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JPRS L/9603

13 March 1981

... FBIS 40TH YEAR 1941-81 ...

Worldwide Report

TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT

(FOUO 3/81)



FOREIGN BROADCAST INFORMATION SERVICE

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FOREIGN BROADCAST INFORMATION SERVICE
P. O. Box 2604
Washington, D. C. 20013

26 February 1981

NOTE FROM THE DIRECTOR, FBIS:

Forty years ago, the U.S. Government inaugurated a new service to monitor foreign public broadcasts. A few years later a similar group was established to exploit the foreign press. From the merger of these organizations evolved the present-day FBIS. Our constant goal throughout has been to provide our readers with rapid, accurate, and comprehensive reporting from the public media worldwide.

On behalf of all of us in FBIS I wish to express appreciation to our readers who have guided our efforts throughout the years.

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WORLDWIDE REPORT
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CONTENTS

ASIA

JAPAN

Telecommunications Ministry To Permit 'Teletext' (MAINICHI DAILY NEWS, 6 Feb 81).....	1
Overall Evaluation Test Started for Submarine Photofiber Cable (TECHNOCRAT, Dec 80).....	2
Briefs	
High Speed Data Communication	3
Microwave Camera Information	3
Mutual Communication Service	3
Survey on the Effects of Rain	4

EAST EUROPE

CZECHOSLOVAKIA

CSSR-Built Transmitters Abroad Described (Jindrich Bradach; TELEKOMUNIKACE, Nov 80).....	5
---	---

SUB-SAHARAN AFRICA

INTER-AFRICAN AFFAIRS

Worldwide Monopoly of News Agencies Allegedly Broken (Pierre Clary; AFRIQUE-ASIE, 5 Jan 81).....	13
---	----

MADAGASCAR

Briefs	
Microwave Network	18

- a -

[III - WW - 140 FOUO]

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JAPAN

TELECOMMUNICATIONS MINISTRY TO PERMIT 'TELETEXT'

Tokyo MAINICHI DAILY NEWS in English 6 Feb 81 p 5

[Text]

The Posts and Telecommunications Ministry has informally decided to permit the commencement of the Japanese version of the Teletext or character multiplex telecasting services in 1983.

Teletext is the name of a similar character MPX telecasting being operated in the United Kingdom. Similar broadcasting, including testing, is being conducted in France, West Germany, Sweden and the United States.

The character multiplex (MPX) telecasting enables broadcasting stations to air the character information concurrently with the existing image by taking advantage of unused spaces in the TV airwaves. The viewers, by installing an adaptor, can read such information as news, stock market quotations, weather reports, and traffic information on the TV screen at home. The character MPX telecasting will also make possible the electronic newspaper — a newspaper to be read on the TV screen.

The ministry is planning to formally decide upon the technical standards for the character MPX telecasting by the end of March and amend the broadcasting law for the commencement of commercial Teletext broadcasting in 1983.

The Radio Technical Council recently recommended a technical standard on the character MPX telecasting to the ministry after seven years of deliberations. The ministry is to formalize the decision in late March.

According to the ministry plan to allocate 10 airwaves at the start, one is to be dedicated to the transmission of the characters for the hard of hearing, to enable them to enjoy television programs. This is at present being done by the Public Broadcasting System (PBS) in the United States.

The remaining nine airwave channels of the initial allotment will be made available for utilization by organizations other than TV stations. The public will be able to receive these nine airwave channels on the present blank channels of existing TV sets.

The Teletext broadcasting licenses are to be granted to non-TV stations, primarily to newspaper companies. By use of printers, "hard copies" (printed copies) of electronic newspapers will also become available at home. And this possibility meets the ministry's policy of decentralizing the power of the mass media, the ministry said.

But actual Teletext broadcasting by third parties requires the use of some facilities of existing TV stations. If these TV stations refuse to offer the pertinent facilities for third party use, the character MPX service will become impossible.

To resolve this problem, the Radio Regulatory Bureau of the ministry intends to submit to the Diet next year an amendment to the broadcasting law to make it obligatory for TV stations to offer their facilities for Teletext broadcasting by third parties.

The association of broadcasting stations are, however, firmly opposed to such legislation on the grounds that the amendment will infringe upon licensed TV stations' property rights.

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JAPAN

OVERALL EVALUATION TEST STARTED FOR SUBMARINE PHOTOFIBER CABLE

Tokyo TECHNOCRAT in English Vol 13 No 12, Dec 80 p 63

[Text] A cable with optical fibers used as the transmission medium has the following advantages over the conventional copper cable: it can be made to have a large-capacity and it is expected to be more economical because of low transmission losses and the necessity of fewer repeaters. Also, it is light-weight, flexible and easy to handle. Thus, it is expected to serve for submarine speech transmission lines which require difficult maintenance work to be performed within a limited space in installation ships. Various circles are promoting studies to put the cable into practical use.

