



a DX'ERS handbook

INDONESIA

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an introduction to The Republik of Indonesia



CAPITAL: Jakarta. **FLAG:** The national flag, adopted in 1949, consists of a red horizontal stripe above a white stripe. **ANTHEM:** *Indonesia Raya (Great Indonesia)*. **MONETARY UNIT:** The rupiah (Rp) consists of 100 sen. There are coins of 1, 5, 10, 25, 50, and 100 rupiahs and notes of 100, 500, 1,000, 5,000, and 10,000 rupiahs. Rp1 = \$0.001016 (or \$1 = Rp984.25). **WEIGHTS AND MEASURES:** The metric system is standard. **HOLIDAYS:** New Year's Day, 1 January; Independence Day, 17 August; Christmas, 25 December. Movable religious holidays include the Prophet's Birthday, Ascension of Muhammad, Good Friday, Ascension Day of Jesus Christ, the end of Ramadan, 'Id al-Fitr, 'Id al-'Adha', and the 1st of Muharram (Muslim New Year).

Location, size and extent

The Republik of Indonesia consists of five large islands and 13,677 smaller islands (about 6,000 of which are inhabited) forming an arc between Asia and Australia. With a land area of 1,919,443 sq km (741,099 sq. mi.), Indonesia is the fourth-largest Asian country, after China, India, and Saudi Arabia. It extends 5,271 km (3,275 mi) E-W and 2,210 km (1,373 mi) N-S. The five principal islands are Sumatera, 466,200 sq km (180,000 sq mi); Jawa, with an area of 132,600 sq km (51,200 sq mi); Borneo, of which the 72% belonging to Indonesia is known as Kalimantan, 538,700 sq km (208,000 sq mi); Sulawesi, formerly called Celebes, 189,460 sq km (73,150 sq mi); and Irian Jaya (West Irian), the western portion of the island of New Guinea, 420,100 sq km (162,200 sq mi). Indonesia claims East Timor (18,873 sq km/7,287 sq mi), a former Portuguese colony that was abandoned by Portugal in 1974, occupied by Indonesian troops in 1975, and declared an Indonesian province in 1976 despite continuing Timorese demands for self-determination.

topography

The Indonesian archipelago consists of three main regions. Sumatera, Jawa, Kalimantan, and the islands that lie between them stand on the Sunda shelf, where the ocean depths are never more than 210 m (700 ft). Irian Jaya and the Aru Isles stand on the Sahul shelf, projecting northward from the north coast of Australia at similar depths. Between these two shelves lie the Lesser Sunda Islands, the Maluku Islands (Moluccas), and Sulawesi, surrounded by seas whose depths reach 4,570 m (15,000 ft). The large islands have central mountain ranges rising from more or less extensive lowlands and coastal plains. Many inactive and score of active volcanoes dot the islands, accounting for the predominantly rich volcanic soil that is carried down by the rivers to the plains and lowlands; there are 112 volcanoes, 15 of them active, on Jawa alone. Peaks rise to 2,650 m (12,000 ft) in Jawa and Sumatera. Jawa, Bali and Lombok have extensive lowland plains and gently sloping cultivable mountainsides. Extensive swamp forests and not very fertile hill country are found in Kalimantan. Sumatera's eastern coastline is bordered by morasses, floodplains, and alluvial terraces suitable for cultivation farther inland. Mountainous areas predominate in Sulawesi.

climate

Straddling the equator, Indonesia has a tropical climate characterized by heavy rainfall, high humidity, high temperature, and low winds. The wet season is from November to March, the dry season from June to October. Rainfall in lowland areas averages 180-320 cm (70-125 in) annually, increasing with elevation to an average of 610 cm (240 in) in some mountain areas. In the lowlands of Sumatera and Kalimantan, the rainfall range is 305-370 cm (120-145 in); the amount diminishes southward, closer to the northwest Australian desert. Average Humidity is 82%.

Altitude rather than season affects the temperature in Indonesia. At sea level, the mean annual temperature is about 25-27°C (77-81°F). There is slight daily variation in temperature, with the greatest variation at inland points and at higher levels. The mean annual temperature at Jakarta is 26°C (79°F); average annual rainfall is about 200 cm (80 in).

population

Indonesia is the fifth most populous country in the world. As of the 1980 census, the population was 147,490,298, as compared with 1961 census figure of 96,318,829 and the 1971 total of 119,232,499. The growth rate is high, estimated at over 2.1% annually in the early 1980s. Of the 1980 population, about 62% (91,269,528) was concentrated on Jawa and Madura. Overall density in 1980 was 77 persons per sq km (199 per sq mi). Jawa, with a density of about 676 per sq km (1,751 per sq mi), is among the world's most densely populated areas. In 1980, the Indonesian population was about 23% urban. Jakarta's population in 1980 was 6,503,449; Yogyakarta had about 2.75 million; Surabaya, 2 million; Bandung, 1.4 million; Medan, 1.3 million; and Semarang, 1 million.

ethnic groups

The indigenous peoples, ethnologically referred to as Malays or Indonesians, also are found on the neighboring islands of the Philippines, in Peninsular Malaysia, and even as far distant as Taiwan and Madagascar. Indonesians are characterized by smallness of stature, light- to dark-brown pigmentation, thick sleek black hair, broad formation of head, wide nose, and thick lips. The inhabitants of eastern Indonesia have Negroid features, the result of intermarriage with the Papuans of New Guinea.

The population is officially classified into four main ethnic groups: Melanesians, who constitute the majority; Proto-Austronesians, including the Wajaks and the Irianese of Irian Jaya; Polynesians, including the Ambonese on the Maluku Islands, and Micronesians, found on the tiny islets of Indonesia's eastern borders. The Melanesians are subdivided into the Acehnese of north Sumatera; the Bataks of northeastern Sumatera; the Minangkabaus of west Sumatera; the Sundanese of west Jawa; the Javanese in central and east Jawa; the Madurese on the island of Madura; the Balinese on Bali; Sasaks on the island of Lombok; the Timorese on Timor; the Dayaks in Kalimantan; and the Minahasa, Torajas, Makassarese, and Buginese on Sulawesi.

Ethnic Chinese, the principal minority, were the target of riots in 1974 and 1980. Active mainly in business in the major cities, they are relatively prosperous and widely resented by ethnic Indonesians. An estimated 3 million ethnic Chinese held Indonesian citizenship in 1980, when government decrees provided for the naturalization en masse of another 1 million.

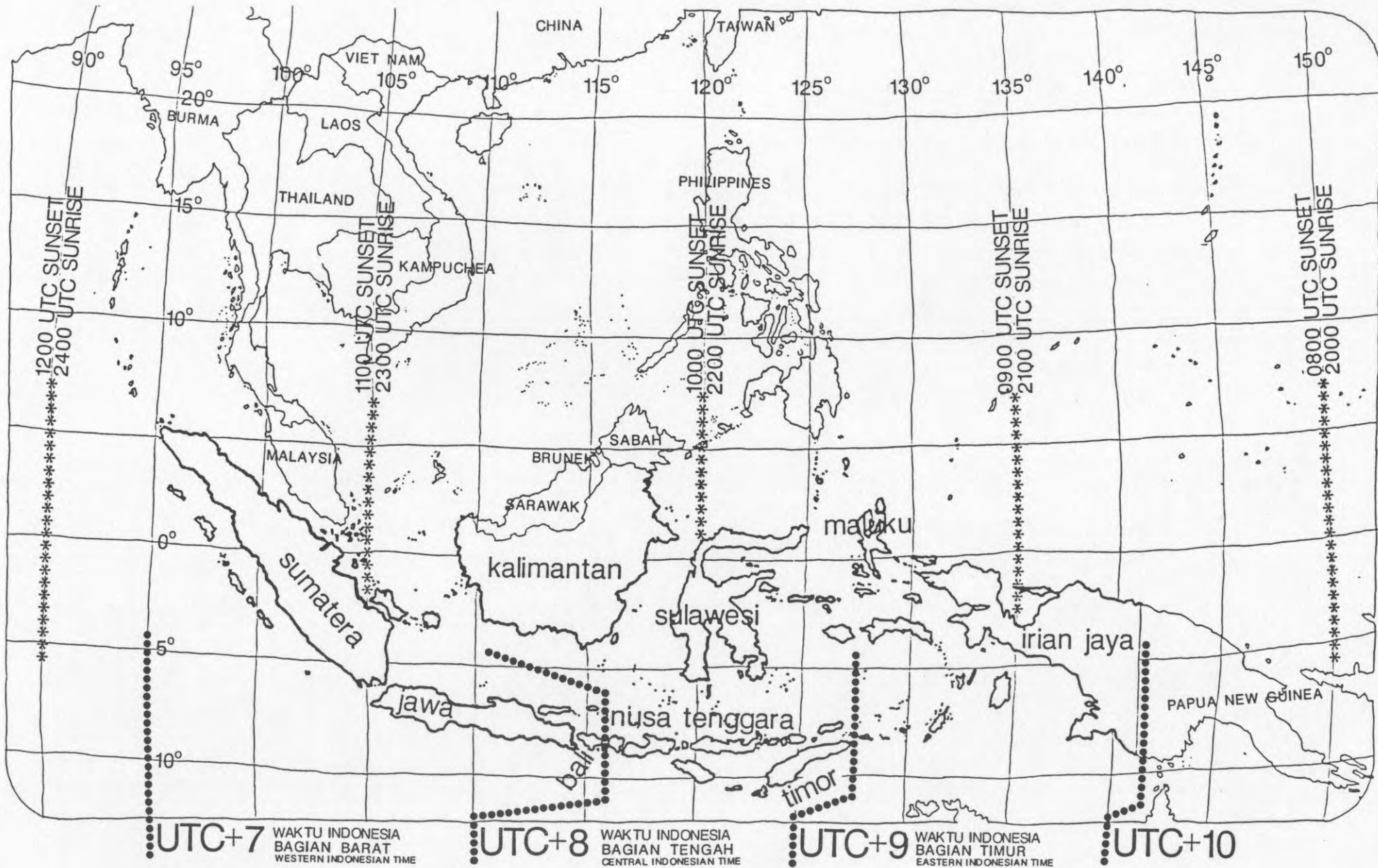
languages

Bahasa Indonesia, a product of the nationalist movement, is the official language, serving as a common vehicle of communication for the various language groups. Based primarily on Malay and similar to the official language of Malaysia, it also contains many words from other Indonesian languages and dialects, as well as from Dutch, English, Arabic, Sanskrit, and other languages. In 1973, Indonesia and Malaysia adopted similar systems of spelling. Use of some 250 local languages persists. English is widely used in industry and commerce.

religions

An estimated 78% of the inhabitants are adherents of Islam, 11% are Christians, 5% follow tribal religions, and 2% are Hindus. Freedom of religion is guaranteed by the constitution, but the government actively supports Islamic religious schools and pays for a number of annual pilgrimages to Mecca. Hinduism was the religion of Jawa for several centuries, but when Islam swept over Indonesia in the 15th century, Hinduism retreated to Bali, where some 3 million Indonesians have remained Hindu in religion and culture. The religious faith of the Chinese in Indonesia may be characterized as Christian or Buddhist-Confucianist. About 44% of the 16 million or more Christians in 1980 were Protestant. The chief Christian communities are found on Ambon and adjacent islands, northern Sulawesi, north-central Sumatera, and Timor and adjacent islands. In central Kalimantan and Irian Jaya, as well as a few other areas, substantial numbers of Indonesians follow animist tribal religions.

The Republik of Indonesia



RADIO REPUBLIK INDONESIA

NOTE: SEASONAL SLOPE OF THE SUNRISE/SUNSET TERMINATOR CAN BE SAFELY IGNORED DUE TO PROXIMITY TO THE EQUATOR.
 SUNRISE/SUNSET TIMES SHOWN SHOULD BE ACCURATE WITHIN 15 MINUTES.

* BRYANT-1986-NASWA/OMDXC

fine tuning

history

Evidence of the ancient human habitation of Indonesia was discovered by Dutch paleontologists in 1891; these fossil remains of so-called Java Man date from the Pleistocene period, when Indonesia was linked with the Asian mainland. Indonesia's characteristic racial mixture resulted from at least two waves of invasions from South China by way of the Malay Peninsula and from intermarriage of these Indonesians with later immigrants, especially from India. The important population groups of today trace their descent from the immigrants of the second wave, which occurred around the 2nd or 3rd century BC. These immigrants subjugated and absorbed most of the other inhabitants and Indian influences then permeated Jawa and Sumatera from the 1st to the 7th Century AD. During this period and extending into the 15th Century, local Buddhist and Hindu rulers established a number of powerful kingdoms. Among the most powerful of these was the Buddhist kingdom of Sri Vijaya, established on Sumatera in the 7th Century; it prospered by gaining control of trade through the Straits of Malacca. To the east, in central Jawa, the Sailendra Dynasty established its Buddhist kingdom in the 8th Century. Relics of Sailendra rule include the great temple of Borobudur, Asia's largest Buddhist monument. Succeeding the Sailendra Dynasty in 850AD were followers of the Hindu god Shiva; these Shivaites built the great temple at Prambanan, east of Yogyakarta. Other Hindu kingdoms subsequently extended Indian influence eastward into east Jawa and Bali. The last of these was the Hindu kingdom of Majapahit, which was at the height of its power during the 13th Century when Marco Polo visited Jawa and northern Sumatera. When Majapahit collapsed around 1520, many of its leaders, according to tradition, fled to Bali, the only island in Indonesia that retains Hinduism as the chief religion today.

