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Worldwide Report

TELECOMMUNICATIONS POLICY,
RESEARCH AND DEVELOPMENT

No. 238

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WORLDWIDE REPORT
TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

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GRENADA TO RECEIVE SOVIET PROGRAMMING VIA SATELLITE

PA091826 Paris AFP in Spanish 0240 GMT 7 Aug 82

[Text] St Georges, 6 Aug (AFP)--Grenada will install a satellite ground-station to receive Soviet radio and television programs.

This topic was discussed during Grenadian Prime Minister Maurice Bishop's recent visit to Moscow, Radio Free Grenada reported.

The Grenadian prime minister said that "this will make it possible to break imperialism's cultural yoke on Grenada" and to receive news "from progressive and socialist programs different from the garbage from the United States that we must now watch."

Meanwhile, the Grenadian radio station noted that the Soviet Union has donated steel equipment and farming material valued at 14 million and that it signed an agreement to purchase cacao, nutmeg and bananas from Grenada at fixed prices over a 5-year period.

These trade agreements with the USSR will permit Grenada to diversify its trade relations and to develop new markets, Bishop said.

During his trip to Moscow, Bishop also obtained a line of credit for \$7.5 million, payable in 10 years at an interest rate of 3 percent and with a grace period of 3 years.

This credit will permit the construction of the satellite groundstation and will help to finance studies on the possible construction of a port on the island's eastern coast.

CSO: 5500/2341

WORLDWIDE AFFAIRS

DUTCH TV NETWORK CARRIES LIVE TRANSMISSION FROM SOVIET SATELLITE

PM301301 Amsterdam DE VOLKSKRANT in Dutch 26 Jun 82 p 7

[Unnamed "own correspondent" report: "Cable Television Broadcast Pictures from Russian Satellite"]

[Text] Amstelveen--Despite a warning from the Culture, Recreation and Social Welfare Ministry the Amstelveen Cable Television Network showed pictures from the Russian Gorizont communications satellite Friday evening [25 June]. The broadcast was terminated voluntarily at 1930 hours because the linkup between SOYUZ-T6 and SALYUT-7 was delayed.

Russian television, which had intended to show live pictures of the linkup, ended the broadcast because of the late hour. Moscow is two hours ahead of west Europe.

Thursday evening the Amstelveen Cable Television Network broadcast a live report of the SOYUZ launch, also deriving from the Gorizont satellite. The pictures were accompanied by a commentary by a Dutch space expert. After about an hour a Culture, Recreation and Social Welfare Ministry official telephoned to say that the broadcast must be stopped immediately, the Amstelveen Central Antenna System Foundation complied.

The official banned the broadcast because it involved a program produced by Amstelveen, because of the accompanying Dutch commentary. When a locality wants to produce a program of its own, permission must first be asked of the minister for culture, recreation and social welfare. The two broadcasts were intended as experiments. The Amstelveen Cable Network wanted to know whether viewers want a greater choice of programs.

CSO; 5500/2341

BRIEFS

TAIWAN-UK FAST FACSIMILE SERVICE--Taipei, 3 Aug (CNA)--The International Telecommunications Administration (ITA) opened direct fast facsimile service between the Republic of China and the United Kingdom starting Tuesday. Fast facsimile service between the two countries was originally transferred through Hong Kong. To improve quality and speed of the service, the ITA decided to open the direct service. The charge is 400 NT dollars (about 10.5 U.S. dollars) for a 276 mm long and 193 mm wide of any document, chart or kind of sheet language. [Text] [OW031357 Taipei CNA in English 1340 GMT 3 Aug 82]

INTERNATIONAL COMMUNICATIONS CONFERENCE OPENS--Sofia, 10 Aug (BTA)--A meeting between the representatives of the administrations of the communications of Bulgaria, Kuwait, Turkey, Iraq and Syria opens today. The possibilities for direct and transit telecommunications via the territories of the countries participating in the meeting will be discussed. The telecommunication main will follow the Europe-Sofia-Ankara-Damascus-Baghdad-Kuwait route and then further, via a cable crossing the Indian Ocean, to Pakistan, India, Sri Lanka, Bangladesh, Burma, Malaysia, Indonesia and up to Australia. The countries participating in the meeting will inform each other of the present possibilities of their communication systems, ensured by terrestrial radio relay and coaxial cable lines, with a view of establishing already in the initial stage new communication links to meet the present and future demands. Discussed will also be some questions pertaining to technoscientific cooperation in telephone and telex communications and to broadcasting and telecasting of the Eurovision and Intervision programmes. [Text] [AU101500 Sofia BTA in English 1430 GMT 10 Aug 82]

'TASS,' PHILIPPINES AGENCY SIGN ACCORD--An agreement on cooperation and exchange of information between TASS and the PHILIPPINES NEWS AGENCY (PNA) was signed in Moscow on 7 July. The document was signed by S.A. Losev, general director of TASS, and G.S. Cendana, Philippine minister of public information. (V. Malivanag), general director of the PNA, was present at the signing. The minister and the general director are in Moscow in connection with the visit to the USSR by the prominent Philippine state and public figure I.R. Marcos, governor of Greater Manila. [Text] [PM141255 Moscow IZVESTIYA in Russian 8 Jul 82 Morning Edition p 4]

NEWS AGENCY COOPERATION WITH DPRK--Georgetown, Guyana, 21 Jul (CANA)--The state-run GUYANA NEWS AGENCY [GNA] has signed a cooperation agreement with the CENTRAL NEWS AGENCY of the Democratic People's Republic of Korea. At the ceremony Korean ambassador to Guyana, Pak I-hyon, said the exchange would further develop relations between Guyana and his country. Courtney Gibson, editor of the GNA, described the agreement as a further step towards building a new international information and communication order. [Text] [Bridgetown CANA in English 2223 GMT 21 Jul 82]

MEDIA COOPERATION AGREEMENT--A cooperation agreement on exchange of news and photographs and a work protocol were concluded and signed on 4 July in Kabul between BAKHTAR information agency of the DRA and ORBIS Press Agency of the CSSR. The agreement and protocol were signed by the heads of the BAKHTAR and ORBIS agencies and documents were exchanged. According to this agreement cooperation between the DRA and CSSR concerning the exchange of news and publications for the information of the peoples of the two countries regarding their life, work and development (?would be exchanged). [Text] [Kabul Domestic Service in Dari 1530 GMT 5 Jul 82]

AGREEMENT SIGNED BY ZIMBABWE-USSR--An agreement between the USSR State Committee for Television and Radio Broadcasting and the Zimbabwe Broadcasting Corporation was signed in Harare by Popov, deputy chairman of the USSR State Committee for Television and Radio Broadcasting, and (Tirivati Kangai), director general of the Zimbabwe Broadcasting Corporation. The document provides for the exchange of television films, programs and news-reel material on the political, economic and cultural life of the Soviet Union and Zimbabwe. [Text] [LD030106 Moscow Domestic Service in Russian 2230 GMT 2 Jul 82]

MEXICO SYMPOSIUM ON MASS MEDIA--An international symposium on "The Mass Media" has ended in Mexico. It was organized by the newspaper EL DIA (one of the leading and most influential newspapers in Mexico), TASS reports. The symposium examined a wide range of questions touching on the process of the development of the mass media, the search for ways of resolving the problems existing in this field and the elaboration of future directions for modern journalism. Representatives from the USSR, Cuba and Nicaragua stressed that the mass media must actively influence public opinion and expose the inciters of war and champions of the arms race who are trying to mislead world public opinion. [Text] [PM060859 Moscow IZVESTIYA in Russian 29 Jun 82 Morning Edition p 4]

RADIO COOPERATION WITH BULGARIA--An agreement for cooperation between the Sri Lanka Broadcasting Corporation [SLBC] and the Bulgarian radio was signed on 2 August at the SLBC. This agreement will help strengthen the bonds of friendship between the SLBC and the Bulgarian radio through the exchange of programs depicting the cultures of the two countries. [Colombo International Service in English 1045 GMT 3 Aug 82]

PRC-U.S. FIRM CABLE AGREEMENT--Beijing, 27 Aug (XINHUA)--An agreement on the transfer of technology for manufacturing telephone cables has been signed by Chinese corporations with the Essex Group Inc., a subsidiary of

the United Technologies Corporation, U.S.A., according to the Ministry of Posts and Telecommunications. According to the agreement which took effect from 15 August, the production facility of the Chengdu cable plant will be revamped to manufacture polyolefine insulated and integral sheathed telephone cables, developed by the U.S. Essex Group and used throughout the world. The Essex Group will transfer overall production techniques, experiences and know-how for the cable products and take charge of the technological process design and the selection of production equipment, the agreement says. The group will also give technical training and send engineers to the plant to render technical services. The group will also act as sales agent for the products in international market. The new facility will open by 1984 and reach the designed capacity by 1988. [Text] [OW271632 Beijing XINHUA in English 1513 GMT 27 Aug 82]

FRG SEEKS HALT TO RADIO JAMMING--Bonn, 30 Aug (DPA)--The Federal Government is still making efforts "with the means at its disposal" to stop the jamming of Western radio broadcasts by the Eastern bloc countries. This fact emerged from the FRG Government's response--made public today--to Werner Marx, chairman of the defense committee. It was pointed out in the response that Federal Foreign Minister Hans-Dietrich Genscher has called on his Bulgarian counterpart to stop the jamming of Deutsche Welle broadcasts in Bulgarian. Marx said that according to the government statement, emphatic protests were made last spring to the Soviet Embassy in Bonn regarding the Soviet jamming of Deutsche Welle Russian and Polish language broadcasts. At the plenary session of the CSCE followup conference in Madrid, Genscher criticized Poland's jamming of radio broadcasts. Marx commented that in the past few weeks an increasingly massive campaign by Soviet-controlled media has been observed against American transmitters in particular. One could assume that the Polish military regime is trying to blame its increasing internal difficulties on the so-called influence of foreign "agitation stations." Everyone knows that the American stations and Deutsche Welle in particular aim at the highest degree of objectivity in their broadcasts in order to be able to truthfully inform people in Eastern Europe about events. [Text] [LD301904 Hamburg DPA in German 1258 GMT 30 Aug 82]

PRC TRANSMITTERS TO CENTRAL AFRICAN REPUBLIC--Beijing, 31 Aug (XINHUA)--China and the Central African Republic today signed a contract on the extension project of the Bimbo broadcasting station. According to the contract which was signed in Bangui, capital of Central Africa, China will provide two sets of China-made 50 kw transmitters and antennas for the station, and will undertake the construction of the machine room and other subsidiary buildings. [Text] [OW010105 Beijing XINHUA in English 1537 GMT 31 Aug 82]

CSO: 5500/2236

INTER-ASIAN AFFAIRS

TALKS WITH SINGAPORE COMMUNICATIONS MINISTER HELD

BK040958 Jakarta ANTARA in English 0734 GMT 4 Aug 82

[Text] Jakarta, Aug 4 (ANTARA) -- Singapore Minister of Communications Ong Teng Cheong held talks here Tuesday with his Indonesian counterpart Rusmin Nuryadin. The discussions, held at the Ministry of Communications here, had the nature of routine consultations and this time dealt with telecommunication and air transportation between the two countries, the spokesman of the Ministry of Communications, Abdullah, told newsmen after the meeting.

The Singapore minister arrived at Halim Perdanakusuma Airport at 0900 yesterday for a 2-day visit in the company of senior officials, including Secretary General of the Ministry of Communications Sim Kee Boon and Director of Telecommunication Sun Siauw Ma. He was accompanied at the talks by the Singapore ambassador here, J.F. Conceicao.

One of the topics discussed was the possibility of Australia's participation in the submarine cable communication system (SKKL) linking Southeast Asia with the Middle East and Europe. This project is an extension of the Medan-Singapore SKKL system built on the basis of a memorandum of understanding signed by the two communications ministers on May 23, 1981.

The two countries have agreed to build the two systems -- one linking Medan-Singapore-Middle East-Europe and the other serving Singapore-Indonesia-Australia. The two projects are now still in the feasibility study stage. The western project is being handled by the four countries Indonesia, Singapore, Saudi Arabia and France and the eastern project by Indonesia, Singapore and Australia.

In the field of air transportation the two sides discussed matters concerning the "Flight Information Region" in the South China Sea area in the light of the best interests of civil aviation in the surrounding countries, including Indonesia. They also discussed the two of the Indonesian Palapa A-1 satellite for border communication between the two countries for realization early next year [sentence as received]. In the first stage, the satellite to link Singapore with Pekanbaru (Riau), Pontianak (West Kalimantan) and Samarinda (East Kalimantan).

