



Thailand— Radio Active!

by Manosij Guha

Asia’s “Land of Smiles” has stood serene for centuries. At the crossroads of the Indian Ocean and the South China Sea, it has been wooed by Dutch, British, Portuguese, French, Arab and Indian traders.

Historically, the unified kingdom of Siam was established in the mid-14th century. In 1930 the country was renamed Thailand, then a

bloodless coup in 1932 led to a constitutional monarchy.

It is the only Southeast Asian nation never to have been colonized, thanks to a nimble foreign policy. During World War II, for example, it initially allied with Japan. But when Nippon’s sun began to set, the kingdom did an about face. It became, and continues to be, friendly with the United States.

Temple Houses Early Radio

Like everything else in this monarchy, there is a royal twist to pioneering efforts. So it was with broadcasting.

Two experimental transmitters were inaugurated during the reign of King Chulalongkorn (Rama V) in the early 1900s. One, in Bangkok, was inside Wat Sa Ket, a Buddhist temple popularly known as the Golden Mount. The other was on Si Chang island in the Gulf of Siam, off the coast of Chonburi. Both were used by the Royal Thai Navy for ship-to-shore communication.

In 1919 the next monarch, King Vajiravudh (Rama VI) used these transmitters to proclaim the birth of broadcasting in Thailand. However, radio was perceived as a Western intrusion, so traditionalist resistance had to be overcome. It took nearly a decade before broadcasting became a reality.

The father of this glasnost was the ruler of Kamphaengphet, Prince Purachatra Jayagara, who in the early 1920s was also Minister of Commerce and Telecommunications. He had a natural technical bent, and was credited with introducing the telegraph and railroad to the kingdom. The prince installed a small transmitter in his palace and began experimental broadcasts using his voice accompanied by classical music. He was so pleased with the result that by 1927 he instructed his ministry to carry out further tests.



**"The Radio Prince,"
Purachatra Jayagara.**

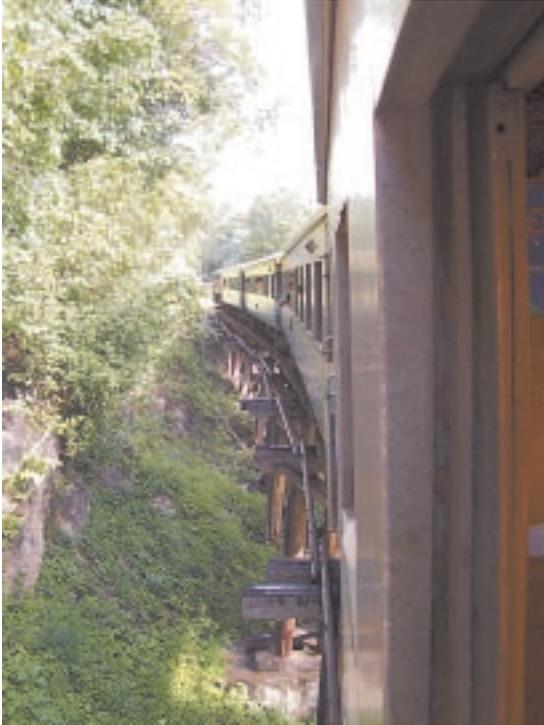
PRD



**Radio Thailand
World Service
uses powerful
American
transmitters.**

**Once home to Thailand's
first public broadcaster,
the Phyathai Palace is
now a renowned hospital.**

PRD



Death Railway.

Edith Meier

However, the first regular transmission had to wait until May 31, 1929 when station 4PJ, carrying the prince's initials as part of its call sign, went on the air. Located near the Memorial Bridge in Bangkok, the transmitter used a mere 200 Watts on 37 meters. Later, a one kilowatt mediumwave AM transmitter supplemented this on 320 meters, call sign 11PJ.

"Broadcasting" originally was narrowcasting—not intended for general consumption but, rather, for royalty and its institutions. However, the Telegraph Act was amended in September, 1929 to allow the public to own radio receivers. To cater to this audience, the Post and Telegraph Department set up a new station, Radio Bangkok at Phyathai, within the palace of the same name. It was inaugurated on

February 25, 1930 to commemorate the coronation of King Prajadhipok (Rama VII).

From the regal Amarindravinitchai Throne Hall in the Grand Palace, His Majesty announced, "Radio broadcasting, which has been experimented for the past years, is meant to enhance education, trade and entertainment for members of the public." True broadcasting had finally arrived in this authoritarian but prosperous kingdom.