Even before Majapahit disintegrated, Muslim missionaries, probably Persian merchants, had begun to win much of the archipelago for Islam. About this time, also, the first Europeans arrived, and the first Chinese settlements were made. The Portuguese captured Malacca (now Melaka), on the west coast of the Malay Peninsula, in 1511 and established control over the archipelago. Dutch ships visited Jawa in 1596. The Dutch came in increasing numbers and soon drove the Portuguese out of the archipelago (except for the eastern half of the island of Timor), beginning nearly 350 years of colonial rule. By force and diplomacy the Dutch thus became the supreme rulers of what became known as the Dutch East Indies.

The British East India Company ruled the Indies during the Napoleonic wars, from 1811 to 1816. During his period, Sir Thomas Stamford Raffles became governor of Jawa. When Dutch rule was restored, the Netherlands government instituted the "culture system" on Jawa, under which the Javanese, instead of paying a certain proportion of their crops as tax, were required to put at the disposal of the government a share of their land and labor and to grow crops for export under government direction. From a fiscal point of view the system was very successful, yielding millions of guilders for the Netherlands treasury, but this "net profit" or "favorable balance" policy fell under increasing moral attack in the Netherlands and was brought to an end about 1877. Thereafter, private Dutch capital moved into the Indies, but the augmentation of Dutch prosperity at the expense of Indonesian living standards was increasingly resented. With the adoption of what colonial administrators called the "ethical policy" at the beginning of the 20th century, the first steps were taken to give Indonesians participation in government. A central representative body, the Volksraad, was instituted in 1918. An Indonesian nationalist movement began to develop during those years and steadily gained strength. Although retarded in the 1930s by the world economic depression, which was strongly felt in Indonesia, the movement revived during the Japanese occupation (1942-45) in World War II. A nationalist group under the leadership of Sukarno and Hatta proclaimed an independent republic on 17 August 1945, adopted a provisional constitution providing for a strong presidential form of government, formed a revolutionary government, and resisted Dutch reoccupation. After four years of intermittent negotiations and frequent hostilities, and after UN intervention, the Netherlands agreed to the Indonesian demands. On 27 December 1949, the Dutch granted independence to all the Dutch East Indies except West New Guinea as the Republic of the United States of Indonesia. A few months later, on 17 August 1950, the federal system was rejected and a unitary state, the Republik of Indonesia, was established under a new constitution. West New Guinea remained under Dutch control until October 1962, when the Netherlands transferred the territory to a UN administrator. On 1 May 1963, Indonesia took complete possession of the disputed territory as the province of Irian Barat (West Irian), later renamed Irian Jaya.

Sukarno became the first president of the new nation, and Hatta vice-president. Internal difficulties, fostered by a multiplicity of political parties inherited from Dutch colonial days, soon developed, and regional rivalries also threatened the unity of the new nation. Then as now, Jawa had some two-thirds of the country's population, but the great sources of wealth were found on the other much less densely settled islands. Those living in the so-called Outer Islands believed too much governmental revenue was being spent in Jawa and too little elsewhere. After Vice-President Hatta, a Sumateran, resigned in December 1956, many in the Outer Islands felt they had lost their chief and most effective spokesman in Jakarta. Thereafter, Sukarno bypassed parliamentary procedures and pursued an increasingly authoritarian, anti-Western policy of "guided democracy."

Communist agitation within the country and secessionist uprisings in central and eastern Jawa came to a head in the 30th of September Movement. Sukarno, whose foreign policy had turned increasingly toward the Communist Chinese, may have had advance knowledge of a Communist-led coup attempt on 30 September 1965, which was directed against Indonesia's top military men; the coup was crushed immediately by the army, however, and in the ensuing anti-Communist purges more than 100,000 persons (mostly Indonesian Chinese) lost their lives and another 700,000 were arrested. By Mid-October, the army, under the command of Gen. Suharto, was in virtual control of the country. On 12 March 1966, following nearly three weeks of student riots, President Sukarno transferred to Suharto the authority to take, in the president's name, "all measures required for the safekeeping and stability of the government administration." In March 1967, the People's Consultative congress voted unanimously to withdraw all Sukarno's governmental power and appointed Gen. Suharto Acting President. One year later, it conferred full presidential powers on Suharto, and he was sworn in as president for a five-year term. The Congress also agreed to postpone the general elections due in 1968 until 1971. Sukarno died in relative obscurity in June 1970.

The recent past, with President Suharto re-elected several times and providing leadership throughout the past 15 years has been largely tranquil and can be characterized as a period of rapid development. The new-found prosperity of Indonesia is attributable in large part to the massive state-owned petroleum industry and to the highly inflated price of oil in the period 1975-1983. With oil prices tumbling and no real hope of return to the high prices of the early 1980's, real questions exist about the future path of development for the Republik. It remains to be seen whether the fragile sense of nationhood, nurtured really only in the past half century can withstand the stresses inherent in the cultural, political and geographic diversity of the country.

local government

The Republik of Indonesia is divided into 27 provinces and special national districts, counting formerly Portuguese East Timor. Each province (propinsi) is administered by a governor chosen by the central government from candidates proposed by the Provincial Assembly. Each province is divided into regencies, similar to counties in the USA. These regencies are known as Kabupaten or "Tingkat II", and are administered by regents chosen similarly to governors. As of 1980, there were 246 Kabupaten, 54 Kotamadya (municipal districts), 3,349 Kecamatan (sub-districts) and 63,058 Desa (villages). Please refer to Appendix "A" for a very complete listing of geographical units.

Should you wish to delve into the richness of Indonesian culture, the following three references are strongly recommended:

Oey, Eric, ed. "Insight Guide to Indonesia," Prentice-Hall Inc., 1985 in USA; others worldwide.

Latif, Chalid, A. Pelatta and P. Wayong. "Atlas Indonesia dan Dunia." pub. by P.T. Pembrina, 1985. available only in Indonesia.

Bunge, F.M. and Vreeland, N. "Area Handbook for Indonesia" 1985 US Government Printing Office.

This Section was adapted from the 6th Edition (1984) of the five volume Worldmark Encyclopedia of The Nations, published by Worldmark Press. This is a superb DX'ers reference!

Shortwave Broadcasting in Indonesia

introduction

Like many so-called Third World countries, the development of a radio broadcast infrastructure has a very high priority with the Indonesian people since their independence soon after World War II. The need for a radio broadcast infrastructure was heightened by the need to nurture the concept of nationhood among a very ethnically and culturally diverse people very unevenly distributed among over 6,000 inhabited islands of the Indonesian archipelago. Due to the vast distances and, in many cases, the rugged terrain involved, the developmental priority has been on construction and operation of low frequency shortwave stations rather than medium wave or FM band stations. This shortwave strategy has allowed full coverage of a sprawling country by usually two and sometimes three layers of "local" SWBC stations. This drive to use radio to foster the concept of nationhood, along with the geography and relatively adequate funding provided by an oil export based economy has led to the establishment of the most extensive government-owned SWBC system in the world. This extensive system, along with Indonesia's unique culture, has caused Indonesian SWBC to be a very highly popular area of specialization for senior members of the DX community around the globe. Somewhat paradoxically, information about the Indonesian SWBC scene is not terribly accessible and, where found, the data is usually scattered and incomplete. This situation is due in large part to the absolutely internal and local mission of all Indonesian shortwave stations except those known as the Voice of Indonesia. Most station personnel have no interest in the fact that they may have a small but almost world wide audience outside Indonesia. Their entire concern, and that of their governmental employers, is the local audience, usually within 200 km of the transmitter site.

This Handbook is an attempt to draw together a large percentage of the Indonesian SWBC information available to the North American and European DX communities under one cover for the personal convenience of the author and other serious Indo DX'ers.

shortwave broadcasting organization

Current shortwave broadcasting in Indonesia can be broken down into three basic categories. The first category is the External Service of the government-operated Radio Republik Indonesia which is known in its English language broadcasts as the "Voice of Indonesia." For a number of years, VOI has operated two 100kw transmitters in parallel on 11790 and 15150khz. VOI broadcasts in at least eight languages with Indonesian and English having multiple hour offerings. In general, the English Language broadcasts are timed to occur in the dawn, and sunset times in North America and at mid morning in Europe.

At the other end of the spectrum, literally and figuratively, are the local privately-owned "commercial" SW stations. By Indonesian law, these stations are limited in power to 500 watts and in their hours of operation to 2200-1700UTC - basically sunrise until midnight local time. Even though these stations are authorized 500 watts, poor antennas and operations with usually far less than the 500 watts authorized limits DX reception to these private commercial stations almost exclusively to listeners in Australasia. Please note that these private commercial SWBC stations are known as "amatir" stations.

In between these two limits of SWBC in Indonesia lies the most extensive government-owned SWBC system in the world - the networks of Radio Republik Indonesia. RRI is headquartered in Jakarta, of course, with the Program Nasional being produced in the same studio complex as the Voice of Indonesia. Program Nasional is produced from 2200-0100, 0500-0800 (Sun 2200-0800), 1000-1705, all times UTC. This works out to 5am-8am, noon-3pm, 5pm to midnight, local Jakarta time (WIB).

Almost all government owned SWBC stations relay a significant amount of Program Nasional via the network system. All SWBC, both government and "amatir," are required by national law to relay news from Program Nasional, Jakarta at 2300, 0000, 0500, 0600, 0700, 1200, 1300, 1500 UTC. News paper articles in 1986 have covered expressions of concern from various government officials that the news relay is not occurring in many cases (primarily with the "amatir" stations). It is understood by the author, though not confirmed by RRI personnel, that most network relay outside of Jawa is accomplished by off-the-air rebroadcast.

RRI program relay is accomplished in a hierarchy, depending first on five network (Nusantara) flagship stations ("Regional Key Stations.") These are:

Network	Station	Main Transmitter	Coverage
Nusantara Satu (I)	Medan	4764 (50KW)	Sumatera
Nusantara Dua (II)	Yogyakarta	5046 (20kw)	Jawa, Bali
Nusantara Tiga (III)	Banjarmasin	3250 (10kw)	Kalimantan
Nusantara Empat (IV)	Ujung Pandang	4719 (50/20)	Sulawesi,
Nusantara Lima (V)	Jayapura	6070 (20)	Nusa Tenggara Maluku, Irian Jaya

The second map presented in this Handbook illustrates the five nusantara, calling out the "key" or flagship station in the network, and the other "level one" RRI Stations in each nusantara. Note that each of the 27 propinsi or special districts have at least one Level One station (with an RRI designation). Several propinsi, most notably Irian Jaya and those on Jawa and Sumatera, have multiple main RRI stations. Most official RRI stations operate at least one transmitter nominally rated at 10kw, although some RRI stations on some frequencies may operate with as few as 300 watts.

deciphering the RPD alphabet soup

In the RRI Network structure, but beneath the stations officially titled "RRI...." are a multiplicity of stations identified with individual Propinsi, Kabupaten/Tingkat 2, and even Kotamadya (municipal districts). A few bahasa Indonesian words will help us here:

satu = one
dua = two
Propinsi = province (also referred to as tingkat satu)
Kabupaten = regency or county (also referred to as tingkat dua)
Tingkat = level or degree

Thus, tingkat satu (meaning "level 1") is a level one internal government or a propinsi

Kotamadya = municipality
Daerah = region or regional
Khusus = special
Permerintah = governmental authority
Siaran = channel

Therefore:
RKPDTI Riau would be Radio Khusus Permerintah Daerah Tingkat Satu Riau
rough english translation:
Special Regional Radio for the Province of Riau

and therefore:
RKPDK Dili would be Radio Khusus Permerintah Daerah Kotamadya Dili
rough english translation:
Special Regional Radio for the City of Dili

If this is not complicated enough, the K for Khusus is sometimes used, sometimes not. The term Tingkat 1 usually replaces the word "propinsi" in Provincial Station titles, while Tingkat 2 sometimes replaces Kabupaten, sometimes doesn't and sometimes, both are used!!!