CSO: 5500/2236

INTER-ASIAN AFFAIRS

BRIEFS

CHINA-JAPAN TV PLANT--The China National Electrical Devices Corporation and Japan's Hitachi have formally opened a plant in Xianyang, Shaanxi Province, which is designed to produce 960,000 colour picture tubes a year. The plant has already turned out more than 60,000 tubes, which have been inspected and approved by Chinese and Japanese engineers. The Chinese corporation now has four plants producing colour picture tubes, integrated circuits, chromium plates, and getters, a substance used to remove traces of gas from vacuum tubes. All have met world standards after only 3 years of trial production. As recently as 1980, China was unable to manufacture any of these products. [Beijing CHINA DAILY in English 23 Jul 82 p 2]

JAPANESE COMMUNICATIONS DELEGATION IN BEIJING--Beijing, 31 Aug (XINHUA)--State Councillor Gu Mu met this afternoon in the Great Hall of the People with a delegation from the Communications Committee of the Japanese House of Representatives led by Committee Chairman Kiyohi Mizuno. They discussed development of technology exchange in telecommunications. This evening, the delegation gave a return banquet attended by Wen Minsheng and Yang Taifang, minister and vice-minister of posts and telecommunications, and Koji Watanabe, minister of the Japanese Embassy in Beijing. [Text] [OW312031 Beijing XINHUA in English 1549 GMT 31 Aug 82]

CSO: 5500/2236

AFGHANISTAN

BRIEFS

RADIO STATION GEARED TO EMIGRES--Kabul, 26 Aug (TASS)--The first issue of the newspaper VOICE OF THE HOMELAND has come out. The paper is published by the National Fatherland Front and is geared to Afghans who have left their homeland under the influence of lying imperialist propaganda. The appeal by Babrak Karmal, the Afghan head of state, to his compatriots is published in the first issue of the paper. It contains a call to those who have been deceived and maltreated to return to their homeland and contribute to the development and prosperity of the new Afghanistan. Two hundred thousand issues of the paper have been printed. Broadcasts by the Voice of the Homeland radio station have also begun. They are being made in the Dari, Pashto and English languages. [Text] [LD270430 Moscow TASS International Service in Russian 0807 GMT 26 Aug 82]

DETAILS FOR NEW RADIO--Kabul, 28 Aug (BAKHTAR)--A 2-hour radio programme under the name of the "Voice of the Homeland" beamed to Afghans living abroad went on the air here by the radio-broadcasting station of the DRA on the evening of 27 August. The programme, broadcast on 19-25 and 49 metre bands everyday from 7 to 9 pm local time, presents facts about the revolution in Afghanistan and exposes the real faces of bandits and their criminal acts committed against the people and revolution in Afghanistan. The programme also devotes its time to the successes achieved by the April Revolution, especially its new evolutionary phase. [Text] [LD290600 Kabul BAKHTAR in English 0430 GMT 29 Aug 82]

CSO: 5500/2236

COMMUNICATIONS SATELLITE POSES CONCERNS FOR WEST AUSTRALIA

Reassurance on Orbit

Perth THE WEST AUSTRALIAN in English 20 Jul 82 p 33

[Text]

THE Federal Government has given fresh assurances that WA will not be disadvantaged by a decision to change the orbit of the proposed Australian communications satellite.

The Minister for Industrial Development and Commerce, Mr MacKinnon, said yesterday that the State Government's fears about the move had been largely put to rest.

The State satellite advisory committee was worried that a decision to move the orbital location from above Wyndham to a position off the east coast of Australia could seriously disadvantage WA.

At the new location, ground stations in WA would need to focus at an angle close to the horizon in order to "see" the satellite.

Travel

In addition, the signal would have to travel farther through the atmosphere. During heavy rainfall,

in WA and the WA spot-beam 48 per cent stronger.

This will particularly benefit users of the proposed remote area television and radio service, enabling farmers and others to pick up the service using smaller and cheaper receiving antennas.

With the satellite in the originally-chosen position, remote users would have needed receivers with 1.8-metre diameter dishes costing from \$1700 to \$2500.

In the new position, smaller 1.5m diameter dishes costing from \$1200 to \$1900 will be suitable. The smaller receivers will also be easier to install and cheaper to maintain.

there was a risk that the signal could deteriorate seriously.

However, the Commonwealth Department of Communications has replied to a series of technical questions put to it by a consultant to the satellite advisory committee, Dr Brian O'Brien.

Department studies showed that Australia as a whole, and WA in particular, would benefit from the changed orbit.

Because WA looks smaller when seen from the new orbit, there will be a greater concentration of signal power from the satellite beams.

In the new position, the national beam will be 17 per cent stronger.

Network TV Issue

Perth THE WEST AUSTRALIAN in English 20 Jul 82 p 10

[Text]

THE STATE Government is worried about the impact that national satellite television could have on local TV stations in WA.

The Minister for Industries and Commerce said: "We don't want to find ourselves in a situation where we are being blanketed by networking from the Eastern States or—and I gather that it's technically possible—from overseas."

"We don't want to find ourselves in a situation where we are being blanketed by networking from the Eastern States or—and I gather that it's technically possible—from overseas."

He said he did not

want country people to miss major sporting and other national events, but at the same time he did not want to see local TV stations lose their individuality.

Mr MacKinnon said afterwards that he understood there had been a lot of pressure from Eastern States networks to secure national satellite networking for their programmes.

He told the convention that small busi-

nesses needed to make increasing use of new technology if they were to develop and stay competitive.

Small business men needed to be kept informed about the use of advanced equipment to ensure that they were able to make the right choice about the sort of technology suited to their needs, he said.

It was imperative for governments and private companies to co-operate to stimulate the development of the electronics industry in Australia.

CSO: 5500/7562

ONE OF TWO CHALLENGERS TO TELECOM MONOPOLY WITHDRAWS

Sydney THE SYDNEY MORNING HERALD in English 20 Jul 82 p 21

[Article by Peter Freeman]

[Text]

The challenge to Telecom's communications monopoly suffered a setback yesterday when its main rival, Business Telecommunications Services Pty Ltd, lost two of its founding shareholders.

The two to withdraw from BTS were Amalgamated Wireless (Australasia) Ltd and the major building products group James Hardie Industries Ltd.

In a joint statement yesterday the companies said AWA had identified a conflict of interest between its role in BTS and as a supplier to its major customer, Telecom.

According to the general manager of BTS, Mr Peter Holmes aCourt, the decision of the two companies to withdraw had been mutually agreed on and would not affect the role or scope of the company's operations.

Asked about his company's withdrawal from BTS the managing director of James Hardie, Mr David Macfarlane, dismissed suggestions it reflected disagreements within the communications company.

"As with the other shareholders we joined simply to have a look at BTS's prospects," said Mr Macfarlane. "we have to the conclusion it doesn't fit James Hardie's long term plans. There is definitely nothing sinister about our decision to withdraw."

BTS was established in September, 1980, with a general brief to "research and define" the long-term communications needs

of business. Since then it has taken the initiative in the campaign against Telecom's communications monopoly.

The founding shareholders were Mr Kerry Packer's Publishing and Broadcasting Ltd, IBM Australia Ltd, Australian Consolidated Industries Ltd, CRA Ltd, CSR Ltd, the Myer Emporium Ltd, the AMP Society Ampol Petroleum Ltd, Thomas Nationwide Transport Ltd, AWA and James Hardie. These companies were later joined by BHP.

The potential for divergences within BTS was shown late last year when the company was confronted with the Federal Government's decision to scrap Telecom's proposed national videotex (Prestel) service.

Although BTS had apparently wanted Telecom to be able to compete in this area it refrained from criticising the decision.

This stance seemed to reflect the fact that two of its members, Myer, and Publishing and Broadcasting, hoped to gain from the Prestel decision.

Similarly, while Myer is publicly enthusiastic about the development of cable television, PBL sees its own television interests threatened by cable technology. The pair put quite different submissions to the Australian Broadcasting Tribunal's inquiry into the issue.

And while AWA endorsed the BTS submission to the Davison Inquiry into Telecommunications it later took a different view in its own submission.

GOVERNMENT OPPOSES FUNDING ACCESS TO LANDSAT-D SATELLITE

Canberra THE AUSTRALIAN in English 23 Jul 82 p 4

[Article by Nicholas Rothwell]

[Text]

AUSTRALIA will not have access to the high-quality satellite images of the continent taken by the new Landsat-D spacecraft.

The Federal Government has decided against spending \$6 million on a special receiving station needed to pick up the images.

This means Australia will have no access to satellite pictures after the present generation of orbiting photographic spacecraft stops operating in 1986.

Landsat-D, launched last Saturday from the US, can provide farmers, miners, defence planners and scientists with pictures that are twice as detailed as any previous space images and contain seven times more information on the earth's surface.

From their orbits more than 700 km above the earth, Landsat-D and similar probes will be able to distinguish features only 30 metres across and will pick up data that can distinguish different crops or rock formations.

The Minister for Science and Technology, Mr Thomson, and senior officials from his department, told representatives of six of the nation's largest mining and development companies this

week that industry should pay for the receiving station if it wanted to use the data.

But the mining industry, which has used satellite images for the past 10 years with great success in prospecting, is refusing to finance the station on the grounds that the Landsat images are a national resource that will be used by many customers.

The new station is essential for access to Landsat-D pictures as the more accurate data is transmitted on a waveband that cannot be picked up by the only Australian Landsat station, at Alice Springs.

Senior mining company executives tried to persuade Mr Thomson and the Minister for National Development and Energy, Senator Carrick, of the potential economic benefits offered to the community by the new system.

The major industry group of satellite image purchasers, Indusat, has warned that without the new receiving system Australia will be unable to receive any new Landsat data except basic weather pictures.

Indusat, whose members include CSR and Western Mining Corporation, claims Landsat-D could play a critical role in agriculture by making possible highly accu-

rate estimates of crop acreage, flooding and salt levels.

The group's senior representative, Mr Dick Walker, said yesterday the mineral and oil exploration industries were confident Landsat-D would offer higher benefits.

"We have suggested to the Government that it should build the station and operate it on 'user pays' principle since this is the only system that is compatible with the spirit of free dissemination of data," Mr Walker said.

Mr Thomson would only commit the Government to spending \$300,000 to upgrade the present receiving equipment to pick up data from Landsat-D's "multispectral scanner" device. But this would not be enough to receive the new type of detailed signals from the satellite.

The mining industry, which believes the market for satellite images will expand rapidly soon, suggested all users pay at market price, and opposed separate price tiers for private and public users.

"There is a real risk of export earnings by Australian resource companies being disadvantaged. Overseas-based companies will be able to gain experience in using data from the new satellites in their home country," Indusat warned.

ADVANCED TELEPHONE SWITCHING SYSTEMS ON INCREASE

Canberra THE AUSTRALIAN in English 19 Jul 82 p 18

[Text] DATAPOINT Corp Pty Ltd is making inroads into the emerging Australian market for advanced telephone switching systems.

The company, which took over Sigma Data just over a year ago, is already showing the upper echelons of the Australian business community how to reap profits from its automatic call distributor (ACD) systems.

Datapoint has done four installations in Australia so far and has orders for four other large systems.

The four have an installed value of about \$2 million but the systems start from \$50,000 and range well past the \$500,000 mark, depending on the type of system the client company needs.

Basically the ACD is a telephone queuing system which works in conjunction with a PABX, rather than replacing it.

Datapoint company guarantees that the first call in will be the first answered and each grouping of phones will get an even load.

ACD also provides comprehensive monitoring facilities.

All clients have been large service companies relying heavily on the telephone to do business — mainly on the answering end of the phone.

Avis has one in Sydney, TAA has systems in Brisbane and Perth, and John Fairfax has one.

The primary motivation for these users to select this type of equipment was to give a better service.

That the improved service came with elaborate and comprehensive monitoring equipment was undoubtedly a major consideration.

Avis found the monitoring equipment to be more revealing than it imagined. The company's executives were aghast to find out how many calls dropped out while waiting to be answered.

Gains

These dropouts would most likely try their luck calling Avis' competitors.

When the Avis system was up and running the amount of calls answered rose by 60 per cent and the number of bookings rose 20 per cent.

Admittedly this was supported by a massive advertising campaign, but the company says it could not have responded to the surge in calls if it did not have the ACD in place.

Gains of this magnitude could not be expected in all applications of ACD equipment but where they do occur, they pay off the system in a relatively short time.

The ACD is continually looking around to find a party to answer a call.

Specific procedures are programmed into the unit. If it cannot carry out its primary procedure it then goes on to the next step, and so on.

The ACD system can be programmed to patch the caller to another number, be it local, interstate or overseas — all with no charge to the caller.