Starting in 1931, broadcasting became a state monopoly operated by the Royal Thai government. Following a coup in 1932 which changed the kingdom into a constitutional monarchy, the national radio station at Phyathai Palace was moved to suburban Bangkok. Renamed Radio Bangkok at Saladaeng, it had a new call sign, 7PJ, along with a beefier transmitter.

Thailand Pioneers World Band

Tests were also carried out on a shortwave transmitter, 8PJ, to reach an international audience. Its original antenna can still be seen at the Armed Forces Academics Preparatory School, near Lumpini Park, where the street continues to be called Withayu (Wireless) Road.

Initially, there were four stations. Besides Radio Bangkok, there were the experimental stations of the Post and Telegraph Department, the Military Signal Corps and the Territorial Army. In 1933, the Government Public Relations Department took over responsibility for broadcasting from Post and Telegraph.

War Boosts External Service

There was now a regular mediumwave AM service in Thai, an experimental mediumwave AM station, and a shortwave external service. On April 1, 1939 the 7PJ station's transmitter was upgraded to ten kilowatts and began service as the National Broadcasting Station of Thailand. It was

financed by government grants and advertising revenues, with listener license fees being collected by the government until the fee system ended in 1952.

With World War II imminent, services were added in English and French to reach out to neighboring countries ruled by Britain and France. In keeping with the kingdom's neutrality, foreign dignitaries were invited to state their views over the air.

In 1942, as the war peaked, Burmese, Hindi, Japanese and Malay were added to the world band roster. These programs were simple and for only a few hours a day. Yet, they served as vital sources of information and entertainment throughout Asia.

The Public Relations Department's musical ensembles provided much-needed distraction during the dark years of war. The domestic services also aired an almost daily fare of drama and plays that reinforced Thai national feelings. This defiance was especially appreciated during the de facto Japanese occupation of the kingdom.

Broadcasting history scholar Adrian Peterson of the Ragusa Media Group witnessed much of what went on. He writes in "Japanese Occupation Radio—South East Asia":

"Although the original shortwave transmitters near Bangkok were quite low powered, just 2.5 kilowatts, a new international shortwave service in English was launched on October 20, 1938. This new programming from HSP5 & HS6PJ was beamed towards the United States, though there is no evidence that it was ever heard on the American mainland."

Peterson, back then based in Australia, adds, "Work began on the construction of a 100 kilowatt shortwave station at a new location, Nonthaburi, in 1941 and test broadcasts were noted early in the following year. Soon afterwards, the Japanese took over the operation of Radio Siam and a very

strong signal was noted in Australia. However it would seem that usage of the 100 kilowatt unit ended quite soon and the Japanese were then on the air from the two lower powered units.

"On one occasion Radio Bangkok was noted calling Osaka in Japan and Berlin in Germany with a programming relay. They were heard quite frequently in both Australia & New Zealand. This station was reactivated under Thai control at the end of 1945 with two new call signs, HSP2 & HS8PD." The Transmitter Documentation Project shows HSP2 as a 2.5 kilowatt Philips from the Netherlands.

Fruitboat.

M. Guha



Buddhist temple.

M. Guha



After World War II, Thailand faced its own years of internal strife. Following a period of dalliance with constitutional monarchy, the country was beset with a series of coups and counter-coups by varying degrees of authoritarian and military regimes. Such was the impact of broadcasting that radio stations became the first buildings to be occupied, so takeovers could be announced to a national audience. State radio and eventually television deteriorated to the status of political footballs to promote whoever was in power at the time.

As the Kingdom of Siam morphed into Thailand, the official station's name was changed to Radio Thailand. Over the following years the development of radio increasingly took a backseat to television, which had wider appeal. Yet, radio was found to have an unusual impact in the provinces. So, on July 21, 1955 Radio Thailand opened its first station outside the capital, in the southern city of Surat Thani. This paved the way in 1959 for a full blown plan to develop countrywide regional broadcasting.

Competing Agency Chops Funding

Unlike sluggish governments in some other Asian countries, Thailand has been quick to enact legislation to keep pace with media changes. Apart from the Telegraph Act of 1929, which governed early broadcasting, the Radio Communications Act was enacted in 1955 under the aegis of the Post and Telegraph Department. This act for the first time spelled out licensing regulations in detail.