Titles for Propinsi wide Stations

RRI Radio Republik Indonesia
RPDT1 Radio Pemerintah Daerah Tingkat Satu
RPD Radio Pemerintah Daerah
RKPD Radio Khusus Pemerintah Daerah

Titles for stations associated with a Kabupaten (District/Regency/County)

RKDT2 Radio Kabupaten Daerah Tingkat Dua
RKPD2 Radio Khusus Pemerintah Daerah Tingkat Dua
RKPKDT2 Radio Khusus Pemerintah Daerah Kabupaten Daerah Tingkat Dua
RKPKD Radio Khusus Pemerintah Daerah Kabupaten
RKPKDT2 Radio Khusus Pemerintah Daerah Kabupaten Tingkat Dua
RPDK Radio Pemerintah Daerah Kabupaten
RPDKDT2 Radio Pemerintah Daerah Kabupaten Daerah Tingkat Dua
RPDT2 Radio Pemerintah Daerah Tingkat Dua
RPKDT2 Radio Pemerintah Kabupaten Daerah Tingkat Dua

Titles for stations associated with Kotamadya (municipalities)

PKPKD Radio Khusus Pemerintah Daerah Kotamadya

Other titles

RS Radio Siaran
RAB Radio Angkatan Bersenjata (military)
RKIP

Several other things can be said about this middle level of Indonesian SWBC. First, all of these "less than RRI Stations" appear to be limited to transmitting power of 500 watts or less, with very few exceptions. Secondly, again with scattered exceptions, the spectrum location of these "less than RRI stations" seems to be tightly controlled between 2460khz and 3900kz.

Given the propagation conditions on 75 meters and below, and probable average power of around 300 watts, regular DX reception of this middle level of Indonesian Stations is pretty well limited to reception locations within 500km of the Pacific Rim. However, exceptional propagation conditions can make world wide reception possible. One of the most regularly reported stations in this category is RKIP Surabaya on 4699.

Listening times

Basically, since almost all RRI Station broadcast in the Tropical Bands, what is needed is a darkness path between the transmitter and receiver during the common hours of RRI operation. The period 2040-2340 UTC, as dawn sweeps across the Indonesian archipelago is "prime time" for European DX'ers who specialize in Indonesia. This is also the favored listening time for many North American DX'ers located east of the Mississippi River. The "best period" for Indonesian DX'ing, of course, is after sunset in the local Indonesian evening. Sunset sweeps across the archipelago (refer to maps) starting in Irian Jaya at about 0840 and reaching Banda Aceh, Sumatera at 1140 UTC. From the time of Indonesian sunset until either sunrise at the receiving site or until station shutdown at 1500 to 1700 UTC is the true Indo "prime time". Outside Australiasia, the obvious prime reception locations are the western coasts of North and South America.

station identification

So-called "list-logging", that is "identifying" a station simply because you hear something on the correct frequency at the correct time is a very dangerous and counter productive DX technique. However, using a good, UP TO DATE, list of currently active Indonesian Stations and a few other techniques certainly narrow down the candidate stations for an "un-ID".

Several other simple techniques can help you:

1. Remember, all Indonesian SWBC stations are supposed to relay news from Jakarta at 2300, 0000, 0500, 0600, 0700, 1200, 1300, and 1500 UTC. If your unknown is broadcasting news in parallel with a powerful known Indonesian, you can be sure that you have some Indo SWBC station.

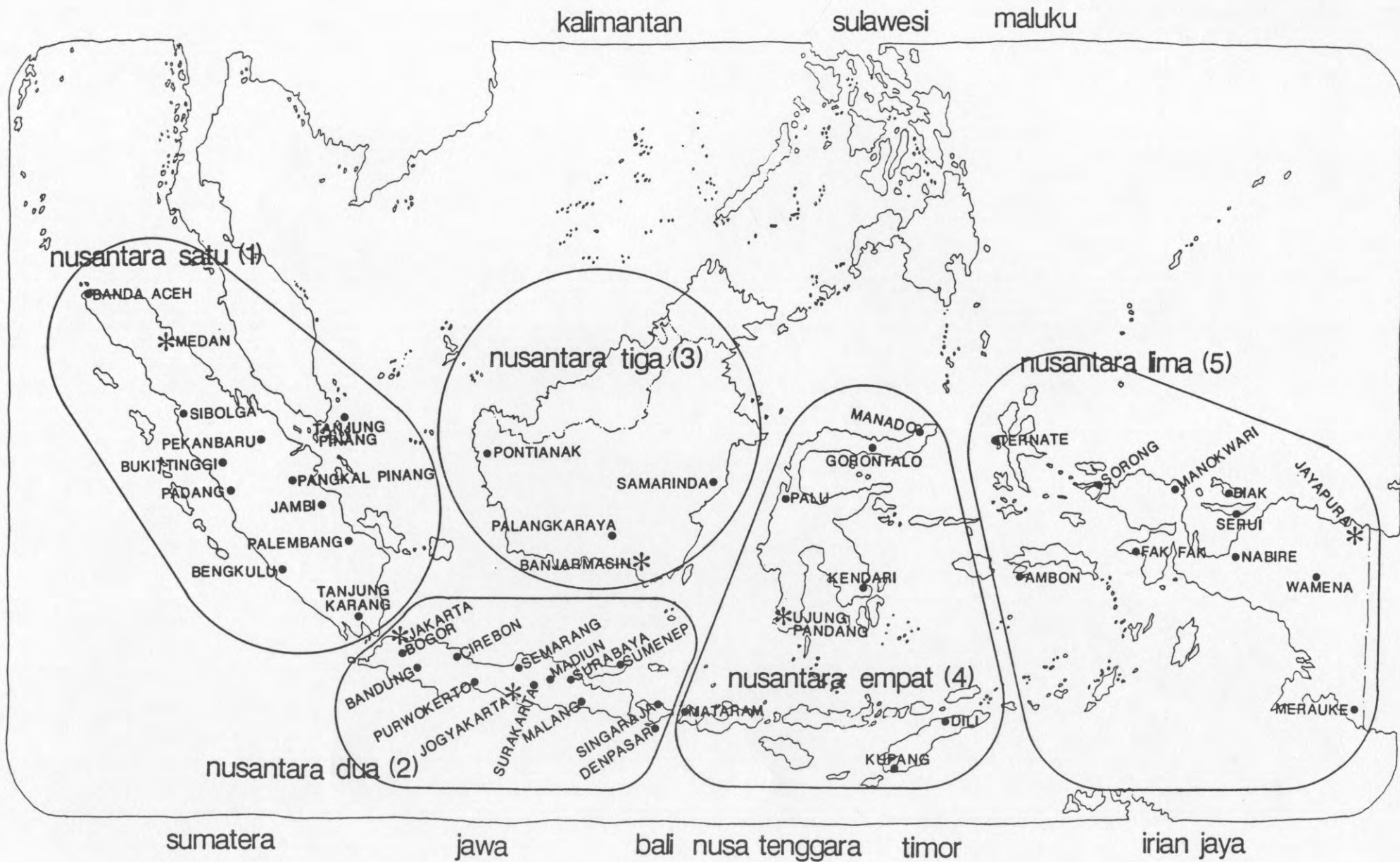
2. Immediately before the Programma Nasional News, Jakarta broadcasts about one minute of the unmistakable RRI Interval Signal - known in English as "Song of the Coconut Islands." Relaying stations usually join the nusantara in time to pick up at least 10 seconds of this beautiful Interval Signal. Please note, the actual title of the song is "Rayuan Pulau Kalapa", and it is played by an organ, flute, vibe and piano ensemble. Incidentally, the name of the national anthem of Indonesia is "Indonesia Raya."

3. Almost all station identifications will start with the word "Inilah...." (Here is or this is).Some Common ID's:

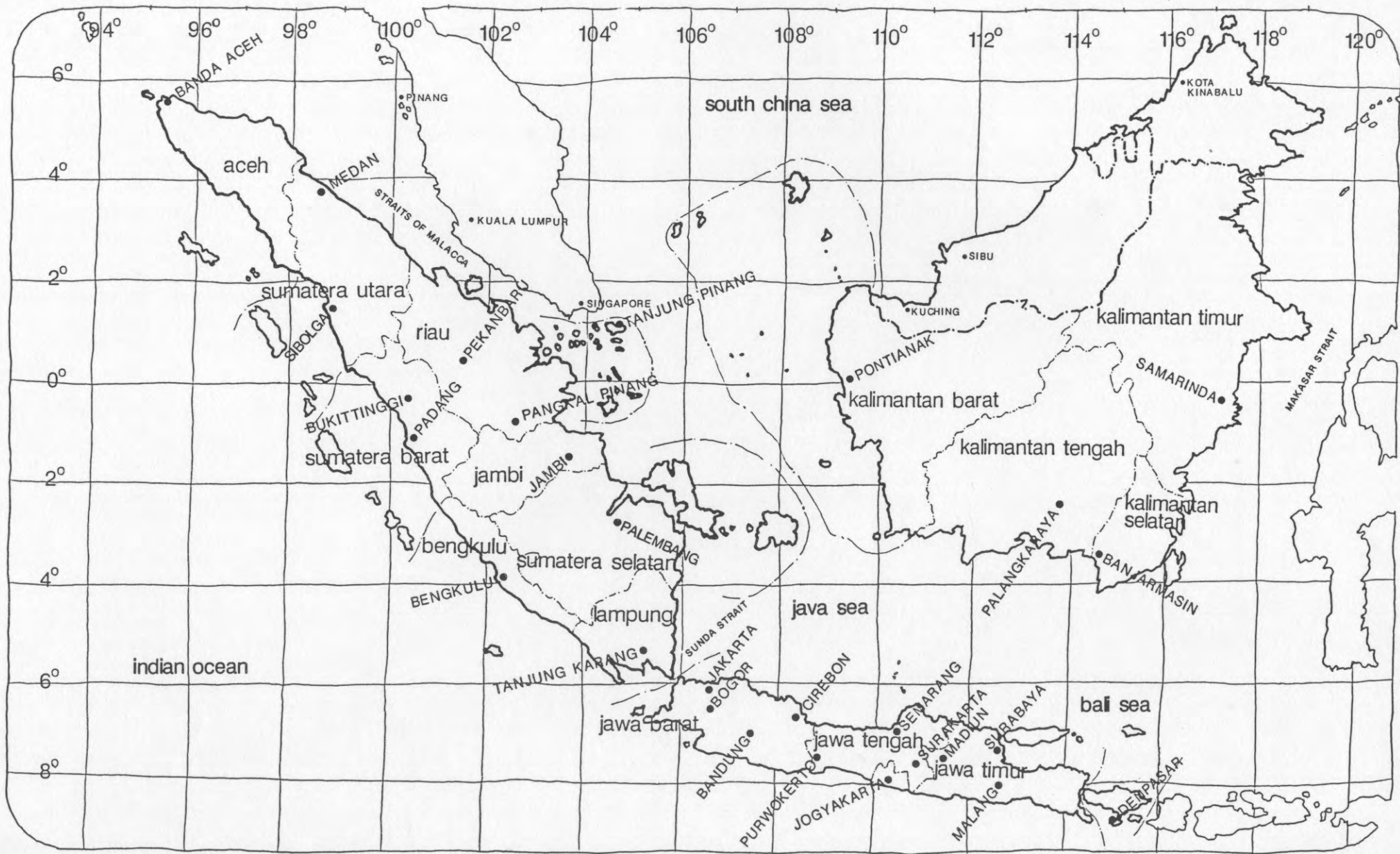
"Inilah Radio Republik Indonesia, Programma Nasional, (dari) Jakarta."
This is RRI, National Program (from) Jakarta.

