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TRANSLATIONS ON TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT

No. 14

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INTERNATIONAL

BCP GREETSS PRESS AGENCIES CONFERENCE

Sofia BTA in English 1335 GMT 13 Sep 77 AU

[Text] Sofia, Sep 13 (BTA)--A meeting of the directors general of the news and press agencies of the socialist countries began today at the 'Boyana' residence.

The meeting is attended by 17 delegations of the Socialist Republic of Vietnam, the GDR, Cuba, Mongolia, Poland, Romania, the USSR, Hungary, Czechoslovakia and Bulgaria.

The meeting was opened by Mr Lozan Strelkov, director general of the Bulgarian Telegraph Agency.

On behalf of the CC of the BCP, a speech of greetings was delivered by Mr Dimitur Stanishev, member of the Secretariat and head of "foreign policy and international relations" department with the CC of the BCP.

Each of the traditional meetings, he pointed out, marks a positive stage in the interrelations of the fraternal agencies and opens up promising prospects to their professional advancement. These meetings are an eloquent expression of fraternal interaction and all-round spiritual integration among the socialist countries and parties, a live proof of the truth that it could be best advanced along the common road to socialism and communism by means of complete political, ideological and professional cooperation.

Mr Dimitur Stanishev stated that in the complex battle between the world of socialism and the world of capitalism, which is inflamed with unparalleled force, the place of information is enormous. The place of the political and ideological information is of a special importance today, when the battle for man, for our contemporary, has reached one of its peaks.

The fact that the meeting is opened several weeks before the 60th anniversary of October imparts it not only political significance but also great topicality, because all socialist agencies are the natural result of the first socialist revolution in the world, the greetings read.

Mr Dimitur Stanishev pointed out that in today's world of active advance of EAL socialism and increased ideological activity of imperialism, the activity of the fraternal socialist agencies is of great propaganda importance. This activity exceeds the framework of the single countries and grows into a powerful ideological blow with lasting international impact. A great deal of the truth about our life and the constructive moves of our policy in all spheres of international life passes through the transmitting equipment. What the world learns and knows about us as theory and practice, as ideology and politics, as exploration and successes, is mainly due to the tireless round-the-clock work of the agencies.

It is emphasized in the greetings that at the present stage the interaction of the socialist news and press agencies should be built up chiefly along the lines of a still more successful propagation of the successes of EAL socialism. Of the all-round struggle against imperialist aggression and of active expose of all deviations from Marxism-Leninism in the international communist and workers' movement, built on this solid foundation, the interaction in your complex and responsible work will prove extremely fruitful. It will not only meet the requirements of the moment, but will throw sound bridges to higher forms of cooperation in the future.

At the meetings will be discussed the questions of interaction of the socialist news agencies in the coverage of the 60th anniversary of the Great October Socialist Revolution, the tasks of the agency news service in today's international situation.

Problems related to the improvement of technical means for receiving and transmitting information, using electronic equipment, will also be reviewed.

CSO: 5500

INTERNATIONAL

BRIEFS

MPR-HUNGARY RADIO-TV PACT--Ulaanbaatar, 9 Sep, (MONTSAME)--A cooperation agreement for the 1978-1982 period was signed here today by the Information, Radio and Television Committee of the MPR Council of Ministers and Hungarian television. The document provides for further development and expansion of business relations between the two fraternal countries in the field of information, radio broadcasting and television. In accordance with this agreement, Mongolian and Hungarian television will shoot a joint film, "The Animal World of Hangay." The mutual exchange of television material, films and photographs will be expanded. [Text] [Ulaanbaatar MONTSAME in Russian 1505 GMT 9 Sep 77 OW]

SOMALI-SUDANESE NEWS AGREEMENT--The Somali National News Agency, SONNA, and the Sudan News Agency, SUNA, today signed an agreement on information and technical cooperation. The agreement between the two news agencies, which was signed at the headquarters of the Information and National Guidance Ministry here in Mogadiscio, follows the longstanding friendship and cooperation between the fraternal peoples of Sudan and Somalia. The agreement also includes the exchange of visits between officials of the two agencies with the aim of strengthening ties between them and their role in the Arab world. [Text] [Mogadiscio Domestic Service in Somali 1115 GMT 8 Sep 77 LD/EA]

CSO: 5500

BANGLADESH

BRIEFS

NATORE SATELLITE STATION--The Natore satellite station of Bangladesh television is being commissioned on 9 September. The Natore satellite station has been putting out this transmission for the last 2 years to the viewers of the country's northern region. It will now relay Dacca programs direct through Bangladesh television's own microwave link between Natore and Kushtia and onward on its microwave channel linking the capital. [Text] [Dacca Overseas Service in English 1230 GMT 9 Sep 77 BK]

CSO: 5500 .

BURMA

BRIEFS

SATELLITE COMMUNICATIONS PLANS--Rangoon, 28 August--On 28 February 1977 the Transport and Communications Ministry inaugurated the Rangoon-Tokyo direct telex link at the radio transmitting station at Togyauungale, Rangoon. Since the telephone, telegraphic and telex communications with foreign countries through the line are not satisfactory, the ministry is preparing to set up a station that will use a satellite and replace the Rangoon-Tokyo telex link. The new system will also be useful for television stations. [Text] [Rangoon BOTATAUNG in Burmese 29 Aug 77 p 1 BK]

CSO: 5500

TOBARU WARD CHIEF CITES VOA-CAUSED ELECTRICAL INTERFERENCE

Naha OKINAWA TIMES in Japanese 14 Sep 77 p 7 OW

[Excerpts] Kunigami--Tobaru in Kunigami-son was the only place on Okinawa or in all of Japan where there were "no utility poles." To prevent jamming by strong radio waves generated from the VOA (Voice of America) broadcasting facility in the neighborhood [as published], telephone, electric light poles and television antennae had to be buried underground. However, since VOA's relocation last May, it has been decided to reintroduce poles, and they are now being erected.

According to Ward Chief Seisho Oshiro, because of radio jamming by VOA, telephone cables, electric light cables and antenna cables had to be buried underground and this caused difficulties for public works in the village. The underground system made it difficult to carry out road, waterworks and sewage construction. When construction work was underway, cables had to be cut, which caused frequent power outages and telephone interruptions. When there was a heavy rain, cables became soaked, which caused frequent power failures. When telephones, electric lights and televisions were not functioning properly, it was difficult to check underground cables and it took a long time to fix them. In addition, installing telephones or electric lamps required that the ground be dug up. This involved a lot of time and money and consequently, it was not easy to get a telephone installed.

Oshiro said: "There were advantages to the underground cable system in that it makes lights and telephones strongly resistant to typhoons; but there were more disadvantages. Finally, we found that poles are better. Since there is no more VOA radio jamming, we have petitioned the telegraph and telephone corporation through the village office to install poles."

Wearing a bitter smile, Ward Chief Oshiro said: "This will bring an end to the fuss about radio jamming and also to our postwar era. This is how the Tobaru villagers feel about it."

CSO: 5500

JAPAN

BRIEFS

KDD TELEX SERVICE OUTAGE--Tokyo, 2 Sep KYODO--A Kokusai Denshin Denwa Co (KDD) machine used for international telex services went out of order Friday afternoon, suspending almost all international telex communications in the country for 2 hours. KDD officials said that an electronic converter machine stopped functioning at about 4:08 pm, interrupting 986 circuits, or 90 percent of all overseas telex communications. As a result, almost all KDD subscribers, including the Foreign Ministry, leading trading companies and news organs, were without overseas telex services until the machine was put back in operation at 6:10 pm. Officials said that the fully automatic CT-10 model converter had two systems so that service could be maintained if one system stopped working, but that in this instance both systems had broken down at the same time. It was the first time in KDD history that such a widespread suspension of service occurred. [Text] [Tokyo KYODO in English 1233 GMT 2 Sep 77 OW]

SOVIET'S HOKKAIDO TV BLOCK--Sapporo, 3 Sep KYODO--A Soviet television broadcast was picked up by television sets in the Soya-Misaki area at the northernmost tip of Hokkaido Saturday, completely blocking transmission of one Japanese private network. Officials of the Hokkaido Radio Regulatory Bureau said the broadcast apparently came from a new station on the southern end of Sakhalin, directly across the Soya Strait from Hokkaido. They said the television signal was picked up by a mountaintop antenna overlooking Soya village and conveyed to the sets of about 200 households in the area. A black-and-white test pattern appeared on August 14, and regular broadcasting began Saturday. As a result, the affected area has been unable to receive the Hokkaido broadcasting station, Channel 10. People said vertical stripes moved down the screen but that the picture was fairly clear. There was no sound. The Regulatory Bureau sought assistance from the Ministry of Posts and Communications in learning whether the Soviet broadcast will be permanent and what kind of steps can be taken to prevent the Japanese network from being obstructed. [Text] [Tokyo KYODO in English 1020 GMT 3 Sep 77 OW]

CSO: 5500

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

POSTS MINISTER TO DPRK--Peking, September 3, 1977 (HSINHUA)--A posts and telecommunications delegation of the People's Republic of China led by Chung Fu-hsiang, minister of posts and telecommunications, with Vice-Minister of Posts and Telecommunications Peng Hung-chih as its deputy leader, left here by air today for a friendly visit to Korea at the invitation of the Ministry of Communications of the Democratic People's Republic of Korea. Seeing them off at the airport were Shen Kuang and Li Yu-kuei, vice-ministers of posts and telecommunications; Chon Hyong su, ambassador of the Democratic People's Republic of Korea to China was present. [Text] [Peking NCNA in English 1256 GMT 3 Sep 77 OW]

