercial logging since the 1970s. Rich deposits of oil, gas, coal, tin, copper, nickel, bauxite, gold, silver and iron sands, kaolin, marble, granite, limestone and pumice are the mainstay of the mining and quarry sector.

Statistics

GDP:	US$758.8 billion
GDP Growth Rate:	4.1%
GDP per Capita:	US$3,200
Inflation Rate:	6.6%
Budget Revenues:	US$40.91 billion

Expenditures:	US$44.95 billion, incl. capital expends.
Exports:	US$63.89 billion
Commodities:	Oil and gas, electrical appliances, plywood, textiles, rubber
Partners:	Japan 22.3%, U.S. 12.1%, Singapore 8.9%, South Korea 7.1%, China 6.2%
Imports:	US$40.22 billion
Commodities:	Machinery and equipment, chemicals, fuels, foodstuffs
Partners:	Japan 13%, Singapore 12.8%, China 9.1%, U.S. 8.3%, Thailand 5.2%, Australia 5.1%, South Korea 4.7%, Saudi Arabia 4.6%
External Debt:	US$135.7 billion
Industries:	Petroleum and natural gas, textiles, apparel, footwear, mining, cement, chemical fertilizers, plywood, food, rubber, tourism
Agriculture products: (accounts for 16.6% of GDP)	Rice, cassava, peanuts, rubber, cocoa, coffee, palm oil, copra, other tropical products, poultry, beef, pork, eggs
Labor Force:	Agriculture/Fishing: 45% Industry: 16% Services: 39%

Petroleum

Indonesia, the only Asian member of the Organization of Petroleum Exporting Countries (OPEC), ranks 17th among oil producers, with about 1.8 percent of world production. Crude and condensate output averaged 1.01 million barrels per day in 2003. In the 2002, the oil and gas sector, including refining, contributed US$12.1 billion or 21.2 percent of total export earnings and about 25 percent of government revenues, a greater

percentage than recent years due to high world oil prices. U.S. companies have invested heavily in the petroleum sector. Limited refining capacity

Western Indonesia Industry

and growing domestic demand for petroleum fuels forced Indonesia to become a net importer in 2003. Indonesia ranks sixth in world gas

Eastern Indonesia Industry

production, is still the top exporter of liquefied natural gas (LNG). In 2003, Indonesian imports of crude oil and petroleum products totaled US$7.5 billion while Indonesian exports of crude oil and oil products, natural gas, and LNG totaled US$13.6 billion.

Agriculture

Rice is an Indonesia staple. When rice is not available, cassava is substituted. Corn, soybeans, and peanuts are also primary consumer crops; agricultural products include poultry and meat (sheep, goats, and pigs), although the Muslim population does not eat pork. Fish is a significant source of protein, but is not always readily available to the average Indonesian citizen.

Tourism

Tourism is becoming increasingly important as a source of employment. Since 1986, the tourist industry has grown sharply. The government is involved in attracting more tourists. However, recent terrorist attacks and sporadic killings and kidnappings have kept tourists away.

Indonesian Farmers

THREAT

Crime

The criminal threat for Indonesia is assessed as high. Petty crimes, such as pocket picking and theft, occur in popular tourist areas throughout the country. Credit card fraud and robberies are a growing concern. U.S. personnel should safeguard their passports and credit cards. A common criminal technique is to puncture automobile tires so that the occupants can be robbed while changing the tire. Additionally, American citizens are advised to keep doors and windows rolled up on their vehicles due to the potential for theft of items in the car. Americans in Jakarta and Surabaya are advised against hailing a taxi from the street, but should call a taxi company or wait for one at a major hotel queue.

Penalties for breaking the law can be more severe in Indonesia than for the same offenses in the United States. Those who violate the law, even unknowingly, may be expelled, arrested, or imprisoned.

Violence

In recent years, U.S. service members have been beaten severely by groups of Indonesian males for interacting with Indonesian females. Service members need to be aware of how they interact with Indonesian females, as the appearance of inappropriate behavior can incite violence among Indonesian men. Their customs and values differ from those in the United States and acceptable behavior by Western standards can be offensive to the Indonesian people.

Drug Trafficking

U.S. personnel should expect to be offered illicit drugs in Bali. Drugs such as hashish and ecstasy are readily available in Surabaya. Penalties for possession, use, or trafficking illegal drugs in Indonesia are strict. Convicted offenders can expect jail terms and heavy fines. The death

sentence can be given for drug trafficking. Even possessing small amounts of marijuana can lead to prison sentences longer than 4 years.

Travel Security

The Department of State recommends that Americans defer all non-essential travel to Indonesia. Americans, who chose to travel to Indonesia are urged to observe vigilant personal precautions and to remain aware of continued potential for terrorist attacks against Americans.

There is strong anti-U.S. sentiment in Indonesia in the wake of the war against Iraq. The country is 88 percent Muslim, and most of the population is against the war. There is potential for violence and terrorist actions against U.S. citizens and interests throughout the country. Several Muslim extremist groups are in Thailand and they have demonstrated the ability to carry out attacks.

Various extremist groups have been known to attack nightspots, bars and places of entertainment. Over the past 3 years, domestically targeted bombings have struck religious, political, and business targets. In 2003, the Jakarta international airport, an open-air concert at the northern tip of Sumatra known as Aceh, and other Indonesian government facilities were bombed.

Americans should avoid travel to Aceh. The government of Indonesia downgraded the region from a State of Military Emergency to a State of Civil Emergency in May 2004. However, fighting between government forces and *Gerakin Aceh Merdeka* (Free Aceh Movement [GAM]) continues. Indonesia restricts travel by foreigners to Aceh; a foreigner was killed and another wounded by security forces in 2004.

Americans considering travel to the provinces of Papua, located in the western half of the island of New Guinea, and West Timor, a region that comprises the western half of Timor and forms a part of the Indonesian province of Nusa Tenggara Timor, should exercise extreme caution because of sectarian, ethnic, communal and separatist strife.

Travel to Maluku, located in Eastern Indonesia and encompassing approximately 1,000 islands, and in particular the capital city of Ambon, should be avoided due to sectarian violence that has killed at least 40 and injured more than 200 people since April 2004.

Travel should also be avoided to Central, South and Southeast Sulawesi, in the Indonesian archipelago, due to sporadic sectarian violence.

Terrorism

The international terrorist group Jemaah Islamiyah (JI) poses the largest threat to U.S. personnel in South East Asia and has conducted numerous attacks against Western targets in Indonesia. JI has ties to the al Qa'ida organization and maintains a presence throughout Southeast Asia, including Indonesia. JI is believed to be responsible for an attack at a nightclub frequented by Westerners in Bali in October 2002. JI has also been implicated for an attack against the Marriott Hotel in Jakarta in 2003 and, most recently, in the attack of the Australian Embassy in Jakarta in September 2004. Areas where Americans or Westerners live, congregate, shop or visit, including hotels, clubs, restaurants, and shopping centers will continue to be targets for terrorists groups. U.S. government travelers are encouraged to avoid hotels that are typically used by Westerners. Indications of plans for future attacks against U.S. personnel and Westerners by JI and other extremist groups continue to be substantiated. Credible information suggesting that the JI is planning an attack in Indonesia has surfaced recently. One possible target is a Hilton Hotel, although specific information about which Hilton is unclear. An attack could also be directed against any location known to be frequented by foreigners.

The Philippines-based terrorist group Abu Sayyaf Group (ASG) has carried out kidnappings in Malaysia and in the Philippines and the potential exists for them to carry out kidnapping operations in areas close to the Philippines, such as the outlying islands of North Sulawesi, and the border regions of Kalimantan. The ASG is known for their kidnapping for ransom activities, targeting wealthy foreigners vacationing at resorts.

Indigenous Terrorism Threat

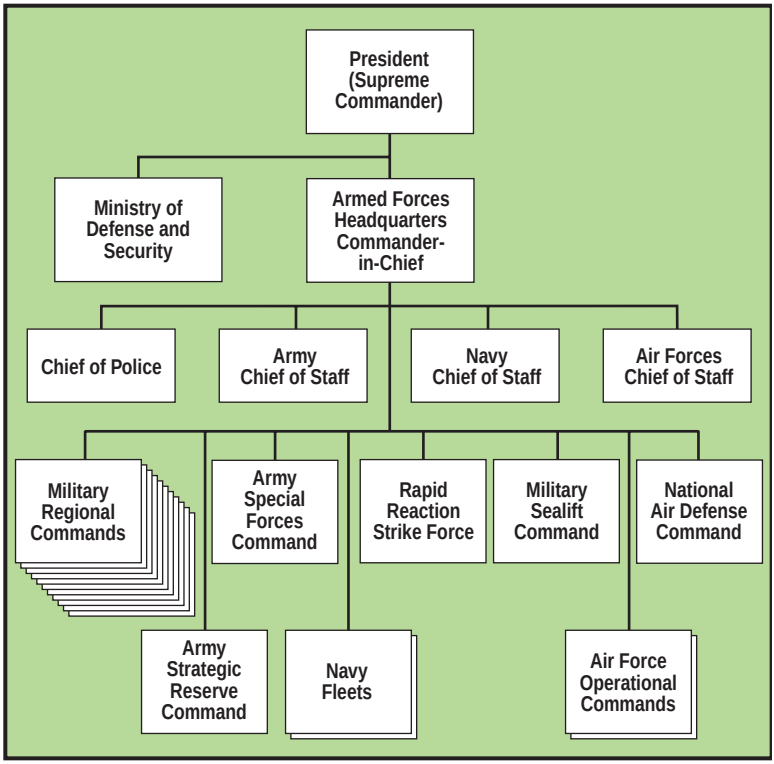
GAM, a Muslim separatist group, operates in the northern region of Sumatra, in Aceh. GAM has been known to engage in piracy along the Straits of Malacca, mainly targeting commercial vessels. Twelve nautical miles surrounding Aceh have been closed to foreign shipping by the Indonesian authorities. GAM has also conducted low-level insurgency activity against the Indonesian Government. GAM is suspected to have carried out the bombing at Jakarta's international airport in April 2003 and the bombing of an open-air New Year celebration in Aceh.

ARMED FORCES

Organization and Capability

Indonesia's armed forces (*Tentara Nasional Indonesia*, or TNI, formerly ABRI) total about 350,000 members, including the army, navy, marines, and air force. The army is by far the largest, with about 280,000 active-duty personnel. Defense spending in the national budget is only 1.8% of GDP but is supplemented by revenue from many military businesses and foundations. Centralized control of the military is accomplished through the Minister of Defense and Security, the Commander of the Armed Forces, and an armed forces general staff.

During the 30-year Suharto era of authoritarian rule under the New Order system of the ABRI wielded considerable political influence. Since 1999, however, the relationship between the government and the military has been the subject of scrutiny and reform by fits and starts. The impact of political reforms on the TNI has been to redefine its role in society. In April 1999, the *dwi-fungsi* (dual function) concept used to validate military involvement in all aspects of the state was formally rescinded. Also revoked was the guaranteed appointment of TNI and Indonesia Police (POLRI) representatives to the People's Consultative Assembly (MPR), with the last appointees vacating politics when the new government was



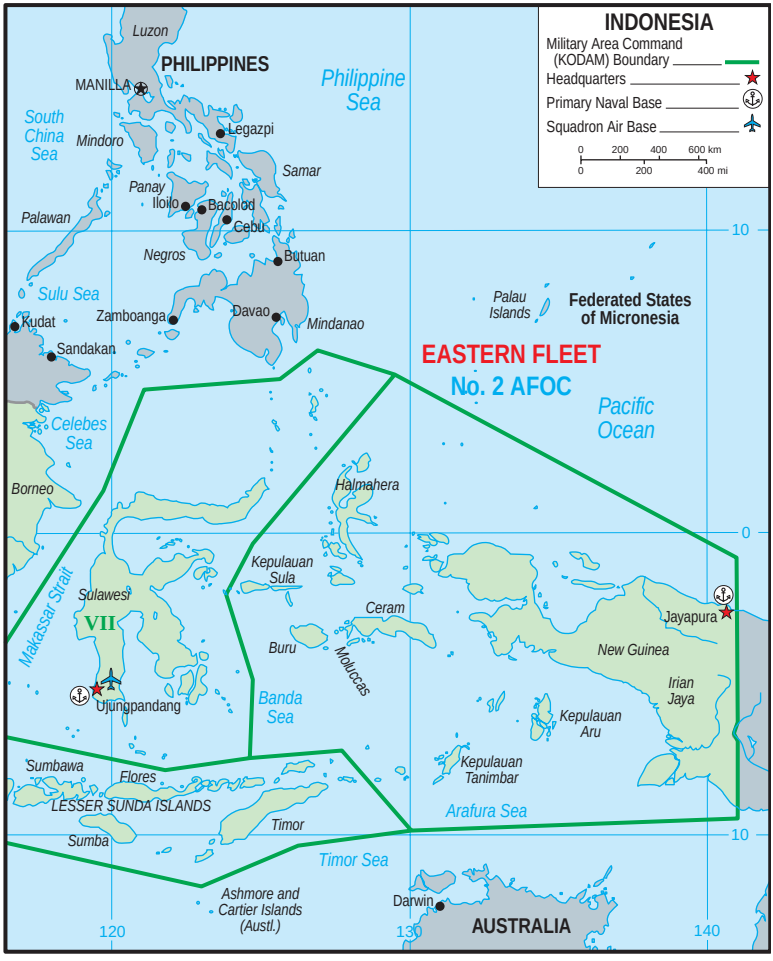
TNI Chain of Command

inaugurated on 1 October 2004. While the government now exercises central control over defense and security affairs, the TNI is still in the process of removing itself from the political and economic functions it had formerly exercised. As it does so, the TNI is becoming a more professional force that mainly focuses on national defense and internal security rather than on the wider functions of government.

However, a sizeable portion of the officer corps still believes military involvement in government operations is justified. This notion has

Western TNI Command Structure and Major Bases

recently reemerged in the draft of the Indonesian National Army Bill that could permit military officers to hold positions in departments and



Eastern TNI Command Structure and Major Bases

non-departmental agencies without leaving the TNI. The same bill incorporates the older practice of permitting the Army to deal with threats to domestic security instead of deferring to the police. Despite the slow pace of reforms in the TNI's functions, the government has tried to lay a legal foundation for the TNI and POLRI to undertake their new responsibilities within a democratic system. Whether this effort will overcome the opposition in the TNI is difficult to gauge.

The territorial system remains in place, with the regional commanders conducting operations in 12 area commands (KODAMs) that are under the authority of the Minister of Defense and Security, the Armed Forces Commander and the general staff. The Strategic Reserve Forces (KOSTRAD) and the Special Forces Command (KOPASSUS) are the other commands in the TNI. The latter has been the subject of numerous investigations about abuses of human rights in the strife torn areas of Aceh, Irian Jaya, and the Maluku Islands. For now, territorial integrity and domestic stability will likely take precedence over external threats. Only if nonstate actors assume greater prominence will the issue of terrorism come to the forefront. The commitment of TNI and government leaders to domestic Islamic terrorist cells will depend on their assessment of the influence these groups could have on national stability.

The legacy of the overlapping military, political and economic involvements has resulted in recognition on the part of some TNI officers that the military needs to undergo a thoroughgoing upgrade in standards of professional conduct. In the wake of the establishment of East Timor, the TNI decisionmakers have had to confront the necessity to revamp the troop training so that they are better prepared to fight an insurgency. Though elements of the TNI have had numerous deployments with the UN forces in Cambodia, Bosnia, Croatia, Georgia, and Kuwait, a majority still harbors rather parochial viewpoints. Participation in the Global War on Terror could introduce them to methods of operation that could enhance their skills. Though staunchly secular in its orientation, the TNI may be subject to pressures from certain quarters of the Muslim community to act somewhat circumspectly toward alleged Muslim terrorist organizations. The

A. SERSAN MAYOR (SERMA)
(Sergeant Major)

A. SERSAN KEPALA (SERKA)
(Master Sergeant)

A. SERSAN KEPALA (SERKA)
(Master Sergeant)

A. SERSAN SATU (SERTU)
(Sergeant First Class)

A. SERSAN SATU (SERTU)
(Sergeant First Class)

A. SERSAN DUA (BERDA)
(Sergeant Second Class)

INDONESIAN ARMY EMBLEM

ABRI EMBLEM

NOTES:
1. Field dress rank.
2. Gold or yellow on dress of day.
3. For daily (non-ceremonial wear). Army NCOs wear their stripes on a dark green background. Navy sky blue. Air Force dark blue and Police khaki.
4. Army, Navy, and Air Force badges have TNI , Police have POLRI .
5. Red border denotes command appointment.
6. Ceremonial rank not shown.

Enlisted Rank/Insignia

GENERAL

LIEUTENANT GENERAL

MAJOR GENERAL

BRIGADIER GENERAL

COLONEL

LIEUTENANT COLONEL

MAJOR

CAPTAIN

LIEUTENANT

SECOND LIEUTENANT

ASSISTANT LT. OFFICER CADET

ASSISTANT LT. FIRST CLASS

ASSISTANT LT. SECOND CLASS

FIELD RANK

1. Worn on right collar, corps badge on left collar.
2. Red line down center denotes command appointment.

MAJOR GENERAL

LT. COLONEL

CAPTAIN

NOTES:

1. Dress of the day rank.
2. Red border around shoulder board denotes wearer in command appointment.
3. Area shown by dotted circle contains corps badge.
4. Ceremonial rank not shown.

Officer Rank/Insignia

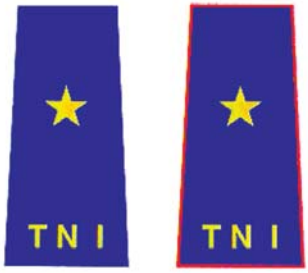
NAVY	ARMY AND POLICE	AIR FORCE	RAN EQUIVALENT
LAKSAMANA	JENDERAL	MARSEKAL	ADMIRAL
LAKSAMANA MADYA (LAKSDYA)	LETNAN JENDERAL	MARSEKAL MADYA	VICE ADMIRAL
LAKSAMANA MUDA (LAKSDA)	MAYOR JENDERAL	MARSEKAL MUDA	REAR ADMIRAL
LAKSAMANA PERTAMA (LAKSMA)	BRIGADIR JENDERAL	MARSEKAL PERTAMA	COMMODORE

NOTE: Marine Corps One, Two, Three, and Four Star Officers use Army titles.

LAKSAMANA (Admiral)

LAKSAMANA MADYA (LAKSDYA)
(Vice Admiral)

LAKSAMANA MUDA (LAKSDA)
(Rear Admiral Upper Half)



LAKSAMANA PERTAMA (LAKSMA)
(Rear Admiral Lower Half)

NOTE: Red border indicates Command Position.

Senior Officer Rank/Insignia

ultimate decision on how rigorously to enforce the antiterrorist agenda will depend on whether the TNI leaders see such action as being an exhibition of their improved professionalism or whether they regard it as being forced to comply with demands from the United States.

Mission and Strategy

Indonesia's defense priorities are maintaining national cohesion and defending archipelago sovereignty. One side conducts operations to counter separatist insurgencies, while also securing of Indonesia's political and economic boundaries, including Indonesia's Exclusive Economic Zone, fisheries, and oil production areas, and defending Indonesia against external aggression, particularly with regard to the South China Sea.

The Indonesians have had to shift their priorities since the United States initiated the GWT. Overtures to the current government to participate in joint maritime operations against terrorist attacks and piracy have only spurred a nationalistic response that Indonesia, Malaysia and Singapore are fully capable of protecting the crucial sea-lanes of communication and trade. Indonesian military planners will want to prevent setting a precedent for legitimizing the presence of foreign (U.S.) forces in its territorial waters lest Japan and/or China start asserting their desire to do the same. The country's anti-colonialist struggle has instilled sensitivity to any foreign power that manifests an intention to assert their interests without due consideration of Indonesia.

The major problem that the TNI faces is lack of funding for equipment. Though the Asian financial crisis of 1997 has passed, the long-term effects on the Indonesian economy are still being felt. Low pay scale for soldiers and officers has contributed to the tendency of the TNI to enter into security arrangements with local businesses. The system of defense expenditures has lacked accountability and many operations have been conducted without prior budget support. To rectify this situation, Indonesia must increase the defense budget and the TNI must accept appropriations through the state treasury, rather than through its internal channels. In this way it could avoid corruption charges and could direct

Indonesian Soldier

its resources to procurement of necessary equipment. Furthermore, greater confidence in budgetary audits would encourage military leaders to set realizable strategic goals and acquire the means to achieve them.

Personnel

Indonesian Armed Forces is an all-volunteer force. Each volunteer serves for a 2-year term. Recruits are trained at each KODAM's regimental center. Servicemen are promoted to NCO grade on the basis of length of service and technical skill. Officers are graduates of a 1-year general academy followed by a 3-year specialist academy.

The Indonesian armed forces have 346,000 personnel. There are approximately 175,000 reserves. Within this infrastructure are paramilitary forces, a Coast Guard and Customs Service, and the Civil Defense Force.

Force Modernization

Acquisition priorities are focused on developing TNI's counterinsurgency, antiterrorism, airspace, and sea line communication programs.

The chiefs of Indonesia's three military services have reported abysmal states of readiness caused by poor maintenance, shortages of spare parts and a lack of modern technical equipment. As a result Parliament moved an estimated US$72.25 million from the 2002 budget to the military services and another US$38.9 billion to the national police. However, this amount is not believed to be sufficient to correct all maintenance problems and shortages, so the military will continue to rely on its secretive business empire for other operational and equipment funding.