"Inilah Radio Republik Indonesia Programma Khusus (dari) Jakarta"
This is a RRI Special Program (from) Jakarta

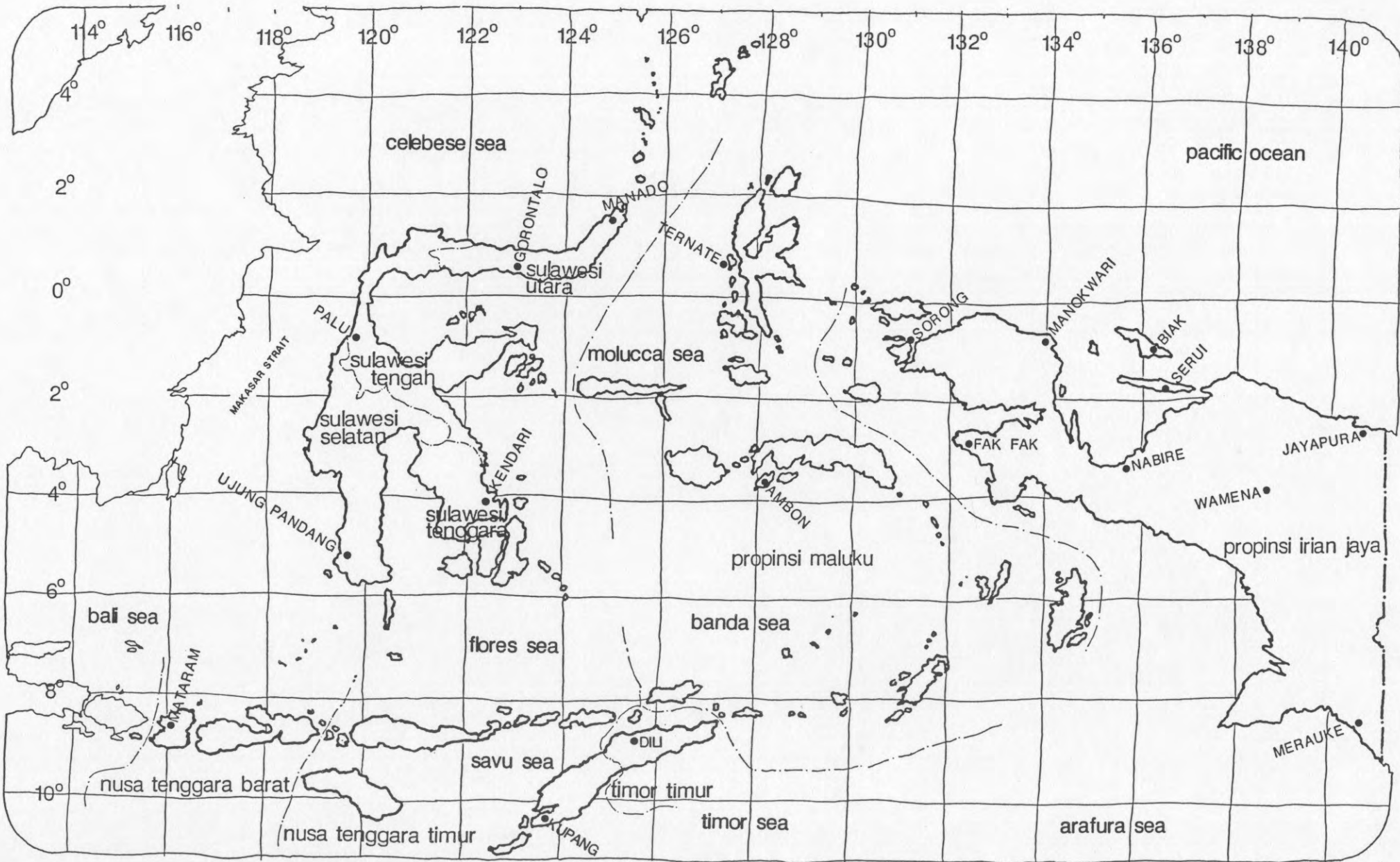
"Inilah Radio Republik Indonesia dengan Warta - Berita"
This is RRI National News



nusantara (networks)
 RADIO REPUBLIK INDONESIA

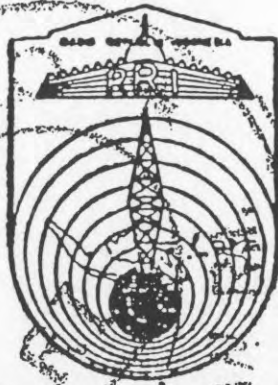
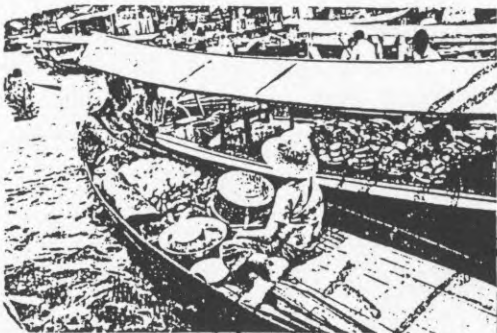


propinsi and main RRI SWBC locations



propinsi and main RRI SWBC locations

BRYANT NASWA/OMDXC



Obtaining Verifications

Today, verifying most Indonesian stations beyond Voice of Indonesia is quite unpredictable and rather difficult. This pattern has developed for a number of reasons, not the least of which are chronic understaffing of stations common throughout the world and the fact that, except for V of I, the entire mission of the RRI organization and its constituent stations is to serve a local, internal audience. Therefore, verifications received from Indonesia are strictly a gesture of friendship and a personal favor, often done by station personnel "on their own time."

With that in mind, the following suggestions are offered:

1. Always be courteous and friendly. You are asking these strangers from another land for a personal favor that takes a good deal of time.
2. Always write your report in bahasa Indonesian. English is a fairly common second (or third) language for many Indonesians. However, the person who may wish to verify your report MAY NOT read or write English and you lose a QSL if your report is in English! Why take a chance? Besides, writing in Indonesian shows some effort and caring on your part as well as being the friendly thing to do.
3. Always enclose return postage in mint Indonesian stamps, if possible. Stations are not funded to spend money (government funds at that!) to answer foreign reception reports. Generally, a lack of return postage will guarantee not getting a reply. International Reply Coupons are accepted in some Indonesian post offices. However, even in those situations, converting IRC's is a real hassle for station personnel. Indonesian stamps are readily obtainable in both Europe and North America through several postal services which cater to the DX community.
4. Use every technique suggested in Gerry Dexter's extraordinary new book on QSLing.
5. Even with all of that, your reply rate probably won't be above 40% (more likely 30%).

The following somewhat standard reception report letter is a slight modification of one developed originally by Radio Nederland.

Obtaining Verifications

Preparing Your Own QSL's

Most serious DX'ers who specialize in Indonesian SWBC stations eventually succumb (knuckle-under?) to making their own QSL's for the stations. These cards are usually enclosed with first or second "follow-up" reports and simply ask that the station personnel review the report, stamp the card with official Station Stamp, sign it and mail it back to the DX'er. As of yet, the author has chosen not to use this method of QSL generation on the shortwave bands. However, I still have three "prepared card" broadcast band QSL's from the 1950's - very rare catches. They are exceedingly ugly eyesores made when I was 14 years old. The point of this story is that, if you use the prepared card route, these cards will be in your collection for the rest of your hobby career. As such, they ought to be as attractive as possible. Until recently, making really attractive QSL cards was restricted to the lucky few of us who were professionally trained in the arts. However, the advent of neighborhood photocopy centers has brought attractive self-prepared QSL's within the reach of anyone with a pair of scissors, a pot of paste and a modicum of creativity!

The basic technique proposed here is making QSL's by the same simple "cut and paste" method used by graphic designers. Basically, you use a photocopy machine, hopefully with the capacity to "blow up and blow down," to develop a kit of parts for QSL's. After you have a kit of parts, you "compose" your QSL by cutting and pasting a "camera-ready copy" of your card. You then go to your local photocopy store and have them copy your original on to "CARD STOCK." Even though you will probably have several white on white cut edges showing on the original paste-up, PROPER EXPOSURE SETTING on the copy machine will burn those white-on-white lines out, leaving you with a very professional looking card. It is suggested that you copy the back and front of the card separately and the "spray glue" the two sheets together for a really stiff card.

Some hints and suggestions:

A. Always make your "camera-ready" original in black and white, even if you are going to copy the final in color. B&W is easier to work with, and, as an original, produces the crispest copies in the next generation.

B. Harris/3M copiers now coming on the market make blacker blacks and whiter whites than any other machine currently available.

C. Doing color copies - blue or brown or red copies on either white or colored card stock opens up a whole world of possibilities.

D. The newest generation of full color copiers, just becoming available in larger cities, opens up another whole world of using photos from National Geographic, maps, etc. as "copy" for QSL's. If you are in a big city, call a blueprint company and ask them who has the right kind of copier. If you can't find a blueprint company, call an architectural office and ask for "one of the designers." They will know where the best full-color copiers are!

E. For doing your "cut and paste," use Scotch "Double Stick" tape with adhesive on both sides - its fast! There is also a new kind of clear fast-acting paper cement often sold at photocopy outlets.

F. To glue large areas of paper or the front and back of the card together, use spray adhesive, which comes in aerosol cans and is made for this purpose. Some is sold, for more money, as Photo Mount. Its generally the same stuff.

G. Graphic designers use a light blue colored pencil to make layout lines, etc. when doing a "paste-up." There are special pencils sold for this purpose, called "Non-Reproducing Blue." However, any colored pencil called "sky blue" or "light blue" should work. Mark lightly, and it does not show at all in either off-set printing or photocopying!

Relax and have fun with these things. Each one should cost you about \$0.25 US, and shouldn't take you longer than 15 minutes after you get set up and learn how.

You are welcome to use the following **INDONESIAN GRAPHICS SCRAPBOOK** at will! You should note that the old artworks and architecture shown are products of the Hindu and Buddhist eras, and are probably most appropriate for stations on Sumatera, Jawa and Bali.



Prepared QSL's

Ini menyatakan bahawa saudara telah menerima

(station name here)

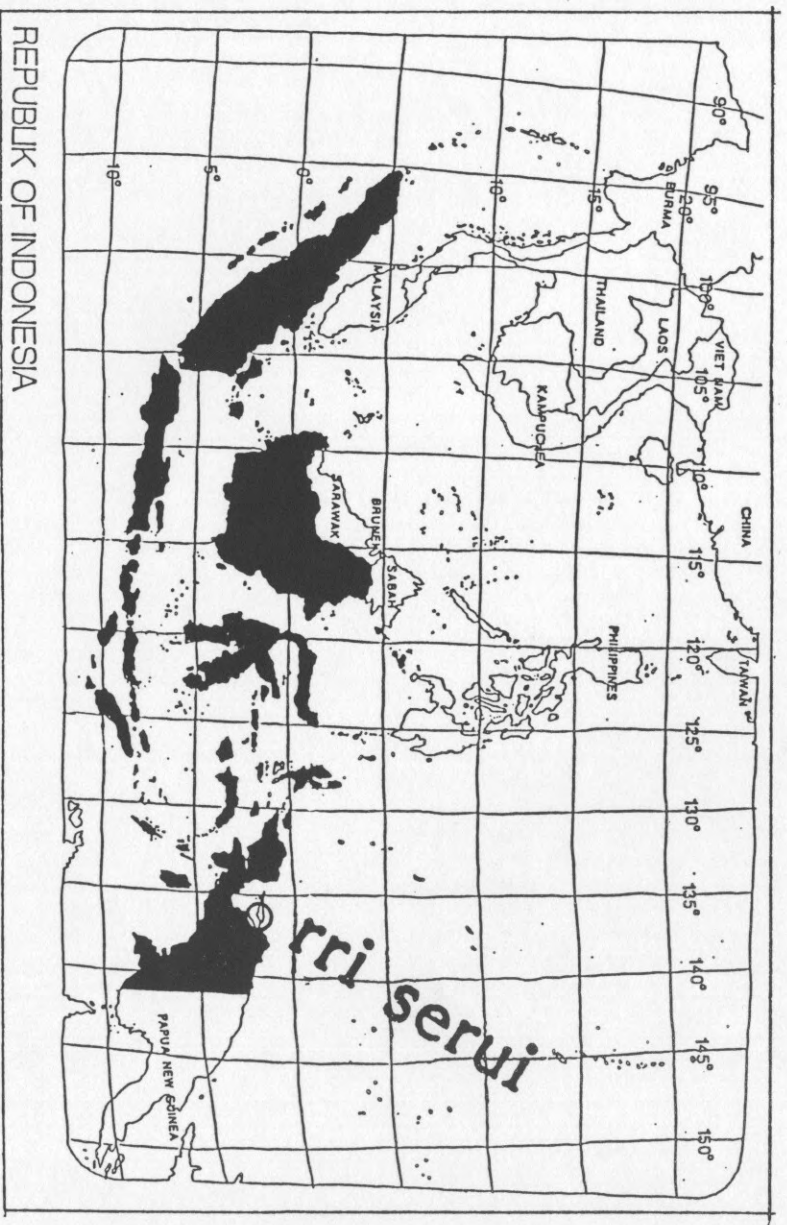
pada meters jam (time)

pada (date) tanggal

Hormat kami,

Stasiun Stampel

Prepared QSL's



Indonésia

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Indonésia

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INDONESIA

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INDONESIAN GRAPHICS SCRAPBOOK



GARUDA is a part-bird, part-human deity who is worshiped by Hindus and Buddhists, as well as by the followers of Bon, the pre-Buddhist religion of Tibet.