LHASA POST, TELECOMMUNICATIONS MEETING--On 18 August the post and telecommunications departments of Lhasa Municipality and the masses of Lhasa held a meeting to warmly acclaim the brilliant inscription written by Chairman Hua for the post and telecommunications workers and welcome the victorious return of the Tibet regional delegation from the Second National Conference of the Post and Telecommunications Front on Learning from Taching. Party, government and army leaders of the autonomous region and the municipality attended the meeting. Yang Tung-sheng, secretary of the regional Party Committee and vice chairman of the regional Revolutionary Committee, read Chairman Hua's inscription to the meeting. He called on the meeting to act upon the inscription to strive for the modernization of the post and telecommunications facilities. (Chang Tsung-yu), leader of the regional delegation and deputy director of the regional Bureau of Posts and Telecommunications, also spoke in the meeting. [Lhasa Tibet Regional Service in Mandarin 1100 GMT 20 Aug 77 OW]

CSO: 5500

SINGAPORE

BRIEFS

NEW CIVIL AVIATION SYSTEMS--The Civil Aviation Department has ordered a fully computerized and automated long-range surveillance radar and data display system to cope with the projected growth of aircraft movement in Singapore. The system, costing Singapore \$18.5 million, will be installed at Changi International Airport and be operational by October 1979. A digital air traffic control simulator, costing Singapore \$4.8 million, has just been installed at the department's training center at Pelita Airport to upgrade the skill of air traffic controllers. By 1982 the projected commercial aircraft movement will reach some 82,000 a year, 43 percent more than in 1976. [Singapore Domestic Service in English 1130 GMT 3 Sep 77 BK]

CSO: 5500

VIETNAM

HANOI REPORTS ON NORTH VIETNAM WIRED-RADIO CONFERENCE

Hanoi Domestic Service in Vietnamese 1430 GMT 8 Sep 77 OW

[Text] The Vietnam Broadcasting and Television Commission held a North Vietnam wired-radio conference [hooij nghij truyeenf thanh] from 5 to 7 September to discuss the stepping up of the wired-radio tasks in support of agriculture and the organization of management of the local wired-radio tasks.

Attending the conference were representatives of the propaganda and training committees of provincial party committees and committees for administrative organization of provincial people's committees and cadres in charge of broadcasting and wired-radio tasks in the northern provinces. Comrade Tran Lam, alternate member of the party Central Committee and chairman of the Vietnam Broadcasting and Television Commission attended and addressed the conference. He informed the conference that recently the Council of Ministers decided to place under the leadership of the Vietnam Broadcasting and Television Commission the local wired-radio leadership, which was formerly subordinate to the Information General Department, in order to achieve uniform guidance over the broadcasting, wired-radio and television tasks according to sectors from the central level to the grass-roots level. The conference then heard Comrade Pham Tuan Khanh, vice chairman of the Vietnam Broadcasting and Television Commission, report on the current wired-radio tasks and plans for developing the wired-radio network in the years to come. The conference discussed major measures for implementing these plans. It unanimously agreed that it is necessary to build a management apparatus for the broadcasting and wired-radio tasks in the localities at an early date so as to promptly stabilize the organization for implementation of plans.

CSO: 5500

BULGARIA

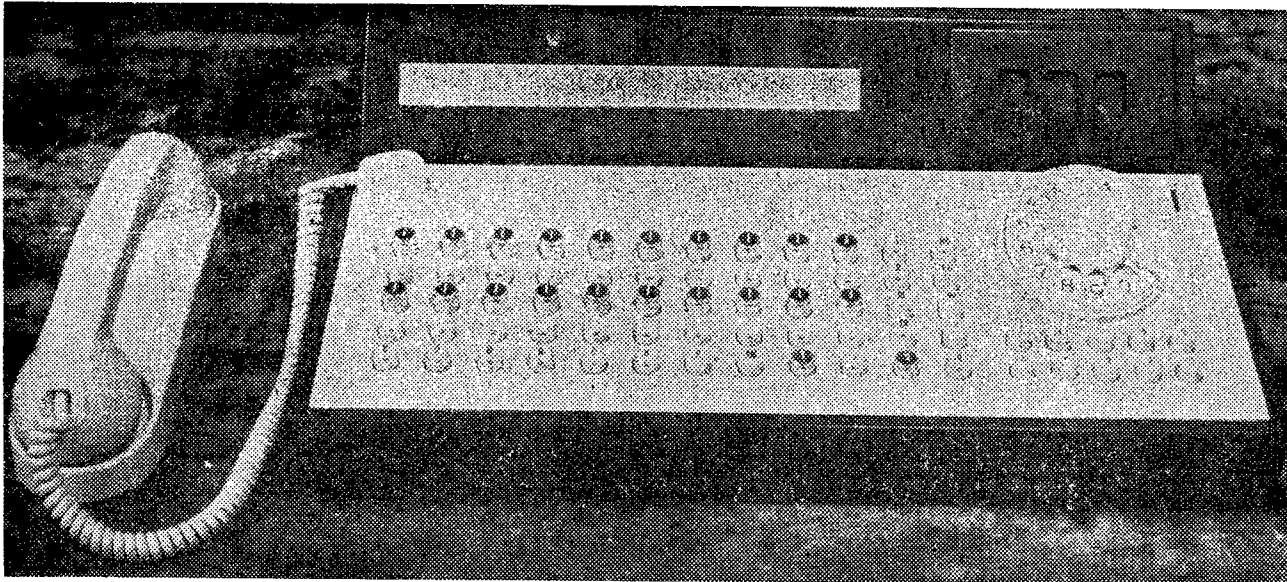
SPECIFICATIONS OF TELEPHONE EQUIPMENT PRODUCED BY WEAK-CURRENT COMBINE

Sofia TEKHNICHESKO DELO in Bulgarian 13 Aug 77 p 8

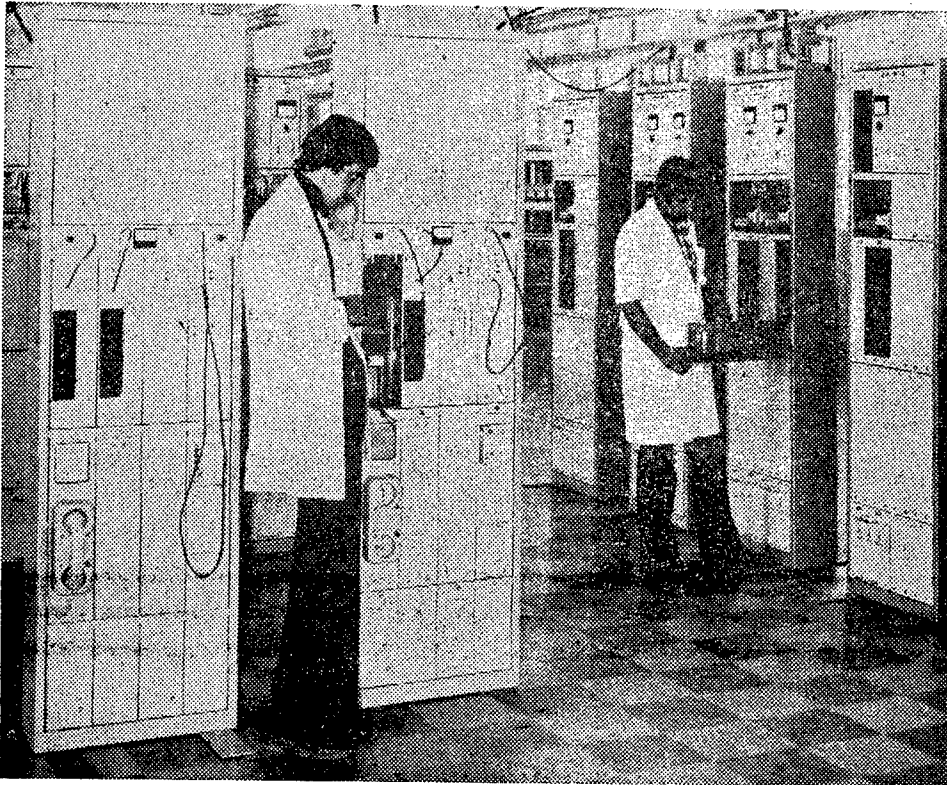
[Unattributed article: "Sofia Weak-Current Combine"]

[Translation] The Weak-Current Combine is a specialized economic juridical organization within the Ministry of Electronics and Electrical Engineering for the production of the manufactures of the weak-current industry. The combine directly runs seven production plants and one institute for scientific research work in the communications industry.

THIRTY-THIRD INTERNATIONAL FAIR -- PLOVDIV 77,
PAVILION 16, "ELECTRO 77"



The exhibits of the Sofia Weak-Current Combine are a realistic manifestation of the technical progress that has been made.