Nippon Telegraph and Telephone Public Corporation has already sought cable structures sufficiently strong enough to endure the submarine environment and external pressures during installation and has established the basic technology for making them practical. In order to establish the technology for submarine photofiber cable and equipment for submarine terminal stations and to conduct overall assessment, the corporation has recently provided coastal test stations at Inatori and Kawazu on Izu Peninsula and has installed a transmission line consisting of a submarine photofiber cable, 10.2km long and 240m (max.) deep in the sea between the stations.

The cable installed is made from a collection of optical fibers covered with pressure-resistant copper tubing and further covered with PE, and an alternate double stranded sheath. The core system consists of a singlemode and 5 graded multimode optical fibers. These core wires were connected in folds to make a cable which was available for transmission tests, with a cable length of 50km and the cable was provided on the way with two junctions to obtain data on cable properties at these points.

Mean optical losses after installation, with an optical wavelength of 1.3 μ m, are 0.79dB/km for the single-mode optical fibers and 0.81dB/km for graded multimode optical fibers. These values are the smallest in the world for long-wavelength band optical transmission lines installed in the sea in any previous test.

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JAPAN

BRIEFS

HIGH SPEED DATA COMMUNICATION--Nissei Electrical Institute has developed an "Optical Space Transmission Communication System" which provides high speed data communication of 1 megabit/second by sending infrared rays of 0.9μ direct without any cable. The system adopts a GaAs (gallium arsenide) LED (light emitting diode) as the light emitting device of the transmitter, a silicon photodiode (APD) as the light receiving device of the receiver, and provides data communication by sending 0.9μ infrared rays in space over a maximum communication distance of 600m. The system has the following features: (1) It is low priced at ¥1,800,000. (2) It is simple and quick to install requiring merely adjusting sights. (3) It is easily connected to a computer using TTL (transistor transistor logic). (4) Transmitter-receiver combinations can be connected in line with each other up to 4 or 20 combinations, in order to extend the distance. (5) Since the system is small and light, it is easily portable. [Text] [Tokyo TECHNOCRAT in English Vol 13 No 12, Dec 80 p 62]

MICROWAVE CAMERA INFORMATION--NEC has succeeded in picturization of information concerning the earth's surface taken by a microwave camera mounted on Seasat (U.S. Satellite for Oceanographical observation) using digital processing by a large capacity computer. The image data was obtained by processing 100km x 15km area of information into an image on the basis of 25m x 25m area information for one image element. It is said that it took them fully 20-30 hours to picturize the area information of 30km square. Up to date, NASA (U.S.A.), MDA (Canada) and RAE(U.K.) have succeeded in the digital processing of such data. These are all national organizations specialized in space research. NEC developed its own processing method three months after their getting the Seasat observation data and succeeded in digital picturization. [Text] [Tokyo TECHNOCRAT in English Vol 13 No 12, Dec 80 p 62]

MUTUAL COMMUNICATION SERVICE--NTT will start a public data communication service between their DRESS center (which stands for stock management service center and DEMOS center (which stands for science technology computation service center) around next fall. Due to this service, users can use not only the transmission service of DRESS's file to DEMOS (or DEMOS's file to DRESS) but both DRESS and DEMOS services by one terminal equipment now in service. The mutual communication between the centers means greatly improved and easier access to the system for users who can only use one service (DRESS or DEMOS) at present. Aiming at the scheduled introduction of mutual communication

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between centers, NTT is planning to expand the intercenter communication ability between each DRESS center in order to attain file transmission ability which is already available at DEMOS service centers. Moreover, NTT will start a kanji output service at three centers (DRESS Tokyo III, Osaka IV and DEMOS of Tokyo V Science Technology-E batch center) by introducing their high speed kanji printer of 15,000 lines per minute. [Text] [Tokyo TECHNOCRAT in English Vol 13 No 12, Dec 80 p 62]

SURVEY ON THE EFFECTS OF RAIN--KDD (Kokusai Denshin Denwa Co., Ltd.) has announced its experimental plan, and according to KDD's statement, they will start communications experiments based on the site diversity method, and which will use from late 1981 the Yamaguchi Satellite Communication Station and Hamada International Relay Station. This experiment aims to ensure good transmission of the 14/11GHz range (quasimillimeter) electric waves used in communications making use of the Intelsat V satellite. The satellite is expected to be launched into space above the Indian Ocean in 1981. The experiments aim to establish countermeasures for rain, since quasi-millimeter waves are easily affected by rain and this wave characteristic makes communications by one earth station difficult, especially in an area having a heavy rainfall such as Japan. Since a real satellite will be used in the experiment, KDD is expecting to obtain fruitful results concerning electric propagation or communication methods in the quasi-millimeter wave range. [Text] [Tokyo TECHNOCRAT in English Vol 13 No 12, Dec 80 p 62]

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CZECHOSLOVAKIA

CSSR-BUILT TRANSMITTERS ABROAD DESCRIBED

Prague TELEKOMUNIKACE in Czech Nov 80 pp 176-178

[Article by Eng Jindrich Bradach, candidate of sciences: "Our Transmitters Abroad"]

[Text] Transmitters and auxiliary equipment from Tesla Hloubetin are delivered, installed and operated not only in this country, but in other countries as well, frequently nations quite distant from Czechoslovakia, and many of them with demanding climates or with a certain exotic atmosphere, such as Mali, Guinea, Algeria, Morocco, Egypt, Syria, Sudan, Burma, Yemen, Cuba and Colombia.