REPUBLIC OF INDONESIA

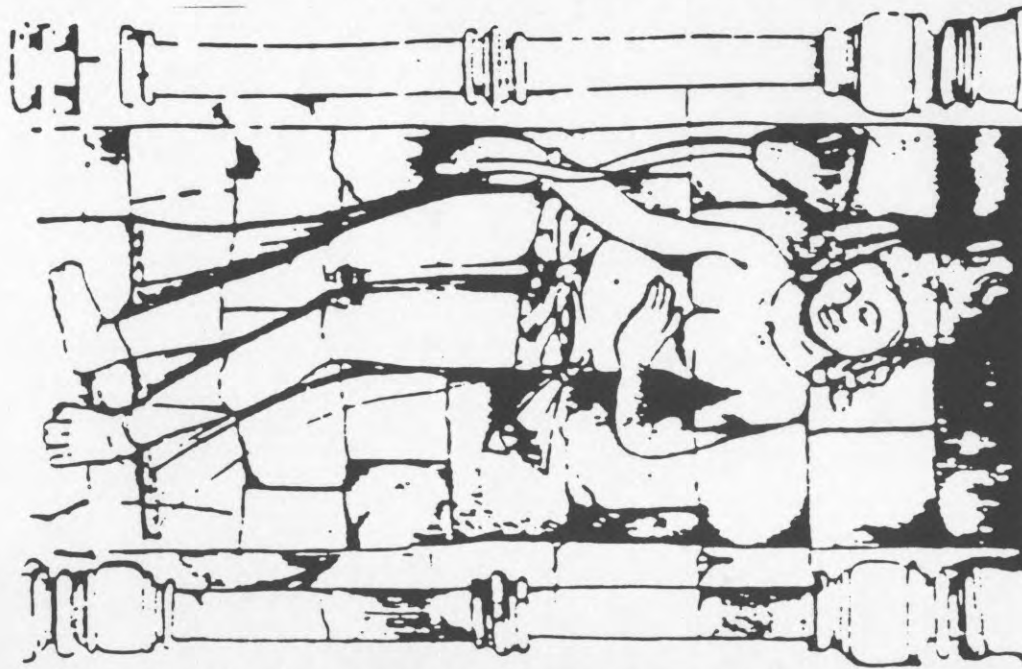
Indonesia Indonesia Indonesia

indonesia

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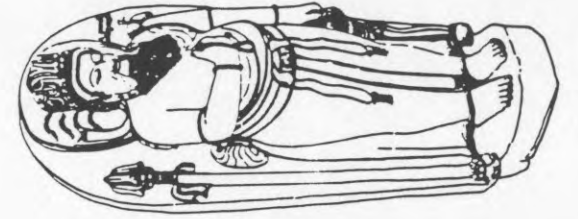
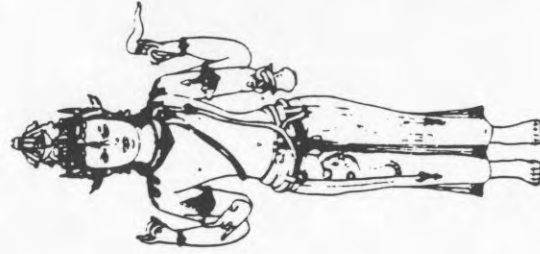
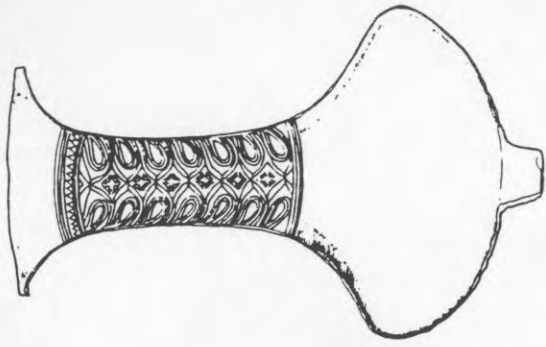
indonesia

You should be cautious when using the photocopy machine and you should be aware of current "copyright" law. In the USA, basically, you should not copy "copyrighted" material for other than your own direct personal use. I've always felt that single "Prepared Cards" fell in that category, but I am not an expert on copyright law!

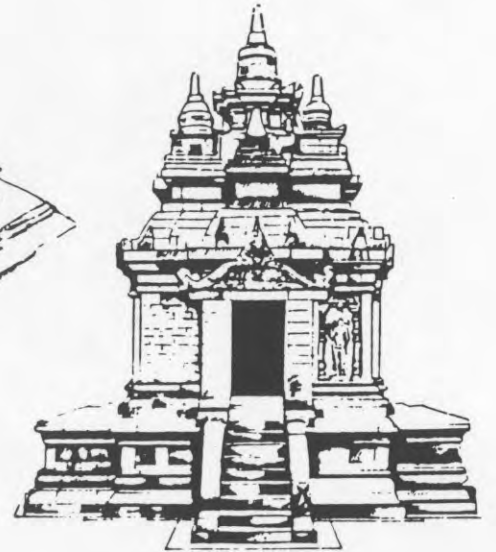
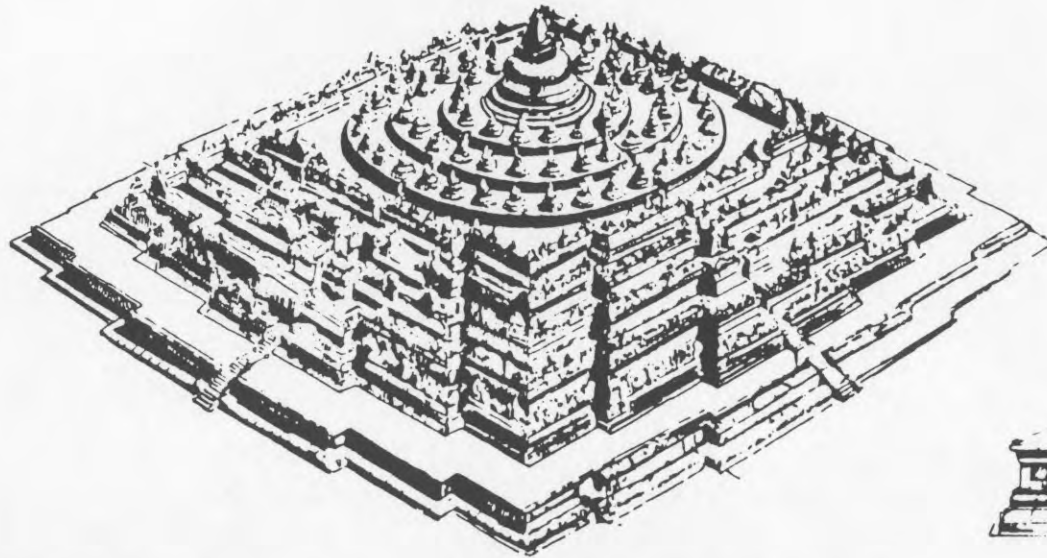
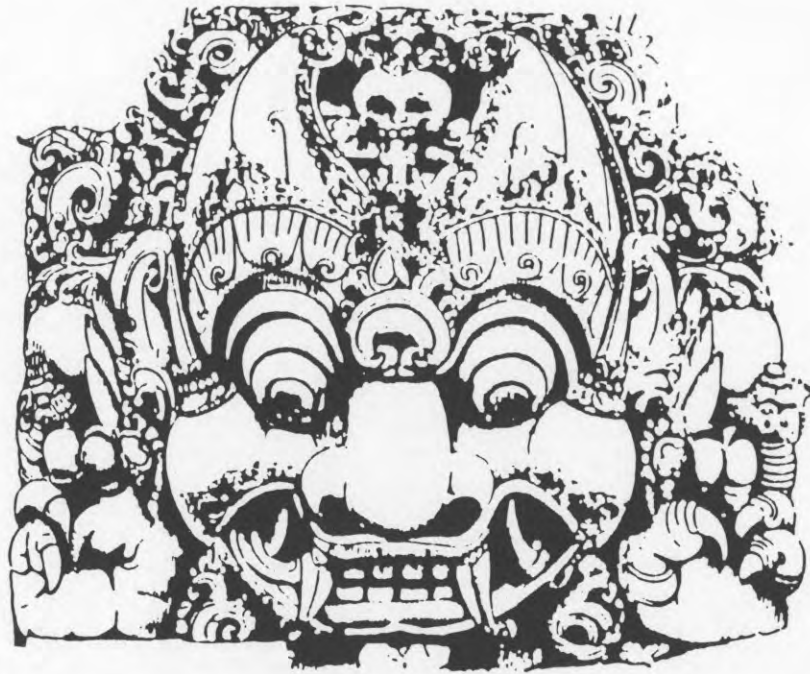
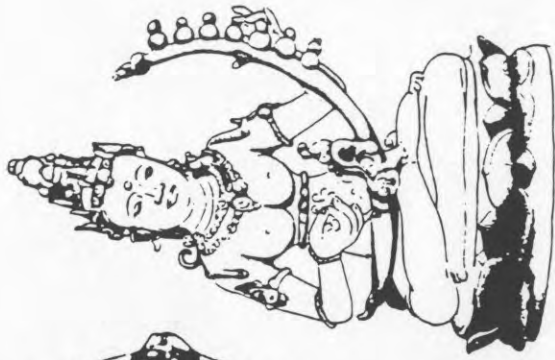


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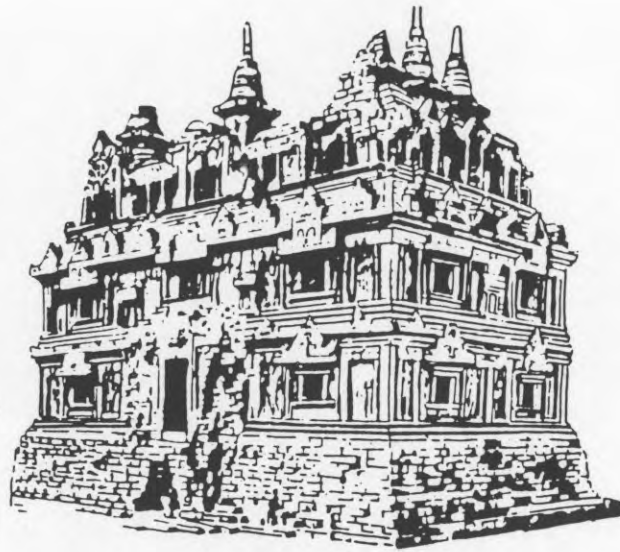
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INDONESIAN GRAPHICS SCRAPBOOK



INDONESIAN GRAPHICS SCRAPBOOK



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One difficulty is finding a cheap source of good looking lettering for your prepared cards. This sheet of lettering was developed by simply blowing up normal typing on a photocopy machine. The slight rough texture makes a nice "style"!!!

Republik of Indonesia
PROPINSI AND SPECIAL DISTRICTS

Indonesian Name

English Translation

Capitol City

SUMATERA	SUMATRA	
DAERAH ISTIMEWA ACEH	Special District of Aceh	Banda Aceh
Propinsi SUMATERA UTARA	North Sumatra	Medan
Propinsi RIAU	Same	Pekanbaru
Propinsi SUMATERA BARAT	West Sumatra	Padang
Propinsi JAMBI	Same	Jambi
Propinsi BENGKULU	Same	Bengkulu
Propinsi SUMATERA SELATAN	South Sumatra	Palembang
Propinsi LAMPUNG	Same	Tanjung Karang
JAWA	JAWA	
DAERAH KHUSUS JAKARTA RAYA	Special District of Jakarta	Jakarta
Propinsi JAWA BARAT	West Java	Bandung
Propinsi JAWA TENGAH	Central Java	Surakarta
DAERAH ISTIMEWA YOGYAKARTA	Special District of Yogyakarta	Yogyakarta
Propinsi JAWA TIMUR	East Java	Surabaya
BALI	BALI	
Propinsi BALI	Same	Denpasar
NUSA TENGGARA	LESSER SUNDA ISLANDS	
Propinsi NUSA TENGGARA TIMUR	East Lesser Sundas	Kupang
Propinsi NUSA TENGGARA BARAT	West Lesser Sundas	Mataram
Propinsi TIMOR TIMUR	East Timor	Dili
KALIMANTAN	INDONESIAN BORNEO	
Propinsi KALIMANTAN BARAT	West Borneo	Pontianak
Propinsi KALIMANTAN TENGAH	Central Borneo	Palangkaraya
Propinsi KALIMANTAN SELATAN	South Borneo	Banjarmasin
Propinsi KALIMANTAN TIMUR	East Borneo	Samarinda
SULAWESI	CELEBESE ISLANDS	
Propinsi SULAWESI UTARA	North Celebes	Manado
Propinsi SULAWESI TENGAH	Central Celebes	Palu
Propinsi SULAWESI SELATAN	South Celebes	Ujung Pandung
Propinsi SULAWESI TENGGARA	Southeast Celebes	Kendari
MALUKU	MOLLUCCA ISLANDS	
Propinsi MALUKU	Moluccas	Ambon
IRIAN JAYA	INDONESIAN NEW GUINEA	
Propinsi IRIAN JAYA	West Irian	Jayapura