Key Defense Personnel

President and Commander in Chief	Susilo Bambang Yudhoyono
Minister of Defense	Matori Absul Djalil
Armed Forces (TNI) Commander	General Endriatono Sutarto
Chief of the General Staff	Vice Marchal Wartoyo
Army Chief of Staff	General Ryamizard Ryacudu
Navy Chief of Staff	Admiral Bernard Kent Sondakh
Commandant of Marine Corps	Major General Achmad Rifai
Air Force Chief of Staff	Air Chief Marshal Chappy Hakim
National Police Chief	General Da'i Bachtiar

Army

Mission

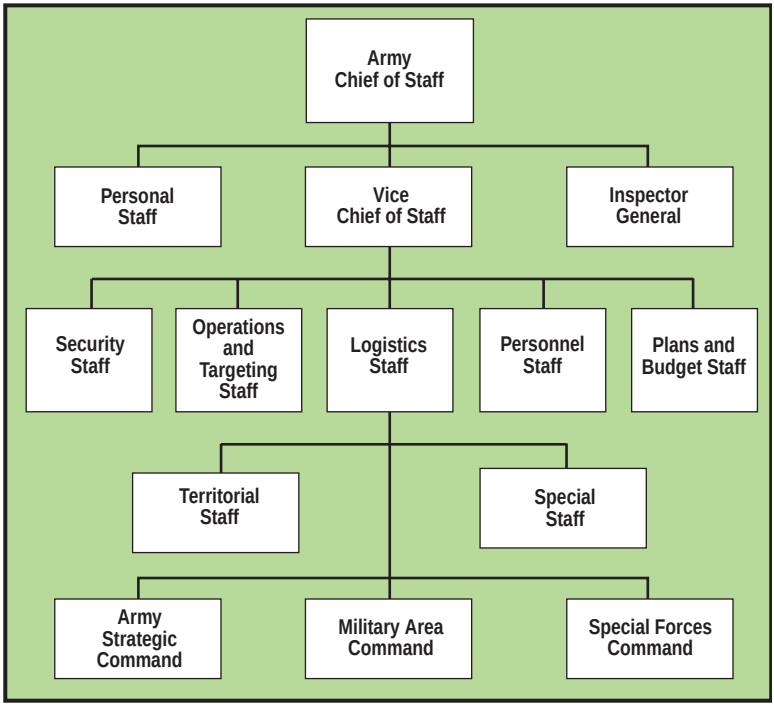
The Army is responsible for land operations, air support, and some maritime transportation. Aircraft and logistical landing craft are manned and maintained by the Army for this purpose.

Indonesia's army has traditionally been oriented toward internal security tasks. In the 1990s, there was an effort to develop limited capabilities for conventional warfare using more modern equipment. However, the

army's principal focus will remain counter-insurgency operations against regional separatist movements. The national police, separated from the armed forces on 1 April 1999, have the primary mission for internal security. The army retains a major support role in this mission.

Organization

Most operational army units are controlled through the 12 KODAMS. These territorial units account for the bulk of the army's personnel (about 140,000 to 150,000 troops). The territorial system deploys army



Indonesian Army Chain of Command

units at every level of the civilian government structure: Korem (Garrison Command), Kodim (District Command), Koramil (Subdistrict Command), and finally Babinsa, non-commissioned officers (NOCs) resident in each of the country's villages. The territorial system is the weakest and least professional element of the army. It has the lowest priority for equipment, manpower fill, and training. The army's best combat units are held in the Strategic Reserve (KOSTRAD). Within each KODAM are subunits called KOREMs. These include:

Units	Quantity
Infantry Battalions	65
Cavalry Battalions	8
Artillery Battalions	11
Air Defense Battalions	10
Engineer Battalions	8
Aviation/Helicopter Squadrons	2

The Special Forces Command (KOPASSUS) has three special warfare groups, and an elite counterterrorism unit, regarded as the best unit in the armed forces. The KOPASSUS is divided into three groups, consisting of two para-commando units, one intelligence unit, eight counter-terrorist units, and one training unit. The units have rapid reaction capability and often deploy to hotspots, generally in teams of 50 men or fewer. Until violence broke out in East Timor in 1998, the KOPASSUS had close links with the Australian and British Special Air Service (SAS) regiments and the U.S. Army Special Forces. Units include the following:

Unit	Location	Strength
Group I (combat)	Serang, West Java	1,200
Group II (combat)	Kartasura, nr Surakarta, Central Java	1,200
Group III (intelligence and covert operations)	Cijantung	200
Training Center	Batujajar, West Java	1,600
Unit 81 (counterterrorism)	Cijantung	800

The Strategic Reserve force (KOSTRAD) has approximately 30,000 personnel in two divisions and an airborne brigade, and is the largest and most important operational command in the armed forces. Its main operational weakness is its minimal organic logistics capability. Units obtain most of their logistical support from the territorial military regional commands in whose geographic area they are deployed; thus, KOSTRAD has a limited capability to deploy independently for long periods to remote areas. KOSTRAD strength is as follows:

Unit	Quantity
Infantry Division Headquarters	2
Infantry Brigades (9 battalions)	3
Field Artillery Regiments	2
Air Defense Regiment	1
Armored Battalions	2
Engineer Regiment	2
Rapid Reaction Strike Force	1

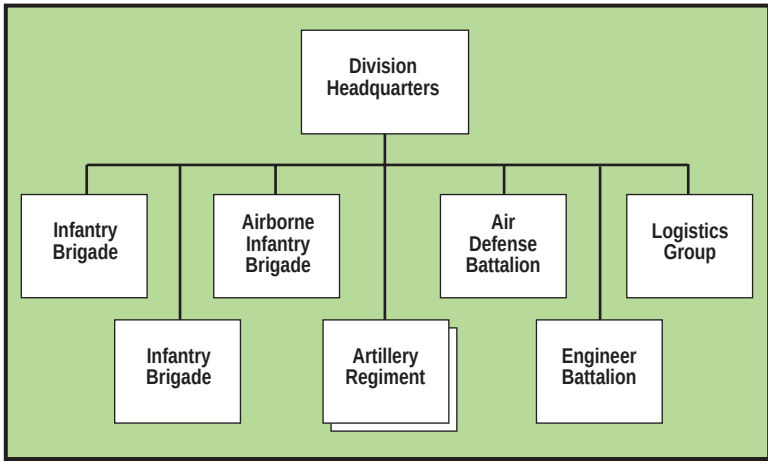
Personnel

The total active manpower of the Indonesian Army is approximately 265,000, including the KOSTRAD, which numbers 25,000-30,000 personnel. The KOPASSUS consists of approximately 5,000 men, following a reduction in 2001.

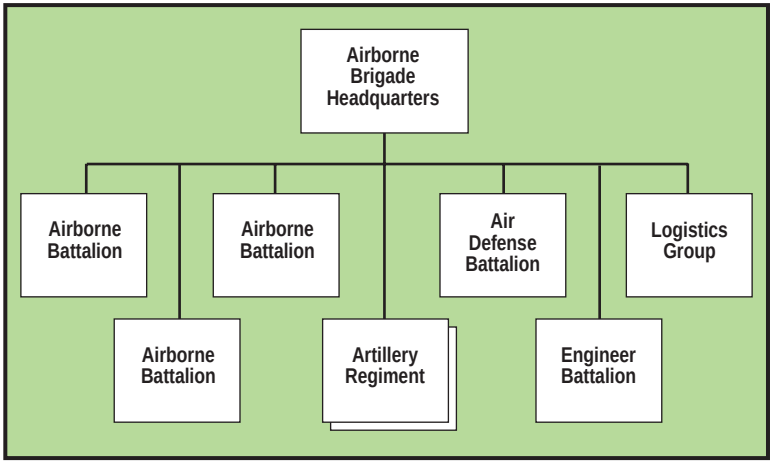
Training

Recruits train for 3 months with their local territorial command (KODAM) training regiment. Specialists and technicians attend centralized corps schools. NCO candidates undergo 5 months of promotion training at their Kodam training regiment. Officer recruits selected for the Military Academy (Akmil) first undertake basic training as soldiers. The academic component of officer training is increasingly stressed, and many officers can now leave Akmil with an undergraduate degree. Officers are also recruited from university and other vocational graduates, who undertake an abbreviated 20-week course at Akmil. An addi-

Army Deployments



KOSTRAD Infantry Division



KOSTRAD Airborne Brigade

Indonesia Army Enlisted Rank Insignia	 Bhayangkara Dua	 Bhayangkara Satu	 Bhayangkara Kepala	 Korpral Dua	 Korpral Satu	 Korpral Kepala
U.S. Equivalent	Serviceman 2	Serviceman 1	Senior Serviceman	Corporal 2	Corporal 1	Senior Corporal
	 Sersan Dua	 Sersan Satu	 Sersan Kepala	 Sersan Mayor	 Pembantu Letnan II	 Pembantu Letnan I
U.S. Equivalent	Sergeant 2	Sergeant 1	Senior Sergeant	Sergeant Major	Servant Lieutenant II	Servant Lieutenant I
Indonesia Army Officers Rank Insignia	 Letnan Dua	 Letnan Satu	 Kapten	 Mayor	 Letnan Kolonel	 Kolonel
U.S. Equivalent	2nd Lieutenant	1st Lieutenant	Captain	Major	Lieutenant Colonel	Colonel
	 Brigadir Jenderal	 Mayor Jenderal	 Letnan Jenderal	 Jenderal	 Jenderal Besar	
U.S. Equivalent	Brigadier General	Major General	Lieutenant General	General	Senior General	

Army Rank/Insignia

tional source of officer recruitment is from the ranks, with one year of training at officer cadet schools.

During the 1990s, the army benefited from training links and exercises with the Singaporean, Australian, U.S., and UK armies. Many of those training opportunities were lost when the United States and Australia ended many training programs in the wake of the East Timor violence.

In 1998, the army consolidated authority over training and education by strengthening the command responsibility of the Army Education and Training Command (Kodiklat) over the subordinate branch training centers and schools. Most army training centers now come under Kodiklat.

Capabilities

Since 1945, the Indonesian Army has accumulated substantial experience in guerrilla warfare, counter-insurgency and other forms of low-intensity combat. Elements of the army, particularly the Special Forces, have been influenced by U.S., British, and Australian doctrine. However, the army's capacity for combined arms and joint-service operations remains limited and under-developed.

Disposition

Army units are deployed throughout the country. Each KODAM and KOREM has at least one territorial infantry battalion, and KOSTRAD and KOPASSUS serving as a rapid reaction force. The army has been extensively involved in counter-insurgency operations in East Timor, Papua and Aceh. Following the separation of the police from the armed forces, the army has been relegated to a support role in terms of dealing with civil disorder.

Equipment

Armor

Type	Role	In Service
AMX-13	Main Battle Tank	275
PT-76	Light Tank	30
Scorpion	Reconnaissance Vehicle	60
VBL	Reconnaissance Vehicle	18
Ferret	Reconnaissance Vehicle	55
Saladin	Reconnaissance Vehicle	6
AMX-VCI	Armored Personnel Carrier	200
Saracen	Armored Personnel Carrier	55
Commando V-150	Armored Personnel Carrier	200

Type	Role	In Service
Commando Ranger	Armored Personnel Carrier	22
APR-1	Armored Personnel Carrier	14
BTR-40	Armored Personnel Carrier	40
BTR-50	Armored Personnel Carrier	9
BTR-152	Armored Personnel Carrier	150
Stormer	Armored Personnel Carrier	8

Artillery

Type	Role	In Service
70-mm NDL-40	Multiple Rocket Launcher	UNK
70-mm LAU-97	Multiple Rocket Launcher	UNK
122-mm M1938	Howitzer	20
105-mm M101	Howitzer	60
105-mm M56A	Howitzer	10
155-mm FH 2000	Howitzer	5
105-mm Light Gun	Light Howitzer	20
105-mm Mk 61	Self-propelled Gun	70
76-mm M48	Mountain Gun	50
76-mm M1942	Field Gun	200
120-mm UBM-52	Mortar	80
81-mm Pindad/M29	Mortar	800
60-mm Pindad	Mortar	750
60-mm M2	Mortar	100
Yugoslav 81/82-mm (1969)	Mortar	800
Brandt 12-mm	Mortar	75

Anti-tank

Type	Role	In Service
SS-11	Anti-Tank Guided Missile	40
Milan	Anti-Tank Guided Missile	100
9K11/9M14 (AT-3)	Anti-Tank Guided Missile	Unknown
3.5-in M20	Anti-Tank Rocket Launcher	Unknown
70-mm NDL	Multiple Rocket Launcher	70
70-mm LAU	Multiple Rocket Launcher	97
130-mm M52	Multiple Rocket Launcher	12

Type	Role	In Service
106-mm M40	Recoilless Rifle	45
57-mm M18	Recoilless Rifle	Unknown

Air Defense

Type	Role	In Service
Rapier	Low Altitude SAM	120
RBS 70	Low Altitude SAM	42
57-mm S-60	Anti-Aircraft Gun	200
40-mm Bofors L/70	Anti-Aircraft Gun	40
20-mm Rheinmetall	Light Anti-Aircraft Gun	9
23-mm ZU-23-2	Light Anti-Aircraft Gun	Unknown

Infantry Weapons

Type	Role
7.62-mm vz/52/57	Assault Rifle
7.62-mm Beretta BM59	Assault Rifle
5.56-mm M16A1	Assault Rifle
5.56-mm SIG 541	Assault Rifle
5.56-mm FN-FNC	Assault Rifle
9-mm Beretta M12	Sub-Machine Gun
5.56-mm Minimi	Light Machine Gun
7.62-mm FN MAG	General-Purpose Machine Gun
7.62-mm M60	General-Purpose Machine Gun
12.7-mm DShK	Heavy Machine Gun
0.50-in Browning M2HB	Heavy Machine Gun
40-mm M79	Grenade Launcher
40-mm M203	Grenade Launcher

Army Aviation

Type	Role	In Service
NC212-100/200	Tactical Transport	5
DHC-5	VIP/Utility Transport	3
Rockwell Commander 680FL	Light Transport	2
Gulfstream 695 Commander	Communications	1
BNG BN2A Islander	Communications	1
Mi-35	Attack Helicopter	2
Bell 205A-1	Utility Helicopter	12

Type	Role	In Service
NB-412 HPs	Utility Helicopter	26
IPTN/BO 105C/CBS	Utility Helicopter	17
Mi-17	Utility Helicopter	4
Schweizer-Hughes 300C	Training Helicopter	15

Air Force

Mission

The Indonesian Air Force's (Tentara Nasional Angkatan Udara) principal roles are air defense, strategic strike, reconnaissance, transport and support of the army (particularly in counter-insurgency operations) and navy. A tsunami severely damaged the air force—a force already suffering from shortages of spare parts and training deficiencies.

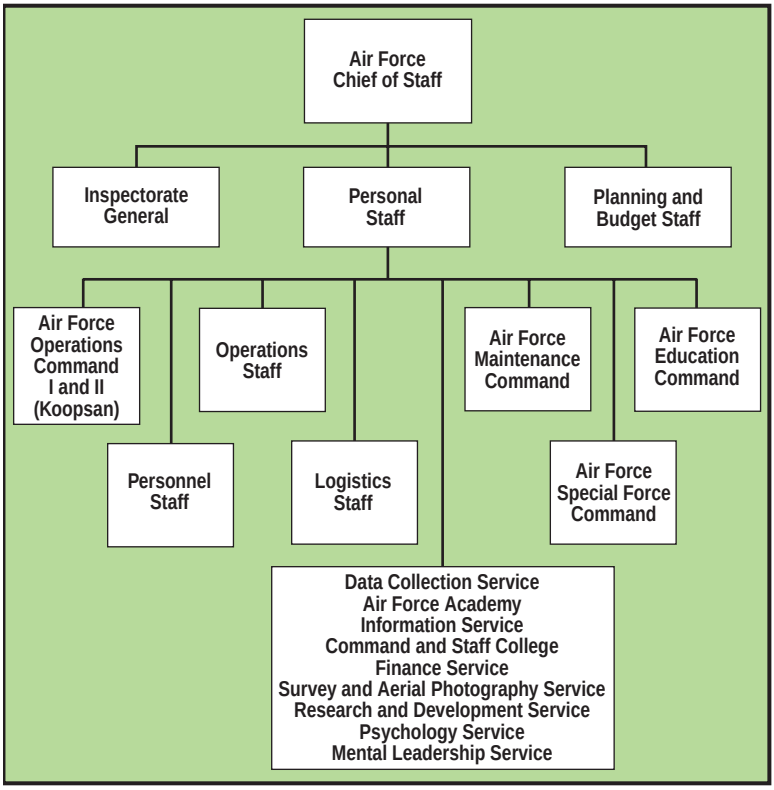
Organization

The main Indonesian air force (Tentara Nastional Indonesia - Angkatan Udara: TNI-AU) commands include two operations commands (Koops I and II, administering air bases and operational units in western and eastern areas of the archipelago, respectively), and the special forces (ground defense), education and maintenance commands.

The two air force operations commands direct the service's strategic strike, reconnaissance and transport roles; operations in support of the army and navy are coordinated by armed forces headquarters. The joint-service National Air Defense Command (KOHANUDNAS) exercises operational control over air defense units through four sector commands —the newest, in Kupang (Timor), was inaugurated in July 2001.

Personnel

There are about 27,000 personnel on active duty in the air force. The air force trains pilots for all branches of the Indonesian Armed Forces.



Air Force Chain of Command

Training

Officers are trained at the Air Force Academy, Yogyakarta. Basic flight training is performed in AS202, T-34C, and Hawk aircraft. Fighter pilots transition to the F-16, F-5, and probably Su-27/30 at the squadron level.

Indonesia Air Force Enlisted Rank Insignia	 Bhayangkara Dua	 Bhayangkara Satu	 Bhayangkara Kepala	 Korpral Dua	 Korpral Satu	 Korpral Kepala
U.S. Equivalent	Serviceman 2	Serviceman 1	Senior Serviceman	Corporal 2	Corporal 1	Senior Corporal
	 Sersan Dua	 Sersan Satu	 Sersan Kepala	 Sersan Mayor	 Pembantu Letnan II	 Pembantu Letnan I
U.S. Equivalent	Sergeant 2	Sergeant 1	Senior Sergeant	Sergeant Major	Servant Lieutenant II	Servant Lieutenant I
Indonesia Air Force Officers Rank Insignia	 Letnan Dua	 Letnan Satu	 Kapten	 Mayor	 Letnan Kolonel	 Kolonel
U.S. Equivalent	2nd Lieutenant	1st Lieutenant	Captain	Major	Lieutenant Colonel	Colonel
	 Brigadir Jenderal	 Mayor Jenderal	 Letnan Jenderal	 Jenderal	 Jenderal Besar	
U.S. Equivalent	Brigadier General	Major General	Lieutenant General	General	Senior General	

Air Force Rank/Insignia

In June 2003, 6 Indonesian Air Force pilots and 18 technicians received flight training in Russia for recently acquired Sukhoi Su-27/30 FLANKER aircraft.

Pilot training has been curtailed due a shortage of spare parts and its direct effect on maintenance. Indonesian fighter pilots are estimated to

get less than 10 flying hours per month. This has lowered their proficiency to a level that directly effects flight safety. Training standards are poor and are handicapped by the poor education of many recruits.

Flying units train in national exercises (the most significant is the annual *Angkasa Yudha*, or Air War) and with the air forces of other regional states, particularly Australia, Malaysia, and Singapore. Exercises are heavily scripted. There is a joint Indonesia-Singapore air-to-ground range/Air Combat Maneuvering Range at Siabu in Riau province, Sumatra.

The Indonesian Air Force and Navy conducted a 3-day joint exercise in the Sunda Straits in May 2004. The purpose of this exercise was to conduct firing of Navy and Air Force strategic weapons. Some 2,100 combined troops took part in the exercise. The Indonesian Air Force provided 11 combat aircraft.

Capabilities

Chronic maintenance problems and the more recent U.S. and European arms embargoes, imposed during the East Timor violence in 1999, have severely degraded air force readiness. Significant portions of its C-130, F-5, F-16, and Hawk fleets are grounded because of spare-parts shortages and maintenance problems. Air Force Chief of Staff Air Marshal Chappy Hakim told parliament in July 2002 that only 30 of 89 warplanes were operational and only 11 of 16 air defense radar units worked properly. He blamed the poor readiness on insufficient funding by the Indonesian government as well on the US arms embargo.

The TNI acquired two Sukhoi Su-30MK multirole fighters, two Su-27SK interceptor/ground-attack aircraft, and two Mi-35 attack helicopters from Russia after a deal signed in early 2003. They were officially handed over on 20 September 2003, and were transferred to SkU11 at Hasanudding to replace the last A4E Skyhawks in TNI-AU service. Contracts for further fighter aircraft acquisitions were placed on hold following the tsunami tragedy in December 2004.

Disposition

Since the 1980s the air force has gradually moved more of its combat forces to forward locations outside Java. These include:

- Pekanbaru in Sumatra's Riau Province, supporting operations in Aceh and over the adjacent Malacca Strait;
- Supadio Air Base at Pontianak in West Kalimantan provides air-cover for the important offshore Natuna gas field;
- Hasanuddin Air Base at Makassar in South Sulawesi supports a major KOSTRAD presence and serves as the main air force presence in the country's eastern provinces.

Equipment

Fixed Wing

Type	Role	Quantity
F-16A/B Fighting Falcon	Multirole Fighter	5
F-5E Tiger II	Air Defense/Attack	8
Sukhoi Su-27 Flanker	Multirole Fighter	2
Sukhoi Su-30 Flanker	Multirole Fighter	2
A-4E Skyhawk	Attack	12
Hawk Mk 209	Attack	32
OV-10F Bronco	Counter-Insurgency	5-6
Boeing 737-2X9	Maritime Patrol	3
F27-400M Friendship	Transport	7
CN-235-100	Transport	6
IPTN NC-212-100/200	Transport	10
C-130B Hercules	Transport	9
C-130H/H-30 Hercules	Transport	9
L-100-30 Hercules	Transport	5
KC-130B Hercules	Tanker/Transport	2
707-3M1C	Communications	1
F28 Fellowship 1000/2000	Communications	1-2

Type	Role	Quantity
Cessna 180	Communications	5
Cessna T207 Skywagon	Communications	5
Cessna 401/2A	Communications	7
Hawk Mk 109	Lead-In Trainer	8
Hawk T. Mk 53	Trainer	12
TA-4H/J Skyhawk	Trainer	5
F-5F Tiger II	Trainer	4
FFA AS 202/18A3 Bravo	Trainer	25
Cessna T-41D Mescalero	Trainer	3-4
PZL-104 Gelatik	Trainer	6
T-34A/C Mentor/Turbo	Trainer	21
KT-1 Wongbee	Trainer	7
SF260 SIAI Marchetti	Trainer	19
PC-6/B Turbo-Porter	Crop-Spraying	5

Rotary

Type	Role	Quantity
Mi-35 Hind	Attack Helicopter	2
IPTN NAS 330J/L Puma	Utility Helicopter	10
Dirgantara NAS 332L1 Super Puma	Utility Helicopter	5
Sikorsky S-58T	Utility Helicopter	10
Dirgantara Eurocopter	Utility Helicopter	4/3

Air Defense Systems

Type	Role	Quantity
AIM-9P-4	Air-to-Air Missile	Unknown
AGM-65 Maverick	Air-to-Surface	Unknown
CASA CN-235 w/AMASCOS	Search Radar	Unknown
Master T3-d Radar	Search Radar	Unknown

Navy

Mission

The navy plays a central role in securing and defending the Indonesian archipelago. In wartime, the navy, acting in conjunction with the air force, is expected to interdict invading forces as far as possible from Indonesia's Exclusive Economic Zone (EEZ) and to mount defensive operations against those that penetrate the EEZ. In peacetime, the navy polices Indonesia's EEZ to counter maritime poaching, smuggling, and piracy, and supports army internal security operations.