The Radio Broadcasting Act of 1965 also covered television, legally defined objectives of broadcasting, and laid the groundwork for the establishment of similar ventures by other government agencies. To oversee this expanded regulatory role, a few years earlier, in 1962, the government had chosen to establish a national broadcasting board. This was the Committee of Radio Broadcasting and Communication of Thailand, which included representatives from every branch of government. This put the new Committee at counterpoint with the earlier regulatory authority, the Government Public Relations Department.

Universal full-page
4-color ad
"Quality Communications Equipment Since 1942"



The entrance to the Radio Thailand World Service is watched over by a serene Buddhist shrine. M. Guha

In the resulting turf struggle the Committee banned advertisements on all state run stations. Commercials were a major source of revenue, so their loss caused programming to be diminished and some stations to be closed down. Fortunately, the ban was lifted in 1969, which breathed new life into Thai radio. In 1970 an attempt was made to define broadcasting rules even more clearly, so the Regulation of Radio Broadcasting Law was enacted on September 4, 1974.

Unusual Ownership Allows Diversity

In Thailand, unlike elsewhere in the region, broadcasting is not controlled by just one arm of the government. Instead, any government agency or enterprise can acquire a broadcast license and several

have done so, often to generate revenue. This includes the armed forces, universities, the police, and several government departments and ministries—together, they control over 500 frequencies. Some, such as the Ministry of Education, have even operated at one time or another on world band. More recently, nearly 200 National Community Radio Network stations have been set up. Although nominally independent, they are under the thumb of the government's Public Relations Department.

All stations are required to relay news and live coverage of major national events from Radio Thailand, as well as programs deemed supportive of government policy. Otherwise, they largely maintain their own editorial control, even during national emergencies.

Nevertheless, in keeping with Thai norms, there is an unwritten broadcasting code. This effectively prohibits coverage of events which might threaten national unity or security, or which question foreign policy.

Franchises Breed Commercialism

Even though radio ownership remains in the hands of government entities, there appears to be more commercialization than in any other Asian nation.

This seeming contradiction is because these stations are classified as "experimental," with no state budget or funding. To cover expenses these outlets have been franchised to private operators, who return the favor in cash and in kind to personnel at the parent agencies. Thus, programming is centered on generating the most revenue, politics be damned.

Little Tiger, Big Voice

Since the end of the Cold War, many Western nations have lost their sense of purpose with international broadcasting. While these operations continue to stumble

and withdraw, the rising nations of Asia are filling the void. The status of China and Thailand, in particular, has risen as they have expanded world band coverage and enhanced program quality.

The National Broadcasting Services of Thailand operates Radio Thailand's World Service, which offers news, current affairs and entertainment. This started under the call sign HSK-9 on October 28, 1938 after three years of experimentation and testing. It now broadcasts globally for over ten hours a day in a dozen languages.

Inside Radio Thailand

The Government Public Relations Department lies on the main road to the airport. Nestled amidst various high security government facilities, this not only houses the studios and administration of the Radio Thailand World Service, but also the domestic service. An ornate shrine at the entrance throws a celestial hand into the technological mix.



Radio Thailand technician.

M. Guha

Hall B of the radio building is dedicated to external broadcasting. Mrs. Porntip Utogapach, director of the external service, extends visitors a warm welcome despite

FRONTIER PROPAGANDA TARGETS NEIGHBORS

In the northern and northeastern provinces, Thais share a common history, language and culture with neighboring Laos. There, most of the Thai Government Public Relations Department outlets on FM and mediumwave AM serve in part as a "frontier broadcasters club." These transmissions propagate the dominant Thai viewpoint across the mighty Mekong that separates the two countries. One effect has been to increase dominance of the fragile Lao economy by Thai entrepreneurs of Lao origin.

The "club" consists of government outlets from the 11 provinces of north and northeast Thailand commonly called Isan and populated by ethnic Laotians. This area was once part of an early Lao kingdom, so Thai dominance is not viewed benignly by Laos.

The Thai Military's Supreme Command Headquarters also operates five mediumwave AM and six FM transmitters. These are in Bangkok and the sensitive provinces of Narathiwat in the south, Muang Phetchabun in the center, Uthai Thani in the north, and Muang Sakon Nakhon in the northeast. Powers range from five to ten kilowatts, although 50 kilowatts has been used during emergencies.

These military broadcasts originated during the Vietnam War to support Thai troops in South Vietnam. Now, suitably altered, they are directed at the sizable Burmese, Laotian and Khmer populations across Thailand's borders.