27 PROPINSI OR SPECIAL DISTRICTS



PEMBAGIAN WILAYAH/DAERAH DAN JUMLAH PENDUDUK NEGARA REPUBLIK INDONESIA

PROPINSI	KABUPATEN	KOTAMADYA	IBUKOTA	JUMLAH PENDUDUK SENSUS TAHUN 1980
I. DAERAH ISTIMEWA ACEH	—	—	BANDAACEH	2.611.000
	Aceh Barat	—	Meulaboh	
	Aceh Besar	—	Jantho	
	Aceh Selatan	—	Tapaktuan	
	Aceh Tengah	—	Takengon	
	Aceh Timur	—	Langsa	
	Aceh Utara	—	Lhokseumawe	
	Pidie	—	Sigli	
	Aceh Tenggara	—	Kutacane	
		Bandaaceh Sabang	Bandaaceh Sabang	
II. SUMATERA UTARA	—	—	MEDAN	8.361.000
	Asahan	—	Tanjungbalai	
	Dairi	—	Sidikalang	
	Deliserdang	—	Lubukpakam	
	Karo	—	Kabanjahe	
	Labuhanbatu	—	Rantauprapat	
	Langkat	—	Binjai	
	Nias	—	Gunungsitoli	
	Simalungun	—	Pematangsiantar	
	Tapanuli Selatan	—	Padangsidempuan	
	Tapanuli Tengah	—	Sibolga	
	Tapanuli Utara	—	Tarutung	
		Binjai	Binjai	
		Medan	Medan	
		Pematangsiantar	Pematangsiantar	
		Sibolga	Sibolga	
		Tanjungbalai	Tanjungbalai	
		Tebtingtinggi	Tebtingtinggi	
III. SUMATERA BARAT	—	—	PADANG	3.407.000
	Agam	—	Bukittinggi	
	Limapuluh Kota	—	Payakumbuh	
	Padang/Pariaman	—	Pariaman	
	Pasaman	—	Lubuksikaping	
	Pesisir Selatan	—	Painan	
	Sawahlunto	—	Muaro	
	Solok	—	Solok	
	Tanah Datar	—	Batusangkar	
		Bukittinggi	Bukittinggi	
		Padang	Padang	
		Padangpanjang	Padangpanjang	
		Payakumbuh	Payakumbuh	
		Sawahlunto	Sawahlunto	
		Solok	Solok	
IV. RIAU	—	—	PEKANBARU	2.168.000
	Bengkalis	—	Bengkalis	
	Indragiri Hulu	—	Rengat	
	Indragiri Hilir	—	Tembilahan	
	Kampar	—	Bangkinang	
	Kepulauan Riau	—	Tanjungpinang	
		Pekanbaru	Pekanbaru	
V. JAMBI	—	—	JAMBI	1.446.000
	Batanghari	—	Muarabulian	
	Bungo Tebo	—	Muarabungo	
	Kerinci	—	Sungaipenuh	
	Sarolangun	—	Bangko	
	Tanjungjabung	—	Kualatungkal	
		Jambi	Jambi	
VI. SUMATERA SELATAN	—	—	PALEMBANG	4.630.000
	Bangka	—	Sungailiat	
	Belitung	—	Tanjungpandan	
	Lahat	—	Lahat	
	Lematang Ilir Ogan Tengah	—	Muaraenim	
	Musi Banyuasin	—	Sekayu	
	Musi Rawat	—	Lubuklinggau	
	Ogan Komering Ilir	—	Kayuagung	
	Ogan Komering Ulu	—	Baturaja	

PROPINSI	KABUPATEN	KOTAMADYA	IBUKOTA	JUMLAH PENDUDUK SENSUS TAHUN 1980
XVII. KALIMANTAN TIMUR	Hulu Sungai Utara	--	Amuntai	1.218.000
	Kota Baru	--	Kota Baru	
	Tabalong	--	Tanjung	
	Tanahlaut	--	Pleihari	
	Tapin	--	Rantau	
		Banjarmasin	Banjarmasin	
XVIII. SULAWESI UTARA	Berau	--	SAMARINDA	2.115.000
	Bulongan	--	Tanjungredeb	
	Kutai	--	Tanjungselor	
	Tanah Pasir	--	Tenggarong	
		Balikpapan	Tanahrogot	
		Samarinda	Balikpapan	
XIX. SULAWESI TENGAH	Bolaangmongondow	--	MANADO	1.290.000
	Limboto	--	Kotamobagu	
	Minahasa	--	Limboto	
	Sangihetalaud	--	Tondano	
		Gorontalo	Tahuna	
		Manado	Gorontalo	
XX. SULAWESI SELATAN	Banggai	--	PALU	6.062.000
	Buol Tolitoli	--	Luwuk	
	Donggala	--	Tolitoli	
	Poso	--	Palu	
			Poso	
			UJUNG PANDANG	
XXI. SULAWESI TENGGARA	Bantaeng	--	Bantaeng	942.000
	Barru	--	Barru	
	Bone	--	Watampone	
	Bulukumba	--	Bulukumba	
	Enrekang	--	Enrekang	
	Gowa	--	Sungguminasa	
	Jeneponto	--	Jeneponto	
	Luwu	--	Palopo	
	Majene	--	Majene	
	Mamuju	--	Mamuju	
	Maros	--	Maros	
	Pangkajene Kepulauan	--	Pangkajene	
	Pinrang	--	Pinrang	
	Polewali/Mamas	--	Polewali	
	Selayar	--	Benteng	
	Sidenreng/Rappang	--	Sidenreng	
	Sinjai	--	Sinjai	
	Soppeng	--	Watansoppeng	
	Takalar	--	Takalar	
	Tana Toraja	--	Makale	
	Wajo	--	Sengkang	
	Parepare	Parepare		
	Ujungpandang	Ujungpandang		
XXII. BALI	Buton	--	KENDARI	2.470.000
	Kendari	--	Baubau	
	Kolaka	--	Kendari	
	Muna	--	Kolaka	
XXIII. NUSA TENGGARA BARAT	Badung	--	DENPASAR	2.725.000
	Bangli	--	Denpasar	
	Buleleng	--	Bangli	
	Gianyar	--	Singaraja	
	Jembrana	--	Gianyar	
	Karangasem	--	Negara	
	Klungkung	--	Karangasem (Amlapura)	
	Tabanan	--	Klungkung	
			Tabanan	
			MATARAM	
	Bima	Raba		
	Dompu	Dompu		
	Lombok Barat	Mataram		

PROPINSI	KABUPATEN	KOTAMADYA	IBUKOTA	JUMLAH PENDUDUK SENSUS TAHUN 1980
XXIV. NUSA TENGGARA TIMUR	Lombok Tengah	--	Praya	2.737.000
	Lombok Timur	--	Selong	
	Sumbawa	--	Sumbawa Besar	
			KUPANG	
	Alor	--	Kalabahi	
	Belu	--	Atambua	
	Ende	--	Ende	
	Flores	--	Larantuka	
	Kupang	--	Kupang	
	Manggarai	--	Ruteng	
	Ngada	--	Bajawa	
	Sikka	--	Maumere	
	Sumba Barat	--	Maikabubak	
	Sumba Timur	--	Waingapu	
XXV. MALUKU	Timor Tengah Selatan	--	Soe	1.411.000
	Timor Tengah Utara	--	Kefamenanu	
			AMBON	
	Halmahera Tengah	--	Soasi	
	Maluku Tengah	--	Masohi	
	Maluku Tenggara	--	Tual	
XXVI. IRIAN JAYA	Maluku Utara	Ambon	Ternate	1.174.000
			Ambon	
			JAYAPURA	
	Fakfak	--	Fakfak	
	Jayapura	--	Jayapura	
	Jayawijaya	--	Wamena	
	Manokwari	--	Manokwari	
	Merauke	--	Merauke	
	Paniai	--	Nabire	
	Sorong	--	Sorong	
XXVII. TIMOR TIMUR	Teluk Cendrawasih	--	Biak	555.000
	Yapenwaropen	--	Seruai	
			DILI	
	Aileu	--	Aileu	
	Ainaro	--	Ainaro	
	Ambeno	--	Pantemakassar	
	Baucau	--	Baucau	
	Bobonaro	--	Maliana	
	Dili	--	Dili	
	Ermera	--	Ermera	
	Kovalima	--	Suai	
	Lautem	--	Lospalos	
	Liquica	--	Liquica	
	Manatuto	--	Manatuto	
Manufahi	--	Same		
Viqueque	--	Viqueque		

appendix A

The Republik of Indonesia

(fine tuning)

5900

Table with 2 columns: Frequency (5900-5949) and Metric Wavelength (50.8475-50.4286)

5950

Table with 2 columns: Frequency (5950-5999) and Metric Wavelength (50.4202-50.0053)

6000

Table with 2 columns: Frequency (6000-6049) and Metric Wavelength (50.0000-49.595)

6050

Table with 2 columns: Frequency (6050-6099) and Metric Wavelength (49.5868-49.1884)

6100

Table with 2 columns: Frequency (6100-6149) and Metric Wavelength (49.1803-48.7884)

6150

Table with 2 columns: Frequency (6150-6199) and Metric Wavelength (48.7805-48.3949)

6200

Table with 2 columns: Frequency (6200-6295) and Metric Wavelength (48.3871-47.6569)

6300

Table with 2 columns: Frequency (6300-6395) and Metric Wavelength (47.619-46.9117)

6400

Table with 2 columns: Frequency (6400-6495) and Metric Wavelength (46.875-46.1894)

6500

Table with 2 columns: Frequency (6500-6595) and Metric Wavelength (46.1538-45.489)

6600

Table with 2 columns: Frequency (6600-6695) and Metric Wavelength (45.4545-44.8096)

6700

Table with 2 columns: Frequency (6700-6795) and Metric Wavelength (44.7761-44.1501)

6800

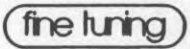
Table with 2 columns: Frequency (6800-6895) and Metric Wavelength (44.1177-43.5098)

6900

Table with 2 columns: Frequency (6900-6995) and Metric Wavelength (43.4783-42.8878)

7000

Table with 2 columns: Frequency (7000-7095) and Metric Wavelength (42.8571-42.2833)



7100

7100	42.2535
7101	42.2476
7102	42.2416
7103	42.2357
7104	42.2297
7105	42.2238
7106	42.2178
7107	42.2119
7108	42.206
7109	42.2
7110	42.1941
7111	42.1882
7112	42.1822
7113	42.1763
7114	42.1704
7115	42.1644
7116	42.1585
7117	42.1526
7118	42.1467
7119	42.1408
7120	42.1348
7121	42.1289
7122	42.123
7123	42.1171
7124	42.1112
7125	42.1053
7126	42.0994
7127	42.0935
7128	42.0875
7129	42.0816
7130	42.0757
7131	42.0698
7132	42.0639
7133	42.058
7134	42.0521
7135	42.0463
7136	42.0404
7137	42.0345
7138	42.0286
7139	42.0227
7140	42.0168
7141	42.0109
7142	42.005
7143	41.9992
7144	41.9933
7145	41.9874
7146	41.9815
7147	41.9757
7148	41.9698
7149	41.9639

7150	41.958
7151	41.9522
7152	41.9463
7153	41.9404
7154	41.9346
7155	41.9287
7156	41.9229
7157	41.917
7158	41.9112
7159	41.9053
7160	41.8994
7161	41.8936
7162	41.8877
7163	41.8819
7164	41.876
7165	41.8702
7166	41.8644
7167	41.8585
7168	41.8527
7169	41.8468
7170	41.841
7171	41.8352
7172	41.8293
7173	41.8235
7174	41.8177
7175	41.8118
7176	41.806
7177	41.8002
7178	41.7944
7179	41.7886
7180	41.7827
7181	41.7769
7182	41.7711
7183	41.7653
7184	41.7595
7185	41.7537
7186	41.7478
7187	41.742
7188	41.7362
7189	41.7304
7190	41.7246
7191	41.7188
7192	41.713
7193	41.7072
7194	41.7014
7195	41.6956
7196	41.6898
7197	41.684
7198	41.6782
7199	41.6725

7200

7200	41.6667
7201	41.6609
7202	41.6551
7203	41.6493
7204	41.6435
7205	41.6378
7206	41.632
7207	41.6262
7208	41.6204
7209	41.6147
7210	41.6089
7211	41.6031
7212	41.5973
7213	41.5916
7214	41.5858
7215	41.58
7216	41.5743
7217	41.5685
7218	41.5628
7219	41.557
7220	41.5513
7221	41.5455
7222	41.5397
7223	41.534
7224	41.5282
7225	41.5225
7226	41.5168
7227	41.511
7228	41.5053
7229	41.4995
7230	41.4938
7231	41.488
7232	41.4823
7233	41.4766
7234	41.4708
7235	41.4651
7236	41.4594
7237	41.4537
7238	41.4479
7239	41.4422
7240	41.4365
7241	41.4307
7242	41.425
7243	41.4193
7244	41.4136
7245	41.4079
7246	41.4022
7247	41.3964
7248	41.3907
7249	41.385