Certain activities associated with radio broadcasting and television, such as planning territorial coverage by the signal, evaluating reception, planning radio and television transmitter networks, procuring and installing equipment, organizing operation and maintenance of equipment, improvement of communication workers' skills and the like, are often carried on in these countries in ways which differ from Czechoslovak practice. The transmitters and radio and television studios are not always owned by the state. We may encounter situations in which radio or television transmitters are privately owned and are used for profit-making purposes.

Our personnel are acquiring a variety of experience in negotiating the size and conditions for delivery, and in installing and operating equipment. Let us cite some examples. In the past Tesla Hloubetin supplied such transmitter equipment as models SRV 30, 2X SRV 30, and SRV 150 (i.e. medium wavelength, powers of 20, 60 and 150 watts) to South and Central America. Experience has been acquired in Venezuela, Colombia, Ecuador, Chile, Argentina, Brazil and Cuba. With the exception of Cuba, transmitter ownership is generally private. A private individual may request that he be assigned a frequency, provided that one is still available, and given a license to operate a transmitter. If the license is granted, the transmitter owner is given a deadline for completing construction of the station, and provided that the equipment meets the radio engineering requirements specified on the license which he has been issued and that the antenna system conforms to the prescribed radiation pattern, operation may be begun. This sounds quite unbelievably simple, but it is actually the case. Hundreds of private transmitters with powers ranging from tens of watts to tens of kilowatts or more operate in every South American republic. The greatest permissible power, generally in the lower part of the medium wave band, is 50 kilowatts (this does not apply to Cuba, where higher powers are used). Recently, directional antenna systems have been built in order to avoid mutual interference by

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stations operating on the same frequency. In most cases the power is between 1 and 5 kilowatts. We encounter such suppliers as RCA, Gates, Collins, Westinghouse, Continental, Harris, Redifon, Marconi and Philips, but also domestic products, e.g. in Brazil, Chile and Argentina. In Ecuador, transmitters are produced by the Horvath Company, a laboratory in the city of Quito whose owner is of Czech descent. Some transmitters, particularly in Colombia, are owned by the Catholic Church.

Let us cite an arrangement typical in Latin America. The producers of an extremely wide range of equipment, as well as commercial companies, services and other organizations, resort to commercial radio and television advertisements provided by advertising agencies, because they cannot survive in the stiff competition without advertisements. The agencies are connected with profit-making organizations which prepare the advertisements. These advertisements are recorded in special studios and are supplied to radio and television studios which acquire the transmitters (radio or television) for broadcast purposes. Technical services are performed for both the transmitters and the studio equipment and other facilities by specialized companies which work for a number of owners of transmitter equipment. The advertising agencies have offices whose job is to evaluate the stations' reception and popularity. An evaluation (ranking) of the stations' popularity with the listeners is conducted every month. The entire system is reminiscent of football league standings and their changes during successive rounds of games. His station's rank in the standings affects the rates which the transmitter owner can charge for broadcasting advertisements. The competition is stiff and those who end up at the bottom of the standings do not last long. Other interested parties' scramble for their places by requesting licenses so that companies disappear and new ones arise in a short time. The transmitters are used for profit-making purposes. Those who have more influence or more resources can pay for higher-quality programs and achieve first place in the standings, and can charge higher rates for advertisements as a result. Obviously, transmitters and suitably selected programs are also used by political representatives for political propaganda.

Broadcasting in Cuba is arranged in a manner quite different from the South American practices described. The central studios are in Havana, and broadcast centers have been built in all the large cities. Czechoslovakia has also participated in the building of broadcast centers (transmitters with output powers of 30, 60 and 150 kilowatts). Most of the transmitters operate at powers between 1 and 10 kilowatts. There are more than 100 transmitters in Cuba. Programs are relayed to the individual broadcast facilities from the central studios in Havana by cable or microwave link. The relay network has been extended over the entire country. There are several programs, whose shows cater to the widest range of listeners; for example, one program broadcasts domestic and foreign news, another music, and a third current political and economic features and the like. One of the best-known programs is Radio Rebelde, which uses equipment supplied by Czechoslovakia. At night the highest-power transmitters (over 50 kilowatts) are connected with the central studio in Havana and broadcast a single program intended primarily for foreign consumption (United States, Mexico, Venezuela and the like). This program, called Radio Cuba, broadcasts attractive music and information on life in Cuba and its achievements in building socialism, and is popular abroad. I had the chance to convince myself of this personally in Venezuela, which receives an extremely high-quality signal from our SRV 150 medium wavelength transmitters in Cuba, operating near Havana and in Oriente Province.