It can be programmed to answer the call with a message, and introduce background music to make waiting more bearable for the caller.

The messages are digitised so there is no chance of a tape recording malfunction.

Datapoint expects to continue doing solid business in ACD's but managing director, Mr Robert Kaye, is more excited about the company's next step — the Information Switching Exchange (ISX) which is now waiting approval from Telecom.

The ISX will switch voice or any kind of digital information. While the ACD works in conjunction with the PABX, the ISX supersedes the PABX.

The beauty of the ISX is that any line can be used for a variety of applications.

Plugging in a phone, facsimile, or data processor do not require a separate connection.

CSO: 5500/7561

BOOK NOTES USES OF LANDSAT IMAGES OF AUSTRALIA

Canberra THE AUSTRALIAN in English 27 Jul 82 p 18

[Review by Nicholas Rothwell of book "Satellite Images of Australia" by K.G. McCracken and C.F. Astley-Boden]

[Text]

DISPLAYED like a field of glinting jewels, Australia's riches and subtleties are captured by the all-seeing eye of the satellite in this sumptuous record of images of this continent glimpsed from the fastness of space.

This portfolio of pictures collected by the American Landsat earth-imaging satellite has been assembled by two of the CSIRO experts involved in the research programs which have resulted in the development of one of the world's leading computer image enhancement ventures.

The authors have boldly given the treasure-trove formed by these images — a profusion of glimpses from the eye of the satellite, orbiting 920 km above the Earth's surface — their rightful title, describing them as "dream-time art" painted by wind, sun, water and time on a natural canvas.

But many of these images are processed by computer after collection at the advanced Landsat receiving station at Alice Springs, and far from being natural records of the appearance of Australia, they are complex false-color composites that reveal the true character of the continent.

With such probes as the Landsat imaging cameras, vital data can be obtained for studies of earth resources, for

mapping, for forestry and crop management, while the final images have a hallucinatory beauty that seems redolent of the brooding heart of the continent.

Mr Ken McCracken, Chief of the CSIRO Division of Mineral Physics, together with Ms Christine Astley-Boden, information officer for the CSIRO Institute of Energy and Earth Resources, have crafted together images that display the full range of Landsat's capabilities.

Here are depictions of Australia's capital cities — revealed as tiny footholds clinging to the coasts of the land-mass — contrasting with the kaleidoscopic representations of the hinterland.

Transmissions

Each Landsat image is collected by a multispectral scanning telescope, detecting light in green, red and two infra-red bands, with a feature resolution of 80 metres — and in each picture are contained 7.5 million of these tiny picture elements.

The information to build up these "pixels" is transmitted to the Alice Springs receiving station by radio signal, and the different color bands are then combined into the exotic hues recorded in the final images.

Australia has always been a world leader in the use of aer-

ial photography, but Landsat was of little benefit to this country for several years because of a trick of nature.

Since this continent is extremely "bright" to the eye of the satellite, normal Landsat images were always "dazzled" and special computerised image-enhancing was essential before the features of the landscape could stand out.

But CSIRO workers developed a process to "clean up" the images, and by 1979 the special Landsat receiving station was in place to receive continuous transmissions.

In the coming decade, the Alice Springs station will assume ever-growing importance, with the launch of the French Spot satellite and the US Landsat 4 series, which will upgrade even further the "scenes of grandeur, delicate beauty and complex patterns that pass beneath the satellites each day".

In these ochres, greys, the vivid reds thrown back to the sky by vegetation, the cyan blue of lakes and streams, the oranges of monsoon growth, can be read the tell-tale signs of the resources of the country — self-evident to the trained geologist, but a mysterious tracery of colors to the untrained eye.

From Broken Hill to Cooper Creek, from the wilds of Cape Bougainville to the uranium province, the different "eyes" of Landsat are presented here.

Mr McCracken gives examples of pure infra-red images —

built up from nothing but the thermal signature of the earth, while experts from CSIRO land use, remote sensing and forest management teams contribute their experiences in satellite image use to the volume.

Don Gray, director of the Australian Landsat Station, details the operation of the complex data acquisition facility, which receives the multi-spectral data prior to its transportation to a digital processing centre in Canberra.

Accurate

The bulk processing system and a separate high-precision processing system used in image processing are both based on Interdata minicomputers, and a complete catalogue of Australia developed from the satellite pictures is now comprehensively indexed and rapidly made available to a wide range of users.

The man who developed the computer enhancement of the Landsat images, Dr Andy Green, whose research group is now perfecting image processing techniques, explains the data correction systems developed for use with the Australian pictures.

The raw Landsat data can be "improved" by three techniques.

Either high quality pictures are generated by using a computer to correct the data for more accurate final images, or images optimised to solve a particular problem of picture interpretation can be produced, or computer maps of special re-

gions can be built up.

In this last case, the computer itself makes decisions on the data, instead of producing images that must themselves be interpreted by a human expert.

Among the simpler techniques used are methods to emphasise small color differences or to suppress confusing illumination changes caused by varying topography.

"In general, enhancement techniques must be used for obtaining information that is subtly expressed in the tonal, textural and contextual content of the image," Dr Green explains.

He points out that such problems as the mapping of complex geological structures or the delineation of water flow under flood conditions call for an expert interpreter to gain the most from the imagery, even after maximum computer enhancement.

As a result of the pioneering CSIRO work, many mining companies and State authorities have decided to install their own computerised image-enhancing systems, and the Landsat images are being increasingly doctored by computer to provide accurate data.

But the final sensation created by the spectacle of these images is their depiction for use of a more measured perspective of the place of human endeavors on the surface of this planet.

Here, the nation's capital cities stand forth as mere specks.

CSO: 5500/7563

USE OF SATELLITE TO SPOT CYCLONES, VOLCANIC ASH DESCRIBED

Canberra THE WEEKEND AUSTRALIAN in English 31 Jul-1 Aug 82 p 2

[Article by Peter Terry]

[Text]

SCIENTISTS want to expand Australia's communications program so that a satellite launched in 1985 could be used as an early warning system for cyclones and volcanic ash.

They say existing equipment makes it impossible to provide the latest data on cyclone threats or the position of volcanic ash, which poses a hazard to airlines.

Dr Bill Carroll, who leads a team of scientists using foreign satellites to pinpoint ash clouds, said in Perth yesterday the Federal Government should urgently review its satellite program.

He said American and Japanese satellites used to help identify the clouds could only scan the area once in three hours.

Additional equipment on Australia's proposed satellite could provide a constant monitor of volcanic ash and cyclones.

Dr Carroll's suggestion is unofficially backed by airlines operating from Australia, and should be discussed by the powerful Orient Airlines Association which will meet in Manila in two weeks.

Qantas is then expected to detail Dr Carroll's work.

Dr Carroll's team of scientists are from the West Australian Institute of Technology, which, with the CSIRO, has made a breakthrough in tracking volcanic ash in the atmosphere.

They launched a crash program to track the ash immediately after a British Airways Boeing 747 suffered engine damage when it entered an ash cloud over Indonesia.

The team have devised a system by which satellite pictures can be analysed by computer to bring out the minute temperature differences the ash causes.

These pictures are now being used by the airlines but are only a guide.

Because of the time delays in scanning, the pictures are outdated by the time they are processed.

Dr Carroll said the United States had developed a satellite system which could provide a constant scan of danger areas, and this equipment should be used in the new Australian satellite.

"We must find out if it is too late to change the satellite communications program," said Dr Carroll.

"Every attempt should be made to get that equipment on board.

"We cannot just keep relying on other people's satellites," he said.

CABLE TV CLOSER; COMMUNITIES GET OK TO TAKE ACTION

Canberra THE AUSTRALIAN in English 19 Jul 82 p 3

[Text]

THE Federal Government yesterday paved the way for the introduction of cable television by allowing some communities to use the system to improve reception.

The widespread adoption of cable television as a commercial operation is under study by the Australian Broadcasting Tribunal.

But yesterday's move will enable some remote communities or those in poor reception areas to establish the technical infrastructure.

The scheme, known as Self-help Television Reception, offers four systems for receiving and re-transmitting television programs in the outback or in neighborhoods where the signals are blocked.

The Government insists that the costs for land, aerials and cable network should be borne by the users, although in some limited cases the Government will reimburse them.

Yesterday, the Minister for Communications, Mr Brown, said licences would be issued for community groups to receive television and then retransmit the signals.

He said that under the scheme, communities would form a group to own and operate an aerial, transmitter and associated equipment.

"The community may decide

to receive the local commercial telecast or the ABC, or both," Mr Brown said.

"If they wish to receive both, they will need to set up two systems under the scheme.

"The community group will also need the permission of the station from which the programs will originate."

Mr Brown said the costs of the self-help systems would vary, but the lowest "package" necessary was expected to cost less than \$3000.

"Acquiring a site for the community television equipment and installing it will require additional expenditure," he said.

"Obviously, the more subscribers there are to a system, the less each individual will have to pay."

Mr Brown said three systems would use equipment known as translators to pick up signals and rebroadcast them.

These would be received by individual household aerials in the normal way.

"The fourth system will use a community aerial installation to receive signals and distribute them on a small-scale cable network to subscribers' homes," he said.

"For economic reasons these houses should be grouped close together.

CSO: 5500/7561

SUPPLEMENTARY LICENSES FOR RURAL RADIO, TV STATIONS EYED

Canberra THE AUSTRALIAN in English 27 Jul 82 p 3

[Article by Anne-Maria Nicholson]

[Text]

THE Federal Cabinet is to consider a recommendation that supplementary television and radio licences be granted to areas outside capital cities.

If accepted by Cabinet, legislation will be drawn up to allow more than 30 existing regional television stations to apply to broadcast on two separate channels.

In the case of radio, an amendment to the Broadcasting and Television Act was passed last year paving the way for commercial radio stations in country areas to apply for FM licences.

The Government has not yet given the go-ahead for the nation's 60 country radio licence-holders to apply to the Australian Independent Broadcasting Tribunal for the FM licences.

The Federal Minister for Communications, Mr Brown, said supplementary licences were like a half-licence, and would suit regional radio and television stations in areas where it was not economic to support two separate licences.

If supplementary licences are granted for television, viewers will benefit from a greater choice of programs, and broadcasters could have extra advertising revenue.

There has been intense lobbying by radio and television interests to push through the proposal. This is likely to increase following the announcement by Mr Brown at the weekend that multicultural television will be extended to another 10 centres in the next three years.

CSO: 5500/7563

MULTICULTURAL TV CHANNEL TO BE EXTENDED NATIONWIDE

Sydney THE SYDNEY MORNING HERALD in English 26 Jul 82 p 2

[Article by Isabel Lukas]

[Text]

The Federal Government will spend \$13 million over the next three years to extend multicultural television - Channel 0/28 - to another 10 cities and country centres.

The decision to extend Channel 0/28 from its current base in Sydney and Melbourne was announced yesterday by the Prime Minister. Mr Fraser, together with welfare, education, media and legislative measures for the ethnic communities following a report by the Australian Institute of Multicultural Affairs.

Last September the then Minister for Immigration and Ethnic Affairs, Mr Macphie, asked the institute to evaluate the objectives and implementation of the report of the Review of Post-arrival Programs and Services for Migrants, presented to the Government by Frank Galbally in April, 1978.

The institute, which found "an impressive record of implementation", made 89 recommendations in its report. The Government has accepted the proposals almost without exception.

Mr Fraser said that taken together with the Australia-wide extension of multicultural television, the direct additional cost of

the package will be \$21 million over the next three years.

The Minister for Communications, Mr Brown, issued yesterday the timetable for the extension of Channel 0/28, which began broadcasting in October, 1980.

Canberra, Goulburn and Cooma should see the first program by mid-1983, Newcastle, Wollongong, Adelaide and Brisbane are scheduled for sometime between next year and 1984, while Hobart, Perth and Darwin should be included between 1984 and 1985.

The Minister for Immigration and Ethnic Affairs, Mr Hodges, released yesterday details of the package announced by Mr Fraser.

It includes the appointment of 60 social and welfare workers to voluntary bodies under the grant-in-aid scheme at an additional cost of \$6 million over the next three years.

In the area of English teaching to new arrivals, the number of adult immigrants undertaking English classes should more than double to reach an expected 34,000 by 1985.

The present student living allowance will be extended to unemployed part-time students attending the on-arrival education program.

An additional \$1.8 million will be provided over the next three years to the Telephone Interpreter

Service.

The Technical and Further Education system will commit within 12 months 15 per cent of its particular-purpose funding to advanced English language instruction for immigrants. The Commonwealth allocated \$18.75 million for particular-purpose funding during this year.