7250	41.3793
7251	41.3736
7252	41.3679
7253	41.3622
7254	41.3565
7255	41.3508
7256	41.3451
7257	41.3394
7258	41.3337
7259	41.328
7260	41.3223
7261	41.3166
7262	41.3109
7263	41.3052
7264	41.2996
7265	41.2939
7266	41.2882
7267	41.2825
7268	41.2768
7269	41.2712
7270	41.2655
7271	41.2598
7272	41.2541
7273	41.2485
7274	41.2428
7275	41.2371
7276	41.2314
7277	41.2258
7278	41.2201
7279	41.2145
7280	41.2088
7281	41.2031
7282	41.1975
7283	41.1918
7284	41.1862
7285	41.1805
7286	41.1749
7287	41.1692
7288	41.1636
7289	41.1579
7290	41.1523
7291	41.1466
7292	41.141
7293	41.1353
7294	41.1297
7295	41.1241
7296	41.1184
7297	41.1128
7298	41.1072
7299	41.1015

FOR "SPLIT" FREQUENCIES, EITHER INTERPOLATE
OR USE THE FORMULA:
WAVELENGTH (IN METERS) = 300000/FREQUENCY (IN KILOHERTZ)

SUNSET
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	DENPASAR	SURABAYA	YOGJAKARTA	BANDUNG	JAKARTA	JAN 1	PALEMBANG	JAMBI	MEDAN	SIBOLGA	BANDA ACEH	
JAN 1	10.41	10.49	11.00	11.08	11.09	JAN 1	11.12	11.17	11.26	11.29	11.37	JAN 1
JAN 15	10.46	10.53	11.04	11.13	11.14	JAN 15	11.18	11.23	11.32	11.35	11.43	JAN 15
FEB 1	10.48	10.55	11.06	11.15	11.17	FEB 1	11.21	11.27	11.37	11.40	11.49	FEB 1
FEB 15	10.45	10.54	11.04	11.13	11.15	FEB 15	11.21	11.27	11.39	11.41	11.52	FEB 15
MAR 1	10.41	10.50	11.00	11.09	11.12	MAR 1	11.18	11.25	11.39	11.40	11.52	MAR 1
MAR 15	10.34	10.43	10.53	11.03	11.06	MAR 15	11.13	11.21	11.37	11.37	11.51	MAR 15
APR 1	10.25	10.35	10.45	10.55	10.58	APR 1	11.07	11.15	11.34	11.33	11.49	APR 1
APR 15	10.18	10.28	10.38	10.48	10.52	APR 15	11.02	11.11	11.31	11.30	11.47	APR 15
MAY 1	10.11	10.23	10.32	10.43	10.47	MAY 1	10.58	11.07	11.29	11.27	11.46	MAY 1
MAY 15	10.08	10.19	10.28	10.40	10.44	MAY 15	10.56	11.06	11.29	11.27	11.47	MAY 15
JUN 1	10.07	10.19	10.28	10.39	10.44	JUN 1	10.57	11.07	11.32	11.29	11.49	JUN 1
JUN 15	10.09	10.21	10.30	10.41	10.46	JUN 15	10.59	11.10	11.35	11.32	11.53	JUN 15
JUL 1	10.12	10.24	10.33	10.44	10.49	JUL 1	11.02	11.13	11.38	11.35	11.56	JUL 1
JUL 15	10.15	10.27	10.36	10.48	10.52	JUL 15	11.05	11.15	11.40	11.37	11.58	JUL 15
AUG 1	10.18	10.30	10.39	10.50	10.54	AUG 1	11.06	11.16	11.39	11.37	11.57	AUG 1
AUG 15	10.19	10.30	10.39	10.50	10.54	AUG 15	11.05	11.15	11.36	11.35	11.53	AUG 15
SEP 1	10.18	10.29	10.38	10.49	10.52	SEP 1	11.02	11.11	11.31	11.30	11.47	SEP 1
SEP 15	10.17	10.26	10.36	10.47	10.50	SEP 15	10.59	11.07	11.24	11.24	11.39	SEP 15
OCT 1	10.15	10.24	10.34	10.44	10.47	OCT 1	10.55	11.02	11.18	11.18	11.32	OCT 1
OCT 15	10.14	10.23	10.33	10.43	10.45	OCT 15	10.52	10.58	11.12	11.13	11.25	OCT 15
NOV 1	10.15	10.24	10.34	10.43	10.45	NOV 1	10.51	10.56	11.09	11.10	11.21	NOV 1
NOV 15	10.19	10.27	10.38	10.47	10.48	NOV 15	10.52	10.58	11.08	11.11	11.20	NOV 15
DEC 1	10.25	10.33	10.44	10.52	10.54	DEC 1	10.57	11.02	11.11	11.14	11.22	DEC 1
DEC 15	10.33	10.40	10.51	11.00	11.01	DEC 15	11.04	11.09	11.17	11.20	11.28	DEC 15

SUNRISE
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	NIGHT	NIGHT	NIGHT	NIGHT	NIGHT	JAN 1	JAN 15	FEB 1	FEB 15	MAR 1	MAR 15	APR 1	APR 15	MAY 1	MAY 15	JUN 1	JUN 15	JUL 1	JUL 15	AUG 1	AUG 15	SEP 1	SEP 15	OCT 1	OCT 15	NOV 1	NOV 15	DEC 1	DEC 15
JAN 1	22.04	22.16	22.25	22.37	22.41	JAN 1	22.55	23.05	23.30	23.27	23.48	JAN 1																	
JAN 15	22.12	22.23	22.32	22.44	22.48	JAN 15	23.01	23.12	23.36	23.33	23.53	JAN 15																	
FEB 1	22.18	22.30	22.39	22.50	22.54	FEB 1	23.06	23.16	23.39	23.37	23.56	FEB 1																	
FEB 15	22.22	22.33	22.43	22.53	22.57	FEB 15	23.08	23.18	23.39	23.37	23.55	FEB 15																	
MAR 1	22.24	22.34	22.44	22.54	22.58	MAR 1	23.08	23.17	23.36	23.35	23.52	MAR 1																	
MAR 15	22.24	22.34	22.44	22.54	22.57	MAR 15	23.06	23.14	23.31	23.31	23.46	MAR 15																	
APR 1	22.23	22.32	22.42	22.52	22.55	APR 1	23.02	23.09	23.25	23.25	23.39	APR 1																	
APR 15	22.22	22.31	22.41	22.51	22.53	APR 15	22.59	23.06	23.19	23.20	23.32	APR 15																	
MAY 1	22.22	22.31	22.41	22.50	22.52	MAY 1	22.57	23.03	23.15	23.17	23.27	MAY 1																	
MAY 15	22.24	22.32	22.43	22.51	22.53	MAY 15	22.57	23.02	23.13	23.15	23.24	MAY 15																	
JUN 1	22.27	22.35	22.46	22.54	22.55	JUN 1	22.59	23.04	23.13	23.16	23.24	JUN 1																	
JUN 15	22.31	22.38	22.49	22.58	22.59	JUN 15	23.02	23.07	23.15	23.18	23.26	JUN 15																	
JUL 1	22.34	22.41	22.52	23.01	23.02	JUL 1	23.05	23.10	23.19	23.22	23.29	JUL 1																	
JUL 15	22.35	22.43	22.54	23.02	23.04	JUL 15	23.07	23.12	23.21	23.24	23.32	JUL 15																	
AUG 1	22.34	22.42	22.52	23.01	23.03	AUG 1	23.07	23.13	23.23	23.25	23.34	AUG 1																	
AUG 15	22.29	22.38	22.48	22.57	22.59	AUG 15	23.05	23.10	23.22	23.24	23.35	AUG 15																	
SEP 1	22.22	22.31	22.41	22.51	22.53	SEP 1	22.59	23.06	23.20	23.21	23.33	SEP 1																	
SEP 15	22.14	22.23	22.33	22.43	22.45	SEP 15	22.53	23.00	23.16	23.16	23.30	SEP 15																	
OCT 1	22.05	22.15	22.25	22.35	22.38	OCT 1	22.47	22.55	23.12	23.12	23.27	OCT 1																	
OCT 15	21.57	22.08	22.17	22.28	22.31	OCT 15	22.41	22.50	23.09	23.08	23.25	OCT 15																	
NOV 1	21.51	22.02	22.12	22.22	22.26	NOV 1	22.38	22.47	23.08	23.07	23.25	NOV 1																	
NOV 15	21.49	22.01	22.10	22.21	22.25	NOV 15	22.37	22.47	23.10	23.08	23.28	NOV 15																	
DEC 1	21.51	22.02	22.12	22.23	22.27	DEC 1	22.40	22.51	23.15	23.12	23.33	DEC 1																	
DEC 15	21.56	22.08	22.17	22.28	22.33	DEC 15	22.46	22.57	23.22	23.19	23.40	DEC 15																	

WAKTU INDONESIA
 BAGIAN BARAT
 appendix C

UTC+7

BALI JAWA SUMATERA
 fine tuning

SUNSET
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MANADO

GORONTALO

KENDARI

DILI

KUPANG

UJUNG PANDANG

SAMARINDA

BANJARMASIN

MATARAM

PONTIANAK

JAN 1	09.45	09.54	09.59	09.59	10.10	JAN 1	10.18	10.19	10.34	10.38	10.50	JAN 1
JAN 15	09.51	10.00	10.05	10.04	10.14	JAN 15	10.23	10.25	10.40	10.42	10.56	JAN 15
FEB 1	09.55	10.04	10.08	10.05	10.16	FEB 1	10.26	10.29	10.43	10.44	11.00	FEB 1
FEB 15	09.57	10.05	10.07	10.03	10.13	FEB 15	10.24	10.29	10.42	10.41	11.01	FEB 15
MAR 1	09.56	10.03	10.04	09.59	10.08	MAR 1	10.21	10.28	10.40	10.37	10.59	MAR 1
MAR 15	09.53	10.00	09.59	09.52	10.00	MAR 15	10.15	10.24	10.35	10.30	10.55	MAR 15
APR 1	09.49	09.56	09.52	09.43	09.51	APR 1	10.08	10.19	10.29	10.21	10.51	APR 1
APR 15	09.45	09.52	09.47	09.36	09.43	APR 15	10.02	10.15	10.23	10.13	10.46	APR 15
MAY 1	09.43	09.49	09.42	09.30	09.36	MAY 1	09.57	10.12	10.19	10.07	10.44	MAY 1
MAY 15	09.42	09.48	09.40	09.26	09.32	MAY 15	09.55	10.10	10.17	10.04	10.43	MAY 15
JUN 1	09.44	09.50	09.40	09.25	09.30	JUN 1	09.55	10.12	10.17	10.03	10.44	JUN 1
JUN 15	09.47	09.52	09.43	09.27	09.32	JUN 15	09.57	10.14	10.20	10.04	10.47	JUN 15
JUL 1	09.50	09.56	09.46	09.30	09.35	JUL 1	10.00	10.17	10.23	10.08	10.50	JUL 1
JUL 15	09.52	09.58	09.49	09.34	09.39	JUL 15	10.03	10.20	10.26	10.11	10.52	JUL 15
AUG 1	09.52	09.58	09.50	09.36	09.42	AUG 1	10.05	10.20	10.27	10.14	10.53	AUG 1
AUG 15	09.50	09.56	09.50	09.37	09.43	AUG 15	10.05	10.19	10.26	10.15	10.51	AUG 15
SEP 1	09.45	09.52	09.47	09.36	09.43	SEP 1	10.03	10.15	10.24	10.14	10.47	SEP 1
SEP 15	09.40	09.47	09.44	09.35	09.42	SEP 15	10.00	10.10	10.20	10.13	10.42	SEP 15
OCT 1	09.34	09.41	09.40	09.33	09.41	OCT 1	09.57	10.05	10.16	10.11	10.36	OCT 1
OCT 15	09.29	09.37	09.37	09.32	09.41	OCT 15	09.54	10.01	10.13	10.10	10.32	OCT 15
NOV 1	09.26	09.34	09.37	09.33	09.43	NOV 1	09.54	09.59	10.12	10.12	10.30	NOV 1
NOV 15	09.26	09.35	09.39	09.37	09.47	NOV 15	09.57	10.00	10.14	10.15	10.31	NOV 15
DEC 1	09.30	09.39	09.44	09.43	09.54	DEC 1	10.02	10.04	10.19	10.22	10.35	DEC 1
DEC 15	09.36	09.45	09.51	09.51	10.02	DEC 15	10.09	10.11	10.26	10.29	10.41	DEC 15