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Also worthy of mention is shortwave broadcasting from a facility located not far from Havana which has 250-kilowatt transmitters. This station broadcasts information on Cuba in 28 languages around the clock. These programs too are popular abroad, particularly in Latin America.

Broadcasting in Africa and the Mideast is arranged much differently from that in South America. We have gained considerable experience in this area. In recent years, superhigh-powered broadcast transmitters operating in the long middle wavelengths have been built in these countries. We find the investing organizations striving to acquire and install only the best equipment and also to install modern directional antenna systems. Most interest focuses on transmissions beamed abroad. For example, Iraq is interested in beaming its transmissions to Iran and Syria, Syria to Egypt and Jordan, and Egypt to Syria, Jordan, Saudi Arabia, Israel and the like. The use of four-element directional antenna systems with transmitters in the 1-2 megawatt range is not uncommon in these countries. Nor is it uncommon to use multielement antenna systems for long wave broadcasting. The broadcast facilities are state-controlled. Tesla has installed broadcast transmitters in a number of countries, for example Algeria, Sudan, Morocco, Egypt, Syria, Yemen, Guinea and Mali. The first of many construction projects was carried out in 1958-1960 in Egypt, where 3 X SRV 150 triplexed transmitters (output 450 kilowatts) are operating with two-element directional antenna systems. After good experience with these transmitters, we have installed a 600-kilowatt transmitter in the same location (Tesla 3 X 200 kilowatts, three transmitters in parallel using a triplexer). The antenna system is designed in an interesting way. It uses four masts, of antifading height, arranged in a square 100 degrees on a side. In the center of the square is the distributing equipment, which distributes to the two antennas the high-frequency energy coming via the feeder from the transmitter. The other two antennas are grounded by inductive reactance. The two active masts are driven by the same large currents, in phase. As a result of coupling, the currents in the parasitic radiators are about 0.7 times those in the active radiators. The reactances in the parasitic radiators are so chosen that the phase of the current in the parasitic radiators leads that in the active radiators by 100°. The result is considerable radiation in one direction and less in the opposite direction, as was required. The antenna system has switching equipment which makes possible four different connections:

--the two southern masts active, the two northern ones passive, radiation beamed toward the south;

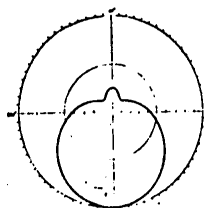
--the reverse of the arrangement above, radiation beamed to the north;

--the two western masts active, the two eastern ones passive, radiation beamed toward the west;

--the reverse of the preceding arrangement, radiation beamed toward the east.

This makes it possible to shift the radiation maximum to any of the four cardinal directions.

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Obr. 1. Příklad vyzářovacího diagramu v horizontální rovině anténního čtyřprvkového systému

Fig 1. Horizontal-plane radiation pattern of a four-element antenna system.

It is worth mentioning the way in which Egypt and Syria arranged to increase output from 450 kilowatts to 1000 kilowatts and from 600 kilowatts to 1200 kilowatts without strengthening the existing insulation of their antenna systems. In the past, transmitter buildings were made rather large, so that as the current trend to decreasing size of transmitters and auxiliary equipment develops, such things as the installation of additional transmitters and diplexers can be carried out without much adaptation work in an existing building. The situation is not so good as regards the antenna system, which has a base insulator and cable insulators and is correctly dimensioned only for the existing output power. Thus an increase in output means stronger insulation, a rather lengthy suspension of transmission, disassembly of the existing antenna system and reassembly after strengthening its insulation. In Egypt it was arranged to increase the output of a two-element antenna system dimensioned for 450 kilowatts to an output of 1,000 kilowatts (carrier wave) by adding a third mast, whose location and supply voltage and phase were so chosen that:

- the existing radiation diagram in the horizontal plane would not be disrupted;
- the third mast would take on the output difference from 450 to 1000 kilowatts.

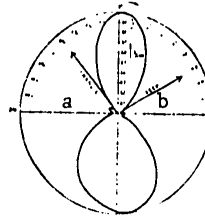
In this arrangement only the ground network is added to. The installation of the third mast results in only an insignificant interruption of broadcasting.

Similarly a plan is now being prepared in Syria according to which a transmitter's output will be increased from 600 to 1200 kilowatts, and the existing directional two-element antenna system will be augmented with a third mast which will take up the increase in power.