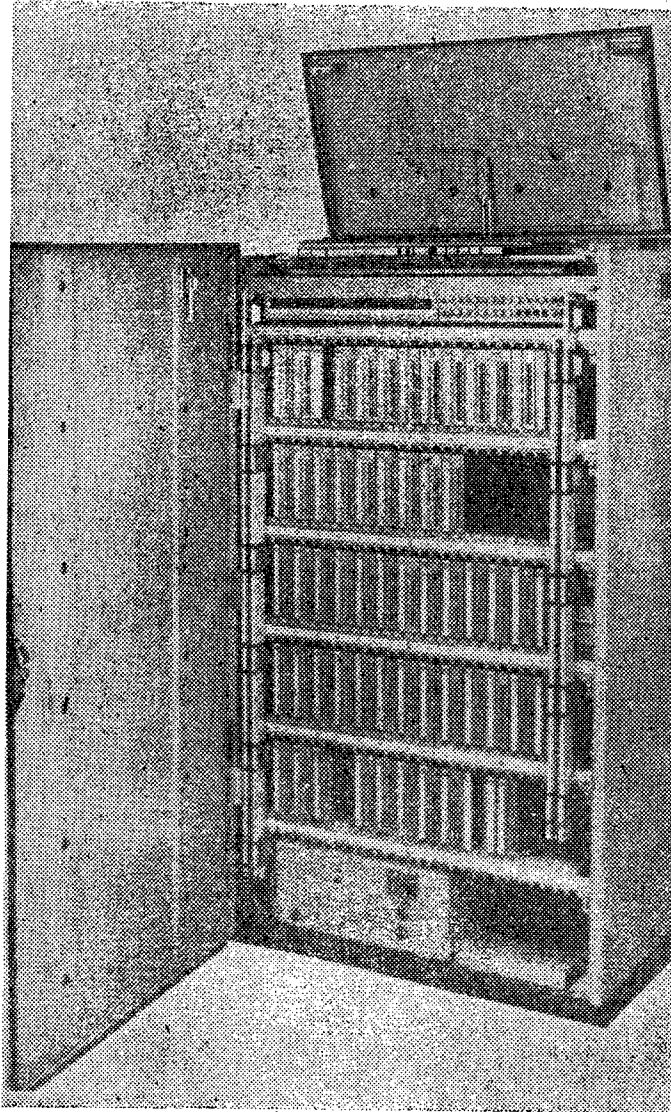
The product mix of the plants in the combine includes the following:

- dial private branch exchanges [PBX], step-by-step system, TST-61 type;
- dial PBX's, step-by-step system, GW type;
- dial PBX's, Crosspoint 400 E system, in the following versions: 2-10-2; 3-25-3; 5-25-4; 20-150-15; 40-400-40; 40-400-48 telephone stations;
- dial PBX's, Crosspoint 3000 E system, with capacity from 300 to 1000 telephone stations;
- automatic dial exchanges, crossbar system, KRZh 104 and 204 type;
- settlement dial telephone exchanges, crossbar system, KRS-103 and KRS-203 type;
- settlement dial telephone exchanges, crossbar system, ATSK 50/200 type;
- settlement dial telephone exchanges, Crosspoint 3000 EL4 system, with capacity of from 400 to 6000 telephone stations;

settlement dial telephone exchanges, Crosspoint 10,000 EL5 system, with capacity from 3000 to 20,000 telephone stations;

settlement dial telephone exchanges, Crosspoint EL8 system, with capacity from 10,000 to 90,000 telephone stations;

settlement dial telephone exchanges, step-by-step system, A-29 type.



In addition to the indicated products, the combine's product mix includes telephone contacts and construction elements for the weak-current industry:

ESK-type relays for dial telephone exchanges, Crosspoint system;
telephone switches for dial telephone exchanges;
five-digit telephone counters for dial telephone exchanges;
luminous push-button switches;
line distributors with plugs for dial telephone exchanges;
key tapes for dial telephone exchanges;
luminous push-buttons for Crosspoint dial telephone exchanges;
push-button, flag, connecting, jack, lamp and safety spacers for dial telephone exchanges;
thermal safety fuses for dial telephone exchanges;
construction elements for communications and electronics industry etc.;
connectors, direct and indirect, for printed circuit boards;
antenna couplings;
rectangular, knife-type couplings;
alarm fuses for electronic computers;
luminous push-buttons with illuminated display;
shades for miniature indicator lamps;
luminous push-buttons and indicators for installation in electronic computers;
luminous push-buttons and indicators for micro switches;
instant-action switches for electronic computers;
special push-buttons with magnetically controlled contacts for electronic computers;
multiswitches etc.

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CSO: 5500

HUNGARY

BRIEFS

SOPRON TRANSMITTER, REDUCED POWER--The Sopron station will transmit the Budapest Radio Kossuth and Petoefi programs at reduced power between 1 September and 14 November 1977, due to the installation of UHF transmitter equipment at the Sopron TV station. [Budapest Domestic Service in Hungarian 0700 GMT 1 Sep 77 LD]

CSO: 5500

YUGOSLAVIA

LAW ON PLANNING FREQUENCIES, MONITORING RADIOCOMMUNICATIONS FROM
1977-1980

Belgrade SLUZHBI LIST SFRJ in Serbo-Croatian 22 Apr 77 pp 1008-1010

[Law enacted by the SFRY Assembly in a session of the Federal Chamber on
14 April 1977]

[Text] Article 1

This law sets forth the Program for Developing and Modernizing Work in
Planning Frequencies and Monitoring Radiocommunications From 1977 to 1980
(hereafter referred to as the "Program") for whose implementation funds
have been provided by a separate federal law.

Article 2

The funds referred to in Article 1 of this law shall be used in conformity
with the provisions of this law and the Program, which shall constitute an
integral part of it.

Article 3

The Program covers the following:

- 1) purchase and installation of specialized monitoring and measuring de-
vices for the planning of frequencies and monitoring of radiocommunica-
tions in monitoring and measuring centers in Belgrade, Rijeka, Skopje, Bar,
Ljutomer and Sarajevo;
- 2) construction of the monitoring and measuring center in Sarajevo;
- 3) construction of garages to accommodate specialized vehicles at the mon-
itoring and measuring centers in Rijeka, Skopje and Bar;
- 4) expansion of the facility of the monitoring and measuring center in
Belgrade;

- 5) construction of fences at monitoring and measuring centers and purchase of devices for the security of these centers;
- 6) purchase of specialized vehicles for the operation of mobile monitoring and measuring centers;
- 7) construction and expansion of antenna installations at all monitoring and measuring centers;
- 8) rounding out equipment for broadcasting standard frequencies and for monitoring standard frequencies;
- 9) purchase of emergency power plants;
- 10) purchase and installation of communication equipment (radio, telegraph and telephone) to maintain communications between monitoring and measuring centers, specialized vehicles and the Federal Radiocommunication Administration;
- 11) preparation of the projects of the digital model of the relief of the Socialist Federal Republic of Yugoslavia (participation in carrying out that project) and use of that model in planning frequencies and in monitoring radiocommunications;
- 12) rounding out equipment for automatic processing of data concerning frequency planning, radio stations and the situation in radiocommunications;
- 13) advanced and specialize training in Yugoslavia and abroad of personnel of the Federal Radiocommunication Administration;
- 14) purchase of specialized literature;
- 15) preparation of technical regulations, standards and norms for purposes of unhindered functioning of radiocommunications;
- 16) construction and purchase of housing for specialists.

Article 4

The rights and duties of the investors in carrying out the Program shall be exercised and discharged by the Federal Radiocommunication Administration.

Article 5

The Federal Radiocommunication Administration must submit a report every year before 31 March concerning progress of work and expenditure of funds to implement the Program to the SFRY Assembly, and upon completion of the entire Program, it shall submit a report to the SFRY Assembly.

Article 6

The use of funds to carry out the Program in each year shall be budgeted by the director of the Federal Radiocommunication Administration.

Article 7

This law shall take effect on the eighth day after publication in SLUZHBE NI LIST SFRJ.

PROGRAM

for Developing and Modernizing Work in Planning Frequencies and Monitoring Radiocommunications From 1977 to 1980

Work in planning frequencies and monitoring radiocommunications shall undergo development and modernization in annual stages, beginning with 1977 and ending with 1980.

1. Developing and modernization encompass the following:

1.1. At the Belgrade monitoring and measuring center, which is the main center:

i. purchase of new equipment for monitoring the frequency range up to 15,000 megacycles;

ii. rounding out equipment for identification of radiobroadcasts in the range up to 15,000 megacycles;

iii. rounding out monitoring and measuring equipment for types of transmissions not covered to date;

iv. purchase of equipment for close-range goniometry;

v. rounding out equipment for logging of transmissions;

vi. addition to equipment for special measurements.

1.2. At the Rijeka and Bar monitoring and measuring centers:

i. rounding out equipment for monitoring the range up to 1,000 megacycles;

ii. purchase of new equipment for monitoring radiocommunications up to 15,000 megacycles;

iii. addition to specific equipment for monitoring marine radiocommunications and for inspection of shipboard radio equipment;

- iv. rounding out equipment for close-range goniometry;
 - v. rounding out equipment for logging of transmissions.
- 1.3. At the Skopje monitoring and measuring center:
- i. rounding out equipment for monitoring the range up to 1,000 megacycles;
 - ii. rounding out equipment for close-range goniometry;
 - iii. rounding out equipment for logging of transmissions.
- 1.4. At the Ljutomer and Sarajevo monitoring and measuring centers:
- i. purchase of a complete set of equipment for monitoring the range up to 1,000 megacycles;
 - ii. installation of devices at work stations;
 - iii. purchase of equipment for logging of transmissions;
 - iv. purchase of equipment for close-range goniometry.
2. Construction of the facility of the monitoring and measuring center at Sarajevo:
- i. purchase of land;
 - ii. construction of the building and garage;
 - iii. construction of the low-voltage network for electric power input;
 - iv. construction of access roads;
 - v. construction of plumbing and sewer systems;
 - vi. construction of antenna installation.
3. Construction of garages to house specialized vehicles at the Rijeka, Skopje and Bar monitoring and measuring centers.
4. Expansion of the facility of the monitoring and measuring center in Belgrade:
- i. purchase of land to expand the antenna installation;
 - ii. enlargement of building to add new space;
 - iii. construction of a special room for testing under special conditions;

- iv. reconstruction of the plumbing and sewer systems;
 - v. reconstruction of the low-voltage network for input of electric power from the substation;
 - vi. reconstruction of the heating system.
5. Construction of buildings at monitoring and measuring centers and purchase of devices for security:
- i. construction of appropriate enclosures;
 - ii. purchase and installation of special signal and alarm devices;
 - iii. purchase of other means of security.
6. Purchase of vehicles:
- i. purchase of 5-ton trucks with special cab for accommodation of monitoring and measuring equipment;
 - ii. purchase of 2-ton trucks for accommodation of monitoring and measuring equipment;
 - iii. purchase of a bus to carry personnel of the Belgrade monitoring and measuring center to and from work;
 - iv. purchase of an automobile for official use.
7. Purchase and installation of communication equipment to maintain communications among monitoring and measuring centers, between the monitoring and measuring centers and the Administration, and between monitoring and measuring centers and specialized vehicles working in the field:
- i. lead-in of PTT [Postal, Telegraph and Telephone] lines for telephone and teleprinter communications in monitoring and measuring centers;
 - ii. purchase of two-way short-wave radio equipment for communication among the monitoring and measuring stations, the specialized vehicles and the Administration;
 - iii. purchase of two-way ultrashort-wave radio equipment for communication between monitoring and measuring centers and specialized vehicles working in the field;
 - iv. purchase of walkie-talkies for communication between those making measurements and vehicles when work is being done in the field.