The navy performs most coast guard functions, but the Department of Transport's Sea Communications Agency includes a Maritime Security Agency that operates some search and rescue and harbor patrol craft.

Organization

The navy has two operational commands and three functional commands. The operational commands are regionally oriented, with the defense responsibility for national waters divided between Eastern Fleet at Surabaya East Java) and the Western Fleet at Tanjung Priok (Jakarta). The three functional commands are the Naval Training Command, including a naval academy located at Surabaya, Military Sealift Command, and the Marine Corps.

Each fleet includes main naval bases, support naval bases, naval observer posts, and two operational components: a combat command and a maritime security command. The maritime security commands oversee maritime law enforcement.

Personnel

The Indonesian Navy is large, as required for a nation composed of innumerable islands. The navy deploys almost 42,000 personnel on active duty, including the marines (14,000) and the naval aviation arm (1,000).

Indonesia Navy Enlisted Rank Insignia						
	Kelasi Dua	Kelasi Satu	Kelasi Kepala	Korpral Dua	Korpral Satu	Korpral Kepala
U.S. Equivalent	Sailor 2	Sailor 1	Senior Sailor	Corporal 2	Corporal 1	Senior Corporal
						
	Sersan Dua	Sersan Satu	Sersan Kepala	Sersan Mayor	Pembantu Letnan II	Pembantu Letnan I
U.S. Equivalent	Sergeant 2	Sergeant 1	Senior Sergeant	Sergeant Major	Servant Lieutenant II	Servant Lieutenant I
Indonesia Navy Officers Rank Insignia						
	Letnan Dua	Letnan Satu	Kapten	Mayor	Letnan Kolonel	Kolonel
U.S. Equivalent	2nd Lieutenant	1st Lieutenant	Captain	Major	Lieutenant Colonel	Colonel
						
	Laksamana Pertama	Laksamana Muda	Laksamana Madya	Laksamana	Laksamana Besar	
U.S. Equivalent	First Admiral	Rear Admiral	Vice Admiral	Admiral	Senior Admiral	

Navy Rank/Insignia

Training

Naval and Marine Corps Officers are trained at the Naval Academy at Surabaya, but some are recruited on graduation from tertiary institutions. Naval training for other ranks is concentrated in Surabaya.

The major national naval exercises are the annual or biannual *Armada Jaya* (Victorious Fleet) maneuvers, which include amphibious operations involving the Army and Air Force.

The navy has conducted bilateral exercises with regional partners, especially Australia, Malaysia and Singapore. However, the economic downturn in 2001 forced severe cutbacks in these expensive training exercises, and more emphasis was placed on training simulations.

Capabilities

The Indonesian Navy is attempting to improve its capabilities. Indonesia's huge geographical extent, vital maritime resources and expansive archipelagic waters, not to mention the emergence of China and other regional naval powers, make a sizeable, modern navy necessary.

Former President Wahid placed a priority on naval modernization, although restricted funds have slowed progress. There are currently plans to purchase 22 new ships, including 8 corvettes, 2 submarines, 3 landing ship tanks and 4 patrol craft.

Disposition

Naval bases have been developed throughout Indonesia to fulfill the archipelagic doctrine's requirement that the armed forces should defend the whole of Indonesia's land and sea territory. A disproportionate number of larger vessels are deployed in the Eastern Fleet Command.

Equipment

Type	Role	Quantity
CAKRA Class	Submarine	2
Van Speijk FF (Ahmed Yani)	Frigate	6
Fatahilah FFL	Frigate	3
1850 Ton (Hajar Dewantara)	Frigate/Training	1
Parchim-I Class PG	Patrol	16
PSK MK 5 PTG	Patrol	4

Type	Role	Quantity
Lurssen FPB 57 PT	Patrol	6
Lurssen FPB 57 PC	Patrol	2
Attack PC	Patrol	9
Kal Kangean Class PB	Patrol	65
KONDOR-II Class	Patrol	9
Tanjung Dalpele LPD	Landing Ship	1
Frosch-I Class LST	Mech. landing craft	12
LST 511 LST (Teluk Langsa)	Tank landing	4
AKKUH ! LST (Teluk Semangka)	Tank landing	6
LCM (6) Class (U.S.)	Landing craft	20
LCVP MK VII LCVP	Landing craft	25
Wooden-hull	Landing craft	10
GRP-hull	Landing craft	18
Mechanized (Indonesian design)	Landing craft	40
ALKMAAR MHS	Mine warfare	2
Military Sealift Command (Kolinlamil)		
LST 511 LST (Teluk Bayur)	Tank landing ship	2
Teluk Amboina LST	Tank landing ship	1
AMURANG LCU	Utility landing craft	1
Kupang Class LCU	Utility landing craft	2
Sambu Class AOT	Tanker	1
Balikpapan AOT	Tanker	1
TISZA AK	Cargo	3
Frosch II AE	Auxiliary	2
Tanjung Kambani AP	Auxiliary	1
Tanjung Nusanive AP	Auxiliary	1

Marine Corps

The Marine Corps (KORMAR) has a strength estimated at 14,000, and hopes to increase its numbers to 20,000 by 2005 and possibly 26,000 to 30,000 by 2009. In early 2004, the Marine Corps consisted of three brigades, each with three infantry battalions; a combat support regiment

with tank, reconnaissance, artillery, air defence and landing craft battalions; and a combat service support regiment with engineer, communications, supply, transport and medical units.

The KORMAR is composed of one Marine Corps Group, two Infantry divisions (expected to expand to 4 divisions by 2009), an Independent Mine Infantry Brigade, Special Forces Battalion, a Combat Support Regiment (Artillery and Air Defense).

- The 1st Marine Corps Group with the 1st, 3rd and 5th Battalions, is based in Surabaya to cover Indonesia's eastern region (PASKAR 1)
- The Independent Marine Corps Brigade with the 2nd, 4th and 6th Battalions is based in Jakarta to cover the central region.
- The 8th Battalion (formed in January 2004), the 9th Battalion, the 7th Battalion, and support elements will form PASKAR 2, covering the western region from Teluk Ratai naval base in South Sumatra.

Plans to move the 1st Marine Corps Group headquarters from Surabaya to Makassar (Sulawesi) and the Independent Brigade from Jakarta to Surabaya appear to have been delayed, probably reflecting friction with the Army.

The Marine Corps' efforts to eventually field two divisions are believed to have antagonized the Army, reflecting both historical rivalries and the perpetual struggle for resources and influence.

The current plans for the Marines to move out of Jakarta and the curtailing of their security role in the capital may be in response to pressure from the Army. Marine Corps equipment includes the following:

Equipment

Model	Role	Quantity
PAC-90	Tank	10
PT-90R	Tank	30
AMX-10P	Armored Personnel Carrier	34
K-61	Amphibious Transport	12
122-mm M-38	Howitzer	28

Marine Corps Rank/Insignia

105-mm LG-1 Mk1	Howitzer	20
140-mm BM-14	Multiple Rocket Launcher	Unknown
40-mm L70	Antiaircraft Artillery	40
57-mm S-60	Antiaircraft Artillery	Unknown

Naval Aviation

The primary role of the navy's aviation component is maritime reconnaissance, and search and rescue. The Naval Air Arm is equipped mostly with land-based aircraft, including several varieties manufactured by Indonesia's domestic aviation industry; a few helicopters can be deployed on frigates.

Equipment

Type	Role	Quantity
N22B Searchmaster	Patrol/ASW	12
N22SL Searchmaster	Patrol/ASW	6
HU-16B Albatross	Patrol/ASW	4
C-212 Aviocar	Transport	4
CN-235	Transport	6
C-47 Skytrain	Transport	6
Aero Commander 100	Transport, Training	6
PA-38 Tomahawk	Training	6
AS 332L Super Puma	Helicopter	26
B0105C	Helicopter	4
HAS.1 Wasp	Helicopter	9
Alouette-III	Helicopter	1

National Police

The police do not have the widespread respect from the public, who view them as venal, brutal, and inept. The force's separation from the armed forces also intensified competition with the military for lucrative off-budget sources of revenue (legal and illicit), which have occasionally led to armed confrontation. Police officers and soldiers have been killed in

clashes, often in remote areas of the country, where their commercial interests have overlapped or real and imagined slights have turned violent.

Organization/Personnel

Indonesia Police and Security Forces Enlisted Rank Insignia	 Bhayangkara Dua	 Bhayangkara Satu	 Bhayangkara Kepala	 Korpral Dua	 Korpral Satu	 Korpral Kepala
U.S. Equivalent	Policeman 2	Policeman 1	Senior Policeman	Corporal 2	Corporal 1	Senior Corporal
	 Sersan Dua	 Sersan Satu	 Sersan Kepala	 Sersan Mayor		
U.S. Equivalent	Sergeant 2	Sergeant 1	Senior Sergeant	Sergeant Major		
Indonesia Police and Security Forces Officers Rank Insignia	 Pembantu Letnan II	 Pembantu Letnan I	 Letnan Dua	 Letnan Satu	 Kapten	 Mayor
U.S. Equivalent	Servant Lieutenant II	Servant Lieutenant I	2nd Lieutenant	1st Lieutenant	Captain	Major
	 Letnan Kolonel	 Kolonel	 Brigadir Jenderal	 Mayor Jenderal	 Letnan Jenderal	 Jenderal
U.S. Equivalent	Lieutenant Colonel	Colonel	Brigadier General	Major General	Lieutenant General	General

Police Rank/Insignia

The national police force (INP), numbering approximately 285,000, separated from the armed forces on 1 April 1999, becoming an independent entity for the first time in more than 30 years. In July 2000 the force was transferred to the Office of the President and its rank structure changed from military to more traditional police nomenclature.

The INP is controlled from its Jakarta headquarters. Each province has a subordinate headquarters in major urban areas (Polwil) and at district (Polres) and sub-district (Polres) levels. The INP is organized along functional lines, with divisions responsible for intelligence and security, criminal investigations, routine patrol work, traffic and community liaison.

The INP also controls the paramilitary Mobile Brigade (Brimob), which has around 15,000 personnel. Brimob units, which are routinely accused of human-rights abuses, serve in a gendarmerie role in all provinces.

In August 2002 the United States announced a wide-ranging 2-year, US$50 million assistance and modernization program for the INP, including US$12 million for the formation of the Task Force 88 counter-terrorism unit. The funding resulted in a major improvement in arms, equipment and training for the poorly equipped force. In September 2003, for example, Police Chief General Da'i Bachtiar announced plans to purchase 112,000 handguns for distribution to regular personnel. The police handgun inventory in late 2003 totaled 82,000 weapons, leaving more than 50 percent of the force without a personal firearm. The new guns will be purchased from the state-owned PT Pindad.

Capabilities

The police plan to expand their air wing to 3 fixed-wing aircraft or helicopters deployed in 26 provinces, for a total of 78 aircraft. According to the police, by early 2004 there were 35 helicopter pilots; barely half of them had full certification. In the fixed-wing fleet there were 3 captain-pilots and 21 co-pilots. Technical support is also weak, with around 30

ground technicians to service more than 20 helicopters deployed throughout the country. The fixed-wing fleet is maintained by 24 technicians.

The Australian Government presented the INP with five fiberglass catamaran patrol craft in August 2003. The boats are capable of reaching speeds of more than 45 knots, can travel up to 15 nautical miles offshore while also operating in shallow waters, up rivers and over reefs. The gift was intended to help the police prevent illegal immigrants reaching Australia, as well as support anti-terrorist and anti-smuggling operations.

Additional Security Forces

Maritime Security Agency

The Maritime Security Agency provides search and rescue cover in the nation's maritime territory. There are other security organizations acting on behalf of the government which undertake internal security duties.

Naval Auxiliary Force

The Naval Auxiliary Force serves as a paramilitary unit of non-commissioned craft. Approximately 24 vessels serve in the eastern fleet, 47 in the western fleet and three belong to the Naval Academy.

Counter-terrorism Force

The principal counter-terrorism unit, Task Force 88, will be a self-contained unit of approximately 400 personnel that will become fully operational by 2005. The unit will have the capability of handling a wide range of counter-terrorism issues, including bomb investigations, hostage-rescue and armed assaults against terrorist targets. U.S. funding provides for considerable amounts of new arms and equipment for the force, including sophisticated communications gear, night vision devices, Heckler and Koch MP-5 submachine guns, Remington 700 sniper rifles and extensive computerized training aids.

APPENDIX A
Equipment Recognition

INFANTRY WEAPONS

5.56-mm Pindad SS1 Series

Caliber	5,56 x 45 mm
Fire Modes	Fully automatic, 3-round burst, single shot
System of Operation	Gas, selective fire
Effective Range	450 m (600 m with optical sight)
Cyclic Rate of Fire	720 to 760 rounds/minute
Feed Device	Detachable 30-round box magazine
Weight (with empty magazine)	3.37 to 4.01 kg (varies by model)
Overall Length	0.77 to 1.00 m (varies by model)

NOTE: Based on Herstal FNC 5.56-mm assault rifle.

5.56-mm M16A1

Caliber	5.56- mm/45
Fire Modes	Automatic (semiautomatic 3-rd burst available)
System of Operation	Gas direct action, selective fire, air-cooled
Effective Range	800 m
Cyclic Rate of Fire	700 rounds/minute
Automatic Rate of Fire	60 to 80 rounds/minute
Single-Shot Rate of Fire	40 to 50 rounds/minute
Feed Device	20- or 30-rd detachable box magazine
Weight (Loaded)	3.85 kg (20-rd magazine)
Overall Length	990 mm

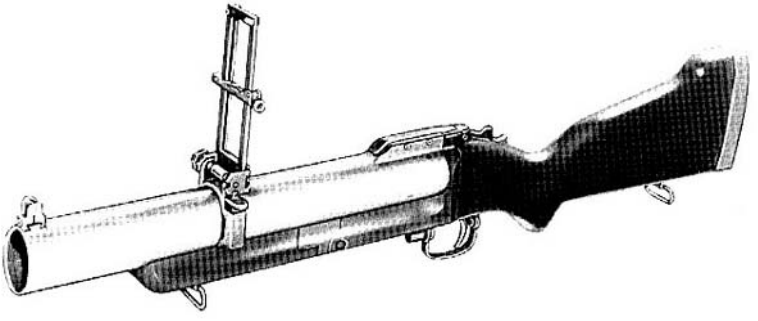
NOTE: optional bayonet (knife and wirecutter) and under-barrel grenade launcher (M203) available.

40-mm M203 Grenade Launcher

Caliber	40 x 46 mm
Mode of Operation	Breech loaded, sliding barrel
Sights	
Maximum Effective Range	Point target 150 m; area target 350 m
Weight (Loaded)	
Overall Length	380 mm

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

40-mm M79 Grenade Launcher



Maximum Effective Range	350 m
Operation	Break-open; single shot
Sights	Front, blade; rear, folding leaf, adjustable
Weight (Loaded)	2.95 kg
Overall Length	737 mm

NOTE: Superseded in U.S. by M203.

7.62-mm SPR-1 Sniper Rifle

Caliber	7.62 x 51 mm
Fire Modes	Single shot
System of Operation	Bolt action
Feed Device	Manual (rounds are loaded individually)
Weight	6.82 kg
Barrel Length	0.65 m

7.62-mm FN MAG

Maximum Effective Range	1,500 m
Caliber	7.62- x 51-mm NATO
System of Operation	Gas, automatic
Feed Device	Belt
Weight (Loaded)	13.92 kg (with butt stock and bipod)
Overall Length	1.26 m

9-mm Beretta M12

Maximum Effective Range	200 m
Caliber	9-mm
System of Operation	Blowback, selective fire
Rate of Fire	Cyclic, 550 rounds/minute
Feed	20-, 32-, or 40-rd detachable box magazine
Weight (Loaded)	3.77 kg
Length	645 mm (stock extended)

NOTE: Weapon has two safety systems: a grip safety in the front of the pistol grip, below the trigger must be held in before the action can be cocked; a push-button safety above the pistol grip locks the grip safety until pushed to the right.

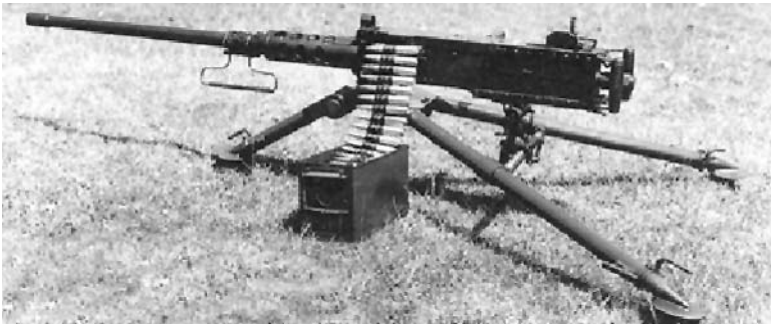
9-mm Uzi

Maximum Effective Range	200 m
Caliber	9-mm
System of Operation	Blowback, selective fire
Feed	32-rd detachable box magazine
Weight (Loaded)	3.99 kg
Overall Length	650 mm (stock extended)

7.62-mm M60

Maximum Effective Range	3,750 m
Caliber	7.62- x 51-mm NATO
System of Operation	Gas, automatic
Feed Device	Link belt
Weight (Loaded)	11.1 kg
Overall Length	1.26 m

.50 cal. Browning M2 HB



Maximum Effective Range	1,500 m
Caliber	50 caliber (12.7 x 99-mm)
System of Operation	Short recoil
Feed Device	100-round disintegrating-link belt
Weight (Loaded)	38 kg
Overall Length	1.651 m

120-mm UBM52 Mortar

Crew	5
Ammunition types	HE, HE-RA, smoke, illum, practice, marker
Range	300 to 9,400 m
Rates of fire	
Sustained	2 rounds/minute
Normal	6 rounds/minute
Burst	25 rounds/minute
Elevation	+45 to +85 degrees
Traverse Left/Right	3 degrees
Travel Weight	420 kg
Length x Width x Height	2.25 x 1.15 x 1.40 m

82-mm Mortar M69A

Rate of Fire	20 to 25 rounds/minute
Elevation	+45 to +85 degrees
Weights	
Complete	45 kg
Barrel	14.5 kg
Bipod	14 kg
Base plate	15 kg
Length of Barrel	1.2 m

81-mm M29

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

PT-76

Crew	3
Type	Light tank
Armament	
Main	Rifled 76-mm D-56TS gun with 40 stored rounds
Effective Range	650 m
Coaxial	7.62-mm light machinegun with 1,000 rounds
Road Range	260 km (450 km with auxiliary tanks)
Maximum Road Speed	44 km/h
Vertical Step	1.1 m
Gradient	75 percent
Trench Crossing	2.8 m
Combat Weight	14,000 kg
Length x Width x Height	7.62 x 3.14 x 2.19 m

NOTE: The PT-76 was originally designed as an amphibious scout tank. The hydrojet system allows the PT-76 to travel across a river flowing at about 8 km/h. It has a water speed of about 10 km/h and a range of 70 km. The PT-76 may be fitted with a turret-mounted 12.7-mm DShK heavy machinegun.

AMX 13/SM1

Crew	3
Type	Light tank
Armament	
Main	75-, 90-, or 105-mm gun
Coaxial	7.62-mm machinegun with 3,600 rounds
Road Range	400 km (500 km for the SM1)
Maximum Road Speed	60 km/h
Vertical Step	0.65 m
Gradient and Side Slope	60 percent (40-percent side slope for the SM1)
Trench	1.6 m
Fording	0.6 m
Combat Weight	15,000 kg
Length x Width x Height	6.36 (gun forward) x 2.51 x 2.3 m
Fuel Capacity	480 L

NOTE: Indonesia has base and SM1 versions. The SM1 upgrade replaces the original gasoline engine with a turbocharged diesel engine and fully automatic transmission.

AMX VCI

Crew/Passengers	3/10
Type	Tracked infantry fighting vehicle
Armament	12.7-mm machinegun or turret with 7.5 or 7.62-mm machinegun
Road Range	550 km
Maximum Speed	64 km/h
Vertical Step	0.65 m
Gradient/Side Slope	60/30 percent
Trench	1.6 m
Fording	1 m
Combat Weight	15,000 kg
Length x Width x Height	5.7 x 2.67 x 2.1 (2.4 with turret) m

VAB

Crew/Passengers	2/10
Type	Amphibious light armored personnel carrier
Road Range	1,000 km
Maximum Road Speed	92 km/h
Maximum Water Speed	7.0 km/h
Vertical Step	0.5 m
Gradient/Side Slope	50/35 percent
Combat Weight	13,000 kg
Length x Width x Height	5.98 x 2.49 x 2.06 m
Fuel Capacity	300 L (Diesel)

NOTE: may be armed with a 12.7-mm heavy machinegun on a rotating mount.

BTR-40A

Crew/Passengers	2/6
Type	Armored personnel carrier
Armament	Twin 14.5-mm machineguns (antiaircraft variant)
Road Range	285 km
Maximum Speed	80-km/h
Vertical Step	0.47 m
Gradient	60 percent
Trench	0.7 m
Combat Weight	5,300 kg
Length x Width x Height	5.00 x 1.90 x 1.75 m

BTR-50P/PK

Crew/Passengers	2/20
Type	Amphibious armored personnel carrier
Armament	7.62-mm (PK) or 12.7-mm (P) machinegun
Road Range	240 km
Maximum Road Speed	45 km/h
Maximum Water Speed	7 km/h
Vertical Step	1.1 m
Gradient	75 percent
Trench	2.8 m
Combat Weight	14,200 kg
Length x Width x Height	7.32 x 3.14 x 1.42 m

NOTE: the base BTR-50P has an open roof and is armed with a 12.7-mm heavy machine gun. the PK variant adds collective CBR protection and an armored roof.