In planning and constructing stations with large outputs (megawatt range), due attention must be paid to the international recommendations of CCIR, according to which specific radiation limitations must be observed in certain cases when interference might arise between transmitters operating on the same frequency. These include, for example, limitations of power at night, in certain directions or at certain angles of elevation. Designing an antenna system intended to meet the above radiation

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limitation requirements requires synthesis of the system or possibly system modeling. An example of such a radiation pattern, which meets the stringent requirements described and which we designed for a specific station in Egypt, is shown in Fig 2.



Obr. 2. Příklad předepsaného tvaru horizontálního vyzařovacího diagramu megawattové stanice v Egyptě

Fig. 2. Prescribed form of radiation pattern of megawatt station in Egypt.

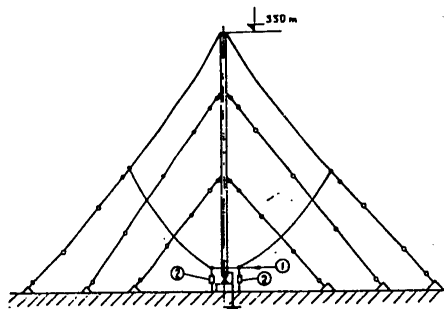
KEY:

- a. France
- b. USSR

Fig 3 is a diagram of an interesting antenna system which we installed for a 2 X DRV 750 Tesla long-wave transmitter (1,500 kW output) in the city of Tipaza, Algeria, about 70 km from the capital. The antenna is located close to the sea. It is 351 meters tall and uses trapezoidal modulation. The transmitter covers two-thirds of the territory of Algeria with a high-quality signal and gives very good reception in Western Europe, particularly in France, West Germany and England. According to statements by the RTA radio and television technical management in Algiers, this transmitter is among the Algerian broadcast service's best equipment. Let us also note as a matter of interest that the plans for constructing the network allow for additional megawatt-level transmitters (long and medium wavelength). These include, for example, Bechar, where a 3-element long wave directional antenna system with an output of 1-2 megawatts and an antenna system gain of 6 dB directed towards Spanish Sahara is required.

[Fig. 3 on following page]

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Obr. 3. Příklad antény pro DV vysílač Tesla 2 X DRV 750, Alžírsko

Fig. 3. Antenna for Tesla 2 X DRV 750 long-wave transmitter, Algeria.

As another interesting example from the Arab world let us mention the system supplied by Continental USA to Saudi Arabia. The antenna system consists of two Yagi-Uda antennas. The lower half of the antenna is mirror-shaped. According to the manufacturer's data, the system gain within ± 15 [as published] of the frequency range is 8 dB better than that of a single classical-design radiator. The system is suitable for installation in extremely demanding, climatically difficult locations, particularly in the Sahara. The reflector and directors are permanently connected to the ground network. They are designed as self-supporting towers without cable insulators. An advantage of this antenna system is the low construction height (quarter wave), the high directionality and in particular the fact that it is not necessary to install cable insulator and a base insulator, which means reliable operation even in areas with extremely frequent atmospheric disturbances.

It is worth noting that Tesla Hloubetin is now offering a Yagi-Uda antenna system (gain about 10 dB) with a 2 X SRV 750 transmitter (competitive design for sale of medium-frequency transmitter to Iraq).

Let us return to Algeria. Like Egypt, and in contrast to other African and Arab countries, Algeria is well supplied with engineering and technical personnel in the broadcasting services. Current practice in these countries (it is practically the same in Syria) is to send broadcast and television workers abroad for a long apprenticeship or advanced study. For example, in Syria we encountered engineers who had studied in London, Paris, Dresden, Karlsruhe, East and West Berlin, Moscow, and Prague; some had served an apprenticeship in Japan, the United States and West Germany. In Algeria, a program for measuring the intensity of signals from foreign stations in Algeria was completed about two years ago. Field intensity measurements were carried out during several monthly periods over practically the entire territory of Algeria. Use of the CCIR program, with a computer, made it possible to evaluate the effective conductivity of the ground surface throughout Algeria.

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Now let us mention Syria. Our transmitters and antenna systems have gained a good reputation there. Currently Tesla transmitters have been operating in Syria from more than 20 years (for example, on SRV 30, 2 X SRV 30, and 2 X SRV 150 with a directional antenna system). Recently a medium wavelength Tesla 2 X SRV 750 transmitter (1500 kilowatt output) was put out into operation in Dayr al-Zawr. It is coupled with an antenna system designed and furnished by Czechoslovakia. The antenna system consists of 4 antennas of antifading height located in a square. It has switching equipment for directional or all-directional operation. In directional operation, the main radiation is oriented toward Baghdad in Iraq. The smaller lobe radiates in the reverse direction. The transmitters and the antenna system meet the demanding requirements of the Syrian plan.