The Attorney-General will be preparing within six months a report on all Commonwealth legislation discriminating between immigrants from different countries and a schedule of amendments to remedy the situation.

For instance, action is to be taken to amend all Acts covering Commonwealth employment which have a nationality requirement so that Australian citizenship becomes the only requirement for eligibility.

Mr Hodges said that the Government would spend significantly increased sums of money, but some funds would be reallocated as the institute's report had identified several areas where savings could be made.

The Federal Opposition's spokesman on immigration and ethnic affairs, Mr Mick Young said yesterday: "There must be an early election in the air if Fraser starts to take some care of the migrants. 'It's a bit different from the Razor Gang Report.'"

SOLAR POWER CELLS GIVE BOOST TO MOBILE RADIOS

Canberra THE AUSTRALIAN in English 26 Jul 82 p 14

[Article by Nicholas Rothwell]

[Text]

MOBILE radio transmission has been given an important boost as a serious avenue of telecommunications development in Australia.

According to a report by the Australian Electronics Industry Association this has been brought about by advances in computer technology and solar power cells.

The release of the new AEIA briefing, calling attention to major improvements in the range, quality and versatility of radio transmission services, follows a recent extension of the mobile radio frequency by the Federal Department of Communications.

The extension from 820 to 900 MHz has provided a wider amount of the radio spectrum for the use of mobile radio services across Australia.

A final detailed plan for the wider frequency range is now being developed by the department, in co-operation with representatives of the AEIA.

The Association's report gives details of two new developments in the field:

A special solar-powered system for the operation of mobile radio transmission equipment, just installed in the Northern Territory's Kakadu National Park, has opened up new avenues for use of the technology in remote areas.

The system was provided for the Australian National Parks and Wildlife Service, which sought a system using fixed,

unattended relay stations for radio communication between the park's headquarters and rangers scattered through the 6100 sq km parkland region.

The system relies on solar powered cells since conventional power sources are not practical in the park's densely forested and uneven terrain.

The sites for the relay stations were selected after helicopter surveys and developed only after extensive consultations with local Aborigines to ensure that no sacred sites in the park would be despoiled.

World-wide patents are now being sought for the system, developed specially for the Kakadu park.

Capacity

Because of the terrain of Kakadu, patrol vehicles have had to carry back-up receivers, but the new microprocessor-controlled system needs no back-up — its design means that a circuit is available even if the main circuit fails.

In a more conventional application of the technology, the Australian Federal Police and NSW Police are being supplied with advanced radios equipped with microprocessor-synthesised frequencies.

These are tailored to police needs for simultaneous multiple-channel use in limited areas.

Standard police radios, with crystal frequency transceivers, are limited in channel capacity since each channel requires a separate crystal.

In the latest devices, electronic equipment produces 24

pre-programmed channels from a single reference crystal, and the machines can scan nine receiver channels at once.

Such mobile radio systems are being developed in tandem with advanced computerised control centres for the communications network.

A new "voting system", already installed for the Victorian Police's Melbourne advanced mobile radio network, ensures that the best signal connections are made between central operators and radio links.

The "vote" to find the best link is carried out by computer-sampling of the different two-way signals established, through 13 link stations in the headquarters transmission room of the Victorian system.

The AEIA report points out that this "voting" system, and a related "trunking" system — in which microprocessors use special software to switch automatically to the least-used frequencies in a given segment of the radio spectrum — are both innovations.

The new mobile radio telecommunications systems also have reduced one of the main disadvantages of conventional mobile radio transmission — the fact that busy traffic on a given channel makes it difficult for an operator to give a message.

New radio control systems can automatically scan the channels of a system and select the least crowded channel, reducing delays in urgent transmissions.

SEVERAL 'FIRSTS' RECORDED IN QANTAS DIGITAL SYSTEM

Canberra THE AUSTRALIAN in English 26 Jul 82 p 14

[Text]

QANTAS has established a digital microwave link between its new office tower and its jet base at Mascot.

It has created several firsts in the process.

It is the first fully digital microwave link to be made in Australia.

It is the first private and fully exclusive system.

Unlike the normal leasing deals, Qantas is also the first company to own its equipment.

The link will handle all the airline's voice, data and facsimile circuits between the two centres, rendering cable communications obsolete on that route.

It will start handling calls across the 7.5km distance in three weeks when Telecom hands it over.

Elaborate

The link will not run immediately at full power, but will be phased in gradually until all data and voice communica-

tions between the two points are introduced to the transmission.

The microwave system can handle information at up to 34 million bits a second. Qantas says this gives up to 46,900 conversations or 2400 data circuits. (A voice channel needs about 64,000 bits, and a data channel needs 96,000 bits.)

It will operate at 13 gigahertz, and its capacity can be expanded if necessary.

An elaborate back-up system has been installed which duplicates everything except the dishes themselves. The alternate system switches over when there is any malfunction.

To be absolutely safe, Qantas has made provision to use cables if the microwave link fails.

Equipment for the system has been supplied by 11 manufacturers, six of them Australian.

The whole system was installed and will be maintained by Telecom, but the equipment is owned by Qantas.

A mini computer at Telecom's control centre con-

stantly monitors all the major system components of the microwave link.

A Qantas spokesman says Telecom helped the airline greatly in designing the interface for the major components.

One of the 1.8m-diameter microwave dishes is mounted almost 200m above ground level on top of Qantas' new \$150 million office block on the Rocks side of Sydney's CBD. The other dish is suspended from the wall of a building at the jet base.

Qantas will not hold onto its string of firsts for very long. Telecom now has five large orders on the books from government departments and large companies.

Other companies are using non-digital (analogue) microwave links for inter-company communications.

A popular use for it is closed-circuit television between two of a company's properties.

There are also several installations using infra-red links to service various video conferencing facilities.

LOCAL COMPANY DEVELOPS TELEX NETWORK CONTROL SYSTEM

Canberra THE AUSTRALIAN in English 27 Jul 82 p 26

[Text]

AUSDATA Pty Ltd, agent for the Four Phase Series IV and 5000 computers, has announced its TNCS telex network control system.

Developed in Australia by Ausdata, the TNCS software allows telex messages to be keyed as word processing documents and then queued for transmission via one of up to four leased or public telex lines.

Incoming messages are stored in a word processing text area for subsequent printing or re-routing via Four Phase's electronic document distribution software.

Announcement

TNCS runs under Four Phase's MFE/IV operating system.

Ausdata said TNCS allowed frequently-used telex numbers and their answerback codes to be called up by keying a three-digit number.

Message queues for each line could be displayed and entries could be deleted from a queue.

"All significant events are automatically recorded in a system log file, and

information about incoming and outgoing messages is noted in separate statistics files."

An Ausdata spokesman stressed that the recent announcement of Macroset's distributorship of the Four Phase 312 did not change Ausdata's relationship with Four Phase.

"The System 312, an IBM 4300 plug-compatible machine, is an independent product for which Macroset is ideally situated," he said.

"We welcome Macroset's involvement with Four Phase and look forward to working closely with the company on future joint marketing opportunities."

He said Ausdata's TNCS had completed field testing at Ciba-Geigy, which had a network of four Four Phase systems for word processing.

A 480K System IV/90 at Ciba-Geigy's head office in Lane Cove handles all traffic on one public and two leased telex lines.

Smaller System IV/70s in three outlying offices route telex messages to and from the central system via dial-up Datel lines using Four Phase document distribution software.

CSO: 5500/7563

BRIEFS

UNDERSEA CABLE REPEATERS--STC Australia has shipped its first batch of nine electronic repeaters for the ANZCAN undersea cable. The cables were made at STC's Liverpool plant in a specially constructed \$10 million clean area factory opened by the Minister for Communications, Mr Brown, on May 28. STC Australia will make at least 450 of the 1000 repeaters required for the cable, to be delivered by the end of next year. Repeaters will be placed at 12km intervals along the 14,000 length of the cable. High technology has gone into the manufacture and assembly of the repeaters, which must operate at the bottom of the ocean for 25 or more years without maintenance. There are 14 nations involved in the project, but Australia will be paying for approximately half of it. Australian participation and offsets amount to \$78 million. The 1380 circuit cable goes from Bondi Beach, Sydney, to Norfolk Island, Fiji, Hawaii and then Vancouver, Canada. A spur runs from Norfolk Island to Auckland.

ETHNIC RADIO FUNDING--Ethnic radio programmes on public broadcasting stations will get a 60 percent increase in Government subsidies this financial year. The Minister for Communications, Mr Brown, said yesterday that \$650,000 would be provided in 1982-83 through Special Broadcasting Service subsidiaries. Mr Brown said the decision came after a study of the Galbally report on post-arrival programmes and services for migrants by the Australian Institute of Multicultural Affairs. The institute found that public broadcasting had provided radio services to a large part of Australia's migrant and ethnic communities. It found that \$650,000 was necessary to ensure the viability and quality of the service. Mr Brown said that public broadcasting stations were important in providing ethnic radio programmes in centres not directly served by the Special Broadcasting stations 2EA and 3EA. He said that in the next three years the Government would also provide \$90,000 to public broadcasting stations to train recruits in producing and presenting ethnic radio programmes. A discussion paper on the long-term development of ethnic radio would be issued shortly for public comment and a report prepared for Government consideration, Mr Brown said. [Text] [Melbourne THE AGE in English 26 Jul 82 p 6]

'MOST SOPHISTICATED' COMMUNICATIONS SYSTEM--The Australian Army's new communications system will be the most sophisticated in the world, according to its manufacturers, Plessey. The company said in London that the \$7 million contract would lead to contracts worth a potential value of between \$150 million and \$200 million. Plessey's Chairman Sir (John Clark) said that strategically, it was the most important army tactical radio contract ever awarded to the company. He said the system was expected to set a new standard for defense communications around the world. [Text] [BK011200 Melbourne Overseas Service in English 0830 GMT 1 Aug 82]

NEEDS OF NARAYANGAN TELEPHONE EXCHANGE TOLD

Dacca THE NEW NATION in English 6 Aug 82 p 2

[Text] Narayanganj--The Sub-divisional Telephone Exchange of Narayanganj needs immediate expansion and repair. It is learnt that scarcity of telephone cables, spare-parts and shortage to trained staff mostly crippled the exchange and its regular service to the subscribers has degraded very much.

It is further alleged that on average 50 percent lines of the 4000 lines exchange of this commercially important town have become inoperative. Expansion of 1000 lines installation work was supposed to start last year but there has been no sign of such progress. The subscribers have been facing innumerable problems with their telephone sets and also in getting lines.

It is very difficult for one to get line to Dacca from Narayanganj as there are 100 to 125 lines only working out of 287 lines.

There are only 70 lines functioning out of 178 lines started with 2 and in case of 3 only 15 lines out of 42 and in case of dialling by 4 only 10 lines out of 30 are working roughly. Sometimes most of the working lines become ineffective for technical reasons.

Similar is the condition with the incoming lines. A person is lucky enough if he avails Narayanganj from Dacca after tough try for several minutes. About 50 percent of the incoming lines remain idle and the situation will worsen further if effective measures are not taken immediately.

Number 14 is well known for time enquiry but sometimes it connects other places instead of giving time and only 2 lines are working out of 4 lines for time queries. Phonogram and trunk lines are also rendering poor service as only 2 phonogram lines are working out of 4 lines.

The authority planned to install 25 coin box telephone sets at different business centres of Narayanganj which was a long demand of the people, but only 9 coin box telephones have been installed due to scarcity of junction cable pair from Dacca.

The authority planned to install 25 coin box telephone sets at different business centres of Narayanganj which was a long demand of the people, but only 9 coin box telephones have been installed due to scarcity of junction cable pair from Dacca.

It was gathered that the T&T authority would establish telephone exchange in Nabiganj, Siddirganj and Fatullah and if this plan was implemented immediately the people of the suburb areas would get the telephone facility and the long demand of the local people would be fulfilled.

It was also gathered that about 1500 applications are pending and awaiting telephone connections since long. According to many, since Narayanganj is a commercially important place and the Dundee of mile trade have large industrial belt, the capacity of the Telephone Exchange should be increased to 10,000 lines, in order to cater to the bare requirements.