8. Construction and expansion of antenna installations at all monitoring and measuring centers:

i. construction of complete antenna installations at the Ljutomer and Sarajevo monitoring and measuring centers in the range up to 1,000 megacycles;

ii. completion of antenna installations at the Belgrade, Rijeka, Skopje and Bar monitoring and measuring stations for the range up to 1,000 megacycles;

iii. purchase and mounting of new antennas for the Belgrade and Rijeka monitoring and measuring centers for the range up to 15,000 megacycles;

iv. construction of antenna towers for the Rijeka, Bar, Ljutomer and Sarajevo monitoring and measuring centers.

9. Rounding out equipment for automatic processing of data on the following: frequency planning, radio stations and the situation in radiocommunications:

i. expansion of the computer memory;

ii. addition of terminal units at all monitoring and measuring centers;

iii. purchase of microfilm readers;

iv. rounding out devices for maintenance and calibration of computers.

10. Preparation of the project of the digital model of the relief of the Socialist Federal Republic of Yugoslavia:

i. in cooperation with other interested federal agencies, participation in preparation of the digital model of the relief of Yugoslavia;

ii. its use in the planning and monitoring of radiocommunications.

11. Rounding out equipment for broadcasting standard frequencies and for monitoring the broadcasting of standard frequencies:

i. purchase of equipment (stationary and mobile) for monitoring the accuracy of the frequencies of the Yugoslav standard frequency system and for calibration of the Administration's own measuring instruments.

12. Advanced and specialized training of personnel of the Federal Radio-communication Administration:

i. advanced training in Yugoslavia;

ii. advanced and specialized training abroad for work in the planning of frequencies, monitoring and measuring of radiocommunications and automatic data processing.

13. Purchase of specialized literature in the field of radiocommunications:

i. for frequency planning;

ii. for monitoring of radiocommunications;

iii. publications of the International Telecommunication Union.

14. Preparation of technical regulations, standards and norms to guarantee unhindered function of radiocommunications:

i. regulations on technical operating conditions and performance characteristics of radio stations;

ii. regulations and instructions concerning uniform methods of measurement and testing in the field of radiocommunications;

iii. proposals of Yugoslav standards in the field of radiocommunications and interference in radiocommunications.

15. Construction and purchase of housing for specialists.

16. Purchase of independent (standby) power plants:

i. purchase and installation of 15-kilovolt-ampere standby power plants at the Belgrade and Sarajevo monitoring and measuring centers;

ii. purchase and installation of 5-kilovolt-ampere standby power plants at the Rijeka, Skopje, Bar and Ljutomer monitoring and measuring centers;

iii. purchase of mechanical-drive units for power supply of equipment housed in specialized vehicles for work in the field;

iv. purchase and installation of storage batteries and voltage stabilizers and transformers in all monitoring and measuring centers.

7045

CSO: 2800

'LA PRENSA' STRESSES IMPORTANCE OF RADIO-TV FREEDOM

Buenos Aires LA PRENSA in Spanish 3 Sep 77 p 4 PY

[Editorial: "Radio Broadcasting in Latin America"]

[Text] The Inter-American Radio and Television Association [AIR], whose representatives met last week in Quito, ended its 13th annual assembly with the signing of a declaration which states "the unwavering will of its members for the permanent defense of freedom of expression throughout the social communication media, as an indispensable condition for the promotion and defense of the rights of man and democratic principles." The "Quito Declaration," as it is called, reiterates, furthermore, the conviction that Latin American radio broadcasting, through the intervention of private spheres and implementing a policy of free competition, "insures in an efficient manner, more than any other system, freedom of expression and constitutes one of the most effective means for achieving the development of peoples through the improvement of their ethical and economic standards."

At a time in which the private enterprise is prevented from participating in radio broadcasting activities in various Latin American countries, this declaration acquires a particular importance because it seems to appeal to the sound judgment of government leaders and an invitation to carefully analyze the problems affecting freedom of expression. Twenty-five years after having signed jointly with the Inter-American Press Association [IAPA] the Panama declaration for the defense of free press and radio broadcasting, the AIR observes with regret that "state control is spreading through Latin American broadcasting" and attacking the media. The declaration adds that "those who attack free radio broadcasting also attack our free and democratic Latin American nations." And making a clear reference to Cuba, it adds that "these ideas can only stem from philosophies or systems which are foreign to our native ideals."

The barriers opposing the development of private radio broadcasting are based on the false idea that the broadcasting of news and ideas is a government function, disregarding the fact that radio broadcasting constitutes "a service of public interest" and not "a public service." This flagrant confusion is the basis for errors such as the belief that radios must be managed and directed strictly by government officials.

This statism leads to accepting the official monopoly of radio broadcasting as the only way to appease those governments which believe that they have the mission to control the opinion of their people.

The AIR has acted correctly in opposing these generalized errors by reaffirming the principle that radios do not belong to the state but rather to those who represent the people and their diverse leanings and desires. The Panama declaration could have well stated that all mass media are "means for expressing popular will" as well as "for the development of people's education."

CSO: 5500

BRAZIL

PRESIDENT GEISEL MESSAGE MARKS NEW AMAZON BROADCASTS

Brasilia Domestic Service in Portuguese 2200 GMT 1 Sep 77 PY

[Text] In a message addressed to all Brazilians residing in the Amazon region, on launching a special shortwave broadcast over Radio Nacional Brasilia, President Geisel emphasized the special attention given to achieving national integration by all governments since 1964. The president said that these efforts have been aimed primarily at linking the vast Amazon region with the rest of the country and, at the same time, at creating conditions conducive to allowing the region greater participation in achieving general development.

The message was broadcast today at 1600 to initiate the Amazon integration program of radio broadcasts. Broadcasting on shortwave, Radio Nacional Brasilia will cover the entire Amazon region, carrying a program which will go on the air from 1600 to 2100 daily, Brasilia local time. This is the first truly important effort made by the Brazilian Radio Telegraphic Company, Radiobras, in the Amazon region, where it also has a radio station operating in Boa Vista, Roraima Territory. This broadcast is designed to meet an old desire of the people of the Amazon region to counter the growing influence of foreign broadcasts.

Through the creation of Radiobras, the government sought to set up in that region a radio broadcasting service which would simultaneously carry programs for entertainment and information purposes without overlooking its basic commitment to education and culture. The wording of this special program will be appropriate for both the radio and the people of that region. The news and educational items will be carefully selected on the basis of research and surveys, thus offering the listeners various options. Care will also be taken to not fall into formalism and [word indistinct], apart from following a modern and dynamic line.

President Geisel outlined the many measures which led to the development of the old (?SDA) into the Superintendency For the Development of the Amazon Region (SUDAM), the establishment of the Manaus duty-free zone, the revitalization of the Amazonia Bank, the policy of tax incentives, the establishment

of agricultural and agricultural-mining development centers, and the construction of roads linking the Amazon region with the central plateau and with the other regions of the country. He said that these are tangible evidence of the many achievements obtained in recent years.

After mentioning the initiation of the Radiobras broadcasts, the president emphasized that from now on all Brazilians living in the Amazon region will be able to listen to our own line, to our own music, through the radio and thus be well informed on what is going on in the country, so that they may feel closer to their other Brazilian brothers and fully share our high national interests and desires.

President Geisel concluded by stating: "On this significant occasion, which coincides with the initiation of the Independence Week celebrations, I wish to greet all Brazilians living in the Amazon region, to reaffirm to them my confidence in the value of our present common effort and in the promising future which we are building together."

CSO: 5500

BRAZIL

BRIEFS

EMBRATEL MONITORING SYSTEM CONTRACT--Rio de Janeiro--The Brazilian Telecommunications Company (EMBRATEL) today signed a contract for the establishment of a national radio-monitoring system with both TELEFUNKEN of Brazil and TELEFUNKEN of Germany. The amount of 230 million cruzeiros will be earmarked for technical supervision and permanent control of all broadcasts utilizing a range of frequencies in areas of interest to Brazil. [Text] [Brasilia Domestic Service in Portuguese 2200 GMT 1 Sep 77 PY]

CSO: 5500

COLOMBIA

BRIEFS

DECREE ON RADIO BROADCASTING--The government issued today the following decree concerning radio broadcasting in Colombia: The president of the Republic of Colombia, making use of his legal authority granted under Article 121 of the Constitution, and in accordance with Legislative Decree No 2131 of 1976, decrees: Article 1--While the present state of siege remains in effect, no information, declarations, communiques or comments will be broadcast by radio or television concerning illegal work stoppages or strikes. Article 2--The Communications Ministry, by means of a resolution which can only be revoked by appeal, will punish any violations of the stipulations of the present decree in accordance with Articles 17 of Law 74 of 1966 and 85 and 86 of Decree 2085 of 1975. Article 3--Concerning the matters subjected to prohibition in accordance with this decree, only official bulletins authorized by the Communications Ministry will be published or broadcast. Article 4--The present decree goes into effect as of the date of its signature and it revokes dispositions that may be contrary to it. To be published and complied with. [Text] [Bogota CIRCUITO TODELAR in Spanish 0500 GMT 3 Sep 77 PA]

CSO: 5500

NEW NATIONWIDE MICROWAVE SYSTEM COMPLETED

Havana JUVENTUD REBELDE in Spanish 22 Jul 77 p 1

[Text] The installation of a national microwave system, which consists of 28 repeater stations located at different heights some 50 kilometers apart, was completed by workers of Ministry of the Communications as a tribute to 26 July and the 60th anniversary of the October Revolution.