V-100 Commando Scout

Crew	2 (+1 radio operator in the command variant)
Type	Armored reconnaissance vehicle
Armament	
Main	Twin 7.62-mm MG, 7.62-mm and .50 cal MG or 40-mm grenade launcher combination, 106-mm recoilless rifle, TOW, 20-mm gun, or 30-mm gun
Coaxial	7.62-mm machinegun
Road Range	1,287 km
Maximum Road Speed	96 km/h
Vertical Step	0.61 m
Gradient/Side Slope	60/30 percent
Trench	1.14 m
Fording Depth	1.2 m
Combat Weight	6,600 kg
Length x Width x Height	5.00 x 2.06 x 2.16 m
Fuel Capacity	212 L

V-150 Commando

Crew/Passengers	3/9
Type	Amphibious armored personnel carrier
Armament	12.7-mm MG, or 90- or 20-mm gun
Road Range	800 km
Maximum Road Speed	112 km/h
Maximum Water Speed	5.0 km/h
Vertical Step	0.61 m
Gradient/Side Slope	60/30 percent
Combat Weight	9,136 kg
Length x Width x Height	6.37 x 2.26 x 2.08 m

Stormer

Crew/Passengers	3/8
Type	Amphibious armored personnel carrier
Armament	12,7-mm heavy machinegun or 30-mm cannon
Road Range	650 km
Maximum Speed	80 km/h
Vertical Step	0.6 m
Gradient/Side Slope	60/35 percent
Trench	1.75 m
Fording	1.1 m (1.8 m with preparation)
Combat Weight	12,700 kg
Length x Width x Height	5.33 x 2.69 x 2.27 m

NOTE: Stormer is amphibious with preparation; water speed is 5.0 km/h. Many variants are available.

Panhard VBL

Crew/Passengers	2 to 3/0 to 4 depending or variant
Type	Armored reconnaissance vehicle
Road Range	600 km
Maximum Road Speed	95 km/h
Maximum Water Speed	4.5 km/h
Gradient/Side Slope	50/30 percent
Trench	0.50 m
Fording	0.9 m
Combat Weight	3,550 kg
Length x Width x Height	3.82 x 2.02 x 2.14 (with overhead weapon station)

NOTE: The VBL is amphibious with minor preparation. It may be fitted with an air-defense radar system, antitank weapon system, light or heavy machinegun, or 20-mm Rh 202 automatic cannon.

BRDM

Crew/Passengers	2/3
Type	Amphibious scout car
Armament	12.7-mm and 7.62-mm machineguns
Road Range	500 km
Maximum Road Speed	80 km/h
Water Range	96 km
Maximum Water Speed	9 km/h
Vertical Step	0.4 m
Gradient	60 degrees
Trench	1.22 m
Combat Weight	5,600 kg
Length x Width x Height	5.60 x 2.17 x 1.90 m

LAV-150S

Crew/Passengers	3/12
Type	Amphibious armored personnel carrier
Armament	
Main	20-mm Oerlikon gun
Coaxial	7.62-mm machinegun
Road Range	800 km
Maximum Road Speed	112 km/h
Maximum Water Speed	5.0 km/h
Gradient/Side Slope	60/30 degrees
Combat Weight	9,800 kg
Length x Width x Height	5.70 x 2.36 x 2.54 m

LAV-300

Crew/Passengers	3/9
Type	Amphibious armored personnel carrier
Armament	
Main	12.7-mm machinegun
Coaxial	40-mm automatic grenade launcher
Road Range	925 km
Maximum Speed	105 km/h
Maximum Water Speed	3 km/h
Vertical Step	0.61 m
Gradient/Side Slope	60/30 percent
Combat Weight	14,969 kg
Length x Width x Height	6.40 x 2.54 x 2.59 m

Saladin

Crew	3
Type	Amphibious armored reconnaissance vehicle
Armament	
Main	76-mm cannon
Coaxial	7.62-mm machinegun
Road Range	400 km
Maximum Road Speed	72 km/h
Maximum Water Speed	4.0 km/h
Vertical Step	0.46 m
Gradient	42 degrees
Trench	1.52 m
Fording	1.07 (2.13 m with kit)
Combat Weight	11,590 kg
Length x Width x Height	5.28 x 2.54 x 2.38 m

NOTE: the **SARACEN** is an armored personnel carrier using the same chassis as the Saladin, but it is equipped with a small turret housing a 7.62-mm machinegun.

Ferret Mk II

Crew	2
Type	Armored reconnaissance vehicle
Armament	7.62-mm machinegun
Vertical Step	0.34 m
Gradient/Side Slope	46/30 percent
Trench	1.22 m (with channels
Fording	0.91 m (1.52 m with preparation)
Range	>300 km
Maximum Speed	80 km/h
Combat Weight	4,400 kg
Length x Width x Height	3.84 x 1.91 x 1.88 m

Scorpion 90

Crew	3
Type	Amphibious armored reconnaissance vehicle
Armament	
Main	Cockerill Mk II 90-mm cannon
Coaxial	7.62-mm machinegun
Road Range	866 km
Maximum Speed	73 km/h
Vertical Step	0.5 m
Gradient/Side Slope	60/45 degrees
Trench	2.05 m
Fording	1.07 m
Combat Weight	8,723 kg
Length x Width x Height	5.29 x 2.24 x 2.10 m
Fuel Capacity	423 L

AMX-10 PAC 90, -10P Marines

Crew/Passengers	3/8
Type	Amphibious infantry fighting vehicle
Armament	
Primary	Turret-mounted 90-, 20-, or 25-mm gun and coaxial 7.62-mm MG, or 12.7-mm heavy MG
Auxiliary	7.62-mm or 12.7-mm machinegun
Maximum Road Speed	65 km/h
Maximum Water Speed	10 km/h
Vertical Step	0.7 m (forwards)
Gradient/Side Slope	60/30 percent
Trench	2.1 m
Combat Weight	14,500 kg
Length x Width x Height of Hull	5.90 x 2.83 x 1.95 m

ARTILLERY

155-mm/52 FH 2000 Gun-Howitzer

Crew	6
Caliber	155 mm x 52
Maximum Range	19 to 40 km, based on projectile
Rates of Fire	
Sustained	2 rounds/minute for 30 minutes
Maximum	6 rounds/minute for 3 min.
Burst	3 rd in 20 seconds)
Travelling Weight	13,200 kg
Elevation	–3 to +70 degrees
Traverse	30 degrees left and right
Traveling Length x Width x Height	11.05 x 2.80 x 2.29 m
Gradient	45 percent
Fording	0.76 m
Prime Mover	6 x 6 truck

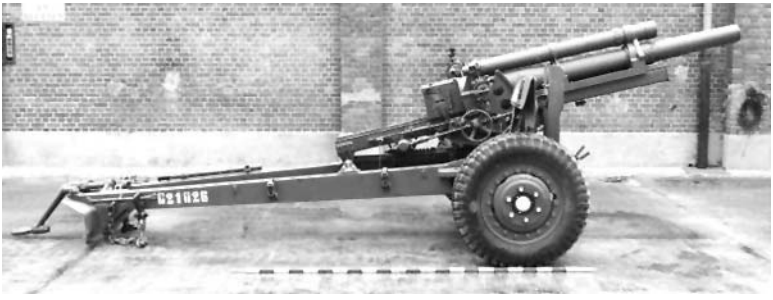
122-mm M-30 Howitzer

Crew	8
Caliber	121.92 mm
Range	11,800 m (630 m effective, HEAT)
Rate of Fire	5 to 6 rounds/minute
Elevation	–3 to +63.5 degrees
Traverse	49 degrees
Travelling Weight	2,450 kg
Traveling Length x Width x Height	5.9 x 1.98 x 1.71 m
Prime Mover	6 x 6 truck or multipurpose tracked vehicle

105-mm LG1 Mk II

Crew	7
Caliber	105.0 mm x 30
Range	11,680 (conventional), 19,000 (extended)
Rates of Fire	
Sustained	4 rounds/minute
Normal	6 rounds/minute
Burst	12 rounds/minute
Elevation	–5 to +70 degrees
Traverse	18 degrees left and right
Travelling Weight	1,450 kg
Traveling Length x Width x Height	5.20 x 1.89 x 1.62 m

105-mm M101A



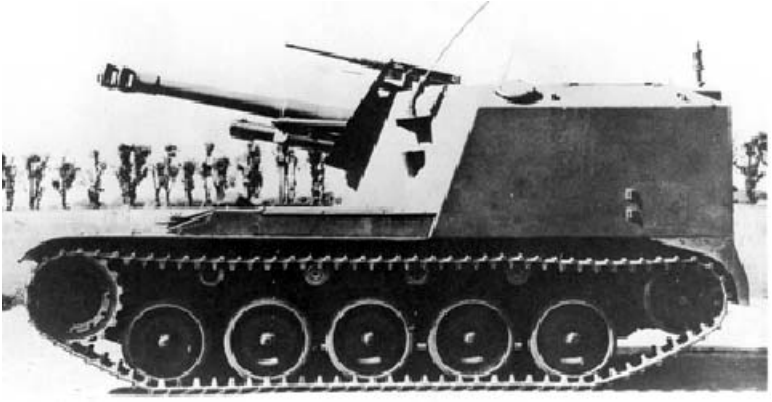
Crew	7
Caliber	105.0 mm
Maximum Range	11,270 m (conventional) 15,000 m (extended)
Rates of Fire	
Sustained	2 rounds/minute
Normal	3 rounds/minute
Burst	10 rounds/minute for 3 minutes
Emplacement/Displacement Time	2 to 3 min.
Elevation	–5 to +66 degrees
Traverse Left, Right	22.4, 23 degrees
Travelling Weight	1,859 kg
Traveling Length x Width x Height	5.99 x 2.16 x 1.58 m

105-mm M-56AHowitzer

Photo source: Yugoimport

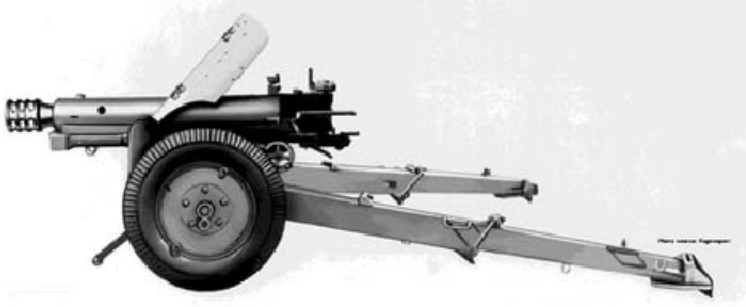
Crew	6
Caliber	105.0 mm x 28
Maximum Range	13,100 m (conventional)
Rates of Fire	
Sustained	4 rounds/minute
Normal	6 rounds/minute
Burst	16 rounds/minute
Emplacement/Displacement Time	2 to 3 minutes
Elevation	–12 to +68.0 degrees (trails spread)
Traverse Left/Right	26/26 degrees (trails spread)
Travelling Weight	2,100 kg
Traveling Length x Width x Height	6.17 x 1.80 x 1.56 m

105-mm Mk 61 SP Howitzer



Crew	5
Caliber	105.0 mm x 22.0
Maximum Range	15,000 (conventional)
Rate of Fire	
Sustained	4 rounds/minute
Normal	6 rounds/minute
Burst	12 rounds/minute
Emplacement/Displacement Time	2/1.5 minutes
Elevation	–4 to +66 degrees
Traverse Left/Right	20 degrees
Cruising Range	350 km
Maximum Speed	60 km/h
Travelling Weight	16,500 kg
Traveling Length x Width x Height	5.70 x 2.65 x 2.70 m

76-mm Mountain Gun M48B-1



Crew	6
Caliber	76.2 mm x 15.5
Maximum Range	8,750 km (conventional)
Rates of Fire	
Sustained	5 rounds/minute
Normal	15 rounds/minute
Burst	25 rounds/minute
Emplacement/Displacement Time	3 min.
Elevation	–15 to +45 degrees
Traverse Left/Right	25 degrees
Travelling Weight	720 kg
Traveling Length x Width x Height	2.42 x 1.32 x 1.00 m

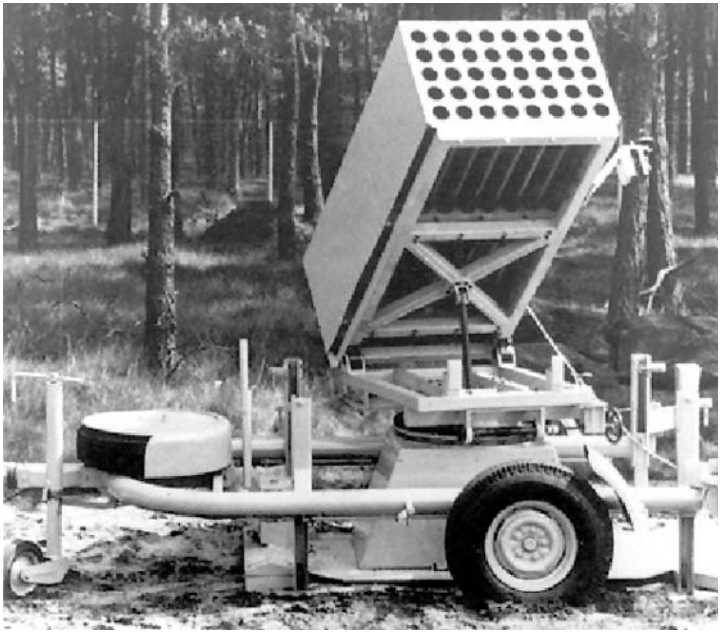
NOTE: M48B-1 is easily broken down for transport and can be moved by pack animals or crewmen.

70-mm NDL-40 Multiple Rocket Launcher

Number of Rocket Tubes	20 (can be increased to 40)
Ammunition Types	70-mm/2.75-in FZ LAU-97 rockets (HE, WP, frag)
Maximum Range:	8,750 m
Coverage Area (20-round salvo)	200 m x 300 m
Rate of Fire	0.1 to 0.9 seconds
Elevation	–3 to +65 degrees
Traverse Left/Right	180 degrees
Travel Weight	755 kg
Travel Length x Width x Height	3.60 x 2.00 x 1.60 m

NOTE: launcher can be mounted on a truck chassis, fast patrol boat, or two-wheel trailer pulled by a light truck; rockets can be fired singly or in salvo; individual tubes can be removed and mounted on a tripod to form a manportable system.

70-mm LAU-97



Crew	3
Number of Rocket Tubes	40 (5 rows of 8 tubes)
Ammunition Types	70-mm/2.75-in FZ LAU-97 rockets (HE, WP, frag)
Maximum Range	10,000 m
Rate of Fire	40 rounds in 6 seconds
Reload Time	3.0 minutes
Emplacement/Displacement Time	1 minute
Elevation	0 to +55 degrees
Traverse	360 degrees (left and right)
Weight Travel Mode	1,245 kg (trailer-mounted version)
Travel Length x Width x Height	4.12 x 1.96 x 1.90 (trailer-mounted)

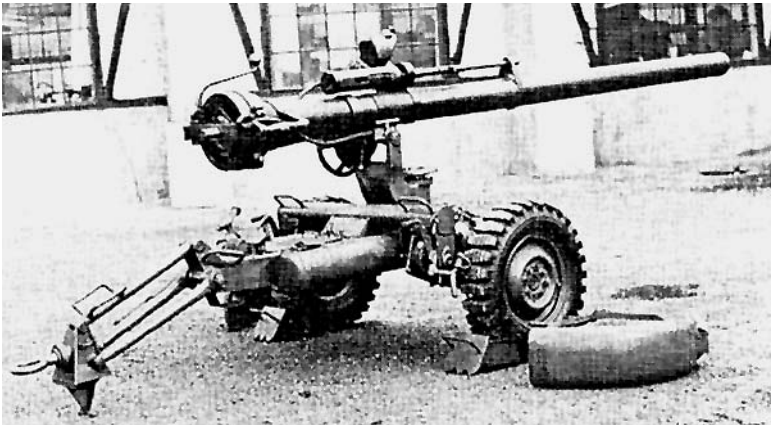
NOTE: can be adapted to a variety of chassis including two-wheel trailers and 6 x 6 light trucks.

140-mm BM-14-17

Crew	5
Number of Launch Tubes	17
Ammunition Types	140-mm Smoke, frag-HE
Range:	1,000 (with large brake ring) to 9,800 m
Rate of Fire	17 rounds in 7 to 10 seconds
Reload Time	1.5 minute
Elevation	0 to 50 degrees
Traverse Left/Right	33.5/166.5 degrees
Emplacement/Displacement Time	2 to 3 minutes
Travel Weight	5,500 kg
Length x Width x Height	5.43 x 2.05 x 2.31 m (firing mode)

ANTIARMOR

106-mm M-40-A1 Recoilless Rifle



Caliber	105 mm
Maximum Range	6,900 m (indirect fire)
Rate of Fire	5 rounds/minute
Elevation	–17 to +22 degrees
Traverse	360 degrees
Rifle Weight	113.9 kg (combat order)

57-mm S-60

Crew	8
Caliber:	57 mm x 348
Rate of Fire:	105 to 120 rounds/minute
Ranges	
Tactical	4,000 m (optical), 6,000 m (radar)
Horizontal	12,000 m
Vertical	9,400 m
Emplacement Time	1 minute
Elevation	–4 to +87 degrees
Traverse	360 degrees
Weight:	4,763 kg
Length x Width x Height	8.84 x 2.08 x 2.37 m
Travel Speed (towed)	Up to 60 km/h

40-mm Bofors L/70

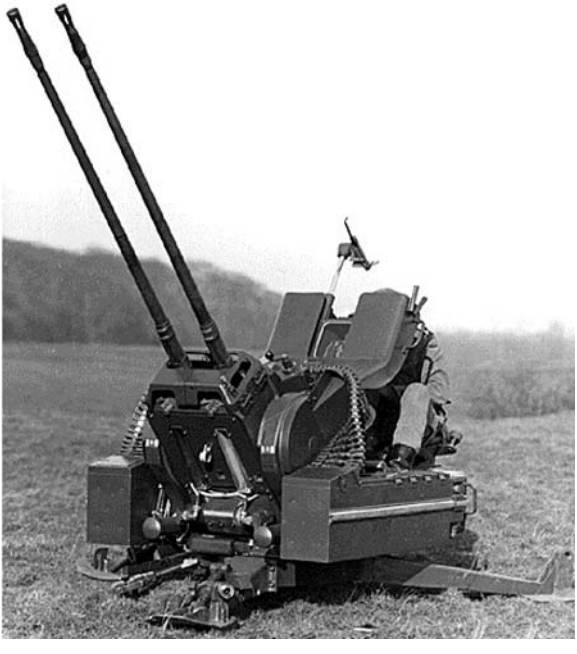
Crew	5
Caliber	40 mm x 365
Ranges	
Tactical	2,500 m (optical), 4,000 m (radar)
Horizontal	12,600 m (horizontal)
Vertical	7,800 m
Rate of Fire	240 to 300 rounds/minute
Elevation	–5 to +90 degrees
Traverse	360 degrees
Emplacement Time	3 minutes
Weight	Up to 5,150 kg
Length x Width x Height	7.29 x 2.23 x 2.35 m
Travel Speed (towed)	Up to 60 km/h

NOTE: many upgrades are available to improve nearly all aspects of system performance.

37-mm M1939

Crew	5 to 8
Gun Caliber	37 mm x 253
Ammunition Types	FRAG-T, AP-T
Feed	5-rd clip
Rate of fire	160 to 180 rounds/minute (cyclic)
Ranges	
Maximum Horizontal	9,500 m
Vertical	6,700 m (maximum), 3,000 m (effective)
Elevation/Traverse	–5 to +85/360 degrees
Weight	2,353 kg
Traveling Length x Width x Height	5.50 x 1.79 x 2.11 m

20-mm Rh 202 Twin ADA



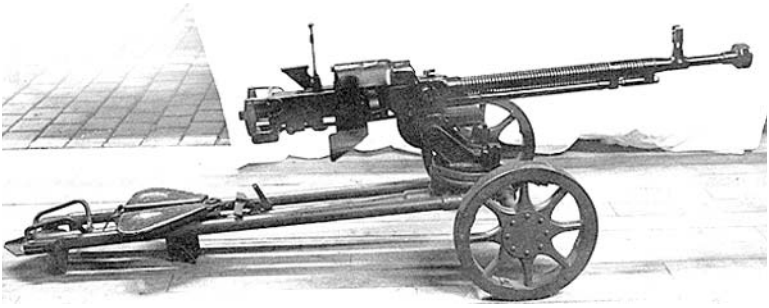
Crew	3 or 4
Caliber	20-mm x 139 (NATO standard)
System of Operation	Gas, automatic
Maximum Effective Range	2,000 m
Rate of Fire per Barrel	1,000 rounds/minute (cyclic)
Feed	Belt feeder Type 3
Elevation	–3.5 to +81.6 degrees
Traverse	360 degrees
Weight (empty)	1,640 kg
Traveling Length	5.035 m
Towing Vehicle	4 x 4 truck

NOTE: The Rh 202 can be adapted to a variety of mounts due to its low recoil forces. It is designed to operate in extreme environmental conditions.