Etón
2-page spread ad
"Porsche Design"

Etón
2-page spread ad
"Porsche Design"

**Mrs. Porntip Utogapach,
director of the Radio
Thailand External Service.**

M. Guha



her busy schedule. "What we broadcast is the framework of the foreign policy, to provide a good image of Thailand, to attract tourism and investment," she explains.

The station has succeeded, judging from the volume of letters it receives from listeners across the world. "It is very heartening to receive personal letters from listeners," enthuses Mrs. Utogapach. "It is very important that they write to us. But because of a reduced budget, we cannot always provide a souvenir or a detailed reply. This is what we would like to change."

Four news and talk studios and one large music studio with adjoining control rooms are used to produce programs in two language groups. In keeping with the ambitious National Broadcasting Master Plan of 2001, Radio Thailand has seven networks, with each catering to a select target audience or interest. Network One is the national channel, whereas Two is for special broadcasts. Three promotes a "developing society and quality of life," while Four targets educational development and Five is for the provinces.

The World Service of Radio Thailand comprises Networks Six and Seven, each

with a distinct role in 12 languages. Network Six targets neighboring countries and foreigners in the kingdom in Thai, Lao, Khmer, Vietnamese, Bamar (Burmese), Malay and Bahasa Indonesia. Six also targets Europe, North America and the Far East in Thai.

Network Seven, like Six in Thai, is a true global service for Europe, North America and the Far East in English, French, German, Japanese and Mandarin. The English portion is aired over four hours a day, with newscasts relayed in Bangkok on 95.5 and 105.0 MHz FM, both ten kilowatts.

Programs are fed locally by landline and nationally by the Thaicom 1 satellite. The building also houses six FM transmitters and a technical staff of 61 to oversee domestic and external services.

Rangsit Si Goes Digital

About 40 miles or 65 km from Bangkok is the first stop along the "transmitter highway." Here, the village of Rangsit Si in Pathum Thani province is home to Radio Thailand's mediumwave AM facility, which uses a ten kilowatt Harris DX-10 transmitter.

During our visit this solid-state unit was being retrofitted to test DRM digital broadcasts for 150 minutes a day on 837 kHz. This showcase project was inaugurated with much fanfare in the presence of representatives of Digital Radio Mondiale, Deutsche Welle, VT Merlin, Harris Corporation, Asia-

Pacific Broadcasting Union and the Thai government.

Weeds and Rotting Masts

The next stop along our road, the village of Si Bang Phun, lies amidst green rice fields.

THE MAJESTY OF RADIO

King Bhumibol Adulyadej (Rama IX) was born in 1927, about the time his family was pioneering broadcasting in the kingdom. So it was no surprise when as a child he began dabbling in radio. During his student days in Lausanne, Switzerland, he continued by constructing his own receiver.

After his return to Thailand in 1952, he established his own radio operation, The Amphone Sathan Throne Station, at the Dusit Palace. His aim was to get a direct line of contact with his people without the complicated procedures that dogged royal protocol in those days.

In the beginning the station was equipped with two 100 Watt communications transmitters from World War II donated by the Government Public Relations Department. Broadcasts were on shortwave and mediumwave AM, and were received as far afield as New Zealand, Japan, North America and Europe. The royal station was subsequently boosted to one kilowatt with the call sign HS1AS.

In 1967 power was further increased and an FM transmitter was added in 1982—all equipment funded by voluntary gifts from private and public organizations. In turn, the king donated the original 100 Watt duo to the engineering school at Chulalongkorn University, where there is a large electronic media department.

The royal station airs news and information, and has been especially helpful during emergencies. For example, it kept Thais updated on the polio epidemic in 1952 and a cholera outbreak in 1958. When in 1962 a storm wreaked havoc on southern Thailand, the king broadcast a personal appeal for relief supplies and donations. The response was overwhelming, and the king wound up personally supervising the distribution of supplies.

The Bureau of the Royal Household still has a daily presence on the airwaves. For about three hours daily, four times a week, the Amphone station radiates on 1332 kHz mediumwave AM with ten kilowatts and on 104.0 MHz FM at five kilowatts from the regal environs of the Chitralada Villa at Dusit Palace in northern Bangkok.

Alas, the modest world band transmitter is history. In the early 1970s it was a worldwide DX catch on 9732 kHz and the clear channel of 6405 kHz. When last heard a few years back, it was operating with a weak signal on 6149.5 kHz with severe interference from Singapore's MediaCorp Radio on 6150 kHz. Perhaps it was this interference combined with the transmitter's increasingly low power that accelerated its demise.



**King Bhumibol Adulyadej
(Rama IX).** PRD

Radio Thailand studio.