It must be pointed out that the total execution of the project was planned for the entire present year, having as the initial goal arriving at Santa Clara for the 24th anniversary of the attack on Moncada Barracs. However, it was decided to extend it to Guantanamo.

Thus 13 transmitters were installed to bring reception of two TV channels to Baracoa and 180 telephone channels to Villa Clara Province, which extended to Santiago de Cuba, will insure the transmission of the main event of 26 July in black and white and in color.

To finish this task, it was necessary to build approximately 40 kilometers of access roads, more than 30 km of electric lines and 21 steel towers up to 90 meters high; transport more than 800 tons of equipment, install basic and auxiliary equipment for microwave, television, telephone, batteries, generators and towers, and build and adapt 22 huts in various places.

Gains for TV

The complete microwave system will offer the following facilities: In television to Pinar del Rio it will have three TV channels: one for Channel 6, one for Channel 2 and a spare. It will also have two channels from Pinar to Havana for transmitting remote control programs which originate in that province.

It has two channels to Guantanamo, one for each TV channel. They will bring the signal to each of the transmitters which are in the intermediate provinces, whether it be directly as in the case of Matanzas, Jacan and Camaguey, or that equipment which is off the path of the network, such as Cienfuegos and Granma.

This precept in TV is provided with equipment beamed from east to west, from Santiago de Cuba to Havana, to transmit TELE REBELDE programs nationally from the eastern region, or any other of the intermediate provinces if so desired.

Telephones

The Havana-Santiago de Cuba telephone system consists of three sections: Havana-Santa Clara, Santa Clara-Camaguey and Camaguey-Santiago, through new installed multiple equipment. It has a total capacity of 960 telephone channels, enough to cover the present needs for long-distance communications, using operators or direct dialing.

These new channels will be placed in operation progressively as of this date until the final phase in 1978, and they will allow all provincial capitals to have automatic dialing through number 07 with City of Havana Province.

In radiobroadcasting, this system to Pinard del Rio, as well as to Santiago de Cuba, has four special audio channel, which allow carrying signals from four other national radio networks to all its transmitters with more quality and reliability.

The new microwave network will serve as a support for carrying TV signals in black and white and color to all the transmitters contained in the development plan of the present 5-year period.

To accomplish this plan, there were united the efforts and enthusiasm of the workers of the Ministry of Communications, the Ministry of the Electric Power Industry, People's Government, as well as the leadership of the Party and the union of the branch in all the provinces.

8908

CSO: 5500

CUBA

INTERCOSMOS RADAR LASER FACILITY IN CUBA DESCRIBED

Havana BOHEMIA in Spanish 24 Jun 77 pp 90-93

Article by Luis Coronado

Text A radar laser station in the outskirts of Santiago de Cuba was recently opened. It was built by a group of socialist countries participating in the Intercosmos program. The station will make geodetic and geophysical measurements using artificial earth satellites.

Professor Jose Altshuler, chairman of the Intercosmos Council of Cuba and vice-chairman of the Academy of Sciences of Cuba, in inaugurating the facility, stated that this station will open up new prospects for work for Cuban scientists, who will now have an additional opportunity to increase their involvement in space research.

Professor Altshuler said: "It is significant that this inauguration is taking place in the year when the 20th anniversary of the space age, which began with the launch of the first Sputnik in October 1957, is being celebrated, and on the 60th anniversary of the October Revolution which made this great achievement possible."

Attending the opening ceremony, presided by Dr Wilfredo Torres, head of the Academy of Sciences of Cuba, were the following persons: Francisco Aranda, member of the executive bureau of the Provincial Party; Ernesto Suarez, member of the provincial executive bureau of the People's Power; Carlos Sarabia, chief of the Department of Science, Culture, and Educational Centers of the Provincial Party; Enrique Maranon, president of Oriente University; Ernesto Lotti, regional representative of the

Academy in Santiago; specialists who took part in the development of the facility, officials of the Academy of Sciences of Cuba, and other guests.

An Example of Socialist Cooperation

The radar laser station located in Santiago de Cuba, is an example of socialist cooperation; its equipment comes from the USSR, Czechoslovakia, the German Democratic Republic, Poland, and Hungary.

On these aspects and other matters of interest, Edubar Ortega Ortega, director of the station, and station engineer Jorge del Pino Boytel, reported the following.

The first phase of the project began about a year ago with the training of personnel, technical planning, and general organization of the project.

The facilities of the Intercosmos radar laser station were designed and built by Cuban personnel; the Cubans won the praise of the foreign specialists for their excellent work.

The installation and testing of the equipment were done by a group of specialists including: from the Soviet Union, Dr Maris K. Abelo and engineering specialist Boris Burg; from Poland, Dr Wlademar Kielek; and from Czechoslovakia, Dr Karel Hamal, head of the Intercosmos radar laser working group; Dr Antonin Novotny, Dr Petr Hirsl, and Dr Helena Jolinkova.

This radar laser facility was built for the program of the sixth section of cosmic physics of Intercosmos's radar laser group. Cuba has been involved in this program since its inception in 1967.

As we have already said, this innovative equipment was designed by the group of specialists listed.

The employees who will operate the equipment have the requisite technical background. Training for this program was given in a course conducted at the Technical University of Prague, Czechoslovakia, at the Faculty of Nuclear Sciences and Physical Engineering. The course was developed by the designers of the radar.

Cuba has had a satellite tracking station since 1967. The radar laser it now has is a step of great importance for its cooperative work in cosmic physics within the Intercosmos program.

The site at Santiago de Cuba was selected for its special geographic conditions, providing satisfactory visibility of satellites from the station.

Concerning its specific operation and the information it collects, we can say that the idea is to send a laser beam to satellites and to measure the time it takes the light reflected by the satellite to return to the point of emission. This procedure makes it possible to measure the distance from the station to the satellite in orbit at a point in time with great precision.

To set the station's clock, an atomic clock synchronized with Universal Coordinated Time was used. This is so precise that if it operates continuously without a failure, it would lose only 1 second in 40,000 years.

Cuba will use the data collected for, among other things, an improved knowledge of the characteristics of the earth, its size and structure, and to increase its technical capability for studying the atmosphere.

Of course, as the technical level and preparation of the workers increase, the laser's applications will be broadened to a great number of fields.

A listing of its present and possible uses would soon be out of date since, with the growing development of science and technology, its range of application is constantly being enlarged all over the world, concluded Mr del Pino in his remarks to the press.

Statements of Dr Karel Hamal

The radar laser station located in Santiago is the 10th such station of the Intercosmos program. Dr Karel Hamal, coordinator of the group of specialists who developed the facility, stated:

Within the Intercosmos program, work is proceeding in many directions and many fields of research. Right now the program is coordinating joint manned flights to be made by cosmonauts from the socialist countries in Soviet spacecraft.

Dr Hamal remarked that the program has different working groups, including the Cosmic Physics group.

Within section six of this working group, he added, there is a program being conducted to measure the distance from one pole

to the other, from the Arctic to the Antarctic of our planet, and the distance from east to west, that is, along the equator.

This research is designed for geophysical and geodetic purposes and will enable us to learn more precisely the size and shape of the earth.

This radar which has just been opened in Santiago will be used to participate in research to measure the Arctic-Antarctic arcs and the east-west arcs. Its measurements are expected to be done jointly with stations located in other countries.

The Intercosmos program now has 30 Soviet-made cameras for tracking satellites; they are distributed all over the earth, and are used for the two lines of research listed above.

Operation of the Radar Laser

How do the radar laser and its equipment work?

For example, when an artificial satellite passes over its area of coverage, the station sends a laser beam to the satellite.

The light reflected by the satellite is picked up by the station. There, a computer calculates the time used for the beam to go and return and the distance between the station and the satellite.

The figures obtained are processed to obtain data needed for geophysical and geodetic research.

The radar laser has a device that follows the movement of the satellite in the sky; this device was made in the Soviet Union under the direction of Dr Maris K. Abelo.

The laser that sends the beams was made in Czechoslovakia; Dr Helena Jolinkova was primarily responsible for its design. The receiving telescope came from the Soviet Union.

The reflected light is recorded by a piece of equipment built by Dr Antonin Novotny and Dr Waldemar Kielek of Czechoslovakia and Poland, respectively.

The reference operations require the exact measurement of the time it takes the beam to travel to the satellite and be bounced back. For this reason a time counter capable of recording millionths of seconds, designed by Dr Kielek, is used.

Also used for high precision time measurements is a secondary frequency and time standard built in Czechoslovakia from a design developed at the Basic Technical Research Institute of the Academy of Sciences of Cuba.

The radar laser in Santiago also has auxiliary equipment and systems made in fraternal countries: the USSR, the Democratic Republic of Germany, Poland, Czechoslovakia, and Hungary, as we have already mentioned.

We should point out the great dedication, efforts, and enthusiasm of the designers and builders of this equipment; they have worked hard on its installation and in advising auxiliary personnel working on the construction program.

Once again this makes evident the exemplary solidarity and spirit of cooperation of the fraternal nations of the socialist world in their endeavor to broaden knowledge of cosmic space and to use this knowledge for the benefit of humanity.