In addition, construction of a medium-wavelength transmitter with an output of 200 MW is now being completed: the supplier is Siemens. It also has a 4-element antenna system operating on a principle similar to that of the transmitter in Dayr al-Zawr. The Syrian broadcasting plan for the next 5 years (in whose development we acted as consultants on radio wave propagation and the selection of antenna systems, frequencies and transmitter outputs) calls for construction of transmitters for broadcasting additional programs. The construction will include several dozen high-power transmitters (400, 600, 1,000, 1,500 and 2,000 kilowatts). Thanks to the good performance of our transmitter equipment and antenna systems, Czechoslovakia will not be without hope in the international competition to supply this equipment to Syria.

It is clear from the examples cited that Czechoslovakia is achieving good results in its exports of transmitters and auxiliary equipment, particularly middle-wavelength and long-wave transmitters (not to mention the export of TV transmitters to the Soviet Union, where Czechoslovakia has attained the figure of several hundred transmitters exported). However, it is necessary to devote major efforts to innovation in the equipment, for competition is constantly bringing to the market new and improved equipment and more effectively designed antenna systems. As an example we may cite an extract from information given by AEG-Telefunken in June 1980.

AEG-Telefunken has installed a transmitter for programs 1 and 2 at Flevoland near Amsterdam for the Dutch Ministry of Communications. Installation of the equipment took 12 months. The antenna system is directional. It is designed for two programs at frequencies of 747 and 1008 kHz. A map of territorial coverage by the transmitter is given in Fig. 5 [not reproduced]. The transmitters have a power of 600 kilowatts and a range of 150 km. According to manufacturer's data, the transmitters save a million kilowatt-hours a year through good transmitter efficiency. The transmitter is the first of the 600 kW PANTEL (Telefunken Pulse Anode Modulation System) series. The equipment has a 10 percent higher efficiency than the transmitters currently in use. The transmitter includes only two electronic tubes, both of the same power, while the other stages are completely transistorized. Anode thermal losses are used to heat the transmitter building. Considerable effort was put into the design of the antenna system. It was necessary to design an antenna system suitable for both frequencies, of antifading design, without disruptive effects on the spatial waves. Mathematical modeling was used in the design of the system. Measurements of the proposed antenna system which had been simulated on a computer, were also made on a 1:100 scale model. The two-component antenna system comprises two masts, each 200 meters tall, which are center fed. The anchor cables are not separated with cable insulators. The antenna (even though center fed) operates on the same principle as was described in TELEKOMUNIKACE, No 6, 1980.

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In spite of the great scope of space communications, there is still interest in constructing and expanding or modernizing the networks of so-called "classical" (long and medium wave) media, as we have shown through several foreign examples. The Arab countries in particular make exacting demands regarding the parameters of the equipment they require. If we wish to keep pace with worldwide competition in transmitter exports, we not only need to keep abreast of what top foreign transmitter producers are bringing out, but in addition must study and analyze how broadcast services are organized in the countries in question and to what use broadcast facilities are put (in South America, for example), so as to adapt the design of our export equipment to those specific requirements.

It is gratifying that the activities of the PZO KOVO import-export company, in cooperation with the transmitter supplier Tesla Hlubetin, are in accord with these requirements, as attested for example by our participation in the current design competition to furnish medium wave broadcast transmitters to Iraq, as well as by the recently signed contract to supply medium-wavelength Tesla SRV 750 transmitters, including a directional antenna system, to South Yemen (Aden), and by a number of expert analyses and consultations by our personnel in Syria, Morocco, Cuba, Mozambique and other countries.

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INTER-AFRICAN AFFAIRS

WORLDWIDE MONOPOLY OF NEWS AGENCIES ALLEGEDLY BROKEN

Paris AFRIQUE-ASIE in French 5 Jan 81 pp 35-36

[Article by Pierre Clary: "Breaches in the News Agencies Allegedly Broken"]

[Text] The tremendous increase in national news agencies since 1973 is only a step prior to the restoration of balance in news collection and dissemination.

Press information is the first field which will make us think about the new world order in information but, regardless of their orientation, the countries of the Third World very quickly manifested their desire to establish their own information networks. Starting in 1961, at Bangkok, 14 Asian countries established the Asian Information Agency Organization and thus pointed to the timeliness of having a regional agency. In 1963, at Tunis, 29 African countries established the African Information Agency Union and drafted a blueprint for an African press agency. The countries of Latin America studied the same problem at Santiago de Chile in 1961.

Needs were manifested at that time but the political determination did not exist; it was as a matter of fact the Algiers conference of nonaligned countries in September 1973 which in a coherent fashion presented the priorities regarding the press agencies particularly under the impetus of Yugoslavia, Algeria, Mexico, Tunisia, and India.

This date somehow was a turning point because, following a period of limited and scattered efforts, it opened up a period of achievements that were part of an overall blueprint.