M. Guha



This is the designated transmitter farm, and it boasts more antenna masts than trees. Transmission facilities line the highway, and include station HSK9 which until recently was Radio Thailand's dedicated shortwave transmission facility. A guarded gate leads through a secluded half-mile drive to the station building and adjoining transmitter hall.

Sadly, scarcely a soul is in sight. The entire place has been abandoned in favor of the giant Udon Thani transmitting station. All we found was a lone gardener weeding overgrown grass, oblivious to our presence. Some shortwave dipole aerials and feeders appear to be in good shape, but the older antennas are simply rusting away. Even the little Buddhist shrine near the entrance is unkempt.

This facility was set up in late 1941 with three 10 kilowatt CCA transmitters from Fairburn, Georgia. It was upgraded in 1953 with an RCA 50 kilowatt BHF 50, followed later by a similar BHF 100 (100 kW) and in 1985 by a ten kilowatt NEC.

Until July 2004 the transmitters were fired up daily at 1100 to 1215 World Time. They aired Radio Thailand's external services to neighboring countries in Vietnamese, Khmer, Lao, Burmese and Malay on 4830,

6070 and 7115 kHz. Now silent, they await their ultimate disposition.

Udon Thani, Thailand's Mighty Mouth

On April 4, 1984 the Royal Thai and American governments signed a landmark 25 year renewable agreement. This established a joint super-powered shortwave facility to relay both the Voice of America and Radio Thailand World Service. The northeastern province of Udon Thani, which had hosted the U.S. Air Force during the Vietnam War, was the logical choice.

There is a large expat population in the region and even an American consulate to look after their interests. Fully 8,500 acres were selected in a deserted area outside Ban Dung, where a little sign in the center of the town unobtrusively says, "VOA."

But the huge complex—sometimes simply called IBB-Udon or even IBB-Udon by American employees—is nowhere near the town. About three miles or five kilometers away there finally appear telltale signs: tall antenna masts, curtain dipole arrays and blinking safety lights shrouded by a thick layer of tall trees. Obviously, we had not stumbled across the local Shell station.

Alas, we had to content ourselves with poking around the periphery. “Due to the present situation, we would like to maintain a low profile,” explained Richard Baltes, Transmission Supervisor, when approached by telephone. Given the vast size and visibility of the facility, this seems more wishful than thinking.

The mighty Udon Thani facility began testing in 1991 and was completed in 1993. It houses seven 500 kilowatt Marconi B 6128 transmitters, according to George Woodard, then vice president of engineering at RFE/RL and later director of engineering at IBB. Woodard adds that the Marconis were retrofitted with Continental solid-state modulators, and thus were identical to the ten transmitters at the IBB/VOA facility in Tangier, Morocco. Additionally, a 40 kilowatt PEP single sideband Continental transmitter may have been brought out of 25-year storage.

These powerful transmitters feed 25 high-gain antennas that use the latest fourth generation technology designed for IBB by TCI of Sunnyvale, California. A coaxial switching matrix feeds HR 4/6/Lambda curtain arrays which are electrically slewable in both azimuth and elevation. This fills gaps in VOA coverage in China, Southeast Asia and parts of the former USSR which were not adequately served by

IBB relay stations in Sri Lanka and the Philippines.

Thanks to its tremendous reach—it is audible throughout 40 percent of the world—Udon Thani also carries other IBB services, such as Radio Farda, Radio Free Afghanistan and Radio Liberty. A terrestrial two-way station receives IBB/VOA program feeds in multiple streams from the Network Control Center in Washington.

Radio Muscle Expands Audience

Since 1994 Udon Thani has also been relaying the entire program load of the Radio Thailand World Service, beginning a major new chapter in Thai external broadcasting. A separate agreement in 2004 resulted in Radio Thailand being relayed to North America two hours daily by IBB/VOA transmitters in Greenville, North Carolina and Delano, California.

Taken together, these facilities have helped Radio Thailand become a significant source of Asian news and culture for the planet's 600 million world band listeners.

Which “Free Asia”?

Another Thai-American agreement, signed on August 11, 1965, expired on March 27,



Udon Thani, tucked in the wilderness of northeastern Thailand. This is the largest American transmitter plant in Asia and dominates the airwaves with powerhouse signals.

M. Guha

The shallow Mekong river, once the lifeline of Laos, forms much of the border with Thailand. The Thai frontier town of Nong Khai is only short swim away from this Laotian shoreline.