CSO: 5500/7214

BRIEFS

FORMER ENVOY APPOINTED INFORMATION MINISTER--The chief martial law administrator today appointed former Bangladesh Ambassador to Burma Syed Najmuddin Hashim as a member of the Council of Ministers. He has been given the portfolio of the Ministry of Information. [Text] [BK021718 Dacca Domestic Service in English 1530 GMT 2 Jul 82]

NAGORPUR PHONE EXCHANGE--Tangail, Aug 10--A 30-line megneto system telephone exchange was opened at Nagarpur thana headquarters on Thursday, reports BSS. This is the seventh thana level telephone exchange in the district. According to official source another telephone exchange will be opened very soon by the telephone department at Bashail thana. Only three thanas will then be left without telephone exchange in the district. [Text] [Dacca THE BANGLADESH TIMES in English 11 Aug 82 p 2]

COMMUNICATIONS PROJECTS PLANNED--The Government has earmarked Taka 24.22 crore for implementation of 19 projects in the mass communication sector during the current fiscal year, reports BSS. Of the 19 projects, five are expected to be completed by 1982. These are development of Rampura TV Centre, establishment of a television relay station at Satkira, compilation of history of Liberation War, expansion of film studio laboratory and establishment of a television substation. The Annual Development Programme for 1982-83 envisages construction of a 100 KW medium transmission centre at Bogra for expansion of the radio network in the country's northern region. The implementation of the programmes relating to the television is expected to expand the television network throughout the country by 90 percent. [Text] [Dacca THE BANGLADESH TIMES in English 13 Aug 82 p 1]

CSO: 5500/7216

MINISTER REPORTS DELAY IN SLV-D2 LAUNCHING

New Delhi PATRIOT in English 6 Aug 82 p 5

[Text]

MINISTER of State for Science and Technology C P N Singh told the Rajya Sabha on Thursday that the Satellite Launch Vehicle-Developmental Two (SLV-D-2), which is part of the SLV-3 programme, will not be launched in September as scheduled but later.

In a written answer, Mr Singh informed that the launching was being deferred on account of the failure of the first test of Kevlar motors which took place on 31 July.

The results of the unsuccessful test were being analysed. On the basis of the analyses necessary changes would be effected and other tests carried out, he explained.

Elaborating further, he said testing of the three Kevlar motors for qualification of the fourth stage had been contemplated as part of the preparation for the launching of the SLV-D-2. The present failure was that of the first of such tests.

The Minister said SLV-D-2 incorporated an important improvement over its predecessors in

that the fourth stage motor casing would utilise Kevlar as the casing material. Kevlar has the advantage of providing a lighter and more efficient fourth stage motor leading to increased payload capacity for SLV-3.

The launching of the SLV-D-2 is part of the SLV-3 programme to improve further the reliability in flight of some sub-systems and increase the orbital accuracy. It may be necessary to undertake at the most, two more launches of the SLV-3 configuration, which had already been flown thrice and placed two Rohini satellites into orbit. The first of these launches is designated as SLV-D-2.

In reply to another question Mr Singh said that India had demonstrated its capability for launching satellites from its own territory through the launch of the Rohini satellites by SLV-3.

The Government had recently approved two launch vehicle projects one with a capability to launch satellites of 150 kg class in the near earth orbit and another, more powerful launch vehicle capable of launching satellites of 1,000 kg class in near earth polar orbits.

IMPORTANCE OF RADIO, TELEVISION DISCUSSED

Bombay THE TIMES OF INDIA in English 6 Aug 82 p 8

[Article by N.L. Chowla]

[Text]

AT a recent conference of state information secretaries and ministers in New Delhi, if there was one single demand voiced by all states and Union territories, it was for the extension of television. Representative after representative justified it on account of specific and felt needs of the State that he presented. The States which have television centres wanted relay centres to cover the regions where the signal does not reach and those which have only transmission centres asked for full-fledged programme production studios in the state capitals in order that the programmes put out are of direct interest to the people.

There are several states which are not on the TV map. They are willing to make a beginning with the direct reception system (DRS) — the equipment that enables TV signal to be received directly from the satellite itself. The border states and Tamil Nadu strongly felt that colour TV with effective range was important to check what some considered as a "cultural invasion" through TV programmes from the neighbouring countries.

It was obvious that the commissioning of INSAT-1 had created vast possibilities in TV expansion. The forthcoming Asian Games, has given to the demand for DRS a sense of urgency. States and Union territories in the north-east region, in particular, asked for DRS facilities to enable the people in the remote areas share the excitement of the game.

TV as a medium has acquired a great deal of glamour but the glamour for TV may or may not be related to it. I think the demand for TV on the regional level as well as the reasoning are perfectly legitimate. In the '50s and '60s the demand used to be for setting up radio stations and relay transmitters to communicate with the

people to educate them and to create in them a sense of national awareness. Then also, in several cases, the radio transmissions from other countries was a strong argument for enhancing the power of the transmitter. The expansion of radio network in the country with 86 stations and 90 per cent of the population coverage as claimed, has not been an insignificant achievement. One may therefore expect a breakthrough in TV in the '80s.

Intimate Medium

Glamour apart, the TV medium with its visual potential can be more exciting and revealing than radio. If the potential is professionally exploited TV can also be more effective in discovering and sharing knowledge and in building a national identity than any other medium. When some one from Mizoram says that it is through TV that the people in that State can be exposed to people and places in the rest of the country, I am in full agreement with him. Besides, being visual, the medium is intimate and can create a sense of belonging as no other medium can.

As against the coldness of the printed word and lack of identification in radio broadcasts, TV pictures succeed in establishing identity. One of our outstanding commentators whose views in print have evoked a great deal of interest and controversy over several years once confided that he had remained unidentified by the people till he started appearing on TV. Whether through image-building, identification capability or transmission of live pictures, the TV medium has an edge over the other media for purposes of communication.

It needs to be said, however that even after the commissioning of INSAT and the utilisation of microwave linkages, it is difficult to image

how TV transmission can penetrate the hinterland or remote areas all over the country and in the languages and dialects of the people. The satellite transmission will not respond to such needs. The DRS will also function under several constraints. The cost of the receiver and its maintenance may put on the exchequer a disproportionately high burden.

The problems of TV reception are far greater than those of radio reception. It has not so far been possible to reduce the cost of the ordinary TV receiver. In fact whether through the DRS or the ordinary TV receiver the only possibility of reaching the people is the development of community TV viewing. This aspect of TV reception would appear to need very special attention.

Social Purpose

In the use of TV in the social context, experience elsewhere has not been particularly heartening. The developmental role of TV has in several countries received only lip-service. What has prevailed is the entertainment ethos, imported programmes and imported ideas. The TV programme producers who are invariably trained in the western systems have imposed on the viewers concepts and formats of western programmes. This is what the foreign TV transmissions viewed in some parts of the country are now projecting. How would the Indian television meet this challenge? Would it excel in the styles of foreign transmissions in order to wean away the viewers? If that becomes a primary consideration the social purpose is lost.

The cost of setting up a TV station is high. It is over Rs. six crores. The range remains limited and the ownership of TV receivers is confined to only those who can afford to bear the high cost of the receiver. The policy to instal community receivers, to maintain and sustain them in urban or rural areas has not yet produced any spectacular results.

For a country of India's size with languages, dialects and cultural diversities radio broadcasting is very much a relevant medium. It is irreplaceable not only because it is an instrument of transmission with lower production costs than for any other mass medium with comparable penetration but also because the production of programmes can be decentralised and made relevant to smaller communities. Radio listening facilities still need to be expanded and strengthened. The reach of radio broadcasting is not enough. Remote areas in several parts of the country which have had no listening facilities can be reached only through radio.

There is a genuine fear that in the face of technological advances and possibilities of extending television transmission, radio broadcasting may be demoted, reduced to a lower position. The image-making capability of television should not be allowed to upset values or targets in communication. The case for TV can be over-emphasised. The demand for a TV station, a TV transmitter or a DRS should be justified, not as a status symbol, but as a part of our plan to reach the people through the most appropriate medium of communication.

CSO: 5500/7210

PLANS TO USE INSAT IN DOMESTIC RADIO, TV TOLD

New Delhi PATRIOT in English 9 Aug 82 p 8

[Text]

ABOUT 800 direct reception (DR) sets will be introduced in the rural areas of Andhra Pradesh, Orissa and Maharashtra to receive TV programmes direct from INSAT-1, report UNI, PTI, quoting an official release.

Television services to these three states through INSAT-1 will start on 15 August and networking of different Doordarshan centres for relaying the national programme will also commence from that date.

INSAT TV services to Bihar, Gujarat and Uttar Pradesh will be extended in a phased manner by 1984-85.

Three districts in each state will get a 45-minute educational service in the first phase starting on 15 August are Kurnool, Hyderabad and Mehboob Nagar in Andhra Pradesh Bolangir, Sambalpur and Dhenkanal in Orissa and Nagpur, Bhandara and Chandrapur in Maharashtra.

INSAT-1 will provide both direct reception and rebroadcast service through conventional transmitters. The major advantage in the rebroadcast service is that ordinary (VHF) sets can be deployed within the service range of the transmitter.

INSAT is also being utilised to link all Doordarshan centres in the country. For this purpose, 'uplink' facilities are being provided at Delhi through the Transportable Remote Area Communication Terminal (Tract) made available by the Indian Space Research Organisation (ISRO).

Reception terminals are being set up at the various transmitting centres for simultaneous relay of common programmes.

Of the 800 DR sets being supplied by the Electronic Corporation of India Ltd. (ECIL) 50 sets

have already been sent to Andhra Pradesh and are expected to be installed before 15 August. Another 150 sets will be supplied to Orissa by the end of this month. The installation of all the 800 sets is expected to be completed by the end of October.

According to the schedule worked out by Doordarshan, an educational TV service will be provided from 9.00-9.45 a.m. in Andhra Pradesh and 9.45-10.30 a.m. in Orissa.

The evening service with a board social education content will be telecast from Sambalpur from 7.00 to 7.30 p.m. for Orissa and from Hyderabad from 7.30 to 8.00 p.m. for Andhra Pradesh. Nagpur will put out a Marathi programme from 7.00 to 8.00 p.m. on its VHF (terrestrial) transmitter. All the three centres will relay the national programme via INSAT from 8.00 p.m. to 9.30 p.m.

INDIA

BRIEFS

RADIO SATELLITE LINK--All stations of All India Radio (AIR) are to be linked through the Indian National Satellite--INSAT-1--for relaying programs simultaneously. Linking of 10 AIR stations with Delhi is expected to be completed by the end of August. The stations are: Srinagar, Jaipur, Bhopal, Gauhati, Imphal, Kohima, Cuttack, Trivandrum, Ahmedabad and Hyderabad. Some of them have already started simultaneous broadcast through INSAT; 16 more stations will have the satellite link by March 1983. All the 85 AIR stations will be linked through the satellite by the end of 1983. Transmission facility at the Delhi station has already been provided through a mobile earth station. [Delhi Domestic Service in English 0240 GMT 1 Aug 82]

TV DISSEMINATION--With establishment of 15 more TV transmitters envisaged in the sixth plan, over 33 percent of the population would be covered by TV programs. Giving this information in the Rajya Sabha, Minister for Information and Broadcasting Vasant Sathe said that at present, TV programs are being telecast by 19 centers covering 17.90 percent of the population. [Text] [Delhi Domestic Service in English 0830 GMT 2 Aug 82]

TELECOM COOPERATION WITH FRANCE--India and France signed on 2 August a memorandum of understanding for close cooperation in the field of telecommunications. It covers seven agreements signed by the two countries earlier in the field of communications. The memorandum envisages support of the French Government in the execution of these agreements and for future continuous flow of technology in communications. It was signed by the Indian communications minister and the French minister for postal services and telecommunications. Projects to be executed under the agreements total 1.49 billion rupees with a foreign exchange component of 740 million. [Delhi Domestic Service in English 1530 GMT 2 Aug 82]

MIDNAPORE PHONE EXCHANGE--An automatic telephone exchange with 200 lines will be set up at Durgachak, Midnapore, in October, according to a Press release issued by the Central Government in Calcutta on Saturday. The exchange will have inter-dialling facilities with Haldia industries and Haldia township exchanges. The release added that some of the existing exchanges in West Bengal would be expanded during the next two months. The capacity of the Raniganj automatic exchange will be enhanced from 1,000 lines to 1,300 lines. This will be followed by an expansion of the Siliguri exchange. The Port Blair exchange would also have an additional 200 lines by October. [Text] [Calcutta THE STATESMAN in English 8 Aug 82 p 9]

GAUHATI RELAY THROUGH INSAT--The Gauhati Station of all India Radio [AIR] has started relaying news bulletins originating from Delhi through Insat-1A on an experimental basis. The full-scale relay of programmes is expected to start in the next few days. Gauhati will be the first air station in eastern India to use the satellite. Hyderabad, Ahmedabad and Srinagar have already started utilising the facility. [Text] [BK231245 Delhi ISI Diplomatic Information Service in English 0849 GMT 22 Jul 82]

CSO: 5500/2341

JAPAN

NTT DEVELOPS SATELLITE COMMUNICATIONS TECHNOLOGY

OW090502 Tokyo KYODO in English 0436 GMT 9 Jul 82

[Text] Tokyo, July 9, KYODO -- Nippon Telegraph and Telephone Public Corp. [NTT] has developed the technology to use a communications satellite for four-beam communications networks over the Japanese archipelago, officials said Friday.