In just 10 years, national press agencies throughout the world doubled; some countries still do not have their own agencies, especially in Africa, but the international program for the development of communication sponsored by UNESCO should facilitate the establishment of these new agencies. Since 1975, in particular, many agencies have been created in Africa and the Middle East. That was true of countries which were getting their independence, such as Angola, with the ANGOP [ANGOLAN PRESS AGENCY], Mozambique with the AIM [MOZAMBIQUE INFORMATION AGENCY]; but that was also true of countries which did not yet have their national agencies, in spite of several years of political independence, such as the agency of Burundi (ABP [BURUNDIAN PRESS AGENCY]), dating back to 1975, the agencies of Tanzania (SHIHATA [TANZANIA NEWS AGENCY]), Togo (ATOP [TOGOLESE PRESS AGENCY]), and of Mauritania (AMP [MAURITANIAN PRESS AGENCY]) were all created in 1976.

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In the Near East, the increase in funds of the petroleum companies promoted the development of news agencies; those of Qatar (QNA [QATAR NEWS AGENCY]), of Kuwait (KUNA), and of the United Arab Emirates (WAM) date back to the years 1975-1976.

The tremendous increase in national news agencies is only one step prior to the restoration of balance in the collection and dissemination of news; all of these agencies cannot in short-range terms operate in a satisfactory fashion because they necessarily must provide themselves with the technical support facilities, they must recruit professional newspapermen at home, they must create collection networks on the national level. As a matter of fact, the creation of an agency makes it possible to guarantee satisfactory coverage of the country and can prevent an imbalance between the regions and between urban and rural areas; an agency must be an integral part of the national communications development program.

The western international agencies reproach these agencies on account of their official status. The Anglo-Saxon agencies (1) as a matter of fact are the result of press groupings. But, in a country of the Third World, even if it does decide to adopt a free-enterprise system, the local media cannot establish an agency; they have neither the money nor, in some cases, the desire. Besides, establishing a national press agency appeared as an act of political independence which was too long neglected by certain countries.

In this same vein, the western agencies are hostile to direct or indirect participation of UNESCO in national or regional projects calling for the creation of agencies or cooperation among agencies; they consider that to be intervention which goes beyond the framework of authority granted to the UNESCO. One might note that the United States did not agree to participate in the special UNESCO program.

But, to get through the second stage, the agencies of the Third World countries must progress toward regional and international actions which alone can enable them to guarantee information exchange outside the circuits established by the big western press agencies (2). Independently of these types of agreement, the bilateral agreements, which can relate to the exchange of information and correspondents, the training and translation services constitute one of the forms of cooperation that is most widespread among agencies of the Third World; agreements drawn up on a broader basis are supplementary to these bilateral agreements.

One of the ways to guarantee a balanced exchange situation can be found actually on the regional level. The best-known example is represented by the Caribbean News Agency (CANAN), an agency which has been operating since January 1976; this is one of the first results of exchange within a regional framework but it is a good idea to spell out here the conditions for its creation and its operating style.

In the past, the regional service was provided by Reuter; but, realizing that this service was no longer profitable, the latter decided to stop it and that persuaded the information agencies in the region--totaling 17, including newspapers, private radio stations belonging to foreigners and citizens, one government radio station and one government television station--to support the undertaking for a new agency. Contrary to a certain political desire on the part of the governments in the region,

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the cooperative form was adopted here; the region's information organs thus became the owners of the agency. Reuter heavily contributed to launching the operation and links between the regional agency and the international agency remain close; CANA is Reuter's agent in the Caribbean and has exclusive rights to the dissemination of news from Reuter, while Reuter has exclusive rights from CANA for England.

Overall, CANA produces about 20,000 words of regional news per day and 25,000 words of international news. It concluded information exchange agreements with numerous national agencies, and in particular it has an exchange agreement with Prensa Latina (Cuba's press agency).

Regional projects exist also in Asia: the Asian Information Exchange Network (ANEN). Latin America on every possible occasion reaffirms its desire to establish a news agency for Latin America and the Caribbean or at least a regional exchange organization.

But the regional project which should turn out to be successful in short-range terms is the Panafrican News Agency (PAFNA). Following the Lobito meeting last January, the agency's guidelines were spelled out, since the option of a supranational agency, with international overtones, appeared unrealistic. The agency, which has the theoretical support of all African countries and whose headquarters will be in Dakar, will have the mission of collecting information coming from national press organs and redisseminating it all over the African continent; it will draw on five regional pools. The agency's central services will be used for the translation of news and it is expected that agency journalists will cover the main events taking place on the African continent. We must also mention here the data bank project which will facilitate information consultation on each African country.

The establishment of the agency is often presented as being tied to the establishment of the African satellite telecommunications network, called PANAFTTEL. But, even in the absence of such an outfit, one must unfortunately note that the South African Argus Africa News Service (3) has managed to establish a collection network which, oddly enough, gives the apartheid press outstanding continental coverage.