M. Guha



1998. For 33 years, from studios in Bangkok, the Voice of Free Asia beamed official American programs to Southeast Asia in languages of the region. The spot on the AM dial was 1575 kHz, with a hair-curling one million Watts from Tambon Rasom village in neighboring Ayutthaya province.

The original 1,000 kilowatt transmitter was a Continental Doherty 105B installed in 1952, according to former IBB engineering chief George Woodard. It was replaced in 1996 by an efficient Harris DX-1000.

Woodard points out that the original weary transmitter could pump out no more than 600 kW by the time it was replaced. "When the Harris came online, voltage breakdown problems in the antenna tuning houses began to appear because it had been so long since they had seen a full Megawatt," Woodard recalls. But once these were fixed there was reduced electrical consumption, greater reach and better modulation.

On April 1, 1998, after the U.S.-Thai agreement ended, the facility became "Radio Saranrom," an official voice of the Thai Ministry of Foreign Affairs. New studios have been constructed at the ministry in Bangkok, although for now programs are being produced only in Thai.

The similarly named Radio Free Asia is another and very different IBB station. Its large studio and bureau in Bangkok produces programs for Southeast Asia in Burmese, Lao, Khmer and Vietnamese. The Thai government won't allow anti-establishment broadcasts to its neighbors, so transmitters are in faraway Armenia, Kazakhstan, Mongolia, Palau, Saipan, Sri Lanka, Taiwan, Tajikistan and Tinian Island.

BBC Erects Relay

In 1989 the BBC erected its Asia Relay Station in north-central Thailand to replace the former Hong Kong relay. It is tucked away from prying eyes, about 13 miles or 21 km from the town of Kao Liao in the province of Nakhon Sawan. Hardware includes four Thomcast one-tube TSW-2250 250 kilowatt shortwave transmitters feeding several 6-11 MHz TCI curtain arrays. Future plans call for at least one more comparable transmitter.

Even though the station is owned by the BBC, like other British relay stations outside the United Kingdom it is operated by VT Merlin under a management contract. In 2003 one of the 250 kilowatt transmitters was modified for DRM digital broadcasting, after which extensive tests were conducted.

WHO'S ON?

Thailand has 524 local and national radio stations—211 mediumwave AM, the rest FM. The biggest operators are the Public Relations Department with 147, followed by the Royal Thai Army with 127 and the Mass Communication Organisation of Thailand with 62. Except for a small number of specialist stations, such as those dedicated to traffic reports, all link twice daily with Radio Thailand for official newscasts. Stations must also relay messages from the king and the prime minister, as well as daily Buddhist sermons. Otherwise, they enjoy a fair amount of freedom to produce independent newscasts.

Armed Forces and Police Networks

The Thai armed forces have long been active broadcasters, ostensibly to promote inter-agency cooperation and for national security. The largest has been the Royal Thai Army, today with 51 mediumwave AM and the same number of FM transmitters operating nationwide. Yet other army radio facilities have become weapons in the struggle against Islamist terrorism and for border propaganda (*see* sidebars).

The Royal Thai Navy operates seven mediumwave AM and 14 FM outlets scattered across the country, while the Royal Thai Air Force has 18 each on mediumwave AM and FM. The Supreme Command Headquarters does its share with five mediumwave AM and six FM stations. Even the police get in the act with seven mediumwave AM and 38 FM outlets dotting the landscape.

The present king is both a radio aficionado and a seasoned broadcaster. His Bureau of the Royal Household has participated greatly in advancing broadcasting in the kingdom (*see* separate sidebar).

Media Agencies Operate Nationwide

The Mass Communication Organization of Thailand (MCOT) was constituted by royal decree under the prime minister's office to operate commercial radio and television networks in the country. The organization operates two mediumwave AM and 60 FM transmitters scattered nationwide, and also runs the Thai News Agency.

However, change is in the wind. The Thai cabinet recently unveiled a plan to partially privatize this state enterprise and incorporate the remainder into a public limited company.

The Government Public Relations Department continues to run the influential National Broadcasting Services of Thailand. Domestically, it operates 60 mediumwave AM and 85 FM transmitters from 58 facilities located in five administrative regions. Of the 12 transmitters in Bangkok, six are on mediumwave AM, the rest on FM, while two include English programs. Sizable chunks of the BBC World Service are relayed on mediumwave AM and FM in Bangkok, Chiang Mai in the north and Hat Yai in the extreme south.



Bangkok's police use radio for more than this. They also operate their own commercial AM/FM stations. M. Guha