NIGHT

NIGHT

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NIGHT

JAN 1	21.43	21.48	21.38	21.22	21.28	JAN 1	21.53	22.10	22.16	22.00	22.42	JAN 1
JAN 15	21.48	21.54	21.45	21.30	21.35	JAN 15	21.59	22.16	22.22	22.07	22.48	JAN 15
FEB 1	21.52	21.58	21.50	21.37	21.42	FEB 1	22.05	22.20	22.27	22.14	22.52	FEB 1
FEB 15	21.53	21.59	21.53	21.40	21.47	FEB 15	22.08	22.21	22.29	22.18	22.53	FEB 15
MAR 1	21.51	21.57	21.53	21.42	21.49	MAR 1	22.08	22.20	22.29	22.20	22.52	MAR 1
MAR 15	21.46	21.53	21.51	21.42	21.50	MAR 15	22.07	22.17	22.27	22.20	22.49	MAR 15
APR 1	21.41	21.49	21.48	21.41	21.49	APR 1	22.04	22.12	22.24	22.19	22.44	APR 1
APR 15	21.36	21.44	21.45	21.40	21.49	APR 15	22.02	22.08	22.21	22.18	22.40	APR 15
MAY 1	21.33	21.41	21.44	21.40	21.50	MAY 1	22.01	22.06	22.19	22.18	22.37	MAY 1
MAY 15	21.31	21.40	21.44	21.42	21.52	MAY 15	22.02	22.05	22.19	22.20	22.36	MAY 15
JUN 1	21.32	21.41	21.46	21.45	21.56	JUN 1	22.04	22.06	22.21	22.23	22.37	JUN 1
JUN 15	21.34	21.43	21.49	21.49	22.00	JUN 15	22.07	22.09	22.24	22.27	22.40	JUN 15
JUL 1	21.37	21.46	21.52	21.52	22.03	JUL 1	22.11	22.12	22.27	22.30	22.43	JUL 1
JUL 15	21.40	21.49	21.54	21.53	22.04	JUL 15	22.12	22.14	22.29	22.32	22.45	JUL 15
AUG 1	21.41	21.50	21.54	21.52	22.02	AUG 1	22.12	22.15	22.29	22.30	22.46	AUG 1
AUG 15	21.40	21.48	21.51	21.47	21.57	AUG 15	22.08	22.13	22.26	22.26	22.44	AUG 15
SEP 1	21.37	21.44	21.45	21.40	21.49	SEP 1	22.02	22.09	22.21	22.18	22.40	SEP 1
SEP 15	21.32	21.40	21.39	21.32	21.40	SEP 15	21.55	22.03	22.14	22.10	22.35	SEP 15
OCT 1	21.28	21.35	21.32	21.23	21.31	OCT 1	21.48	21.58	22.08	22.01	22.30	OCT 1
OCT 15	21.24	21.30	21.26	21.15	21.22	OCT 15	21.42	21.53	22.02	21.53	22.25	OCT 15
NOV 1	21.22	21.28	21.22	21.09	21.16	NOV 1	21.37	21.51	21.59	21.47	22.23	NOV 1
NOV 15	21.23	21.29	21.21	21.07	21.13	NOV 15	21.36	21.51	21.58	21.45	22.24	NOV 15
DEC 1	21.28	21.33	21.24	21.09	21.14	DEC 1	21.39	21.55	22.01	21.46	22.27	DEC 1
DEC 15	21.34	21.40	21.30	21.14	21.19	DEC 15	21.44	22.01	22.07	21.52	22.34	DEC 15

SUNRISE
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WAKTU INDONESIA
 BAGIAN TENGAH

UTC+8

SULAWESI
 TIMOR NUSA TENGGARA KALIMANTAN

fine tuning

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SUNSET
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	JAYAPURA	MERAUKE	WAMENA	BLAK	SERUI	MANOKWARI	FAK FAK	SORONG	TERNATE	AMBON		
JAN 1	08.48	09.00	09.00	09.04	09.05	JAN 1	09.13	09.23	09.24	09.36	09.40	JAN 1
JAN 15	08.54	09.04	09.05	09.09	09.11	JAN 15	09.18	09.28	09.29	09.42	09.45	JAN 15
FEB 1	08.57	09.06	09.08	09.13	09.15	FEB 1	09.22	09.32	09.33	09.46	09.48	FEB 1
FEB 15	08.57	09.04	09.07	09.14	09.15	FEB 15	09.23	09.31	09.34	09.47	09.48	FEB 15
MAR 1	08.54	08.59	09.05	09.12	09.12	MAR 1	09.21	09.29	09.32	09.46	09.45	MAR 1
MAR 15	08.50	08.52	08.59	09.08	09.08	MAR 15	09.17	09.24	09.28	09.43	09.40	MAR 15
APR 1	08.44	08.44	08.53	09.02	09.03	APR 1	09.12	09.18	09.23	09.38	09.34	APR 1
APR 15	08.39	08.36	08.47	08.58	08.58	APR 15	09.07	09.13	09.18	09.35	09.28	APR 15
MAY 1	08.35	08.30	08.43	08.54	08.54	MAY 1	09.04	09.09	09.15	09.32	09.24	MAY 1
MAY 15	08.33	08.26	08.40	08.53	08.53	MAY 15	09.03	09.07	09.14	09.31	09.22	MAY 15
JUN 1	08.34	08.25	08.41	08.54	08.53	JUN 1	09.04	09.07	09.15	09.33	09.22	JUN 1
JUN 15	08.36	08.27	08.43	08.57	08.56	JUN 15	09.06	09.10	09.18	09.36	09.24	JUN 15
JUL 1	08.40	08.30	08.46	09.00	08.59	JUL 1	09.09	09.13	09.21	09.39	09.28	JUL 1
JUL 15	08.42	08.34	08.49	09.02	09.02	JUL 15	09.12	09.15	09.23	09.41	09.30	JUL 15
AUG 1	08.43	08.37	08.50	09.03	09.03	AUG 1	09.13	09.17	09.24	09.41	09.32	AUG 1
AUG 15	08.42	08.37	08.50	09.02	09.01	AUG 15	09.11	09.16	09.22	09.39	09.31	AUG 15
SEP 1	08.39	08.37	08.47	08.58	08.58	SEP 1	09.07	09.13	09.19	09.35	09.28	SEP 1
SEP 15	08.35	08.35	08.44	08.53	08.54	SEP 15	09.03	09.09	09.14	09.29	09.25	SEP 15
OCT 1	08.31	08.33	08.40	08.49	08.49	OCT 1	08.58	09.05	09.09	09.24	09.21	OCT 1
OCT 15	08.28	08.32	08.38	08.45	08.46	OCT 15	08.54	09.02	09.05	09.19	09.18	OCT 15
NOV 1	08.26	08.34	08.37	08.43	08.44	NOV 1	08.52	09.01	09.03	09.17	09.18	NOV 1
NOV 15	08.28	08.37	08.40	08.44	08.46	NOV 15	08.53	09.03	09.04	09.17	09.20	NOV 15
DEC 1	08.33	08.44	08.45	08.49	08.50	DEC 1	08.58	09.08	09.09	09.21	09.25	DEC 1
DEC 15	08.40	08.51	08.52	08.55	08.57	DEC 15	09.04	09.14	09.15	09.27	09.32	DEC 15

SUNRISE
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	NIGHT	NIGHT	NIGHT	NIGHT								
JAN 1	20.32	20.23	20.39	20.52	20.51	JAN 1	21.02	21.05	21.13	21.31	21.20	JAN 1
JAN 15	20.38	20.30	20.45	20.58	20.58	JAN 15	21.08	21.12	21.19	21.37	21.27	JAN 15
FEB 1	20.43	20.37	20.51	21.03	21.03	FEB 1	21.13	21.17	21.24	21.41	21.32	FEB 1
FEB 15	20.45	20.41	20.53	21.04	21.04	FEB 15	21.14	21.19	21.25	21.42	21.34	FEB 15
MAR 1	20.45	20.42	20.53	21.03	21.03	MAR 1	21.13	21.18	21.24	21.40	21.34	MAR 1
MAR 15	20.42	20.42	20.51	21.00	21.01	MAR 15	21.10	21.16	21.21	21.36	21.32	MAR 15
APR 1	20.39	20.41	20.48	20.56	20.57	APR 1	21.05	21.13	21.16	21.31	21.29	APR 1
APR 15	20.35	20.41	20.46	20.52	20.53	APR 15	21.01	21.10	21.13	21.27	21.26	APR 15
MAY 1	20.33	20.41	20.44	20.50	20.51	MAY 1	20.59	21.08	21.10	21.23	21.24	MAY 1
MAY 15	20.33	20.42	20.44	20.49	20.50	MAY 15	20.58	21.08	21.09	21.22	21.25	MAY 15
JUN 1	20.35	20.46	20.46	20.51	20.52	JUN 1	20.59	21.09	21.10	21.23	21.27	JUN 1
JUN 15	20.38	20.49	20.50	20.53	20.55	JUN 15	21.02	21.12	21.13	21.26	21.30	JUN 15
JUL 1	20.41	20.52	20.53	20.57	20.58	JUL 1	21.05	21.16	21.16	21.29	21.33	JUL 1
JUL 15	20.43	20.54	20.55	20.59	21.00	JUL 15	21.08	21.18	21.19	21.31	21.35	JUL 15
AUG 1	20.43	20.52	20.54	20.59	21.01	AUG 1	21.08	21.18	21.19	21.32	21.35	AUG 1
AUG 15	20.40	20.48	20.51	20.57	20.58	AUG 15	21.06	21.15	21.17	21.31	21.32	AUG 15
SEP 1	20.35	20.40	20.46	20.53	20.54	SEP 1	21.02	21.10	21.13	21.27	21.26	SEP 1
SEP 15	20.29	20.32	20.39	20.47	20.48	SEP 15	20.56	21.04	21.08	21.22	21.20	SEP 15
OCT 1	20.23	20.23	20.32	20.41	20.42	OCT 1	20.51	20.57	21.02	21.17	21.13	OCT 1
OCT 15	20.18	20.16	20.26	20.37	20.37	OCT 15	20.46	20.52	20.57	21.13	21.07	OCT 15
NOV 1	20.15	20.10	20.22	20.34	20.34	NOV 1	20.43	20.48	20.55	21.11	21.03	NOV 1
NOV 15	20.14	20.08	20.21	20.34	20.34	NOV 15	20.44	20.48	20.55	21.12	21.03	NOV 15
DEC 1	20.18	20.09	20.24	20.38	20.37	DEC 1	20.47	20.51	20.59	21.16	21.06	DEC 1
DEC 15	20.24	20.14	20.30	20.44	20.43	DEC 15	20.53	20.57	21.05	21.23	21.11	DEC 15

WAKTU INDONESIA
 BAGIAN TIMUR

UTC+9

IRIAN JAYA

MALUKU

(fine tuning)

acknowledgments

This Handbook grew out of my own frustration at having fragments of the "Indo Story" in dozens of different source documents. That frustration along with the desire to create the beginnings of an Indonesian DXer's Handbook that could be a living document, led to the creation of this document.

PLEASE NOTE, HOWEVER, THIS DOCUMENT IS MEANT TO BE A COMPANION PIECE TO TWO OTHER ESSENTIAL TOOLS FOR THE TRULY OBSESSED INDO HUNTER: GERRY DEXTER'S INCOMPARABLE "LANGUAGE LABORATORY" SERIES NOW HAS AN INDONESIAN VERSION. ALTHOUGH MY NAME APPEARS ON THE COVER, THAT DOCUMENT IS ALMOST EXCLUSIVELY THE WORK OF GERRY AND OF MY FRIEND, TAN GWAT LAN OF JAKARTA. MISS TAN'S INDONESIAN TRANSLATION OF OUR RATHER ARCANE VOCABULARY HAS BEEN WIDELY COMPLIMENTED BY INDONESIANS AND HAS EVEN BEEN CALLED "POETIC." IF YOU ARE GOING ATTEMPT TO COMMUNICATE WITH INDONESIANS IN WRITING, BUY GERRY'S BOOK!!! THE SECOND ESSENTIAL TOOL FOR AN INDO HUNTER IS A HIGHLY ACCURATE LIST OF CURRENTLY OPERATING INDONESIAN STATIONS, PREFERABLY LISTED BOTH BY FREQUENCY AND BY LOCATION. MITCH SAMS, MANAGING EDITOR OF fine tuning, HAS GUIDED THE DEVELOPMENT OF SUCH A LIST FOR SEVERAL YEARS. IN RECENT YEARS, IT HAS BEEN PUBLISHED BY EITHER NUMERO UNO OR fine tuning. IN 1988, THANKS TO THE POWER OF THE COMPUTER, THE "BY LOCATION" LIST WAS ADDED TO THE PREVIOUSLY PUBLISHED "BY FREQUENCY" ORGANIZATION. BOTH OF THESE TOOLS ARE CONSIDERED ESSENTIAL. NO ATTEMPT IS MADE IN THIS DOCUMENT TO REPRODUCE EITHER, EVEN IN PART.

There are many people who have assisted me directly in the development of this document, and many others who have offered help and encouragement in my continuing fascination with things Indonesian. I would particularly like to thank veteran Indo Hunters Don Jensen and Bill Sparks of the USA, Ed Kusalik of Canada and Geoff Cosier and his Aussie buddies. They have each assisted me in more ways than they know. I would also like to thank Jonathon Marks and the Radio Nederland crowd. Their special interest in Indonesia and their constant assistance to the shortwave community is an inspiration to us all. Finally and most importantly, I would like to thank my many architectural students who are from Indonesia and Malaysia. Their constant kindness and patience at the ill-informed questions of a foriegner was deeply appreciated.

Professor John H. Bryant, AIA

acknowledgments

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