20-mm GAI-C01/C04 ADA

Crew	3 (1 on gun)
Caliber	20 mm
System of Operation	Gas, auto, single (C01) or dual feed (C04)
Maximum Effective Vertical Range	1,500 to 2,000 m
Rate of Fire	1,050 rounds/minute (cyclic)
Feed	75-rd box magazine (x1 for C01, x2 C04)
Elevation	–7 to +83 degrees
Traverse	360 degrees
Weight (no ammunition)	535 kg
Length x Width x Height (Firing)	3.87 x 1.7 x 1.45 m
Towing Vehicle	Light 4 x 4 truck

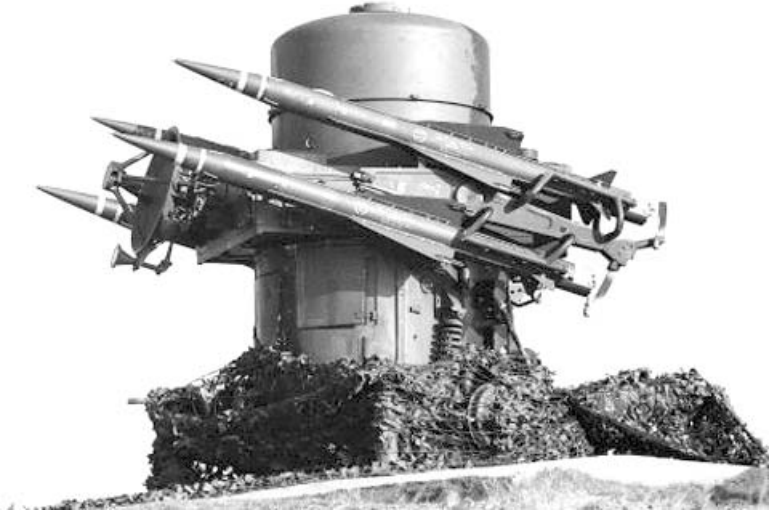
12.7-mm DShK Model 38/46 Heavy Machinegun



Maximum Effective Range	1,500 m
Caliber	12.7 x 108-mm
System of Operation	Gas, automatic
Overall Length	1.588 m
Feed	50-rd metallic link belt
Weight (empty)	35.7 kg

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

Rapier



Crew	8
Type	Low-level SAM system
Launcher	2-wheel-trailer-mounted, 4-round
Weight	1,227 kg
Length x Width x Height	4.064 x 1.765 x 2.134 m
Optical Tracker	
Weight (deployed)	119 kg
Tripod Diameter x Height	1.828 x 1.549 m
Tracker Radar	
Weight	1,186 kg
Length x Width x Height	4.14 x 1,753 x 3.378 m (deployed)
Warhead Type	1.4-kg HE, semi-armor-piercing
Minimum to Maximum Range	500 to 7,000 m
Minimum to Maximum Altitude	15 to 3,000 m

RBS-70 with Mark 2 Missile

Crew	2
Type	2-stage, low-altitude SAM
Guidance	Modulated laser beam riding
Minimum Range	Approximately 200 m
Maximum Range	7,000 m head on, less than 4,000 m crossing
Minimum Altitude	Ground level
Maximum Altitude	4,000
Reload Time	Less than 7 seconds
Length	1.745 m (with end caps)
Weight	26.5 kg (container-launcher with missile)
Warhead	1.5-kg HE-fragmentation
Fuze	Impact and active laser proximity

F-16A, B FALCON

Mission	Multirole fighter
Armament	
Primary	Air-to-air missiles or air-to-surface missiles
Secondary	20-mm guns
Performance	
Maximum Range	3,890 km (2,415 miles)
Maximum Speed	Mach 2.0
Service Ceiling	15,240 m

Su-27, -30, -35 FLANKER

Mission	Air-superiority fighter
Armament	
Primary	Up to 10 AAMs (typically 2x AA-10A, 2x AA-10B, 2x AA-10C, and 4x AA-11/-8); up to 8x 500-kg bombs; 16x 250-kg bombs; or 4x rocket launchers (e.g., S-8, S-13, or S-25 rockets)
Secondary	30-mm gun
Performance	
Maximum Range	1,380 to 4,390 km (based on variant, altitude, and external fuel stores)
Maximum Speed at Height	<2,500 km/h
Service Ceiling	18,500 m

NOTE: Indonesia may have Su-27SK/SMK, Su-30KI/MK, and/or Su-35 aircraft; Su-27SK is shown.

A4E Skyhawk

Mission	Attack
Armament	
Primary	MK 12 cannon, air-to-surface missiles
Secondary	Air-to-air missiles
Performance	
Maximum Range	1,735 nm (2,000 miles; 3200 km)
Maximum Speed	1,085 km/h
Service Ceiling	Not available

Hawk Mk 53, 109, and 209

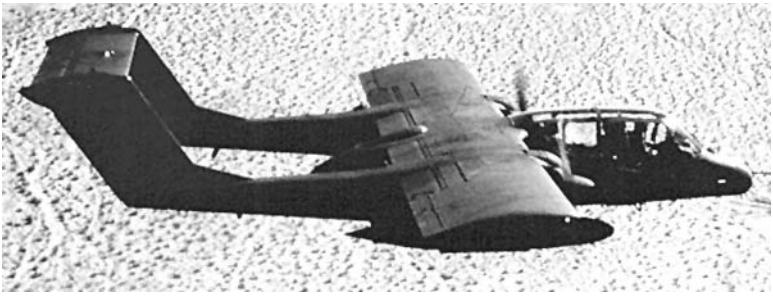
Mission	Multirole fighter
Crew	2 (Mk 109) or 1 (Mk 209)
Armament (Mk 209)	
Airspace Denial	4x AAMs and a 12.7- or 30-mm gun (with two drop tanks for extended range)
Close Air Support	4x 1,000-lb bombs, 4x AAMs, and a 12.7- or 30-mm gun
Antiship Attack	2x antiship rocket pods and 4x AAMs (with two drop tanks for extended range)
Performance	
Ferry Range (two drop tanks)	2,528 km
Maximum Level Speed	1,000 km/h
Service Ceiling	13,715 m

NOTE: can carry a center-line photo reconnaissance pod, rocket-launcher pods, ASMs, or bombs of various types.

F-5E TIGER II

Mission	Fighter/ground attack
Armament	
Primary	Air-to-air or air-to-surface missiles
Secondary	20-mm gun
Performance	
Maximum Range	2,483 km
Maximum Speed	Mach 1.64
Service Ceiling	15,790 m

OV-10F Bronco



Mission	Multipurpose counterinsurgency
Armament	
Primary	M-60C machine guns
Secondary	General-purpose bombs
Performance	
Maximum Range	2,224 km
Maximum Speed	632 km/h
Service Ceiling	9,150 m

Boeing 737-2X9 Surveiller

Mission	Maritime surveillance, transport
Crew/Passengers	2/102
Equipment	Nose-mounted search radar, Side-Looking, Airborne Modular Multimission Surveillance Radar.
Detection Range	185 km port and starboard
Performance	
Maximum Range	3,437 to 4,688 km (based on payload and fuel)
Maximum Cruising Speed	856 km/h
Maximum T-O Weight	56,472 kg
Maximum Payload	15,517 kg

RECOGNITION NOTE: two 4.9-m long antenna arrays are mounted port and starboard above rear fuselage

C130 B, H, H-30, H-MP

Mission	Tactical transport and multimission
Crew	4 or 5
Passengers	92 troops, 64 paratroopers, or 74 litter patients with 2 attendants (H); 128 troops, 92 paratroopers, or 97 litter patients with 4 attendants (H-30)
Range with Maximum Payload	3,791 km
Maximum Cruising Speed	602 km/h
Maximum Payload	19,356 kg (H), 17,645 kg (H-30)
Maximum Normal T-O Weight	70,310 kg
Service Ceiling	10,060 m

NOTE: H-30 variant increases troop and cargo space by 40 percent. H-MP variant is for maritime patrol—2:30 search time for 3,333-km radius, 16:50 for 370-km radius; maximum payload 18,630 kg. Indonesia also has KC-130B tankers.

CN-235

Role	Transport; maritime patrol
Crew	3
Passengers	Up to 57 troops or 46 paratroopers
Armament	3 attachment points under each wing for weapons (e.g., Harpoon ASM); 2x Mk 46 torpedoes or AM 39 Exocet missiles (maritime patrol variant)
Range	727 km (with maximum payload)
Maximum Cruising Speed	456 km/h
Maximum T-O Weight	16,500 kg
Maximum Payload	6,000 kg

F-27 Friendship

Mission	Transport
Performance	
Maximum Range	1,926 km
Maximum Speed	480 km/h
Service Ceiling	9,145 m

C-212 Aviocar

Role	Transport
Crew	2 +16 troops
Armament	Optional cannon, machine guns, or rocket pods
Maximum Speed	359 km/h
Maximum Range	With max payload: 480 km
Wing Span	19 m
Length	15.16 m
Height	6.68 m

NOTE: Pictured is the maritime version of the CASA 212.

HU-16B Albatross

Mission	General utility flying boat
Crew/Passengers	5/12 litters, 10 to 22 passengers
Systems and Equipment	Provisions under each wing for packaged equip. (e.g., bombs, fuel tanks, rescue boat); JATO units; parachute flares
Range	4,587 km
Maximum Cruising Speed	361 km/h
Service Ceiling	6,500 m
Maximum T-O Weight	17,010 kg
T-O Run (with JATO)	640 m (213 m)

C-47 Skytrain

Role	Transport and utility
Range	2,420 km
Maximum Speed	370 km/h
Service Ceiling	7,076 m

Searchmaster B/L (N22B/SL)

Mission	Coastal patrol
Crew/Passengers	2/12
Armament	4 underwing hardpoints accommodating 227-kg loads (e.g., guns, rocket pods)
Operational Equipment	Surveillance radar, night vision equipment
Range (90 percent power)	1,075 km
Cruising Speed	311 km/h
Service Ceiling	6,400 m

Bell 205A-1/UH-1

Role	Multirole transport, SAR, and utility.
System Names	CH-108 (CA), HU.10B (SP), Iroquois (US)
Manufacturer	Bell Textron (CA), Agusta (IT), Fugi (JA)
Crew	2
Maximum Troops	11-14
Engines	Single turboshaft
Fuselage	
Length	12.8 m
Width	2.6 m
Height	3.6 m
Main Rotor	
No. of blades	2
Diameter	14.6 m
Tail rotor	
No. of blades	2
Diameter	2.6 m
Payload	1,980 kg
Cruising speed	205 km/h
Range	252 nm
Hover ceiling	335 m (OGE)
Armament	Possible guns, rockets

Bell 406 (OH-58 D) Kiowa

Role	Armed scout/reconnaissance
System Names	Kiowa Warrior, Combat Scout (406 CS), Aeroscout (U.S.)
Manufacture	Bell Textron
Crew	
Engines	Single turboshaft
Main Rotor	
Diameter	10.7 m
No. of blades	4
Tail Rotor	
Diameter	1.65 m
No. of blades	2
Fuselage	
Length	10.3 m
Width	1.97 m
Height	2.6 m
Payload	760 kg
Cruising speed	220 km/h
Range	300 nm
Hover ceiling	3,415 m (OGE)
Armament	Stinger, Hellfire, rockets, gun pods

NB-412HP (CH-146)

Role	Transport, assault, or SAR
Max. troops	12
Payload	2,451 kg
Engines	twin turboshaft
Main rotor	
No. of blades	4
Diameter	14 m
Tail rotor	
No. of blades	2
Diameter	2.6 m
Fuselage	
Length x Width x Height	13 x 2.6 x 9 m
Cruising speed	230 km/h
Range	375 nm
Hover ceiling	2,805 m (OGE)
Armament	Possible rockets/guns

Note: Upgraded variant of Bell 212.

BO-105C/CBS

Role	**Transport; maritime surveillance**
Crew/Passengers	**1/up to 6**
Payload	700 kg
Maximum Troops:	5
Engines	twin turboshaft
Fuselage	
Length	8.56 m
Width	1.58 m
Height	3.0 m
Main rotor	
Diameter	9.84 m
No. of blades	4
Tail rotor	
Diameter	1.9 m
No. of blades	2
Cruising speed	N/A
Range	596 km
Hover ceiling:	3,200 m (OGE)
Armament	guns, rockets, and missiles

Note: originally a civil design with several military variants; police variant is shown.

SA-319B ALOUETTE III

Role	Transport, MEDEVAC, CAS, ASW, and SAR.
Manufacturer	**FR**
Maximum troops	6
Payload	1,000 kg
Engines	Single turboshaft
Main rotor	
No. of blades	
Diameter	11.0 m
Tail rotor	
No. of blades	3
Diameter	1.9 m
Fuselage	
Length	10.2 m
Width	2.4 m
Height	1.8 m
Cruising speed	185 km/h
Range	142 nm
Hover ceiling	4,250 m (OGE)
Armament	Possible torpedoes, guns, rockets, and ATGMs

NOTE: Based on the SA-316.

AS 332L Super Puma I

Role	Multirole, medium lift
Crew/Passengers	2/25
Maximum Payload	2.727 kg
Sling Load	4,500 kg
Engines	2x turboshaft
Main rotor	
No. of blades	4
Diameter	15.58 m
Tail rotor	
No. of blades	5
Diameter	2.68 m
Fuselage	
Length	16.29 m
Width	3.79 m
Height	4.92 m
Cruising speed	305 km/h
Range	890 km
Armament (optional)	2x 20-mm guns or 7.62-mm guns; 2x AM 29 Exocet missiles; or 2 light-weight torpedoes

HAS.1 WASP I

Role	Shipborne ASW, reconnaissance, and SAR.
Manufacturer	Westland
Crew	Up to 5
Payload	680 kg (slung load)
Engines	Free-turbine turboshaft
Main rotor	
No. of blades	4
Diameter	9.83 m
Tail rotor	
No. of blades	2
Diameter	2.29 m
Fuselage Length	9.24 m
Width	2.64 (blades folded)
Height	2.72 (top of rotor head)
Operational Speed	177 km/h
Range	488 m
Service Ceiling	3,720 m)
Armament	2 x Mk 44 or 1 x Mk 46 torpedoes

NOTE: Overall length can be reduced to 7.86 m with tail and blades folded

CAKRA (German Type 209-1300) Class SS

LOA x Beam x Draft	59.5 x 6.2 x 5.4 m (195.2 x 20.3 x 17.9 ft)
Displacement	1,285 t surfaced; 1,390 t submerged
Propulsion	Diesel-electric, single shaft
Speed Surfaced	11 kn surfaced; 21.5 kn submerged
Endurance	50 days
Torpedoes	8 x 533-mm bow tubes for 14 AEG SUT Mod 0
Radar	Thomson-CSF Calypso I-band
Sonar	Atlas Elektronik CSU 3-2; active/passive search and attack medium frequency; PRS - 3/4 (integral w/CSU) passive ranging

NOTE: Long cylindrical hull. Sail steps forward and aft.

Van Speijk (Ahmed Yani) FF

LOA x Beam x Draft	113.4 x 12.5 x 5.5 m (372.0 x 41.0 x 18.0 ft)
Displacement	2,787 t
Maximum Sustained Speed	28 kn
Aircraft	Helo flight deck and telescoping hangar
Missile launchers	2 x RGM-84A HARPOON quad SSM; 2 x SEACAT quad SAM
Guns	76-mm single-barrel
Other weapons	2 x 32-cm triple torpedo tubes
Radars	DA-05/02 air- and surface-search; DECCA-1229 navigational; LW-03/00 air-search; M-44 and -45 fire-control

NOTE: Rarely seen with missiles fitted; armament provides a multirole capability with the HARPOON for surface targets, the gun and SEACAT for air threats, and torpedoes for subsurface threats.

Fatahillah FFL

LOA x Beam x Draft	83.9 x 11.1 x 3.3 m (275.3 x 36.4 x 10.8 ft)
Displacement	1,450 t
Maximum Speed	30 kn
Aircraft	WASP (NALA only); helo pad and foldable hangar (NALA only)
Missile launchers	2x MM-38 twin EXOCET SSM
Guns	120-mm; 40-mm/70 (NALA has two, all others have one); 2x 20-mm
Other weapons	375-mm twin-barrel mortar; 2x 324-mm triple-tube torpedo launchers (none on NALA)
Radars	DA-05/02 air- and surface-search; WM-28 fire-control

NOTE: equipped for surface and subsurface warfare, shore bombardment, and antiaircraft and antimissile defense.

1850 Ton FFT (Hajar Dewantara)

Complement	76 plus 14 instructors and 100 cadets
LOA x Beam x Draft	96.7 x 11.2 x 4.8 m (317.3 x 36.7 x 15.7 ft)
Displacement (full)	2,082.8 t
Cruising Speed	26 kn
Aircraft	Platform for NBO-105 helicopter
Missile launchers	4x MM38 Exocet SSM
Guns	57-mm/70; 2x 20-mm
Other weapons	2x 533-mm torpedo tubes for AEG SUT; projector/mortar
Radars	Racal Decca 1229 I-band surface-search; Signaal WM28 I-/J-band fire-control

NOTE: torpedo tubes are fixed in the stern transom.

Parchim I Class PG

LOA x Beam x Draft	75.1 x 9.8 x 2.6 m (256.2 x 29.5 x 8.5 ft)
Displacement (full load)	820.5 t
Maximum Sustained Speed	21.9 kn
Missile launchers	2 x SA-N-5 SAM
Guns	57-mm twin-barrel; 30-mm twin-barrel
Other weapons	2 x RBU-600 RL; 4 x 40-cm TT; mines; d.c.
Radars	MUFF COB fire control; STRUT CURVE air- and surface-search; TSR-333 navigational

NOTE: design is similar to Russian GRISHA Class FFL, but has higher freeboard.

PSK MK 5 PTG

LOA x Beam x Draft	50.2 x 7.3 x 2.3 m (164.7 x 23.9 x 7.5 ft)
Displacement (full load)	270 t
Cruising Speed	41 kn
Missile launchers	4x MM 38 Exocet
Guns	57-mm/70; 2x 20-mm
Radars	Racal Decca 1226 I-band surface-search; Signaal WM28 I-J-band fire-control

Lurssen FPB 57 PC

LOA x Beam x Draft	58.1 x 7.6 x 2.7 m (190.6 x 24.9 x 8.9 ft)
Displacement (full load)	425 t
Economy Speed	15 kn
Aircraft	None; helo deck only
Guns	40-mm; 2 x 12.7-mm machineguns
Radars	KH-1007 navigational

NOTE: Large coastal patrol craft.

Lurssen FPB 57 PT

LOA x Beam x Draft	58.1 x 7.6 x 2.7 m (190.6 x 24.9 x 8.9 ft)
Displacement (full load)	425 t
Economy Speed	15 kn
Guns	57-mm single-barrel; 40-mm single-barrel
Other weapons	2 x 53-cm TT
Radars	DECCA

NOTE: can engage air, surface, and subsurface threats.

Attack PC

LOA x Beam x Draft	32.8 x 6.2 x 2.2 m (107.6 x 20.3 x 7.2 ft)
Displacement	146 t
Maximum Sustained Speed	20 kn
Guns	40-mm; 12.7-mm machinegun
Radars	DECCA surface-search

Kal Kangean Class PB

LOA x Beam x Draft	24.5 x 4.3 x 1.0 m (80.4 x 14.1 x 3.3 ft)
Displacement	44.7 t
Maximum Speed	18 kn
Guns	25-mm twin-barrel; 14.5-mm twin-barrel
Radars	Unknown navigational

NOTE: very low freeboard.

KONDOR II PC

LOA x Beam x Draft	56.7 x 7.5 x 2.3 m (187.5 x 25.0 x 7.0 ft)
Displacement (full load)	462 t
Cruising Speed	15 kn
Missile launchers	SA-N-5 SAM
Guns	3 x 25-mm twin-barrel
Other weapons	Mines
Radars	TSR-333 navigational

NOTE: Former East German KONDOR Class minesweeper transferred to the Indonesian Navy.

TANJUNG DALPELE LPD

Type	Landing Ship
LOA x Beam x Draft	122.0 x 22.0 x 6.7 m
Displacement	11,400 t
Speed	15 kn
Helicopters	2x SH-2G Super Seasprites
Guns	40-mm Bofors; 2x 20-mm
Radars	2x I-band navigational

NOTE: Officially designated a multipurpose hospital ship. Has a docking well, and stern and side ramps.

Frosch I LST, Frosch II AE

LOA x Beam x draft	90.7 x 11.1 x 2.8 m (297.6 x 36.4 x 9.2 ft)
Displacement	1,981 t
Maximum Sustained Speed	18 kn
Guns	40-mm; single- and twin-barrel 37- and 25--mm (configuration varies with ship)
Other Weapons	Frosch I can lay 40 mines through stern door; Rocket launchers mounted in front of bridge on Frosch II
Radars	STRUT CURVE air- and surface-search; TSR-333 navigational

NOTE: Frosch II has a 5-ton crane amidships.

LST 511 (Teluk Langsa, Teluk Bayur) LST

Complement	118
LOA x Beam x Draft (full load)	100 x 15.3 x 4,3 m (328 x 50.2 x 14.1 ft)
Displacement	4,145 t
Cruising Speed	10 kn
Guns	2x twin 40-mm AAG and 4x single 40-mm AAG
Radars	SO-1 surface-search

AKKUH I (Teluk Semangka) LST

Complement	90
LOA x Beam x Draft	100 x 14.4 x 4.2 m (328 x 47.2 x 13.8 ft)
Displacement (full load)	3,750 t
Speed	15 kn
Equipment	2x clamshell bow doors, turntable on tank deck, and elevator to main deck
Guns	2x or 3x 40-mm/60, 2x 20-mm/85 Rh 202
Radars	Racal-Decca I-band navigational; E/F-band surface-search radar (Banten and Ende only)

LCM (6) Class

Type	Medium landing craft
Displacement	62 t
Speed (full power)	8 kn

Alkmaar (Tripartite) MHS

Role	Minesweeper
LOA x Beam x Draft	51.5 x 8.9 x 2.5 m (168.9 x 29.2 x 8.5 ft)
Displacement (full load)	577 t
Speed	15 kn
Guns	2x 20-mm
Countermeasures	Mechanical, magnetic, and acoustic sweep gear
Radars	Racal Decca AC 1229C navigational; I-band

NOTE: a Matra Simbad SAM launcher and a third 20-mm may be added for patrol duties.

Teluk Amboina LST

LOA x Beam x Draft	100.0 x 15.2 x 3.4 m (328.1 x 50.0 x 11.2 ft)
Displacement	4,200 fl
Maximum Sustained Speed	13.1 kn
Guns	6x 37-mm; 3x 12.7-mm twin-barrel
Radars	Unknown surface-search

NOTE: has 30-ton crane forward and carries four LCVPs, two port and two starboard of the bridge.

Kupang Class LCU

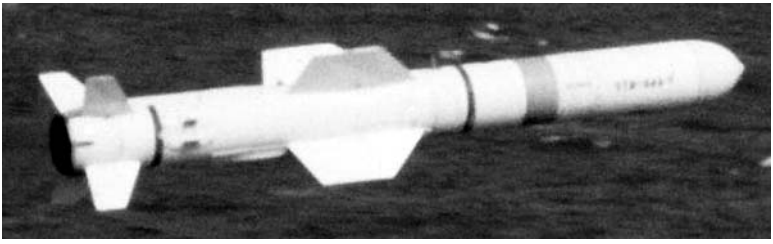
LOA x Beam	42.9 x 9.1 x 1.4 m (140.7 x 29.9 x 4.6 ft)
Displacement	400 t
Speed (full power)	10 kn

NOTE: Kupang generally does not have armament, but light machineguns can be fitted.

TISZA Class AK

Type	Auxiliary ship
Complement	26
LOA x Beam x Draft	78.8 x 10.8 x 4.6 m
Displacement, full load	2,400 t
Speed	12 kn
Guns	4x 14.5-mm machineguns (2x twin)
Radars	SPIN TROUGH I-band navigational

AGM-84, RGM-84 (Block 1B, 1C) Harpoon



Type	Land-, ship-, or air-launched antiship missile
Maximum Speed	Mach 0.85
Range	124 km (RGM-84-1C); 120 km (AGM-84)
Warhead	221.6 kg semi-armor-piercing with contact-delay fuze
Guidance	Inertial and active radar
Launcher	Mk 140
Associated Radar	ZW 06; MW 28
Weight	5.19.3 kg
Length x Wingspan x Diameter	3.84 x 0.83 x 0.34 m

NOTE: With booster, the Block 1C is 4.63 m long and weighs 681.9 kg.