7679
CSO: 3010

JAMAICA

BRIEFS

BRITISH-OWNED STATION TAKEOVER--Georgetown, September 3, 1977 (HSINHUA)--
The Jamaican Government signed an agreement with the British "Rediffusion International Ltd." today on the acquisition of the latter's subsidiary "Radio Jamaica," according to a report from Kingston. The takeover of the radio station, which the British monopoly group has operated for 27 years, will take place 30 days after the signing of the agreement, announced the government. Speaking of the significance of nationalizing foreign-controlled news media in Jamaica, Prime Minister Michael Manley pointed out in Parliament last January 19, "Local ownership of the media is a necessary condition if our people is to be kept fully abreast of the local events and local programmes." [Text] [Peking NCNA in English 1507 GMT 4 Sep 77 OW]

CSO: 5500

INTER-ARAB AFFAIRS

BRIEFS

EDUCATIONAL TELEVISION NETWORK--Dr Muhyi-al-Din Sabir, director of the Arab Organization for Education and Sciences, announced during the international conference of education which is now convening in Geneva, that the Arab countries are in the process of implementing a project to establish an educational television network. He also called for coordination of international efforts to frustrate Israel's attempts to destroy the existence of Arab education in the occupied territories. [Text] [Cairo AL-AHRAM in Arabic 2 Sep 77 p 8]

CSO: 4802

EGYPT

BRIEFS

RENOVATING CAIRO TELEPHONE NETWORK--The first shipment of cables, instruments and special equipment for the renovation of the telephone network in the heart of Cairo has arrived from West Germany. The shipment is worth 3 million pounds. It is expected that the second shipment of cables for the central Cairo area will arrive in Alexandria the beginning of next week. This was revealed by Mahmud 'Abdallah, chairman of the wire and wireless communications organization. He said that the German Telefunken Company will undertake the renovation in collaboration with the organization. It will re-new 40,000 lines in central Cairo at a cost of 55.5 million marks. The chairman of the organization also said this renovation will be executed in stages, and work will be completed the end of next year. All preliminary work for installation of the cables has been completed. [Text] [Cairo AL-AHRAM in Arabic 2 Sep 77 p 8]

CSO: 4802

NATION'S TELEPHONE, TELECOMMUNICATIONS PROJECTS DISCUSSED

Riyadh AL-RIYADH in Arabic 14 Aug 77 p 3

/Article: "In Eighteen Months You Will Get a Telephone Twenty-Four Hours After Applying for It: Urgent Projects to Provide and Consolidate Local Communications via Satellite"/

/Text/ A maximum of 1 and a half years from now, you will be receiving a telephone 24 hours after presenting an application for it. All the public's complaints about telephones have started diminishing and services have started improving. The total number of telephone lines in Jiddah will come to 150,000, rather than 30,000, and Mecca's lines will total 90,000 rather than 32,000, after the new expansion. The lines in al-Ta'if and Medina both will total 50,000 rather than just 10,000. The microwave project will increase communications channels between Jiddah and Medina from 48 to 1,800 and it will provide television service by linking up television broadcasting stations to other stations in the towns of the kingdom.

A meeting with Eng Faysal al-Zaydan, undersecretary of post, telephone and telegraph, reveals important matters regarding this public agency. The meeting leads to conclusions, as it does not lack frankness and direct confrontation with an official.

A group of questions presented themselves during the meeting:

What is the reason for the proliferation of citizens' complaints about telephone service? Is the period of time in which the Ministry of Post, Telephone and Telegraph has been in existence--estimated at about 3 years--enough to pass judgment on the ministry? What conclusions has the ministry benefited from during the period of the experiment? How have maintenance services turned out? What are the future steps for the ministry's projects in the following years? These questions were followed by truthful, frank, objective answers and numerous questions going about in the citizens' minds entered into this comprehensive discussion with the undersecretary of post, telephone and telegraph.

The True Picture of the Situation

I asked the honorable undersecretary, "I would like this discussion of ours to be most frank and clear, so that we may give the reader a true picture of the state of telephone services. I am not specifying any particular province here; rather, this could include all the provinces and towns in the kingdom. How do you interpret this situation? Is it a deficiency in the human or technical resources of the ministry, complex red tape, or the correspondence and submissions for receiving the funds necessary for carrying out projects? Questions are going about in everyone's mind, and we want most explicit answers to them. Are there steps for doing away with these complaints?"

Mr al-Zaydan replied by stating, "I believe that complaints about telephone service have abated a great deal. Previously, they were concentrated on maintenance services, but in the recent period we have arrived at a very good resolution regarding these services. There are still complaints as far as the matter of invoices goes. The ministry is making contracts with a number of computer programming analysts, programmers and key-punch operators to consolidate invoice preparation programs, and this will lead to a reduction of complaints. As regards the subject of receipt of invoices, the ministry is exerting itself to the maximum to have these delivered to the people concerned, but we have faced some problems, such as a lack of clarity in users' addresses and changes of address by telephone users who do not inform the telephone utility of their relinquishment of the telephone.

"The ministry has taken new measures in this area. These take the form of preparation of invoices in two copies, in order to enable persons referring to the office to receive the other copy when they appear and to make payments on the basis of it.

We Need Time

"We believe that this step will help us with the problem of delivering invoices. When looking into inquiries, we find that the ministry has recently embarked on the administration, operation and maintenance of telephones; as is widely known, a company used to perform these functions. The ministry started them 3 years ago only, began to ascertain the weak points and problems, and proceeded to create solutions. I hope that all telephone services will improve, just as maintenance services have improved to their present level."

al-Zaydan went on to say, "The ministry has made a contract to choose 300 engineers and technicians for the purpose of bolstering telephone services.

"As far as financial resources go, these, thank God, are available. However, time is required for complaints of this type to be eliminated."

I asked him, "Do you believe that in the period of time since the ministry took over it has achieved and carried out the requisite amount of

responsibilities?"

Eng Zaydan said, "It is indeed hard to pass judgment on the services of the ministry or the services the telephone utility performs, but, through observations at hand, and a study of the complaints which reach the ministry, we have observed that the number of such complaints is very small. Services are being improved, and there is another aspect of the ministry's services--for instance, the international instantaneous trunk services, which were inaugurated in Riyadh on line 92. We have noticed that there is extreme congestion in this service and that it is difficult to get through to this number at particular times. The ministry has set aside another number in cases where it is not possible to get through to line 92, and the user can register his request through another number and he may subsequently be contacted when the call is ready.

"I believe that the improvement is very great, when one makes a comparison between/the way it was/ before the ministry took charge of telephone utility services and the way it is now."

Regarding the system of decentralization which has been a success in most ministries and the question whether the ministry has been about to apply this system in order to move its own projects forward. Mr al-Zaydan said,

Powers and Work

"From time to time the ministry has been studying the powers granted to the General Telephone Directorate and the provinces and has been giving them new powers in accordance with work requirements."

The conversation with Mr al-Zaydan turned to the ministry's projects, and I asked him about the date of signing of the contract for the new telephone expansion, estimated at about 470,000 lines throughout the kingdom, and what the shares of Jiddah, Mecca, al-Ta'if and Medina will be.

He replied by stating, "This expansion was put up for bids about 3 months ago and the bids will be received during the month of Shawwal /September-October/. It is expected that the awards for this competition will be granted before early December. As far as the shares of Jidda, Mecca, al-Ta'if and Medina go, as is well known, there are 30,000 lines in Jidda and, when this year ends, this will rise to 50,000. Following the expansion, the total number of telephones in Jidda will rise to 150,000. As far as Mecca goes, there are about 32,000 lines there and these will rise to 90,000 following this expansion. In al-Ta'if, there are 10,000 lines and these will rise to 50,000. In Medina there are about 10,000 lines and these will increase to about 50,000 following the expansion."

The Microwave Project

Concerning future steps for the ministry's projects in the provinces mentioned in the previous question, Mr al-Zaydan said,

"There is the microwave project, for which an award was made last month, to increase and bolster communications with the telephone center and extend these communications to the new towns. There the microwave project will increase the capacity of existing channels of communication between Jidda and Medina from 48 to 1,800. Also, the project will include the provision of telephone services between Jidda and Medina, linking the television broadcasting stations in Medina to other television stations in all towns in the kingdom. This project will also extend to Yanbu' and it will be possible to establish direct communication between Yanbu' and other towns. In addition there are other communications, including the microwave project to connect the town of al-Ta'if to al-Bahah, Abba and other towns in the south, like Jizan and Najran.

Direct Communications with the Sudan

"There is another project to hook the kingdom up to the Sudan. A microwave project will be built between al-Ta'if and the Sudan, and this project will make it possible in the future to get in direct telephone contact between the kingdom and the fraternal state of the Sudan. This project will be completed in 2 years from the date on which the contract is made. There are now joint studies by specialized committees in the kingdom and the Sudan to set forth the final specifications for this project and award it. There are urgent projects to provide and consolidate local communications by means of satellite, such as the construction of a satellite station in Medina to support communications. It is anticipated that these stations will be installed 4 months after the contracts on them are signed."

Only 14 Months

I asked him about the Eastern and al-Qasim Provinces' share of the ministry's projects, and he replied by stating, "As far as al-Qasim Province goes, the ministry is now establishing telephone organizations in Ha'il, 'Anayzah and Buraydah. It is expected that the automatic exchanges in this province will be put into operation soon and the microwave project will connect this province to the Provinces of Riyadh and Medina. Fourteen months remain until it is carried out, and the temporary satellites project for internal communication has also reached al-Qasim Province. There are satellites there, this station will be consolidated within the project, and a similar station will be erected in Ha'il.

"Regarding the new telephone expansion, God willing, this will cover all the towns and villages of al-Qasim."

Regarding the schedule, he stated that as far as telephone expansion goes, a number of emergency telephones has been stipulated in import and installation specifications. These are estimated at about 50,000 in the case of the towns of al-Qasim, 100,000 numbers for Abba, and 100,000 numbers for the remaining towns. These will be imported and installed within 1 year of the contract."

The Turnkey System

Regarding the ministry's current procedures for contracting for most projects, al-Zaydan said that current procedure is to contract for certain projects on a turnkey basis--for example, the telephone expansion will be contracted for with a company regarding all importing, installation, maintenance and future operation. The same goes for the microwave project--the contract was made with an international company for importing, installation and operation activities over a specific period of time."