The four-beam satellite communications system has been developed in preparation for launching a one-ton satellite in the future. The achievement reflects the high level of Japan's technology in multibeam satellite communications systems, they said.

The latest system emitting several beams from a single satellite has more advantages than the current single-beam system; radio stations on the ground will be able to receive more electric waves, the volume of electric transmission will be increased, the ground radio stations will be made smaller, and the system can make use of the static satellite orbit effectively.

In accordance with its information network system (INS), the public corporation is planning to launch a one-ton satellite called INS Satellite No. 1 having 25,000 telephone circuits in 1988 and another one of 3- to 4-ton class, INS Satellite No. 2 with 100,000 telephone circuits, some time between 1992 and 1995.

A number of organizations in other countries also have plans to launch similar satellites. Western Union of the United States is reportedly going to launch a seven-beam communications satellite next year, and the National Aeronautics and Space Administration (NASA) is planning to have its own satellite. The International Telecommunication Satellite Consortium (INTELSAT), and the telecommunications ministries of Italy and West Germany are also promoting similar schemes.

The Japanese public corporation has shifted its attention to the development of various equipment to be used for a gigantic multibeam satellite communications system -- 30-beam satellite communications system -- over Japan, officials said.

CSO: 5500/2236

JAPAN

'KYODO,' MALAYSIA'S 'BERNAMA' OPEN NEWS CIRCUIT

OW010449 Tokyo KYODO in English 0410 GMT 18 Aug 82

[Text] Tokyo, 1 Sep (KYODO)--A 24-hour two-way circuit went into operation Wednesday between KYODO News Service and BERNAMA News Agency of Malaysia, opening a new era of closer cooperation between the two Asian news agencies.

The new circuit is to be used immediately from the reception and transmission of Asia-Pacific News Network (ANN) news.

It is also expected to be used for the exchange of news between KYODO and BERNAMA under a bilateral agreement of news exchange and cooperation to be concluded shortly.

Takeiji Watanabe, president of KYODO, in a message to BERNAMA General Manager Ahmad Mustapha Hassan, said:

"I extend my heartfelt congratulations to BERNAMA News Agency on its thoughtful initiatives that culminated today in the opening of a new circuit between our agencies."

The occasion, he said, marks a milestone in KYODO's pursuit of expanded news transmissions overseas. The new circuit will contribute largely to the smoother flow of OANA news as well as to increased bilateral news exchanges between BERNAMA and KYODO.

Hassan, also president of the Organization of Asia-Pacific News Agencies (OANA), in his message to Watanabe, described inauguration of the new circuit as "marking the beginning of a new era of mutually beneficial co-operation."

"It is important not only in the context of our bilateral agreement for news exchange and cooperation, but also in the wider context of closer ties between our countries and peoples."

CS0: 5500/2341

JAPAN

JAPAN TO EXPERIMENT WITH NEW NEWS DELIVERY SYSTEM

OW291331 Tokyo KYODO in English 0837 GMT 29 Jun 82

[Text] Osaka, 29 Jun (KYODO)--An experimental closed-circuit TV station in Ikoma, Nara Prefecture, will inaugurate an epoch-making news delivery system from next month.

It will transmit the latest facsimile news of KYODO news service to 156 monitoring families and seven official organizations in the Ikoma area.

The new visual information delivery service, termed "high ovis" (high interactive optical visual information system) utilizing optical fibers, will provide the latest news for 10-30 minutes every hour from 10 a.m. to 10 p.m. daily for three months to September.

High ovis is being handled by the High Visual Information System Development Association based in Tokyo, an affiliate organization of the Ministry of International Trade and Industry (MITI), which has been working on visual information systems since 1978.

Information, including graphs and figures, will be shown on the screen, together with a commentary by an announcer, a spokesman said.

CSO: 5500/2341

BRIEFS

FOREIGN MINISTRY SATELLITE PHOTOGRAPHY PLANS--Tokyo, 27 Aug (KYODO)--The Foreign Ministry decided Friday to request yen 233,610 million (dollar 920 million) for its Official Development Assistance (ODA) for fiscal 1983, an increase of 11.4 percent over this fiscal year's figure. In order to cope promptly with rapidly changing world situation, the ministry plans to establish within its research and planning department an information division and a research division, he said. To strengthen its information collection and analysis functions, the ministry will increase its "assistants" by 16 and "specialized researchers" by 25. The information division will gather information and supply services around the clock by utilizing computers. At the same time, it will study the collection of information from photos taken by reconnaissance satellites. The research division will collect data available both within and outside Japan and will analyze military, economic and other data, according to the spokesman.

CSO: 5500/2341

EARTH SATELLITE STATION AND GATEWAY EXCHANGE FOR ISLAMABAD PLANNED

Karachi DAWN in English 11 Aug 82 p 4

[Text]

ISLAMABAD, Aug. 10: An earth satellite station and an international gateway exchange will be installed at Islamabad during the next three years.

The earth satellite station and international gateway exchange will be electronically controlled and these will have in-built system of automatic device for recording duration of the call, the number calling and the number called. Recurrence any chances of leakage of revenue and excessive billing will be plugged.

EXPERTS

Technical experts are available with the T and T department to maintain and operate this highly advanced equipment. Efforts are being made for production of electronic telephone exchanges in the country and it is expected that in a couple of years TIP and CTI will be able to manufacture these exchanges.

The production of these exchanges will modernise the present manual exchanges presently in operation in some parts of the country. The manufacture of these exchanges will save a lot of foreign exchange besides creating new employment opportunities in the country.

Another important project of submarine cable is also being undertaken by T and T in collaboration with UAE. The submarine cable will link UAE with Karachi. From UAE it will provide an alternate system of communication with North America via earth satellite station at UAE.

Presently North America is linked with Pakistan via Europe and through Atlantic only.

The new submarine cable system will be safe and secure means of communication. The project is expected to be completed during the next three years.

CSO: 5500/5906

NANJING STATION TESTS SATELLITE TV TRANSMITTING

OW200700 Nanjing JIANGSU Provincial Service in Mandarin 2300 GMT 18 Aug 82

[Text] The Nanjing satellite communications ground stations, designed and built by our country, yesterday conducted a test of transmitting television programs to half of the world through an international communications satellite. Leading comrades of the Ministry of Electronics Industry, Jiangsu Province and Nanjing Municipality as well as comrades engaged in the research and development of satellite communications visited this ground satellite station fitted out with domestically produced equipment and watched television programs transmitted and received through the international communications satellite.

They said: The result of the test is good. The pictures received were soft, sharp and clear.

The equipment of the Nanjing satellite communications ground station was developed and manufactured by the Nanjing Institute of Electronic Technology, the Nanjing Hardware Research Institute, the (Xinlian) Machinery Plant, the Changjiang Machinery Plant, the Nanjing Electron Tubes Plant, the Nanjing Telecommunications Equipment Plant, the Nanjing Radio Factory, the Jinling Radio Equipment Plant, the Nanjing College of Engineering and the Nanjing Posts and Telecommunications Institute.

Since the completion of its construction in 1978, the Nanjing satellite communications ground station has conducted three phases of tests: the first phase was (?acceptance testing), the second was [words indistinct] and the third phase was trying out. Since June this year this station has transmitted television programs on a trial basis through the international communications satellite.

The successful test carried out by the station shows that our country's electronics industry has a technical force capable of developing and producing satellite communications equipment mainly with domestically produced materials and devices.

CSO: 5500/2341

PEOPLE'S REPUBLIC OF CHINA

BEIJING-HOHHOT SATELLITE PHONE LINK TESTED

OW201711 Beijing XINHUA in English 1605 GMT 20 Jul 82

[Text] Hohhot, 20 Jul (XINHUA)--The Municipal Telecommunications Bureau of Hohhot, capital of the Inner Mongolia Autonomous Region, today successfully made an experiment in telephone communications with Beijing by using an INTELSAT satellite 36,000 kilometers above the Indian Ocean.

A XINHUA reporter on the scene reported that the telephone conversation conducted in the course of the experiment was loud and clear as if people at both ends were in the same city, talking through an inner-city system.

Today's experiment in Hohhot is part of the national project to try the use of the INTELSAT satellite in telephone communications and telegraph, facsimile and television transmissions. The project involves ten Chinese ground stations, of which seven are equipped entirely with homemade equipment and machines.

Tests over the past one and a half months show that the equipment and machines at these stations are up to INTELSAT standards.

On 12 July, people in Hohhot were for the first time able to watch a satellite-transmitted live telecast of the 1982 World Cup Football final match.

But for the satellite, local officials said, they would have had to wait for three days to see a replay of video tapes of the event brought back from Beijing by a special messenger of the autonomous regional television station.

CSO: 5500/2341

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

SATELLITE LINK TESTED--Urumqi, 20 Jul (XINHUA)--China has since 10 July successfully conducted an experiment in television and meteorological data transmission between Beijing and Urumqi, capital of the Xinjiang Uygur Autonomous Region, by using an INTELSAT satellite in the Indian Ocean region. The experiment was conducted by a test ground station in Urumqi. Data obtained will be used for the designing and building of a full-fledged station in the city before the end of 1983. China has been conducting from 6 June to 6 August a nationwide experiment in domestic satellite communications and TV transmission by using the INTELSAT satellite. The project involves ten ground stations in Beijing, Shanghai and other places. [Text] [OW201406 Beijing XINHUA in English 1247 GMT 20 Jul 82]

SHANGHAI SATELLITE TV TRANSMISSION--The Shanghai Hongqiao ground station for satellite communications succeeded for the first time in domestically test-transmitting television programs via the international communications satellite 36,000 km above the Indian Ocean on the afternoon of 30 July. Ground stations at Beijing, Xinjiang and Nei Monggol received the transmitted television programs. In a telephone conversation that traveled 72,000 km in space, workers at the ground station in Hohhot, Nei Monggol, said: We are happy to receive the programs transmitted from Shanghai. The color is quite natural, and the pictures on the screen are stable. Both audio and color quality are good. The test transmission was successfully conducted for 2 hours and 40 minutes. All data compiled indicated that the test transmission was a success and that the equipment at the ground stations functioned properly. All this has laid a fine technical foundation for setting up a domestic satellite communications network in China. [Text] [OW011345 Shanghai City Service in Mandarin 2300 GMT 30 Jul 82]

CSO: 5500/2236

PHILIPPINES LONG DISTANCE TELEPHONE EMPLOYS FIBER OPTICS

Manila BULLETIN TODAY in English 9 Aug 82 p 29

[Text]

A new technology in communications called fiber optics will be put in operation, Philippine Long Distance Telephone company (PLDT) said.

Fiber optics, which transmit voice, pictures and signals by using light waves, will be used primarily for long distance service on PLDT overseas network. This will link the company toll facilities at the Intramuros service center with its new communication tower, the company's international gateway, situated near the Manila-Quezon city boundary on España, Sampaloc.

PLDT said this new technology was a gift from Siemens AG of Germany where most of the company's communications equipment were purchased.

Fiber optics is the product of a long process of experimentation and development that goes as far back as 1880, just four years after the invention of the telephone by Alexander Graham Bell.

PLDT also said the fiber optics is still experimental in some countries, used mostly as inter-office trunk which connect switching offices within a region and also as loop lines to connect a number of homes to a central office.

The new technology, however, has not entered many homes since this is very limited and expensive. Besides, copper wires remain the practical material that can handle adequately the information traffic in the average households.

The fiber optics tech-

nology is the first "light wave cable" in use in Southeast Asia. At present, only Japan, Germany and the United States are using the fiber optics on a limited basis. They have however, an ongoing development and manufacturing program for fiber optics.

The diameter of an optic fiber is like that of a strand of human hair. PLDT's optic fiber installation will initially transmit 480 voices simultaneously but the fiber itself can carry thousands of simultaneous conversations.

The fiber is approximately five kilometers long and encased in a metal shield with a plastic sheath. With this protection shield, the light wave cable has a size slightly smaller than the average ring finger.

TELECOMMUNICATIONS INTEGRATION TO BE PUSHED

Manila BULLETIN TODAY in English 5 Aug 82 p 10

[Text]

All telecommunications facilities for domestic services will be integrated into single, public, nationwide network to serve national, urban and rural requirements.