MM 38, MM 40 Block 2, AM 39 Exocet

Type	Air-to-surface or surface-to-surface missile
Ranges	
MM 38	4 to 42 km
MM 40 Block 2	4 to 75 km
AM 39	50 to 72 km
Warhead	165 kg HE shaped-charge fragmentation
Fuze	Active radar and impact
Guidance	Inertial and active radar
Weight	670 to 870 kg (depending on missile type)
Length x Wingspan x Diameter	
MM 38	5.21 x 1.0 x 0.35 m
MM 40 Block 2	5.8 x 1.13 x 0.35 m
AM 39	4.7 x 1.1 x 0.35 m

APPENDIX B:
Biographical Data

Former President Dr. Ahmed Sukarno (1901-1970)

Dr. Ahmed Sukarno

A charismatic and demagogic speaker, Dr. Sukarno was the founder of the Indonesian Nationalist Association (later the Indonesian Nationalist Party or PNI). He supported the Japanese occupation of the archipelago during 1942-45 because the Japanese policy encouraged Indonesian identity, though the Japanese did not encourage nationalism. Following the Japanese defeat, Sukarno became the first president of the newly formed United States of Indonesia, an office he held until he was forced to abdicate in 1967. He was also a founding member of the Third World Non-aligned Movement. Sukarno's administration had an authoritarian posture, and his foreign policy stressed neutrality and nonaligned themes. While Indonesia's fledgling economy struggled, Sukarno, a flamboyant and romantic type, was obsessed with a quest for national unity and built expensive monuments and public buildings. He also opposed Western interests in Indonesia and turned toward Communist China for aid. Following a failed communist-led coup of the military in 1965, Sukarno was stripped of all his executive powers and General Suharto was appointed acting president. Sukarno was held under house arrest until his death in 1970. Dr. Sukarno's legacy of authoritarian administration is still apparent in the framework of modern Indonesian politics.

Former President Haji Mohammed Suharto (1921-)

Haji Mohammed Suharto (Photo Courtesy of Asian Defence Journal— Mar 98— page 8)

Born in 1921 on the island of Java, Suharto received his military training during the Japanese occupation. He rose quickly through the ranks of the post-independence army. Suharto's style is the antithesis of Sukarno, whom he replaced as president in 1968; where Sukarno was preoccupied with appearances, Suharto maneuvered quickly and decisively. Upon being sworn into office, he restored relations with the West, and set an agenda toward salvaging the Indonesian economy. He continued authoritarian policies begun by Sukarno, especially with regard to state censorship; however, he left much of the management of the economy to a team of U.S.-trained economists. Suharto expanded the role of the military to serve a dual function of national defense and state instrument in the conduct of government. Suharto initiated a series of domestic policies aimed at industrializing the Indonesian economy, creating employment, and attracting foreign investment. Ex-President Suharto won seven straight elections, and is a Muslim convert.

Former President Bacharuddin Jusuf Habibie (1936-)

Indonesia's former president owed his rise to power to ex-President Suharto. President Habibie was born on the island of Sulawesi in 1936. Habibie's family befriended the Suharto family while Habibie served his time in the military as a commissioned officer. Suharto favored Habibie as a pillar of his philosophy of government. Habibie was able to convince Suharto of the need to expand the Indonesian economy and mold it into a technological contender in the 1970s and beyond.

Bacharuddin Jusuf Habibie
(Photo Courtesy of Asian Defence Journal—Mar 98—page 6)

Former President Megawati Sukarnoputri (1947-)

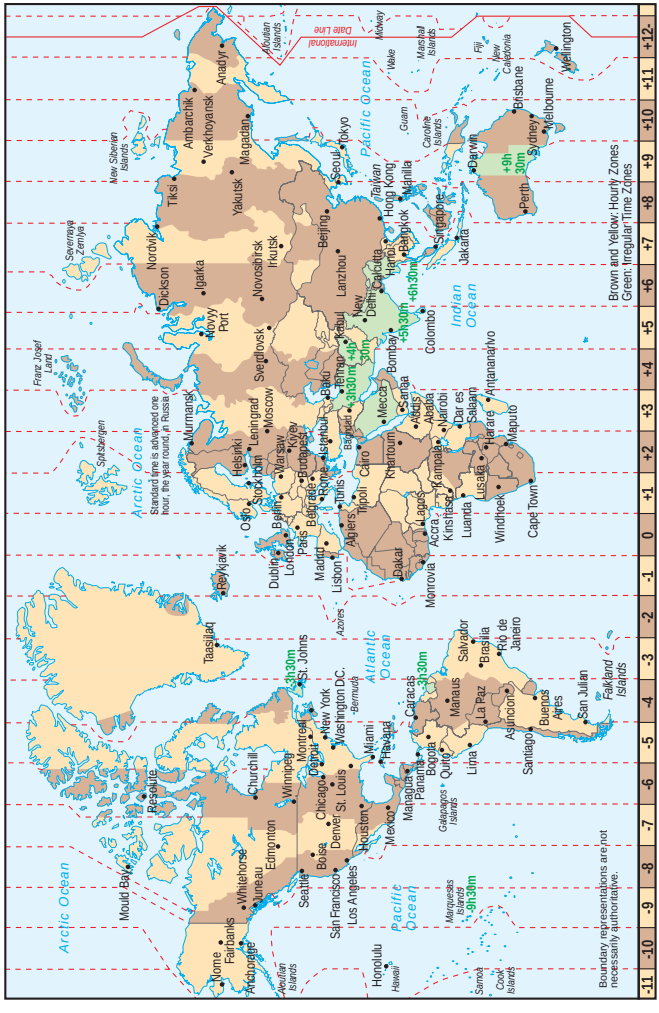
The daughter of former president Sukarno was president of Indonesia from 2001 - 04 and seen by many as her father's political heir. Megawati entered politics in 1987 as a candidate of the Indonesian Democratic party (PDI) and served in parliament for 10 years. She was elected head of the PDI for a five-year term in 1993 but was removed in 1996, at which time she formed the Indonesia Democratic Party of Struggle (PDI-P). Her party won a plurality in the 1999 parliamentary elections, and she ran unsuccessfully for president the same year. She was later chosen as vice president under Abdurrahman Wahid. Wahid encountered numerous problems as president of a resurgent democracy and in mid-2000 turned the administration of everyday operations over to her, When the parliament voted the following year to remove Wahid from office, she was chosen as president.

President Suslio Bambang Yudhoyono (1949-)

President Suslio Bambang Yudhoyono

Former army general Suslio Bambang Yudhoyono won Indonesia's first-ever direct presidential elections in September 2004, unseating the incumbent Megawati Sukarnoputri. Mr. Yudhoyono, who at one time served as a security minister in Ms. Megawati's government, has promised to fight corruption, rejuvenate the economy, and tackle separatist conflicts. On the campaign trail, Mr. Yudhoyono sought to present himself as a man of integrity and as an effective leader in times of crisis. As security minister, he spearheaded operations to capture Islamic extremists blamed for the 2002 Bali nightclub bombings. He has said terrorism is one of the biggest challenges facing Indonesia. Mr. Yudhoyono, a fluent English speaker, studied for his master's degree in the U.S. Rising throughout the ranks under former President Suharto, he led his country's peacekeeping contingent in Bosnia in the 1990s. Sometimes called "SBY," after his initials, Mr. Yudhoyono is praised by his supporters for balancing strength and compassion, although he is often criticized for being "overly-cautious".

APPENDIX C:
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
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

Country	UTC	Eastern	Central	Mountain	Pacific
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
Ecuador	-5.0 H	+0.0 H	+1.0 H	+2.0 H	+3.0 H

Country	UTC	Eastern	Central	Mountain	Pacific
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

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

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

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

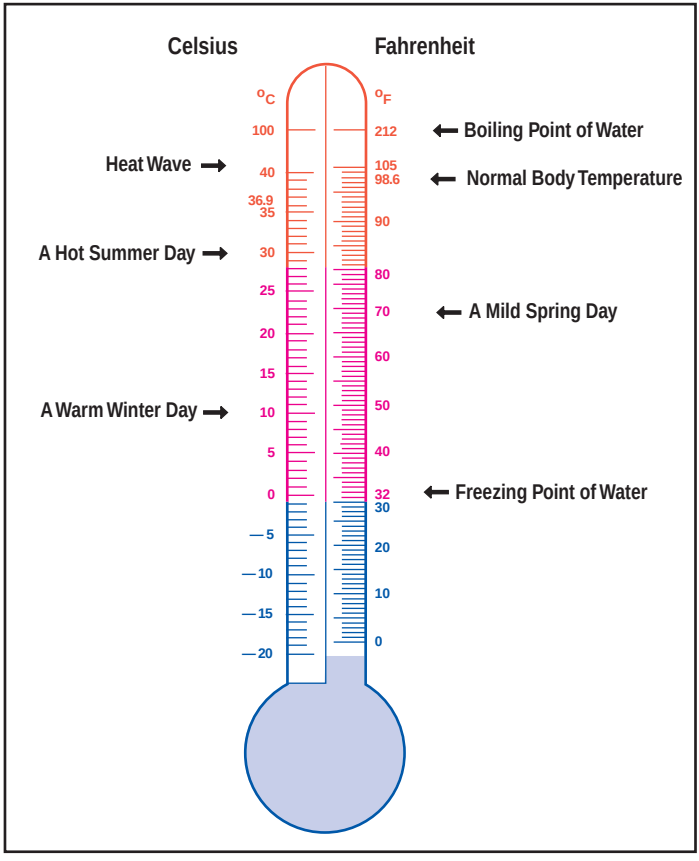
APPENDIX D:
Conversion Charts

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

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

Temperature

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



Temperature Chart

APPENDIX E:
Calendars and Holidays

The Gregorian Calendar

The Gregorian calendar is based on the solar year and has 365 days. Leap years occur every 4 years — the most recent being 1996.

The Islamic Calendar

The Islamic calendar is used solely for religious purposes. Solar calendars (i.e., Gregorian) are used for business purposes and in international affairs.

The Islamic calendar is computed from the Hejira or the flight of Mohammed from Mecca to Medina and often designated with the letters A.H. for Anno Hejira. The calendar is lunar and consists of 354 days. Leap years* occur every 2 or 3 years. The following Western dates indicate the beginning of contemporary Islamic years:

Islamic	Gregorian
1426	21 April 2005
1427	11 April 2006
1428	31 March 2007

The months of the calendar begin with the first crescent of the new moon and alternately contain 30 or 29 days and are named as follows: Muharram, Safar, Rabi I, Rabi II, Jumada I, Jumada II, Rajab, Shaban, Ramadan, Shawwal, Dhu al-Qada, and Dhu al-Hijjah.

The Islamic calendar has 7 days each week beginning at sundown with al-Jumah, which is the day of gathering — a day equivalent to the Jewish Sabbath or Christian Sunday. The week runs from Friday to Thursday with business days from Saturday to Wednesday; Thursday and Friday are the weekend. The Islamic day is from sundown to sundown, although Muslims are active during all hours during certain months of the year.

Secular Holidays

1 January—New Year's Day

17 August—National Day

Christian Holidays

Good Friday and Easter

Ascension Day—Celebrated 40 days after Easter Sunday

Christmas (December 25th)

Islamic Holidays

There are several religious holidays celebrated throughout the Islamic world. Islamic holidays are based on the lunar calendar so the actual day of celebration may vary. They include:

Islamic New Year First day of Muharram	The new year day of Hijrah reminds Muslims the Hijrah (migration) of the Prophet Muhammad from Makkah to Madinah in the year 622 C.E. It is well known that the Hijrah did not take place on the first day of Muharram, it probably occured in the month of Rabu'ul Awwal (3rd month). Also the Hijri calendar was instituted some time in the reign of Caliph 'Umar (634-644 C.E.)
Yom Ashoora 10th of Muharram	After his arrival in Madinah in the year 623, Prophet Muhammad instituted fasting on the 10th of Muharram. A year later this fasting was replaced with the mandatory fasting in the month of Ramadhan.
Maulid Nabi 12th of Raby'al-Awwal	This day is remembered as the birthday of the Prophet Muhammad. It is a very popular day of celebration. It probably began early in the Fatimid Egypt (beginning of 10th C.E.) where people began distributing sweets and making special chanting and festivities on this day.

Isra' and Mi'raj 27th of Rajab	Night of journey of Prophet Muhammad from Makkah to Jerusalem and then his ascension to heavens occured in the year 620 C.E. It is mentioned briefly in the Qur'an (Surah 17 and 53). The hadith literature gives much more details of this experience of the Prophet.
First Day of Ramadhan	Ramadhan is the ninth month of the Islamic calendar. Muslims consider this whole month as a blessed month. They fast during the days of this month and make special prayers at night. People also give more charity and do extra righteous deeds.
Nuzulul Qur'an 17th of Ramadhan	Nuzulul Qur'an is the time in which Prophet Muhammad received the first revelation of The Holy Qur'an, the God's guidance and final message of truth. It was on the 17th day of Ramadhan (in the year 610 C.E.) when Angel Jibreel (Gabriel) came to Muhammad while he was in the cave of Hira, near Makkah and told him that Allah had appointed Muhammad as His last Messenger and Prophet.
Eidul Fitr 1st of Shawwal	The feast occurs at the end of Ramadan or the first day of the month of Shawwal and lasts from 6 to 8 days. this holiday is also known as Id al-Sagheer. The significance of Eid is that it is the day of thanksgiving to Allah that he gave the opportunity to Muslims to benefit from and enjoy the blessing of Ramadhan.
Eidul Adha 1oth of Thw al-Hijjah	Also known as Id al-Keeber of the Day of the Sacrifice, this feast begins on the 10th of Thw al-Hijjah and lasts 5 days. It commemorates Prophet Abraham's attempt to sacrifice his son.

APPENDIX F:
Language

Pronunciation of vowels is similar to that of Spanish or Italian, as follows:

a	as in father
e	as in egg
i	as in tin
o	as in cold
u	as in mule
ai	as in aisle
au	as in Faust

Pronunciation of consonants is similar to that of English, with the following exceptions:

c	like ch in child
g	as in gun
h	often very soft, as in ah
kh	hard, like as strong k
ng	soft, as in singer
ngg	hard, as in ranger
r	rolled, as in Spanish

Key Phrases

English	Bahasa Indonesia
Yes	Ja
No	Tidak
Hello	Selamat bertemu
Thank you	Terima kasih
Good bye (upon leaving)	Selamat tinggal
Good bye (when staying)	Selamat djalan
Madam	Njonja
Miss	Nona
Sir, Mister	Saudara

English	Bahasa Indonesia
Please	Silahkan
Thank you	Terima kasih
Do you speak English?	Apa saudara dapat bitjara bahasa Inggeris?
I don't speak your language well.	Saja kurang pandai bitjara bahasa saudara.
Please speak slowly.	Haraprapelan.
Please repeat.	Harap ulangi.
Excuse me.	Maafkan saja.
Where do you live?	Dimana saudara tinggal?
Is Mrs. Jones at home?	Apa Njonja Jones ada dirumah?
I am from America.	Saja asal dari America.
I don't know.	Saja tidak tahu.
Can you get an interpreter?	Dapatkah saudara tjarikan djuru bahasa?
What is this/that?	Apa ini/itu?
What time is it now?	Pukul berapa sekarang?
Where is the toilet?	Dimana kamar ketjil?
Where is the telephone?	Dimana tilpon?
Will you please get this number for me?	Harap sambungkan saja dengan nomor ini?
Where can I find a taxi?	Dimana saja bisa taxi?
What are you doing?	Saudara sedang apa?
Where are you going?	Saudara hendak kemana?
Please show me.	Harap tundjukkan.
Please write it.	Harap ditulis.
Please wait until I come back.	Harap tunggu sampai saja kembali.
Please show me on this map.	Harap tundjukkan dipeta ini.
What is the name of this street?	Apa nama djalan ini?
Is this the way to . . .	Apa djalan ini . . .
I want to buy . . .	Saja mau beli . . .
Please bring me a cup.	Bawakan saja satu tjangkir.
Please bring me the bill.	Saja minta rekening.
How much will it cost?	Berapa harga?
Stop!	Stop! Berhenti!

English	Bahasa Indonesia
Go away!	Pergi!
Go straight ahead.	Jalan terus.
I'm allergic to . . .	Saya alergi . . .
Where are we now?	Dimana kita sekarang?
I understand.	Saya mengertti.
I don't understand.	Saya tidak mengertti.
I'm sorry.	Saya menyesal.
I apologize.	Saya minta maaf.
I did not do it.	Saya tidak melakukan itu.
Fire!	Kebakaran!
Help!	Tolong!
Danger!	Berbahaya!
It's an emergency!	Kedaan darurat!

Vocabulary

English	Bahasa Indonesia
above	diatas
accident	kecelakaan
address	alamat
age	umur
airfield	lapangan terbang
alive	hidup
American Embassy	Kedutaan Amerika
animal	binatang
apple	appel
banana	pisang
bank	bank
behind	dibelakang
bleed	berdarah
blood	darah
blood group	golongan darah
breakfast	makan pagi
careful	hati-hati

English	Bahasa Indonesia
church	geredja
beans	buntjis
beef	daging sapi
beefsteak	bistik
beer	bier
boat	perahu
boil	merebus
bottled water	air minum di-botol
bread	roti
bus	bis
butter	mentega
cabbage	daunkol
cake	ueh
candy	gula-gula
car	mobil
cheese	kedju
chicken	ajam
child	anak
chocolate	tjoklat
clear	terang
closed	tutup
cloudy	mendung
coffee	kopi
cold	dingin
cool	sedjuk
cream	sari susu
crossroad	perempatan
dentist	doktergigi
doctor	dokter
eggs	telur
electricity	listrik
engine	mesin
fish	ikan

English	Bahasa Indonesia
foggy	berkabut
food	makanan
forest	hutan
fork	garpu
fresh water	air putih
gas/POL	bensin
glass	gelas
grapes	buah anggur
grocery store	toko makanan
hill	bukit
hospital	rumah sakit
hot	panas
hotel	hotel
hurt	sakit
in front of	didepan
lake	danau
lemons	djeruk citroen
mangoes	mangga
market place	menudju kepasar
meat	daging
medicine	obat
milk	susu
mosque	mesjid
nationality	kebangsaan
next to	disamping
no entry	dilarang masuk
no parking	dilarang parkir
one way	satu arah
open	buka
opposite	berhadapan dengan
oranges	djeruk keprok
park	taman
peaches	buah tuffah farsi

English	Bahasa Indonesia
pears	buah per
pepper	meritja
pharmacist	apotik
pineapples	buah nenas
pirate	ianun
plate	piring
poisonous	beracun
police station	kantor polisi
pork	daging babi
post office	kantor pos
potatoes	kentang
radio station	stasiun radio
railroad station	stasiun keretaapi
religion	agama
repair	perbaiki
restaurant	restoran
return	kembali
rice (cooked)	nasi
river	sungai
road	jalan
salt	garam
school	sekolah
sex	jenis kelamin
sit	duduk
sleep	tidur
soap	sabun
soup	sup
spoon	sendok
stamps	perangko
store	toko
sugar	gula

English	Bahasa Indonesia
sunrise	matahari terbit
sunset	matahari terbenam
tea	teh
temple	candi
toilet paper	kertas kamar ketjil
towel	anduk
town square	alun-alun
train	kereta api
truck	trek, truk
valley	lembah
vegetables	sajuran
volcano	gunung api
wait	tunggu
water	air
wood (timber)	kayu

Colors

English	Bahasa Indonesia
red	merah
yellow	kuning
blue	biru
white	putih
black	hitam
green	hidjau
purple	ungu

Direction

English	Bahasa Indonesia
Which way is . . .	Mana . . .
North	Utara
South	Selatan
East	Timur
West	Barat

Numbers

English	Bahasa Indonesia
1	satu
2	dua
3	tiga
4	empat
5	lima
6	enam
7	tudjuh
8	delapan
9	sembilan
10	sepuluh
11	sebelas
12	dua belas
13	tiga belas
14	empat belas
15	lima belas
20	dua puluh
21	dua puluh satu
30	tiga puluh
40	empat puluh
50	lima puluh
100	seratus
1,000	seribu

Days of the Week/General Time

English	Bahasa Indonesia
Monday	Senen
Tuesday	Selasa
Wednesday	Rebo
Thursday	Kemis
Friday	Djum'at
Saturday	Saptu
Sunday	Minggu

English	Bahasa Indonesia
everyday	setiap hari
today	hari ini
tomorrow	besok
yesterday	kemarin
this week	minggu ini
next week	minggu depan
last week	minggu lalu
morning	pagi
afternoon	sore
evening	malam
breakfast	makan pagi
lunch	makan siang
dinner	makan malam

Military Vocabulary

English	Bahasa Indonesia
aircraft	kapal terbang
aircraft carrier	kapal induk
air force	angkatan udar
ammunition	aminisi
antiair artillery	meriam penangkis
army	tentara
artillery	artileri
aviation	penerbangan
battalion	batalyon
battleship	kapal perang
bomb	membom
camouflage	penyamaran
coastal defense	pertahanan pantai
corps	korps
cruiser (ship)	kapal jelajah
destroyer (ship)	kapal perusak
division	divisi

English	Bahasa Indonesia
engineer	insinyur
garrison	garnisum
guerrilla	durhaka
gun	bedil
hand grenade	granat tangan
headquarters	markas besar
infantry	infantri
latitude	lintang
longitude	bujur
machinegun	mitraliur
map	peta
military	militer
mine	ranjau
mortar	mortir
platoon	pleton
radar	radar
reconnaissance	mengintip
rifle	senapan
submarine	kapal selam
tank	tank
tactics	taktik
torpedo	menorpedo
weapon	senjata
weather	cuaca

APPENDIX G:
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

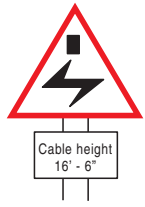
No left turn

One way street

Tourist information point

Traffic signals

No u-turn



Overhead cables, Maximum height

Failure of traffic light signals

Sharp deviation

APPENDIX H:
Deployed Personnel's Guide to Health Maintenance

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

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

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

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

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

Overcrowded living areas should be avoided. Ventilated living areas and avoiding coughing or sneezing toward others will reduce colds and other respiratory infections. Cots or sleeping bags should be arranged "head to toe" to avoid the face-to-face contact that spreads germs.