No to Permanent Companies

On contracting with permanent companies, al-Zaydan said, "As far as contracting with permanent companies for purposes of carrying out the ministry's projects goes, the ministry considers that there are no grounds for contracting with permanent companies for this purpose. However, it is contracting with consulting firms and some of these are permanent, while some are specializing in specific branches."

Setting up and Delivering Telephones in 24 Hours

I asked him about the reason for the length of time the process of setting up and delivering telephones takes: are there new procedures to reduce this period of time?

al-Zaydan answered by stating, "The ministry is looking seriously at reducing the existing red tape and also at speeding up the process of setting up and delivering telephones. The ministry will soon proceed with its own technicians on setting up and delivery activities. The experiment will begin in the city of Riyadh, and we hope that in this manner we will reduce the time period. At present the transaction takes place between the ministry and the company which sets up and delivers. This is what makes the time stretch out.

"We have started by laying out specifications and conditions when planning the system, including lines, cables, distribution points and other technical matters, so that it will be possible to install a telephone within 24 hours of the application. This will start with the new telephone expansion in a year and a half."



Engineer
Faysal al-Zaydan

DIRECT TELEX LINKS WITH EUROPE ANNOUNCED

Jiddah ARAB NEWS in English 24 Aug 77 p 4

[Text]

RIYADH, Aug. 23 (SPA)—PTT Undersecretary for Telegraphic Affairs Dr. Ibrahim Ahmad Ubaid announced Tuesday the installation of direct telex links with France, Belgium and Switzerland.

He said the new lines will provide better and quicker telex services for about 1,000 telex subscribers in the Kingdom.

Dr. Ubaid said there were at present direct telex lines with the USA, the U.K., France, Italy, Germany, Austria, Switzerland, Belgium, Egypt, Bahrain, Hong Kong and Japan.

Moreover, the ministry has taken joint measures with these countries to provide connecting services for telex messages between the Kingdom and the rest of the world.

He said the number of telex

lines, especially with the U.S. and Britain, will keep increasing in the coming few months.

Dr. Ubaid said a six-thousand line electronic telex exchange, which is actually being installed, will start operating at the end of October 1977.

He added that the Kingdom's domestic and international telex services will soon be considerably improved. He said telex bureaux have been renovated and new centers have been created throughout the Kingdom to serve the public and render such facility within everyone's reach.

Three telex bureaux were set up in Riyadh in Al-Nassereya, Al-Murabbas and Al Matar (Airport), one office was opened in the ministry's branch in Mecca while others are about to be set up in suitable areas. There an office was opened at the PTT branch at Mina street in Jeddah, three in Dammam, one at Al-Khobar, one at Dhahran Airport, one in Medina and one in Taif.

Dr. Ubaid concluded by saying that the ministry was constantly catching up with systems development to provide the best facilities to the public.

SAUDI ARABIA

BRIEFS

NEW TELEVISION STATION--Abha 2 September--A new television station will be opened in Abha tomorrow afternoon by His Royal Highness Prince Khalid al-Faysal, governor of 'Asir region. The ceremony will be attended by Information Minister Dr Muhammad 'Abduh Yamani, Information Ministry Under Secretary for Information Affairs Dr 'Abd al-'Aziz Muhyi ad-Din Khurjah, a number of Information Ministry officials and newspaper chief editors. The station's transmission will cover most parts of the southern area. The new station will operate in color using the SECAM system. It will be the sixth television station in the kingdom. The information minister has decided to establish a relay station in the southern area to cover the areas which will not be able to receive the transmission of the new station. The station has been built in cooperation with French experts according to the provisions of the technical and economic cooperation agreement between Saudi Arabia and France. [Text] [Riyadh SNA in Arabic 1022 GMT 2 Sep 77 NC]

CSO: 5500

TUNISIA

BRIEFS

TAP-PARS COOPERATION PACT--An agreement on cooperation between the Iranian Agency PARS and TAP has been concluded. The agreement provides for the exchange of news bulletins, photographic material and documentation. Moreover, TAP will disseminate the Iranian agency's news to Maghreb and African countries and PARS will disseminate TAP's news to Asian countries. Representatives of the two agencies will meet in Teheran next year to assess the implementation of this agreement and devise new forms of cooperation. [Tunis TAP in French 1500 GMT 31 Aug 77 LD]

CSO: 5500

YEMEN ARAB REPUBLIC

BRIEFS

TV RELAY STATION--Yemen Arab Republic President Ibrahim al-Hamadi today inaugurated a television relay station on al-Ghayl Mountain which will cover the northern and northwestern parts of the country. The project was completed with the help of the engineers of the general radio and television organization and the soldiers of the first infantry brigade. [San'a Domestic Service in Arabic 1700 GMT 8 Sep 77 JN]

CSO: 5500

TELEVISION SERVICE TO BE PROVIDED FOR SEVEN TOWNS SOON

Kaduna NEW NIGERIA in English 30 Sep 77 p 13

[Article by Mohammed Bomoi]

[Text]

THE Nigerian Television Authority (NTA), has concluded arrangements to provide television broadcasting facilities for Minna, Bauchi, Ilorin, Abeokuta, Akure, Maiduguri and Calabar.

Already, officers who will take charge of the new stations until they were fully constituted, have been appointed for Minna, Maiduguri and Bauchi.

These stations are in advanced stages of completion and will be commissioned soon.

Acting general managers have also been appointed for the Nigerian Television, Enugu, Ibadan and Owerri.

In a "meet the press" interview in Kaduna at the weekend the Chairman of the Nigerian Television Authority, Alhaji Babatunde Jose, said a committee to draw up a philosophy and objective for the nation's television service has been set up. It is headed by a member of the board of directors of the authority, Dr. Yusufu Bala Usman, who is also the head of Department of History, at Ahmadu Bello University, Zaria.

Alhaji Jose, who was in Kaduna to attend the just concluded two-day

meeting of the board of directors of the authority, told journalists that Dr. Usman was chosen to head the committee, "because we wanted to involve a man of the people."

He said that after the committee must have finished its assignment, the board of directors would summerise the recommendations and have a properly defined philosophy and objective.

Alhaji Jose, turning to problems of staff, said another committee would be set up to work out a staff structure in the television service. Zonal board of directors would be appointed so that staff recruited by the NTA would be delegated to them.

He said television stations in the country have been asked to recruit their own staff up to a certain level, but promotion and recruitment of senior level staff would be the responsibility of the board.

On the continued stay of NTV Kaduna in the premises of Radio Kaduna, Alhaji Jose said ideally, they ought to have separate locations, "but as at now, they have to stay together. When the NTA expands, one must move out", he said.

AUSTRIA

BRIEFS

AUSTRIAN RADIO FREQUENCY CANCELLATION--As of 5 September the Austrian radio service will discontinue broadcasting its "Regional Program" on mediumwave [at 629, 728, 890, 1394 and 1475 kHz] in line with the decisions of the 1975 frequency planning conference. The "Regional Program" will be on the air as of 5 September only on FM channels--in Vienna, at 89.9 MHz. [Vienna WIENER ZEITUNG in German 2 Sep 77 p 6 AU]

CSO: 5500

ITALY

IMPROVED BROADCASTING ABILITY, LARGE AUDIENCE SOUGHT

Paris LE MONDE in French 24 Aug 77 p 7

[Article by Henri Fesquet]

[Text] Who listens to Radio-Vatican in France? (*) Only a very few listeners it would seem. At any rate they are not typical of a public particularly representative of the strong religious forces in our country. A quick glance at the programs broadcast in French--twice a day for a period of 15 minutes, without counting the Latin mass and the Rosary in the evening--provides a primary evaluating element. For example, during the month of June one reads: the Church in Indonesia, young Apostles in our time; missionary discourses; the Pope's Angelus; laity in the young churches; Who is Vladimir Soloviev?; the Pope's Audience; what to think of the waters of Lourdes; the centenary of the invention of the phonograph; love and marriage, etc.

Catholics from divergent circles seem to deplore the old-fashioned and plaintive tone of some broadcasts, the absence of debate as well as the infrequency of important guests. They add that French culture appears to be playing a far more important religious role.

These harsh critics do not take into consideration the limited time allotted to the broadcasts and the considerable effort expended by Radio-Vatican in order to address the five continents, using local languages. Furthermore, it should be borne in mind that while some countries are not as fortunate, others, such as Spain, Great Britain, Hungary, etc., enjoy the privilege of receiving excellent programs. The uneven quality of the broadcasts is due, on the one hand, to the modesty of the budget authorized by the Vatican, and on the other, to a degree of individuality of the linguists in charge, and finally, perhaps to the concept of the Radio-Vatican's objectives themselves, which in essence are: broadcasting the Pope's word, transmit the teachings of the Magistery, including those of the bishops dispersed all over the world, encourage prayers (liturgies, recitations of the Rosary, etc.). Laity, art, philosophy, science come much later.

Nonetheless, the subjects chosen and the manner in which they are presented, do not always seem adapted to the needs and variety of cultural levels.

(*) Radio Vatican can be picked up in France on medium waves, 1,529 kHz (196m).

However, an evolution is taking form. For the past two and a half years Romans have been enjoying stereo broadcasting on the FM band of very good quality (6 hours per day). The success of this experiment is so great that some of the peninsular bishops plan to finance "Hertzian Relays" for the benefit of Italians in other provinces.

Radio-Vatican does not frown on light music any longer, especially during the night when AM-band transmissions are superior. This has caused problems with some listeners who were shocked by the remarks made by certain singers. Therefore, the station prefers to prudently limit itself to melodies without words.

In the framework of news coverage, newscasts are more numerous, more complete and more diversified. News concerning the violation of human rights is given more prominence. The percentage of secular broadcasts has increased. The concept of universality manifests itself especially by the number of languages used. Radio-Vatican was broadcasting in 10 languages in 1940, in 19 in 1948, 29 in 1954; today it is using 33 languages, including Esperanto which is broadcast for 15 minutes every week. (**).