They should also cover all types of transmission and reception services at the lowest applicable cost and use the latest applicable technology.

This policy was enunciated in the five-year communication development plan adopted by the government.

The inadequacy of communications services in the country can be gleaned from the data which show that the telephone density of the Philippines with a population of almost 50 million is only 0.88 per 100 population, and with services concentrated largely in profitable urban centers.

While Metro Manila has a telephone density of 4.77, other urban centers have 2.25, and the rest of the country has 0.24.

At the same time, under the telecommunications development program, the franchise system will be organized to allow for separate franchise and independent operations for the national long-line backbone system.

It will also integrate the present operators either on an area or regional basis to allow profitable operations in densely populated areas and cross-subsidized services to the outlying rural areas.

Whenever feasible, the use of the newest technology in telephone, the digital (pulse code modulation) system, will be encouraged to guard against early obsolescence of telecommunications

systems by the time these become operational. This system reportedly could easily be upgraded to use the latest technology.

Because of the massive funding and borrowing requirements for the development of the telecommunications sector, the government has decided to assist in securing the financing for sectoral programs and projects.

It will also study the feasibility of investing in the sector and then leasing back the facilities to the franchise operators.

All telephone operations will be left to the management of the private sector.

Investments in progressive local manufacturing facilities for exchanges, instruments, terminals and other telecommunications equipment will be encouraged.

Under the program, the telephone facilities in Metro Manila after the merger of the Republic Telephone Co. with the Philippine Long Distance Telephone Co. will be extended to attain a density of 7.4 telephones per 100 persons by 1984.

A computer-analog system will be introduced for better service.

Also to be implemented during the plan period is the rural telecommunications program which, when completed, will provide 30,600 telephones in Regions I and II; 40,000 in Regions III and IV; 30,000 in Region V; 103,300 in Regions VI and VII; and 170,000 in Regions IX, X, XI, and XII.

A backbone network will employ a computer-digital system for interconnecting the urban centers.

PHILIPPINES

BRIEFS

INFORMATION MINISTER BLASTS WESTERN MEDIA--Information Minister Gregorio Cendana denounced yesterday the Western media for trying to impose on the Third World nations. He accused Western newsmen of the most insidious form of intellectual imperialism. He lashed out at the Western media in his address at the meeting of the Thursday Club in Quezon City yesterday. Cendana said the Western media want to condition the Third World to think what the imperialist powers want us to think. According to Cendana, the Western media are presuming to interpret for us events not only in the world but also in our country. The objective, according to the minister, is to dominate the mind, attitudes and beliefs. He called on Filipinos to be skeptical in reading or listening to Western interpretation of events in the Philippines. He said Western newsmen could not seem to report events in the Third World without bias and racial prejudice. [Text] [HK300110 Manila Far East Broadcasting Company in English 2330 GMT 29 Jul 82]

CSO: 5500/2236

ENGINEERS' EXODUS THREATENS OVERSEAS TELECOMMUNICATIONS SERVICE

Colombo SUN in English 3 Aug 82 p 1

[Article by Tyronne Devotta]

[Text]

A steady exodus of qualified engineers is threatening to cripple the Overseas Telecommunication Service, Sri Lanka's major link with the outside world.

Some of the highly qualified men have already left the Department. Others are making plans to go thus forcing officials in the Ministry of Posts and Telecommunications to examine employing engineers from Sweden and Japan. This is as a temporary measure till the staff situation improves.

The Earth Satellite Station at Padukka, the International Telephone Exchange, the Transmission Room and the Telex Exchanges come within the purview of the Overseas Telecommunication Service.

Among those who have already left are the former acting Chief Engineer, the engineer in charge of the Padukka Earth Satellite Station, the engineer in charge of the International Switching Centre (he was trained in Italy and Sweden in this field), and the engineer who was an expert on software management.

The Ministry of Posts and Telecommunications is also examining the possibility of seeking technical assistance from friendly countries to train personnel in various fields.

Ministry sources explained yesterday that even if new hands are recruited, it would be some time before they are trained adequately. During this period it was imperative to ensure that existing services do not deteriorate or the machinery gets into a state of disrepair.

CSO: 5500/5897

SRI LANKA

BRIEFS

FRG-AIDED TRANSMITTING STATION--The Sri Lanka Broadcasting Corporation's [SLBC] transmitting station serving listeners on medium wave was opened on 17 July at Mahayayagane by Minister of State Anandatissa De Alwis. The transmitting station, opened on 17 July, is the 22d of such stations being put up by SLBC with FRG assistance since 1967. Three more stations are to be opened under this program at Ratnapura, Ambawala and Kantalai before the end of 1982. [Colombo International Service in English 1045 GMT 18 Jul 82]

CSO: 5500/2236

TAIWAN

BRIEFS

'CNA' COMPUTERIZED SERVICE--Taipei, 16 Jul (CNA)--The Central News Agency Corp will introduce computerized Chinese language news service to local subscribers. A demonstration was held Wednesday for representatives of newspapers, broadcasting stations and television stations at the CNA Headquarters Office at the Chihching Building on Sungchiang Road. In order to provide better service to subscribers, Pan Huan-kun, president, said that the CNA will begin the computerized news service 1 April next year. CNA computerized its sending of Chinese language news to the United States beginning 26 January this year and results have been quite satisfactory, Pan said. The computerized operation can send 600 words per minute, compared to the current speed of one page (about 200 to 400 words) over 3 and 1/2 minutes through facsimile. The new way of news supply will cover Taipei, Taiwan Province (excluding remote islands) and Kaohsiung. [Text] [OW181738 Taipei CNA in English 1334 GMT 16 Jul 82]

CSO: 5500/2341

SRV'S NORTHERN PROVINCES HOLD RADIO CONFERENCE

OW031120 Hanoi Domestic Service in Vietnamese 1100 GMT 2 Jul 82

[Text] A conference on radio and wired broadcasting in the eight mountainous northern provinces of Quang Ninh, Lang Son, Ha Tuyen, Cao Bang, Hoang Lien Son, Bac Thai, Son La and Lai Chau was held in Quang Ninh from 27 to 29 June 1982.

The conferees heard Comrade Ly Van Sau, vice chairman of the Central Radio and Television Commission, report on the development of radio and wired broadcasting in the mountainous northern provinces.

The conference reviewed and stressed the role and responsibilities of the radio and wired broadcast sector in popularizing and explaining the lines, viewpoints and policies of the party and the state, especially the nationalities policy, and in organizing and encouraging emulation movements for labor productivity and bomat readiness in the mountain areas.

At present, communications in the mountainous northern provinces are difficult and delivery of newspapers is tardy; the compatriots there are suffering privations and the enemy is feverishly stepping up his psychological warfare against our people. Only through radio and wired broadcasts can our propaganda work be carried on in a fast and most effective way. However, whereas the radio and wired broadcast networks of some provinces such as Quang Ninh and Lang Son are operating pretty well, those of other mountainous border provinces and districts remain inadequate and the quality of their operations is poor.

To rapidly develop and improve radio and wired broadcasting in the mountainous areas, delegates from the eight provinces unanimously stressed the need to strictly implement the motto "The central and local levels and the state and the people cooperate in promoting the radio broadcast undertaking."

The conference set forth measures and the immediate tasks in radio and wired broadcasting in the mountainous areas.

The markets in the mountainous border areas, with thousands of customers gathered joyfully on each market day, are important areas favorable for mass information work. We must promptly set up stationary wired broadcast stations with proper electric power. The content and form of radio and

propaganda programs should be compatible with the characteristics, languages, psychology and cultural level of the compatriots of various nationalities and there must be special folksong programs for each nationality, besides relaying the central radio broadcasting station, the radio and wired broadcast programs in the languages of local nationalities by taking into account the respective characteristics of these nationalities and as decided upon by the local party committee echelons and administrations.

The radio stations in the mountainous areas should also promptly form or improve their corps of correspondents and editors of ethnic minorities recruited from among collaborators, cadres and employees of local state forests and farms who have some knowledge about journalism. The party committee echelons, administrations and sectors concerned should actively assist these radio stations in promptly implementing this task.

The conference closed in an atmosphere of enthusiasm with the signing by the radio stations of the eight provinces of an agreement on emulating efforts to improve the quality of radio and wired broadcasting. The emulation drive will initially be reviewed by the end of September and ultimately be assessed in early December this year.

CSO: 5500/2341

BROADCAST NETWORK AUTOMATION VIEWED

Prague PPT REVUE in Czech No 3, 1982 pp 79-81

[Article by Eng Jan Bubak, CSc, Research Institute for Communications, Prague:
"Automation of Broadcast Communication Network Operation"]

[Text] In the era of scientific and technical revolution automation of procedures and processes is becoming an important tool of technical progress expanding into more and more areas. One of these areas is broadcast.

The reason for introducing automation into this field is the sharp development of broadcasting--there is a considerable number of transmissions from the field, exchange of programs between studios is becoming constantly more intensive, international transmissions are on the rise. An important role is also played by the increasing number of broadcasted programs. It can be stated in general that both the number of program sources and their corresponding receivers is increasing as is, naturally, the number of transmission routes among them. In dispatching of programs at dispatching centers or in connecting broadcast channels at broadcasting exchanges there occur considerable fluctuations in operation that are sometimes hard to handle. The operators of such centers often work under stressful situations and errors in manipulation occur easily. As an example can serve the fact that on the occasion of the world ice hockey championship the broadcast center in Prague had to simultaneously connect 50 broadcast channels and 40 intercom circuits. Handling of emergency situations (transmission route breakdowns, etc.) already taxes the limit of human capabilities.

Dealing with this situation by increasing the number of operating personnel is, on the one hand, in direct contradiction with the manpower shortage and the efforts to improve the efficiency of operations. On the other hand, it does not, as a rule, produce the desired effects, because it inevitably leads to fragmentation of operations, reduced ease of orientation and control. Thus, the solution must be sought in automation.

Automating the operation of the broadcast communication network, in addition to doing away with the mentioned hard-to-handle operational situations, would also bring about improved reliability because it would eliminate manual operations which are a significant source of breakdowns (faulty manipulation

accounts for 40 percent of breakdowns in transmissions). In the case of important transmissions it would be possible to introduce a permanent operational control with automated switching to reserve channels. It would also considerably simplify switching to network operation under emergency situations. Another advantage would be saving of broadcast channels in view of their efficient and optimum utilization. Automation could also be used to measure channels during regular maintenance. Finally, automation could also be used for operational record keeping, billing and message accounting, etc.

Principles of Broadcast Communication Network Automation

Certain important requirements have to be met in the automated operation of a broadcast communication network. First of all, on maximum reliability of automated connections is required, because a wrongly connected broadcast transmission cannot be repeated (as is the case during recording in the studio). Further required is the correct timing of the transmission at the time of the connection. However, the transmission cannot be switched on immediately prior to the scheduled moment, as an eventual defect would not be discovered until after the program failed to reach its destination. Thus, the connection must be established ahead of time and, by means of control equipment, and means ensured in case of some defect for it to be switched to an alternative route. Important transmissions must be automatically monitored (operational control) and, in case of defect, are also transferred to an alternate route. After completion of transmission the channels must be uncoupled at the appointed time, but in case of need a provision must be made for prolonging the transmission. Automation of these basic functions must be combined with automation of measurements, maintaining records of transmissions and billing fees for transmissions.

In view of the mentioned requirements, control of communications must avail itself of the most modern method--control by computer. This system is particularly suited for Czechoslovak broadcasting centers which are equipped with cross-coupled communication fields with reed relays and coordinates selection. Access to a control computer is envisioned for the communication organization (highest priority) and, through data circuits, also for broadcasting and television organizations.

Structure of Broadcast Communication Network and Control System Configuration

The broadcast communication network in the CSSR is decentralized into a larger number of broadcasting centers (up to approximately 15 in the future). The broadcasting centers are connected via a spider network with the central exchange in Prague and, in addition, the centers are interconnected by a partial grid network. The broadcasting centers will have to connect a total of approximately 2,000 broadcast channels. In addition to broadcast channels there is also need for connecting intercom circuits (usually 1 to 2 intercom circuits for each broadcast connection during some domestic transmissions). It is envisioned to implement the so-called complex communications (broadcast channels simultaneously with intercom circuits). The daily standard for transmissions amounts to hundreds of them.

The control system will have to be adjusted to the mention structure of the network and the mode of operation. The network must be controlled from a single center which has data regarding the structure of the entire network, number of channels, their type, their allocation, etc. The control computer must be located in this center. However, direct control of all centers of the decentralized network by a single computer would cause a disproportionate increase in requirements on the system of data transmission and the decoding and control system in individual centers. Therefore more advantage is offered by a system using a single central computer with which cooperate subordinate simple satellite computers in individual broadcasting centers. These satellite computers merely control connecting of signal generators and consumers in the given cross-coupled field on instructions from the central computer. For that reason the satellite computers need but a low-capacity memory and simple accessories.