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

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

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

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

Additional Information

Water

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

- Adding calcium hypochlorite at 5.0 ppm for 30 minutes;
- Adding Chlor-Floc or iodine tablets according to label instructions;
- Heating water to a rolling boil for 5 to 10 minutes; or
- Adding 2 to 4 drops of ordinary chlorine bleach per quart of water and waiting 30 minutes before using it.

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

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

Rodents

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

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

Insects

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

- Use DoD-approved insect repellents properly;
- Apply DEET on all exposed skin;
- Apply permethrin on clothing and bed nets;
- Tuck bed net under bedding; use bed net pole;
- Avoid exposure to living or dead animals;
- Regularly check for ticks;
- Discourage pests by disposing of trash properly; eliminate food storage in living areas; and

- Cover exposed skin by keeping sleeves rolled down when possible, especially during peak periods of mosquito biting (dusk and dawn); keep undershirts tucked into pants; tuck pant legs into boots.

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

Bed nets should be treated with permethrin for protection against biting insects using either the single aerosol spray can method (treating two bed nets) or the unit's 2-gallon sprayer. All personnel should sleep under mosquito nets, regardless of time of day, ensure netting is tucked under bedding, and use poles to prevent bed nets from draping on the skin.

DoD-approved insect repellents are:

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

Hot Weather

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

- Stay hydrated by drinking water frequently;
- Follow work-rest cycles;
- Monitor others who may have heat-related problems;
- Wear uniforms properly;
- Use a sun block (SPF 15 or higher), sunglasses, and lip balm;
- During hot weather, wear natural fiber clothing (such as cotton) next to the skin for increased ventilation;
- Seek immediate medical attention for heat injuries such as cramps, exhaustion, or stroke. Heat injuries can also occur in cold weather;

■ Avoid standing in direct sunlight for long periods; be prepared for sudden drops in temperature at night, and construct wind screens if necessary to avoid blowing dust or sand.

Sunscreens:

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

WORK/REST TABLE

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

The work/rest times and fluid replacement volumes will sustain performance and hydration for at least 4 hours of work in the specific heat category. Individual water needs will vary +/- (plus/minus) 1/4 qt/hr.

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

Caution: Hourly fluid intake should not exceed 1 ½ quarts. Daily intake should not exceed 12 quarts. Note: MOPP gear adds 10^{O} to WBGT Index.

Food

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

Human Waste

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

Cold Weather

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

- Drink plenty of fluids, preferably water or other decaffeinated beverages;
- Closely monitor others who have had previous cold injuries;
- Use well-ventilated warming tents and hot liquids for relief from the cold. Watch for shivering and increase rations to the equivalent of four MREs per day;
- Not rest or sleep in tents or vehicles unless well ventilated; temperatures can drop drastically at night;
- Dress in layers, wear polypropylene long underwear, and use sunglasses, scarf, unscented lip balm, sunscreen, and skin moisturizers;

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								

- Insulate themselves from the ground with tree boughs or sleeping mats and construct windscreens to avoid unnecessary heat loss; and
- Remember that loss of sensitivity in any body part requires immediate medical attention.

First Aid

Basic Lifesaving

Those caring for injured persons should immediately:

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

Injuries and Care

Shock

- **Symptoms:**
  - Confusion
  - Cold, clammy skin
  - Sweating
  - Shallow, labored, and rapid breathing
  - Rapid pulse
- **Treatment:**
  - An open airway should be maintained.
  - Unconscious victims should be placed on their side.

- ❑ Victims should be kept calm, warm, and comfortable.
- ❑ Lower extremities should be elevated.
- ❑ Medical attention should be sought as soon as possible.

Abdominal Wound

- ■ **Treatment:**
  - ❑ Exposed organs should be covered with moist, clean dressing.
  - ❑ Wound should be secured with bandages.
  - ❑ Displaced organs should never be reintroduced to the body.

Bleeding

- ■ **Treatment:**
  - ❑ Direct pressure with hand should be applied; a dressing should be used if available.
  - ❑ Injured extremity should be elevated if no fractures are suspected.
  - ❑ Pressure points may be used to control bleeding.
  - ❑ Dressings should not be removed; additional dressings may be applied over old dressings.
- ■ **Tourniquet:**
  - ❑ **NOTE: Tourniquets should only be used when an injury is life threatening.**
  - ❑ A 1-inch band should be tied between the injury and the heart, 2 to 4 inches from the injury, to stop severe bleeding; wire or shoe strings should not be used.
  - ❑ Band should be tight enough to stop bleeding and no tighter.
  - ❑ Once the tourniquet is tied, it should not be loosened.
  - ❑ The tourniquet should be left exposed for quick visual reference.
  - ❑ The time that the tourniquet is tied and the letter “T” should be written on the casualty’s forehead.

Eye Injury

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

Chest Wound

- **Symptoms:**
  - Sucking noise from chest
  - Frothy red blood from wound
- **Treatment:**
  - Entry and exit wounds should be identified; wounds should be covered (aluminum foil, ID card).
  - Three sides of the material covering the wound should be taped, leaving the bottom untaped.
  - Victim should be positioned to facilitate easiest breathing.

Fractures

- **Symptoms:**
  - Deformity, bruising
  - Tenderness
  - Swelling and discoloration
- **Treatment:**
  - Fractured limb should not be straightened.
  - Injury should be splinted with minimal movement of injured person.
  - Joints above and below the injury should be splinted.

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

Spinal, Neck, Head Injury

- ■ **Symptoms:**
  - ❑ Lack of feeling and/or control below neck
- ■ **Treatment:**
  - ❑ Conscious victims should be cautioned to remain still.
  - ❑ Airway should be checked without moving injured person's head.
  - ❑ Victims who must be moved should be placed, without bending or rotating victim's head and neck, on a hard surface that would act as a litter (door, cut lumber).
  - ❑ Head and neck should be immobilized.

Heat Injuries

Heat Cramps

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

Heat Exhaustion

- ■ **Symptoms:**
  - ❑ Cramps in abdomen or limbs
  - ❑ Pale skin
  - ❑ Dizziness, faintness, weakness
  - ❑ Nausea or vomiting

- ❏ Profuse sweating or moist, cool skin
- ❏ Weak pulse
- ❏ Normal body temperature

Heat Stroke

- ■ **Symptoms:**
  - ❏ Headache, dizziness
  - ❏ Red face/skin
  - ❏ Hot, dry skin (no sweating)
  - ❏ Strong, rapid pulse
  - ❏ High body temperature (hot to touch)
- ■ **Treatment:**
  - ❏ Victim should be treated for shock.
  - ❏ Victim should be laid in a cool area with clothing loosened.
  - ❏ Victim can be cooled by sprinkling with cool water or fanning (though not to the point of shivering).
  - ❏ If conscious, victim may drink cool water (2 teaspoons of salt to one canteen may be added).
  - ❏ Seek medical attention immediately; heat stroke can result in death.

Burns

Burns may be caused by heat (thermal), electricity, chemicals, or radiation. Treatment is based on depth, size, and severity (degree of burn). All burn victims should be treated for shock and seen by medical personnel.

Thermal/First Degree

- ■ **Symptoms:**
  - ❏ Skin reddens
  - ❏ Painful

- **Treatment:**
  - Source of burn should be removed.
  - Cool water should be applied to the affected area.

Thermal/Second Degree

- **Symptoms:**
  - Skin reddens and blisters
  - Very painful
- **Treatment:**
  - Source of burn should be removed.
  - Cool water should be applied to the affected area.
  - Blisters should not be broken.
  - A dry dressing should cover the affected area.

Thermal/Third Degree

- **Symptoms:**
  - Charred or whitish looking skin
  - May burn to the bone
  - Burned area not painful; surrounding area very painful
- **Treatment:**
  - Source of burn should be removed.
  - Clothing that adheres to burned area should not be removed.
  - A dry dressing should cover the affected area.

Electrical Burns

- **Treatment:**
  - Power source must be off.
  - Entry and exit wounds should be identified.
  - Burned area should be treated in accordance with its severity.

Chemical Burns

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

Cold Injuries

Hypothermia

- **Symptoms:**
  - Body is cold under clothing
  - Victim may appear confused or dead
- **Treatment:**
  - Victim should be moved to a warm place.
  - Wet clothing should be removed; victim should be dressed in warm clothing or wrapped in a dry blanket.
  - Body parts should not be rubbed.
  - Victims must not consume alcoholic beverages.

Frostbite

- **Symptoms:**
  - Skin appears white or waxy
  - Skin is hard to the touch
- **Treatment:**
  - Victim should be moved to a warm place.
  - Affected area should be warmed in 104 to 108° F (40° C) water for 15 to 30 minutes (NOT hot water).
  - Affected area should be covered with several layers of clothing.

- ❏ Affected area must not be rubbed.
- ❏ Victim must seek medical attention.

Emergency Life-Saving Equipment

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

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

APPENDIX I:
Individual Protective Measures

Security Threats

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

Foreign Intelligence and Security Services

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

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

In your personal contacts, follow these guidelines:

- Do not attempt to keep up with your hosts in social drinking.
- Do not engage in black market activity for money or goods.
- Do not sell your possessions.
- Do not bring in or purchase illegal drugs.
- Do not bring in pornography.
- Do not bring in religious literature for distribution. (You may bring one Bible, Koran, or other religious material for your own personal use.)

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

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

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

Detention

Most intelligence and security services in threat countries detain persons for a wide range of real or imagined wrongs. The best advice, of course, is to do nothing that would give a foreign service the least reason to pick

you up. If you are arrested or detained by host nation intelligence or security, however, remember the following:

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

Foreign Terrorist Threat

Terrorism may seem like mindless violence committed without logic or purpose, but it is not. Terrorists attack soft and undefended targets, both people and facilities, to gain political objectives they see as out of reach by less violent means. Many of today's terrorists view no one as innocent.

Thus, injury and loss of life are justified as acceptable means to gain the notoriety generated by a violent act in order to support their cause.

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

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

To realistically evaluate your individual security program, you must understand how terrorists select and identify their victims. Terrorists generally classify targets in terms of accessibility, vulnerability, and political worth (symbolic nature). These perceptions may not be based on the person's actual position, but rather the image of wealth or importance they represent to the public. For each potential target, a risk versus gain assessment is conducted to determine if a terrorist can victimize a target without ramifications to the terrorist organization. It is during this phase that the terrorist determines if a target is "hard or soft." A hard target is someone who is aware of the threat of terrorism and adjusts his personal habits accordingly. Soft targets are oblivious to the threat and their surroundings, making an easy target.

Identification by name is another targeting method gathered from aircraft manifests, unit/duty rosters, public documents (Who's Who or the

Social Register), personnel files, discarded mail, or personal papers in trash. Many targets are selected based upon their easily identifiable symbols or trademarks, such as uniforms, luggage (seabags or duffle bags), blatant national symbols (currency, tatoos, and clothing), and decals and bumper stickers.

Travel Security

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

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

- You should not travel on commercial aircraft outside the continental U.S. in uniform.
- Prior to traveling by commercial aircraft, you should screen your wallet and other personal items, removing any documents (that is, credit cards, club membership cards, etc.) which would reveal your military affiliation.
  NOTE: Current USMC policy requires service members to wear two I.D. tags with metal necklaces when on official business. Also, the current I.D. card must be in possession at all times. These requirements include travel to or through terrorist areas. In view of these requirements, the service member must be prepared to remove and conceal these and any other items which would identify them as military personnel in the event of a skyjacking.
- You should stay alert to any suspicious activity when traveling. Keep in mind that the less time spent in waiting areas and lobbies, the better. This means adjusting your schedule to reduce your wait at these locations.
- You should not discuss your military affiliation with anyone during your travels because it increases your chances of being singled out as a symbolic victim.

- In case of an incident, you should not confront a terrorist or present a threatening image. The lower profile you present, the less likely you will become a victim or bargaining chip for the terrorists, and your survivability increases.

Hostage Situation

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

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

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

Hostages sometimes are killed during rescue attempts; consequently, you should take measures to protect yourself during such an action.

Drop to the floor immediately, remain still and avoiding any sudden movement; select a safe corner if it offers more security than the floor. Do not attempt to assist the rescuing forces but wait for instructions. After the rescue, do not make any comment to the media until you have been debriefed by appropriate U.S. authorities.

APPENDIX J:
Dangerous Animals and Plants

Snakes

Death Adder

Description:

Adult length 0.3 to 0.5 meter, maximum of 1 meter. Color is highly variable along the back: red, brown, or gray, either uniform or with alternating pale and dark cross-bands. The belly is white, speckled with dark spots. Short stubby body, with distinctive yellow- or cream-colored, rat-like tail that ends in a sharp curved spine. Broad triangular head; occasionally with raised horn-like scales above the eyes.

Habitat:

Dry, sandy areas in or near open woodlands, grassy plains, or rock outcroppings. Widespread in rain forests, lowlands, highlands, and dunes.

Activity and behavioral patterns:

Nocturnal; sluggish during the day. Seeks refuge in leaf litter or loose sand. Commonly encountered asleep on paths and trails during the day; will bite. Strikes quickly. Following the initial bite, often hangs on. Most commonly found at end of the wet season.

Venom's effects:

Bite site may be painless or mildly painful. Symptoms usually mild, until severe paralysis occurs. Some victims experience a mild headache and occasional vomiting soon after being bitten.

Red-necked Keelback

Description:

Adult length usually 0.6 to 0.7 meter. Background color olive, greenish gray, or greenish brown with indistinct flecks of black and yellow which may appear as a stripe mid-back. Neck and forepart of body vivid red; sides of head yellow, with a black streak below the eye.

Habitat:

Brush-covered or grassy fields adjacent to streams, ditches, and paddies.

Activity and behavioral patterns:

Primarily active during the day. When threatened, rears front of body and spreads hood.

Venom's effects:

Bite may be painless with minimal localized swelling. Symptoms may include headache, nausea, and vomiting.

Malayan Krait

No Photograph Available

Description:

Adult 1.2 to 1.4 meters. Black, with white or yellowish speckled crossbands, black tail; belly pure white. Head not distinct from neck. Tail ends in a sharp tip.

Activity and behavioral patterns:

Nocturnal and nonagressive. Active at dusk. Will not bite unless physically disturbed. Often found near inhabited places on trails at night.

Habitat:

Commonly found in lowland forests and moist areas.

Venom's effects:

Most bites while asleep in huts at night. Symptoms are generally minimal and may include abdominal discomfort, headache, and giddiness. More severe symptoms may include facial sagging or paralysis, and inability to open mouth, swallow, or protrude tongue. Fatalities reported.

Red-Headed Krait, Yellow-Headed Krait

No Photograph Available

Description:

Adult length usually 1 to 1.2 meters; maximum of 1.6 meters. Blue-black above and below, with or without yellow line on its back. The head is red or yellow and not distinct from the neck. The tail and sometimes posterior part of body is orange-red.

Habitat:

Forest and jungle, primarily in hilly or mountainous areas.

Activity and behavioral patterns:

Normally active at night. Slow moving. When provoked, raises head and wags tail slowly. Rarely seen.

Venom's effects:

Little known about its venom's effect; likely to cause some paralysis. Few bites recorded.

Javan Krait

No Photograph Available

Description:

Adult length usually 0.8 to 1 meter. Blue-black with a pair of small white spots along most of its back. A narrow yellow line extends along each side of the back from about the middle of the body to the tail. The belly is white-yellow along the entire body, changing to a dark lead gray color beneath the tail.

Habitat:

Likely found in open areas and rice fields.

Activity and behavioral patterns:

Usually active at night and is found on the ground. Slow moving. Rarely seen.

Venom's effects:

Many victims are bitten while asleep in huts at night. Symptoms include difficulty breathing, an inability to speak and paralysis. Fatalities recorded.

Banded Krait

Description:

Adult length usually 1 to 1.2 meters; maximum of 2 meters. Background color is pattern of alternating light and dark bands. Light bands pale to bright canary yellow; dark bands generally black and wider. Distinctive black spear-shaped mark beginning between eyes and extending back along neck. Prominent ridge down back and tail gives thin, emaciated appearance. Tail blunt or slightly bulbous at tip.

Habitat:

Most commonly found in grassy fields, meadows, and cultivated areas, often adjacent to streams, rivers, and lakes. Found at elevations up to 1,550 meters.

Activity and behavioral patterns:

Normally nocturnal; may prowl during day during and after rains. Unaggressive and stealthy. Hides head beneath body if disturbed; may twitch or writhe spasmodically but seldom bites.

Venom's effects:

Minimal localized pain, redness, or swelling. Symptoms develop slowly and include general achiness, paralysis, shock, and respiratory failure. Fatalities recorded.

Oriental Coral Snake

Description

Adult length is 0.3 to 0.5 meter; maximum of 1 meter. It has a narrow body with small head that is barely distinct from its neck. Color ranges from russet to pink, with narrow, widely separated black crossbands and wide cream band across the base of the head, or brown to crimson, with three black stripes from head to tail.

Habitat

Scrub jungles and monsoon forests. Often found near human habitats. Avoids dry terrain.

Activity and behavioral patterns

Nocturnal, remaining hidden during the day within humus of forest floor, or beneath logs, stones, and other debris. Occasionally active in early morning.

Venom's effects

Little is known about the effect of its venom. A few bites have been recorded with one fatality reported in Nepal.

Blue Long-Glanded Coral Snake

No Photograph Available

Description:

Adult length usually 0.6 to 0.9 meter; maximum of about 1.5 meters. It is a relatively slender animal with a small head that is not distinct from its body. The top of its body is dark blue-black with white or pale blue lateral lines. Its head, entire belly, and tail is bright red.

Habitat:

Tropical and montane rain forests, especially near streams. Not generally found in open or dry areas.

Activity and behavioral patterns:

It is a slow moving animal usually active on the ground at night. When disturbed, it may squirm violently. If aroused it raises and coils its tail, revealing red neck and belly.

Venom's effects:

Little is known about the effects of its venom. It is likely to effect the nervous system. Fatalities reported.

Banded Long-Glanded Coral Snake

No Photograph Available

Description:

Adult length usually 0.3 meter; maximum of 0.5 meter. It is brown to black along its back and sides, generally with black, yellow, and whitish lines the length of its body. Its belly has black and white bands. The tail is red.

Habitat:

Common in forested areas up to elevations of 1,100 meters.

Activity and behavioral patterns:

Secretive; hides under logs and beneath vegetable litter. When disturbed, it makes no attempt to escape; in defense, raises its head to display brightly colored neck, and writhes and tumbles about.

Venom's effects:

Little is known about the effects of its venom. It likely affects the nervous system. Some bites have been reported.

Small-eyed Snakes

No Photograph Available

Description:

Adult length usually 0.5 to 0.7 meter; maximum of 1.2 meters. A fairly stocky animal generally yellowish to brownish in overall color. Its belly is yellow and the head and tip of tail is black along the top of its body. The head is narrow and distinct from neck.

Habitat:

Monsoon and rain forest areas, swamps and plantations. Often found under old coconut husks. More commonly found in drier months.

Activity and behavioral patterns:

It can be active either during the day or night, it is seldom seen during the day. It is a burrowing species, often found under leaf litter, loose soil and rotting logs. Aggressive if touched or threatened.

Venom's effects:

Bite can cause muscle pain, tenderness and severe muscular paralysis. Minor symptoms include nausea, severe headache and prolonged weakness. Unconsciousness and respiratory arrest has been reported within two hours; death within seven hours.

Javan Spitting Cobra

No Photograph Available

Description:

Adult length usually 1 to 1.2 meters; maximum of 1.5 meters. Its body color is gray, brown, or black along the back and sides with a white throat and gray-black belly. Its hood may be unmarked or have markings that look like eyes.

Habitat:

Tolerates a variety of habitats. Common in open plains, jungles, and areas populated by man.

Activity and behavioral patterns:

A nonagressive snake generally active at night. It seeks to escape when encountered however, when cornered, rears up and spreads hood. It bites as a last resort and is most dangerous when surprised in close quarters. When biting, tends to hold on and chew savagely. It can spit venom several feet.

Venom's effects:

The venom may cause localized pain, swelling, and tissue damage. If venom enters eyes, it may cause immediate burning pain, inflammation, and permanent blindness.

Sumatran Spitting Cobra

No Photograph Available

Description:

Maximum length about 1.5 meters. Color can vary from a uniform yellow or yellowish-green in some areas to a uniform jet black with bluish-black belly and pale markings on neck and chin in others.

Habitat:

Tolerates variety of habitats. Common in open plains, jungles, and areas populated by man.

Activity and behavioral patterns:

Generally active at night. It is timid and will try to escape when encountered. If cornered, rears up and spreads hood. It bites as a last resort and is dangerous when surprised in close quarters. When biting, tends to hold and chew savagely. It can spit venom several feet.

Venom's effect:

Bite symptoms may include pain, swelling, and tissue damage at the site of the bite. If venom enters eyes, may cause immediate burning pain, inflammation, and permanent blindness.

King Cobra

Description:

This is the world's largest venomous snake. Adult length usually 3 to 5 meters. Its body is olive, brown, or greenish yellow, becoming darker on tail. Its head scales are edged with black and its throat is yellow or orange with dark markings.

Habitat:

Found in open country, cultivated areas, dense or open forests, bamboo thickets, dense mangrove swamps, and hilly jungles. Often found near

streams. Range extends from sea level up to 1,800 meters elevation. Species widespread but uncommon.

Activity and behavioral patterns:

A very active animal during both daytime and nighttime hours. While primarily found on the ground, it is also found in trees and near water. Constructs elaborate nest of dead leaves and other decaying vegetation. It is unlikely to attack unless provoked and when confronted, expands hood rising as high as 1.8 meters. When angry, gives deep resonant hiss similar to growl of small dog. Reports of aggressiveness and unprovoked attacks likely untrue.

Venom's effects:

Severe localized pain and tenderness almost immediately follow a bite. Bites uncommon, but are usually severe and may be rapidly fatal.

Mountain Pit Viper

No Photograph Available

Description:

Adult length usually 0.6 to 0.8 meter; maximum of 1.1 meters. This is a relatively thick-set snake with a light olive, reddish, or orange-brown body. It will typically have one or two rows of squarish patches meeting or alternating down its back. It has a pale belly with brown spots and a dark brown or black triangular head that is distinct from neck.

Habitat:

Inhabits mountains or plateaus from coastal lowlands up to more than 2,000 meters elevation. Found in tea fields, cultivated areas, under shrubs, and among vegetation. Often found near human habitation and sometimes in homes.