The Pool of the Nonaligned

The pool of press agencies of the nonaligned countries obviously is in the very forefront of the Third World undertakings. On the initiative of the Yugoslav press agency Tanjug, following the Algiers summit meeting, the pool was operated on an experimental basis as of January 1975 with 12 agencies; at the beginning of the pool's activity, the Yugoslav agency took care of centralized administration, translation, and redistribution under its own signature. This form of collaboration among agencies, which promotes exchanges between the countries on entirely new foundations, was very rapidly accepted and, during the New Delhi and Colombo conferences, in 1976, the nonaligned countries gave the pool a charter.

Right now, the pool consists of more than 70 press agencies; however, 40 agencies participate regularly in exchanges within the pool which takes care of the dissemination of 40,000 words per day in four languages (English, French, Arabic, and Spanish).

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Some agencies in the pool have the job of redistributing information on the regional level, for example, Tanjug, the Indian News Agency called Samachar, the Iraqi News Agency INA, Prensa Latina, NOTIMEX, the Mexican agency.

The pool thus does not appear as an international agency since each member participates in its operation with its own resources. On the other hand, it tries to coordinate the communications networks between member countries and to reduce the communications rates. Questions of transmission cost precisely constitute one of the essential problems with which the new agencies are confronted; they would like to generalize the press bulletin service and adapt it to their needs while making optimum use of existing resources--high-frequency radio broadcasts, for example--and by joining satellite communications projects when they do exist.

The pool collaborates with the UNESCO to coordinate their respective actions; it is also interested in training programs for agency journalists by getting together with existing institutions.

IPS (Inter Press Service), an agency created in 1964, upon the initiative of journalists, which always had the job of redefining the content and flow of information concerning the Third World, has also joined the pool, in particular making available to it its Latin American network and participating in the redistribution of information from the pool on an international scale. Independently of this collaboration, IPS since 1979 has been participating in a cooperation accord among certain South American agencies, the ASIN, whose initiator is the Venezuelan news agency VENPRESS.

The international press agencies often are present on the occasion of this worldwide change. This was true of Reuter in the case of CANA or the establishment of the Tanzanian news agency. AFP [French Press Agency] is not indifferent to these new agency establishments perhaps because of the regional ambitions of MENA, the Egyptian agency, in connection with the Islamic information agency project or in conjunction with the establishment of the agency of the Gulf (4). At the Stockholm international conference in April 1978, one of the participants was able to say: "The more numerous the media are throughout the world, the more effective will the work of the big agencies be since the national agencies will then play the role of first-line gatekeeper." This thought shows the role which the big western news agencies intend to continue to play.

The stage following this decisive decade should bring the development of the resources of the national agencies in terms of personnel and technical equipment to strengthen the international redistribution of press information, involving a reorganization effort which, for the time being, nevertheless remains entirely limited on the quantitative level, since the three first agencies with a Third World orientation, Tanjug, IPS, and MENA, disseminate only a little more than one percent of the words transmitted each day by all of the international agencies.

FOOTNOTES

1. AFP, which has public status and which conducts most of its business with clients in the public sector, cannot use the same arguments.

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- 2. See AFRIQUE-ASIE, No 227.
- 3. Agency of the Argus press group of H. Oppenheimer.
- 4. The regional bureau of the AFP and the Agency of the Gulf have their headquarters in the same city, Handma, Bahrein.

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5058
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MADAGASCAR

BRIEFS

MICROWAVE NETWORK--The Malagasy Democratic Republic in 1982 will have Africa's most modern hertzian network, partly operating with the help of solar energy. This network will provide telephone and television coverage for the southeastern part of the island, between Fianarantsoa and Toliara (Tulear), the island's most heavily populated coastal zone. The total order, which was obtained by Thomson-CSF, comes to more than F100 million (or 5 billion Malagasy francs). It involves the turnkey delivery of a network of 45 hertzian stations and the supply of the installations for 19 television transmitters. The 45 stations will be equipped with the new TFH 250 unit, with 960 telephone channels with low power consumption, operating in the 6 GHz frequency band. To achieve a maximum reduction in the consumption of fuel to be used in supplying the equipment with energy, 18 stations will be equipped with supply systems operating on solar energy. The others--which require a larger installed power because of the need for supplying several units (transmitters, multiplex, service equipment units) will be provided with turbines operating on closed circuit. This particularly reliable solution requires a minimum of maintenance. The television transmitters will be supplied by LGT, an affiliate of Thomson-CSF, the world leader in television transmitters and retransmitters, whose capacity goes as high as 1 kw. To make it possible to start the network by the required deadlines (first half of 1982), Thomson-CSF has already sent a technical team to the area to take care of the civil engineering work. The company will also participate in the training of operating personnel and maintenance technicians. [Text] [Paris MARCHES TROPICAUX ET MEDITERRANEENS in French 23 23 Jan 81 p 205] 5058

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