The choice of languages clearly reveals the Vatican's goals: 17 out of 33 relate to countries with communist governments. The results have been paradoxical. There are programs in Chinese (30 minutes per day), Albanian, Croatian, Lithuanian, Slovak, Slovenian, etc. Inversely, there is only Arabic for the immensely large Christian world in Africa. Nothing in Swahili, Hausa, Bantu, and other local languages used by tens of millions of blacks.

The persons responsible for Radio-Vatican are sensitive to these gaps and wish they could fill them, if provided with adequate resources. However, they emphasize that the prime concern of the Vatican is to cope with "apostolic pressures", creating the impression that they are less isolated than those Christians who enjoy insufficient or almost worthless religious liberty, who are sometimes dramatically cut off from all ties with Church activities and with the Great Acts of the Magistry, and do not have any religious books at their disposal, beginning with the Bible. Radio-Vatican is literally haunted by the spiritual malnutrition of some of the people who have been baptized and intends to make their needs a priority.

"My Goat and My Radio"

From the mail received it would appear that the people in charge of Radio-Vatican, are partly successful in this endeavor. Thus, the following letter from an inhabitant of Eastern Europe: "I own a small shanty, a goat and a radio. Your broadcasts offer me much consolation and enormous spiritual comfort. I have owned this radio for the past 9 years and have not missed one broadcast". Another native of the same region implored: "Do not abandon us, continue your broadcast of the Rosary and the Latin mass".

(**) Radio-Vatican does not hold the foremost place in the maximum number of languages. Radio-Peking, Radio-Moscow, Radio-Cairo, the B.B.C. of London, and even the Voice of America in Washington (36 languages) are in the top group.

"Thank you for your broadcast in Tamil which is my native language" writes an Indian listener. As Eskimo expresses his joy in being able to follow the Rosary every day.

Can Radio-Vatican be content with these undeniably positive results? Is it enough for it to rejoice in the fact that broadcasts in Japanese are followed very closely, if the abundance of the mail received (more than 500 letters per month) can be believed, while Vietnam remains in abeyance. Are the Christians in that country less interested than the Esperanto fans?

At any rate Radio-Vatican has not been affected by yesteryear's Roman disease: triumphalism. The station is trying to modernize in every way, and if it is not succeeding rapidly enough, it is because, in part, the means are insufficient. Its budget depends on the governor of the Vatican, its programs depend on the office of the Secretariat of State. However, the latter seems to be quite liberal and trusts its prestigious director, Father Tucci, a Jesuit, a former director of CIVILITA CATTOLICA, who enjoys the total confidence of Paul VI. Besides, the present pope has grasped the importance of Radio-Vatican and has demonstrated the most understanding in that respect. Son of a newspaperman, convinced of the interest engendered by the mass-media, Paul VI has made many opportunities available: a budget, administrative structures, personnel, premises and technical improvements.

In this connection Radio-Vatican has just purchased a new 500 kilowatt short-wave antenna for the tidy sum of 6,200,000 francs. It is the tallest in the world in its category: 79 meters. It presents the original advantage of rotation, which means that in 10 minutes it can make a complete circumference on an 89 meter travelling trolley, thus saving precious time, compared to the era when antennas had to be changed 25 times in order to cover the world.

At the present time there are only four antennas of this type, of which two are located in Iran and one in Switzerland (Sottens).

This antenna, built by Telefunken, transmits 6 to 26 megahertz waves. Five times more powerful than previously, it will allow Radio-Vatican to be heard in China, Japan, the Philippines, Australia, Latin America and South Africa. At present it is in the experimental stage, but will definitely be put into service in December. The Santa-Maria-de-Galeria's loose ground, on which this antenna was erected, has delayed its installation. Its gigantic profile demonstrates the progress accomplished since Pius XI inaugurated the modest "Finger of God" in 1931, the Roman name for the small antenna which still rises above the Vatican gardens.

Equipment is one thing, using it is another. In this respect Radio-Vatican is very much aware of the fact that it must go forward. Most certainly the station is not cool toward ecumenism and, since Vatican II, knows how to call upon the services of non-Catholics. However, this is only the beginning. At least one can hope. For example, would it not be "fair play" for Vatican II to draw an inference from the total disappearance

in Addis-Ababa of the Lutheran transmitter "Voice of the Gospel" which fell victim a few months ago to the stalinist behavior of the government? Couldn't the Vatican lend its waves to broadcasts which seem hopelessly suppressed at this time? Such a gesture would have more ecumenical effectiveness than the most generous of encyclical letters. Furthermore, since Radio-Vatican is in operation for 21 hours out of 24, it would be forced to contract for additional use of non-viable antenna time.

If the Osservatore Romano, among others, with whom it is not always easy to collaborate, would have a better understanding of the nature of radio imperatives, and the advantage of broadcasting on a large scale the still reticent news from the Holy See and the Dicastery of the Curia, and, especially if the Vatican would agree to advantageously improve the incomparable cultural and evangelical tool represented by the transmitter, the greatest spiritual power in the world could expand its audience and its effectiveness. To present the message of the Gospel to the people of our times, who are so often unbelievers or agnostics entails some mentality conversion on the part of those who are institutionally in charge. Apologetics are not appropriate any more - except perhaps in some aggressively atheistic regions. When one is called upon to speak to the whole world and has technical means of prodigious consequence at his disposal it is well to abandon the beaten path.

Rome is no longer Rome. It is not sufficient to echo the Bible word for word, nor the word of the popes and the bishops. Without abandoning the faithful traditionalists, who are thirsty for liturgy and security, a new language of the faith must be found which will transcend man's daily concerns.

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CSO: 5500

DEFENSE AIDE'S COMMENTS ON LORAN C SYSTEM CONTESTED

Oslo ARBEIDERBLADET in Norwegian 30 Aug 77 p 3 LD

[Article by Nils Petter Gleditsch: "Loran C and the Base Policy"]

[Text] In ARBEIDERBLADET 23 August, Johan Jorgen Holst was interviewed about the relationship between the Loran C navigation system and Norwegian base and nuclear policy. Some of the claims in this interview are so misleading that they cannot be allowed to stand uncontradicted:

1--"The establishment of the radio navigation transmitters is part of the alliance cooperation." This would have been correct if Holst had been talking about Loran A. But both Loran C and Omega were built in Norway after bilateral agreements between the United States and Norway. Construction and operation have been financed by the United States alone. NATO in general has not been involved. In June 1958 Embassy Counselor Raynor even asked Norway not to inform NATO about the plans for a Loran C station in Bo.

2--After being asked whether Norway has any military interest in Loran C, Holst replies that "Norway depends on support and reinforcements from its allies in an emergency. It was considered natural and necessary to implement measures which could insure effective troop deployments in such a situation. Loran C could be of importance in such a connection." In what connection? So that American aircraft and warships could find their way to Norway? They manage that well enough without a precision navigation system out in the open sea. As is known, the debate concerns missile submarines' navigation by Loran C. The missile submarines are not to be "deployed to Norway." They are to launch their missiles from the sea areas where they patrol even in peacetime.

3--"Some of the Norwegian Air Force's aircraft have Loran C receivers. We expect that Loran C could be of great importance for resolving the coastguard problems in the Norwegian economic zone."

When the United States has given Norway and the world a free military navigation system, it would be strange if no civilian and military users of this system had cropped up in Norway 17-18 years later. According to interviews which Anders Hellebust had in 1974 at the Armed Forces High Command, Loran C had little or no military significance until 1974. The coastguard's potential use of Loran C still lies in the future. These considerations could possibly be arguments for not closing down Loran C stations in Norway but not for establishing them in 1959-1960.

4--"Today Loran C is a general navigation system"--a rather striking statement when the U.S. Defense Department in its official review of military radio navigation stations in July 1974 classified Loran C as a special purpose system, defined as a system which "usually constitutes an integral part of a military weapons system or exists with the primary aim of supporting a special weapons system." (Quoted from the hearings on the 1976 defense budget in the House of Representatives' Finance Committee, D, 5, S, 60) [reference as published]. The same source also states that the Pentagon needs Loran C for its "special purpose" at least until 1983. But, as the Pentagon explains with explicit reference to Loran C, even if something is a special navigation system it can well be used for other purposes than that for which it was primarily intended, once it is available."

5--"So it is expected that Loran C will be the predominant navigation aid in the northeast Atlantic." I would like to see Holst substantiate that claim. For civilian air traffic in this area it is at least quite clear that Loran C is and will be of minimum importance. And what are the civilian consumers to do if the Pentagon decides to close down Loran C after 1983, as it did with Loran A?

6--"I don't know whether Polaris and Poseidon submarines actually have Loran C receivers on board." That is rather a strong statement. It has been substantiated by official U.S. sources how recent years' research on improving the accuracy of Loran C has been financed under the Poseidon program. Therefore, wouldn't the submarines have receivers? Holst also states that "our country profits from the guarantee and counterweight provided by the American nuclear forces, among others," and that navigation systems stationed in Norway can be exploited by allied armed forces, even those possessing nuclear weapons. Here we have probably reached the heart of the matter: "We now live under the Americans' nuclear umbrella," as the then adviser on foreign affairs Boye wrote in a memorandum on Omega in 1969. That Norway accepts that the United States may establish military navigation stations in Norway to support forces with strategic nuclear weapons is presumably seen by Holst and others as reasonable compensation for the protection of the "nuclear umbrella." But why not say so openly, instead of resorting to all sorts of circumlocution?

CSO: 5500

TURKEY

BRIEFS

NEW TRT RADIO LINK--The new radio link between Hatay and Gaziantep was commissioned today. TRT technical officials say that work to build the radio link started last year. Now, close to 4 million viewers in eastern and southeastern Anatolia will be able to receive a much clearer television broadcast. [Ankara Domestic Service in Turkish 1800 GMT 4 Sep 77 TA]

CSO: 5500

END