Activity and behavioral patterns:

Commonly found on the forest floor near streams, but occasionally in trees and other vegetation. Seems sluggish, but is ready to bite if irritated.

Venom's effects:

Reported symptoms include severe localized bleeding and swelling, and hemorrhaging.

Russell's Viper

Description:

Adult length usually 1 to 1.3 meters; maximum of 2 meters. This animal varies in color from pale grayish-brown through reddish-brown to dark brown with round or oval spots edged with black and white along its back and sides. Its belly is white with large black spots. A light V- or X-shaped mark is visible on the top of its head.

Activity and behavioral patterns:

Predominantly active at night but has been seen in the day during cool weather. It will coil up in striking position, inflate its lungs, and emit a loud sustained hissing sound when threatened. It is very aggressive. When disturbed, strikes with great force and speed.

Habitat:

Paddy fields and other agricultural land, open, rocky, bushy, or grassy terrain up to elevations of 3,000 meters. Does not occur in dense forests.

Venom's effects:

Extremely venomous and a major cause of snakebite mortality, especially among rice farmers. Symptoms may include localized pain and swelling, vomiting, abdominal pain, and diarrhea. Bleeding from gums, upper gastrointestinal tract, and urinary tract may develop within hours. May develop acute kidney failure.

White-lipped Green Pit Viper

No Photograph Available

Description:

Adult length usually 0.4 to 0.6 meter; maximum of 0.9 meter. A relatively long thin snake with triangular-shaped head, very distinct from neck. Its body is uniformly green, varying from yellowish-green to

bright grass green down to the top surface of its tail which is reddish-brown. It may have darker crossbands on scales. Its belly is pale yellowish-white to dark green. The side of its head, below the eye, is white, pale yellow or light green and its upper lip is white or pale green.

Habitat:

Found in open country at low elevations; frequently found around human habitats and in gardens.

Activity and behavioral patterns:

Mainly active in trees and vegetation at night; it is rarely seen on ground except after dark. It is relatively slow moving and unaggressive, except when disturbed. When defending itself, it strikes and bites vigorously.

Venom's effects:

Venom symptoms may include localized pain, swelling, bruising, and tender enlargement of lymph nodes. Systemic symptoms may include nausea, vomiting, diarrhea, abdominal pain, lethargy, and gastrointestinal bleeding. Bites are common; fatalities have been recorded.

Pope's Pit Viper

No Photograph Available

Description:

Maximum length up to 1 meter. Usually a uniform green with a lighter green or yellow belly. It may have indistinct white or yellow markings on its belly or on each side near its abdomen. The tip of tail is usually reddish-brown. It has a distinctive triangular head and a pointed snout.

Habitat:

Most abundant in hilly and mountainous country from 900 to more than 1,500 meters elevation. Commonly found on tea plantations.

Activity and behavioral patterns:

Largely active at night in trees; generally not aggressive often permitting a human intruder to get close without striking. When aroused, it will threaten with an open mouth and will strike vigorously and quickly.

Venom's effects:

Little data is available. There are no reliable reports of bites.

Malayan Pit Viper

Description:

Adult length usually 0.6 to 0.8 meter; maximum of 1 meter. It is a relatively short, thick set snake with a flattened body and large triangular head. Its snout is pointed, upturned slightly. Body is gray, pale brown, or pale reddish-brown, with a pattern of alternating dark, triangular markings down its back and a series of dark spots on its sides. Its belly is pale with dark mottling. There is a well-defined, dark patch behind its eyes that is sometimes white-edged.

Habitat:

Coastal forest; bamboo thickets; overgrown, unused farmland; forest adjacent to plantations. Generally inhabit lowlands, but also found in mountains to almost 2,000 meters elevation.

Activity and behavioral patterns:

Mainly active on the ground at night, although it has been seen during the day. It is an aggressive snake, quick to strike if disturbed. It shelters in piles of litter, among fallen logs, or in clumps of grass or bamboo.

Venom's effects:

Localized swelling may begin within minutes after bite, followed by blistering and tissue damage. Respiratory tract bleeding, apathy, thirst, rapid thready pulse, and decreased blood pressure may occur. Bites fairly common. Fatality rate low, but deaths have been attributed to stroke, shock, and tetanus.

Flat-Nosed Pit Viper

Description:

Maximum length of about 1 meter. This animal's body is light brown with darker markings. It has a light, dark-edged streak behind each eye. Its tail and belly are a mottled brown color; darker than upper surface. It has a flattened, slightly upturned snout.

Habitat:

Lowland forest.

Activity and behavioral patterns:

This animal spends all its time in trees and has been found as high as 20 meters above ground. It is rarely seen and very sluggish.

Venom's effects:

Few bites reported. Symptoms include immediate burning pain and swelling at the site of the bite.

Mangrove Pit Viper

Description:

Adult length usually from 0.7 to 0.8 meter; may exceed 1 meter. Has a purplish- or yellowish-brown body with a white line along each side, and a series of large brownish, saddle-shaped markings with small spots on its flanks. It has a whitish-colored belly.

Habitat:

This animal is widely distributed along coastal regions in mangrove and swampy forests. Most often found on offshore islands, but may be found in inland bamboo jungles in up to 600 meters elevation.

Activity and behavioral patterns:

It is a very aggressive snake living primarily on the ground, but is commonly found in low bushes.

Venom's effects:

This animal has a very potent venom. Bites are common and may cause severe localized pain, swelling involving entire affected limb, tender enlargement of local lymph nodes, and incoagulable blood. Bites common. Fatalities have been recorded.

Sumatran Pit Viper

Description:

Adults reach a maximum length about 1.6 meters. This is a relatively slender snake that is bright green with dark crossbands. Typically it has a row of pale brownish or pinkish spots on both sides of its spine and a white line along the sides of body. Its tail is green with brown spots becoming completely brown toward the tip. Its belly is yellowish-green. There is a pale streak of color behind its eyes.

Habitat:

Lowland forests and cocoa and pepper plantations at forest fringes.

Activity and behavioral patterns:

This is a very aggressive snake that is largely active at night and found in trees. It will strike at the slightest movement.

Venom's effects:

Little is known about the venom, but bites are followed by severe pain and swelling.

Temple Pit Viper, Wagler's Pit Viper

Description:

Adult length usually 1 to 1.3 meters. This is a relatively thick-set snake with a green or blue-green body color. Each scale is edged in black. A series of narrow transverse bright yellow or greenish yellow stripes run the length of its body. It has a disproportionately large head with yellow-green marking on the top, a yellow-green streak edged in black behind the eyes and a yellow chin and lips.

Habitat:

Lowland forests, in low shrubs and bushes, and small trees, at elevations up to 600 meters.

Activity and behavioral characteristics:

This snake is primarily active at night and can be commonly found in trees. It is sluggish and docile during the day. It rarely strikes even when severely threatened.

Venom's effects:

Symptoms may include immediate bleeding, pain and swelling at site of bite. No deaths recorded.

Chasen's Pit Viper

No Photograph Available

Description:

Maximum adult length is about 0.7 meter. This snake has a brownish colored body with irregular, light-edged blotches which become trans-

verse bands toward the tail. Its belly is yellow with gray specks and it has an oblique black stripe edged with white behind its eyes.

Habitat:

Little information is available.

Activity and behavioral patterns:

This animal is commonly found on the ground.

Venom's effects:

Reported symptoms include sever pain, swelling, and bruising.

Arthropods

Scorpions

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

Insects

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 two weeks. The substance is extremely irritating if it gets into the eyes; temporary blindness has been reported.

Spiders

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

Centipedes

Although centipedes capable of inflicting painful bite are found, 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 millimeters long) secrete a noxious fluid that can cause severe blistering on contact with tender skin; some are capable of squirting this fluid at least 2 feet.

Plants

Mango

Other name:
Indica

Mechanisms of toxicity:
The leaves, stem and fruit's skin on this tree contain the toxic chemicals that can cause skin rashes and blistering. Skin rash can occur from eating the fruit with the skin intact. Blisters may be confined to the lips and face, or can be generalized. Climbing the tree can result in a severe skin rash. There is also immediate hypersensitivity in some individuals. Ensuring the fruit is peeled prior to eating can prevent the reaction.

Comments:

Genus includes 35 species, usually large trees, primarily in Indo-Malaysia. Frequently found near human dwellings. These trees grow from 40 to 100 feet, and have lance-shaped leaves. Cultivated varieties have excellent fruit (in some wild-growing plants the fruit is unpleasant) edible raw or cooked. Ground seed is used as a flour; its fruit is used in chutney, pickles, squashes, etc.

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, irritate the eyes, mouth, and gastrointestinal tract, and many cause a skin rash by direct contact. In some cases rain water dripping from the plant will contain enough toxin to produce a skin rash or irritate the eye. It can blind. Some contain spiny hairs which break off end with skin contact causing irritation. 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 rashes. 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 pod.

Physic Nut

Other names:

Purging nut, pinon, tempate, Barbados nut.

Mechanisms of toxicity:

Has potential to be quickly fatal. Fruit has two or three black, oily, pleasant tasting, poisonous seeds. The roots and leaves are also toxic. Toxicity occurs rapidly and has caused death. Severe toxicity can follow ingestion of a single seed. Bark has been used as a fish poison.

Comments:

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

Marking Nut Tree

No Photograph Available

Other names:

Tar tree, anacardium

Mechanisms of toxicity:

Often occupied by biting ants. Many of the plants have reputations for causing a severe inflammation of the skin following contact. Anacardium fruit may drip a black, oily resin that hardens like lacquer. The resin can also produce a severe dermatitis. Toxic principles are similar to mango tree or poison ivy.

Comments:
Tree indigenous to India; used to make a liquid used to mark laundry in India and Malaysia. Fleshy swollen basal parts of the fruits are edible.

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.

Wood Nettle

Other names:
Moroides, stinger, gympie

Mechanisms of toxicity:
The leaf edges, stems, stalks and fruit-bearing parts have stiff, sharp, stinging hairs; frequently not conspicuous. On contact the hair tips break and an extremely irritating liquid is injected into the skin. Light contact results in intense burning pain. Poses a serious threat to forestry workers and jungle troops. Death was reported regarding a man who contacted the dried bark.

Comments:
Tends to be particularly thick in areas of regrowth or replanted forests. Chopping or slashing the bushes can produce prolonged sneezing and

intense throat irritation. Light contact tends to be more painful than strong contact — described as tingling interspersed with sharp, stabbing pains accompanied by red inflammation with a large flare area.

Velvet Bean

Other names:
Cowitch, cowhage, pica-pica, ox eye bean, horse-eye bean.

Mechanisms of toxicity:
Many of the species' pods and flowers are covered with irritant hairs. It can be dangerous if they become embedded in the eye. Beans tend to be foul tasting, even after thorough boiling, so little danger of ingestion exists.

Comments:
Many species are widely naturalized.

Poison Ivy

Other names:
Manzanillo, western poison oak, eastern poison oak, poison sumac, Chinese tree, Japanese tallow or wax tree, scarletrhus, sumac

Mechanisms of toxicity:
All contain oils that cause skin rashes and blistering on contact. These oils are highly allergic for some individuals.

There is a cross-reaction between the poison ivy species and the cashew-nut, India marking nut, mango, and Japanese lacquer tree saps.

Comments:

All species loose their leaves with the leaves turning red before being shed. Poison ivy is a climbing or trailing vine with compound leaves of three pointed leaflets. All three leaflets grow from a common point on a narrow branch with the middle leaflet being the largest and growing on the longest stem. Leaflets are smooth on the top and hairy beneath. Poison oak is never a climbing shrub, alternately three-leafed, smooth above and hairy beneath. Found in disturbed areas and along trails in North America and is a common source of skin rash and blistering. Poison sumac is a shrub or small tree with 7 to 13 alternate leaflets, and is found in swampy areas of North America. Very few cases of skin rash are caused by this species because it inhabits isolated areas and few people are exposed to it. Japanese lacquer tree is a large shrub or tree native to India, and cultivated in China and Japan for varnish production. The lacquer is allergenic. It also bears nuts, from which black ink is made, and which is used to mark laundry in India and Malaysia. Can cause dermatitis. Some individuals suffer intense, debilitating reactions from contact with the sensitizing chemicals.

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 4,000 B.C. Cultivated worldwide for 6,000 years for producing castor oil.

Tung Nut

Other name:

Tung oil tree, candlenut, varnish tree, lumbang nut, banucalad.

Mechanisms of toxicity:

The milky latex and hard seed pods contain compounds which are irritants and cause skin inflammation. Several episodes are on record of tung oil mistakenly used as cooking oil resulting in vomiting and diarrhea in those ingesting food cooked with it. The oil will cause severe skin rash and blistering; blindness has resulted from exposure of the eyes to the oil.

Comments:

A tree widely cultivated for commercial use (oil used as a wood preservative).

Rosary Pea

Other names:

Precatory bean, coral pea, crab's eyes, lucky beans, Paternoster beans.

Mechanisms of toxicity:

Contains several compounds which can kill. The unchewed seeds are impervious and will pass through the GI tract without harm. Seeds are attractive and frequently used to make rosaries, necklaces, etc. Poison can be absorbed through breaks in the skin if integrity of the hull is compromised; for example, while stringing beads for a necklace. Onset of toxicity usually in one to three days. Rosary pea is documented to have a quickly fatal potential, having killed a child who thoroughly chewed one seed. Skin inflammation may also occur from wearing a necklace of stringed beads.

Comments:

The genus includes 17 species of slender, twining vines with a woody base supported by other plants or a fence. Fruit is a seed pod; inside the pod are three to five glossy, red and black seeds often used as ornaments. Note: Rosary pea seeds are black at the site of attachment and are easily confused with the much less toxic Mexican Rhynchosia. The colors are reversed in the Mexican Rhynchosia seeds. Symptoms of toxicity include nausea and vomiting with abdominal pains, bloody diarrhea, fever, shock, coma. Used in South America and Africa in folk medicine.

Blistering Ammania

No Photograph Available

Mechanisms of toxicity:

Found mostly in wet places; has an extremely acrid sap that produces intense pain and blistering on contact with skin

Comments:
Often confused with loosestrife plants in the primrose family.

Mexican Poppy

Other names:
Prickly pear, Argemony.

Mechanisms of toxicity:
The entire plant contains toxic compounds some of which can be transmitted through milk. Has caused "epidemic dropsy" (vomiting, diarrhea, glaucoma, abdominal swelling) in India through the seeds contaminating home-grown grains. Prickles cause skin irritation.

Comments:
Found in arid areas.

Crownflower

Other Name:
Milkweed

Mechanisms of toxicity:
Sap has extremely irritant effect on the eyes; also causes an allergic type contact blistering of the skin.

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.

Trumpet creeper

Mechanisms of toxicity:

Causes contact (allergic type) and irritant skin inflammation.

Comments:

Woody climbing vine with fluted pink and orange flowers.

Rattlepod

Other names:

Rattlebox, rattleweed, chillagoe, horse poison.

Mechanisms of toxicity:

Low-level ingestions can cause lung damage; high levels will damage the liver; can kill. Some species have caused toxicity through the contamination of flour or when incorporated in teas.

Comments:

The fruits are inflated sectioned 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.

Milky Mangrove

No Photograph Available

Other names:

Blinding tree, sinugaga, blind-your-eye, scrub poison tree.

Mechanisms of toxicity:

Contains copious, extremely acrid, milky sap with a toxic resin, which can cause damage to the eyes, mucous membranes, and skin of those chopping or sawing its wood.

Comments:

Small evergreen trees that grow to 45 feet with shiny green, leathery leaves and greenish flowers in narrow spikes; native to Indo-malaysian, Pacific Islands, Australia. Contains large quantities of milky sap.

Foxglove

Other names:

Fairy bells, lady's thimbles, lion's mouth, digitalis.

Mechanisms of toxicity:

Entire plant contains irritant toxins.

Comments:

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

Croton

Other names:

Ciega-vista, purging croton.

Mechanisms of toxicity:

Long-lasting skin rash and blistering results from contact with the toxic resin. The plant's toxins found in the oil and resin can cause vomiting, diarrhea, severe gastroenteritis, even death; 20 drops potentially lethal (the oil applied externally will blister the skin). Many members covered with hundreds of sticky hairs that cling to the skin if contacted. Contact with the eyes can be very serious.

Comments:

Croton is a woolly-haired annual herb, or evergreen bush, or small tree with smooth ash-colored bark, yellowish-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.

Spurge Laurel

Other names:

February daphne, merezon, mezereon.

Mechanisms of toxicity:

Entire plant is toxic. Resin is acrid; has been used in the past as pepper substitute, with fatal consequences. Skin rash and blistering results 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.).

Jimsonweed

Other names:

Thorn-apple, stinkweed, Devil's trumpet.

Mechanisms of toxicity:

The entire plant is toxic. Fragrance from the flowers may cause respiratory irritation, and the sap can cause skin irritation and inflammation on contact. 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.

Modikka

No Photograph Available

Mechanisms of toxicity:

The root is reported to contain toxins, which are destroyed by drying. The usual poisoning scenario is that of the root being mistaken for an edible tuber, especially in situations of scarce food. Death has occurred after ingestion of the fruit. Used in India as a "worming" medicine; sap is very irritating. Has been used in Africa to murder.

Comments:

Some species have been used in Africa as medicinals (e.g., for malaria and leprosy).

Fish Berry/Indian Berry

No Photograph Available

Mechanisms of toxicity:

Fruit are highly poisonous. Used as a fish poison (the flesh of the fish may also be toxic) and in an ointment to kill lice (dangerous). Malaysian natives use it in arrow poison. Has been used in India as an adulterant to beer to increase the power of intoxication. Has resulted in deaths.

Comments:
Fish berry has only one species. It is a woody climber native to Indo-malaysia.

Bulb Yam

Other Name:
Air potato, wild yam.

Mechanisms of Toxicity:
Bulb yam, air potato, and wild yam have tubers that contain toxins. 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.

Manghas

No Photograph Available

Mechanisms of toxicity:
The seed contains irritant toxins and cardiac glycosides, which can result in severe vomiting and diarrhea, even death, if eaten.

Comments:
Has a milky sap, formerly used in ordeal poisons and for suicide; also used as a fish poison. Green fruit used in India to kill dogs.

Shanshi

Mechanisms of toxicity:

Toxins cause hallucinogenic effects and 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.

Heliotrope

Other names:

Cherry pie, scorpion's tail, Indian heliotrope.

Mechanisms of toxicity:

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).

Chinaberry

Other names:

White cedar, African lilac, bead tree

Mechanisms of toxicity:

Yellow globe-shaped berry with three to five smooth, black, ellipsoidal seeds; has a resin; all parts have a some toxicity, and a gastrointestinal irritant of uncertain chemical nature. Has killed adults.

Comments:

Widely cultivated.

Sasswood

No Photograph Available

Other names:

Ordealtree, mancona bark, ironwood, camel poison, black bean, Cooktown ironwood.

Mechanisms of toxicity:

Extremely poisonous; the two main species have similar toxicities.

Comments:

A fish poison.

Freshwater Mangrove

No Photograph Available

Other names:

Putat, bitung, laut.

Mechanisms of toxicity:

Toxins have been isolated from fruit and seeds. Used as fish poisons in many Pacific islands.

Comments:

Large tree found growing along shorelines; have large (20-38 centimeters-long, 10-15 centimeters-wide) smooth-edged leaves, white to pink

flowers (on individual stalks; square in cross section), and one-seeded fruits (9-13 centimeters-long; square in cross-section). Seeds are crushed and used as fish poison by Australian troops and aborigines.

Balsam apple

Other names:
Leprosy gourd, bitter gourd, cucumber gourd

Mechanisms of toxicity:
Seeds and outer rind and pulp of ripe fruit contain toxins. Small amounts cause headache, flushing, salivation, dilated pupils, emesis, diarrhea, abdominal pain. Can kill.

Comments:
A slender vine with small yellow flowers. Fruits have a rough outer rind, variable shape but like a gourd, usually yellowish with reddish pulp.

Pokeweed

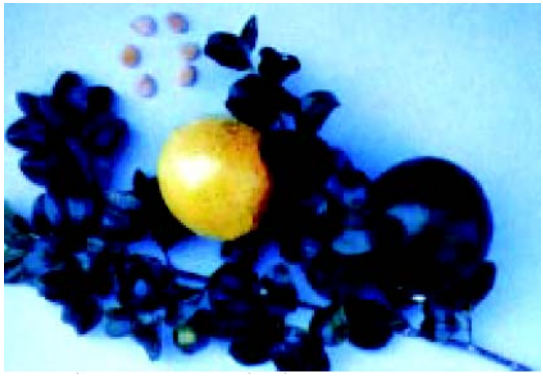
Other names:
Pokeberry, poke salet.

Mechanisms of toxicity:
Mature stems, roots, and berries are poison. Death possible when not prepared properly.

Comments:
Young shoot tips, less than 6", 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.

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.

Annual/French Mercury

No Photograph Available

Other names:

Dog's Mercury

Mechanisms of toxicity:

Native to Europe; entire plant is toxic. Has been mistaken for edible greens. Causes vomiting and diarrhea. Has proven fatal.

Comments:

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

APPENDIX K:
International Telephone Codes

International Telephone Codes

Algeria	213	Malta	356
Australia	61	Mexico	52
Austria	43	Morocco	212
Bahrain	973	Netherlands	31
Belgium	32	Nigeria	234
Brazil	55	New Zealand	64
Canada	1	Norway	47
China	86	Oman	968
Cyprus	357	Philippines	63
Denmark	45	Portugal	351
Djibouti	253	Qatar	974
Egypt	20	Republic of Korea	82
Ethiopia	251	Saudi Arabia	966
Finland	358	Senegal	221
France	33	Seychelles	248
Gabon	241	Singapore	65
Germany	49	Somalia	252
Greece	30	South Africa	27
Hawaii	1	Spain	34
Hong Kong	852	Sweden	46
Indonesia	62	Switzerland	41
Iran	98	Syria	963
Iraq	964	Taiwan	886
Ireland	353	Tanzania	255
Israel	972	Thailand	66
Ivory Coast	225	Tunisia	216
Japan	81	Turkey	90
Jordan	962	UAE	971
Kenya	254	United Kingdom	44
Kuwait	965	United States	1
Libya	218	Yemen	967
Madagascar	261	Zambia	260
Malaysia	60	Zimbabwe	263
AT&T (public phones)	0072-911 or 0030-911	On-base	550-HOME or 550-2USA

Notes

Notes

Notes

Notes

Notes

Notes

Notes

Notes