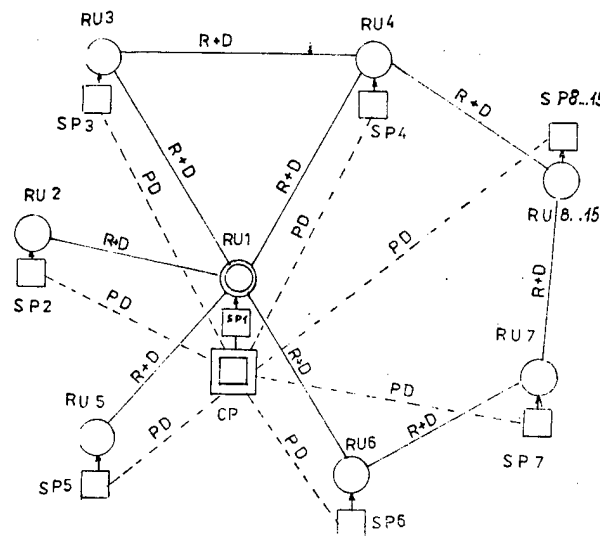


Figure 1. Configuration of the Control System

Key:

- RU - Broadcasting center
- CP - Central control computer
- SP - Satellite control computer
- R+D - Broadcast channels, intercom circuits
- PD - Data transmission

Configuration of the broadcast communication network with decentralized control is shown in Figure 1. Fourteen broadcasting centers RU 2 through RU 15 are connected via broadcast channels and intercom circuits R+D through a spider network with the main exchange RU 1. Some centers are interconnected directly. Each of the 15 centers is controlled by a small satellite control computer SP 1 through SP 15. All satellite computers are controlled by the central computer CP by means of a special network of data circuits PD.

Functioning of the Control System

Functioning of the control system can be seen in Figure 2. which shows a simplified layout of connections of the central computer with two satellite computers.

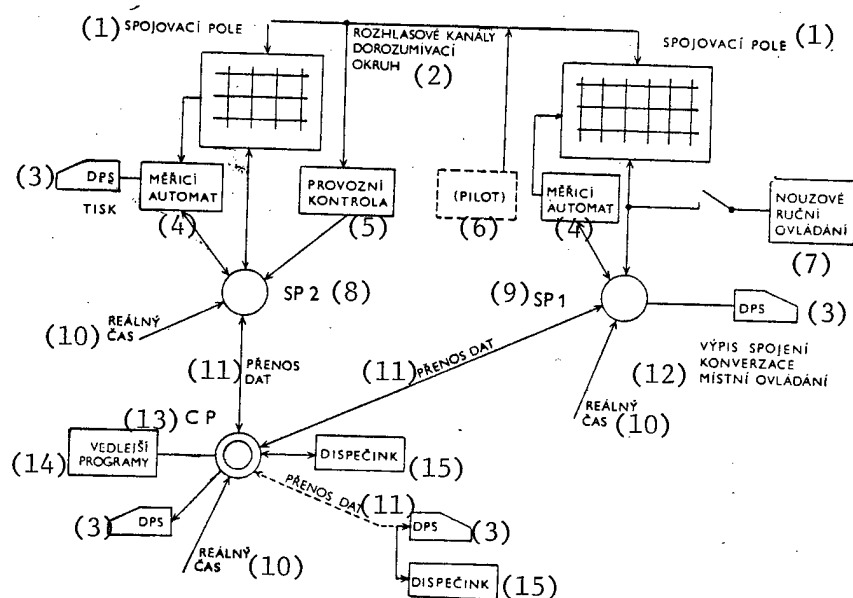


Figure 2. Functioning of the Control System

Key:

- | | |
|-----------------------------|-------------------------|
| 1. Communication field | 9. Satellite computer 1 |
| 2. Broadcast channels | 10. Real time |
| 3. Teletype | 11. Data transmission |
| 4. Automatic meter | 12. Connection printout |
| 5. Operational control | Conversation |
| 6. Pilot | Local control |
| 7. Emergency manual control | 13. Central computer |
| 8. Satellite computer 2 | 14. Subprograms |
| | 15. Dispatching |

All requests for transmission are fed into the central computer by teletype or display units locally, or by data circuits from remote subscribers. Requests for transmissions are submitted in the prescribed form several days (e.g., 7) ahead of time, at the latest, e.g., 30 minutes prior to the required time of transmission. The computer has in its memory stored the layout and types of all broadcast channels in the CSSR. The computer checks whether the requested transmission can be implemented and provides a positive or negative answer. The request is then stored in the central computer memory. The central computer gives with a certain time lead instructions through the data circuits to satellite computers for connection (e.g., several hours ahead of time). Satellite computers store these instructions in their memory and

print out the prepared transmissions in chronological sequence on teletype which, in case of breakdown of the automated system, facilitates transfer to emergency manual operation. The central computer and satellite computers operate in real time. Immediately prior to the start of transmission (e.g., several minutes) the satellite computers connect in the cross-coupling switchboards of broadcasting centers the requisite channels. At the same time they check by means of a test transmitter and receiver (automatic meter) whether the connection can get through. Satellite computers inform the central computer whether a channel can or cannot be cleared and the central computer eventually finds an alternate route and reports the defect. The transmission is terminated at the required time. In case of need, the central computer may be additionally informed of the need to prolong, shorten or cancel the transmission. The teletypes of satellite computers designed for providing a printout of prepared and implemented connections can also be used for local control and for conversations with the computer. The central computer is further equipped with an input and output for subprograms (accounting, statistics, etc.).

The central computer also controls the regular measuring of channels according to scheduled maintenance requests. It again uses the satellite computers which collaborate with automatic meters at each broadcasting center. The results of measurements are printed out or can be transferred to a designated point.

Important transmissions can be continuously monitored by a remote control system.

From what has been said it is clear that automation can be applied to building up of connections the partial components of which terminate directly at the broadcasting centers, meaning among broadcast channels or broadcast channels with local busbar lines to broadcasting and television organizations. Which means that it will not be possible to build up connections for some occasional transmissions when the connection is built up of line sections, e.g., in the local telephone network, etc. In that case the control system must provide at least for informing in time all the points that will participate in implementing the connection.

Implementation of the System

The described control system is not just some interesting theoretical possibility. At the present time, the Toll Cable Administration, Tesla Electroacoustics and the Research Institute for Communications are collaborating in its implementation.

The programmed control unit type Tesla JPR 12 R will be used as satellite computer for control of transfer switchboards in individual centers. The unit JPR 12 R is a 16-bit minicomputer with operational ferrite memory capacity of 64 KB (1 KB - 1,024 byte), assembled of modules with 16 KB each.

This type of minicomputer was selected primarily because of its high reliability in comparison with other minicomputers and because of its low

price. Another advantage is the wide assortment of available units for contact with the controlled object (available are, e.g., plates with static and dynamic digital outputs, all-purpose connecting plates, analog-digital converters, digital clock connections, etc.). The connecting units are located with the computer in the same housing. An important factor in the selection of a computer type was the experience of the producer of broadcasting centers (Tesla-Electroacoustics) who used an older type of this computer (JPR 12) for control of studio switchboards.

To expand the capacity of computer memory, use will be made either of the flexible disks (discettes) MOM 3200 with a capacity of 256 kbyte or cassette tape memories KPP 800 with a capacity of 200 kbyte.

Development of equipment for cooperation of the satellite computer with the broadcasting center (contact units) was contracted out to the concern enterprise Tesla-Electroacoustics in Bratislava. The extant manual control of cross transfer switches in broadcasting centers is done from a control panel. Connection of cross points (reed relays) occurs through coordinate control by means of sets of push buttons for hundreds, tens, and ones. Disconnecting is controlled by cancel keys connected in selfsustaining circuits of cross relays. Outputs from the automatic control system are adapted to this control system--to each selection button is connected the connecting contact of the reed relay in a contact unit in parallel, and with each cancel key is connected in series with the disconnecting contact in a contact unit. At an exchange capacity of, e.g., 100 inputs, 50 busbars, 100 outputs that translates into connecting 70 relay connecting contacts in parallel and 150 relay disconnecting contacts in series. These functions, for all practical purposes, are carried out by means of dynamic digital output plates DDV (in the case of connecting contacts) and are supplied by the computer manufacturer, and busbar register plates with relay units (in the case of disconnecting contacts) which will be supplied by Tesla-Electroacoustics. All contact units will be located either in a common housing (1,792x600x725 mm) with the computer and additive memory, or in an adjacent housing of the same dimensions (for large exchanges).

No decision has been made as yet in regards to the type of the central computer. As a suitable type appears to be some of the minicomputers of the series ADT 4000 (Plants for Industrial Automation Trutnov) or some type from the series SMEP [system of small electronic computers] (SM 3, or SM 4). Supplemented by external memory of a higher capacity, the described type JPR 12 R might also do. The requirements on memory are approximately as follows: operational memory at least 64 KB, external memory on the order of MB.

Control of broadcast channel clearance will be done by means of a set consisting of an automatic transmitter and a broadcast channel meter which will be produced under the designation ANS 1 in the near future (1983) by Tesla-Hloubetin. The set is controlled by microprocessors and can handle several fixed programs as well as introduction and clearing of several random programs. The set of fixed programs includes the so-called short program mono, short program stereo, long program mono and long program stereo. For example, the short program mono, which lasts 5.64 s, includes

measurement of nominal transmission level, attenuation distortion at 3 frequencies, noise, harmonic distortion at 2 frequencies. This short program is an excellent means which will facilitate control of channel clearance prior to transmission. The control system for connecting channels in the cross-coupled field will make it possible to connect the set's receiver to the incoming channel. Actual assesment of the results of measurements will be done by the set's receiver which will pass on the result to the control system. Eventual transfer to a reserve channel is carried out by the control system.

Connecting of the set's transmitter and receiver will make use of the cross-coupled connecting fields of broadcasting centers in which some inputs or outputs will be reserved for the set's transmitters and receivers.

The same principle will be used for automatic maintenance of channel measurement. Requests for measuring will be handled by the control system the same was as requests for transmission. The long programs will be used for measurements. The long program stereo lasts 10.4 s and includes measurement of the nominal transmission level, attenuation distortion at 15 frequencies, harmonic distortion at 4 frequencies, intermodulation distortion at 3 combinations of frequencies, crosstalk between channels at 3 frequencies, noise, level and phase differences at 15 frequencies. The results of these measurements are retained in the memory of the automated set wherefrom they can be displayed, printed out, transmitted or recorded by a cassette recorder.

It is envisioned to use 2 principles for the system of operational control. The first is a system comparing two signals--from operational and alternate routes. The basic element of this system is the switch-over unit EIP 215 (Tesla-Electroacoustics). Under consideration is also a system using a pilot frequency in the vicinity of 320 Hz which would be combined with a signal at channel input and analyzed at channel output--this system is currently being verified from the viewpoint of subjective interference.

Independent noncommutated data circuits will be used for data transmissions between the central and satellite computers. It is envisioned to use 200 Bd modems Tesla MDS 200 and operation in echo-system (reverse transmission of each character already stored in computer memory and again read from the memory). This system will make it possible to eliminate errors during transmission and eventual errors during storage into the memory.

As a breakdown of the control system cannot be excluded, provisions will be made for automatic switching to manual operation of broadcasting centers. This transfer will be tied in each computer to an incorrect result (symptom) of a suitable testing program which the computer constantly repeats during waiting periods or prior to implementation of each connecting instruction.

An equally important component of the system as the so far described equipment (hardware) is its program equipment (software). Software for cooperation of satellite computers with the broadcasting center (storage of requests for transmissions 24 hours ahead of time, their implementation in real time,

automatic control prior to transmission, automatic measurement, the computer's own testing for defects, etc.) is being worked out by the Research Institute for Communications. No decision has been made as yet about software for the central computer, as the requisite capacities for analysis and programming will be considerable.

Project Stages

Implementation of the system can be divided into 3 stages:

In the first stage will come development of units for contact between the satellite computer and the broadcasting center, then will be devised suitable software followed by experimental operation of the center controlled by the satellite computer, to include the automatic measuring system. It is expected that trial operation will commence in mid-1983.

In the second stage the broadcasting centers will be gradually equipped with satellite computers. The centers will be controlled by local generation of connecting instructions according to the guidelines of the central outlet of the Toll Cable Administration. There will be a gradual transition to providing instructions remotely from central dispatching via data circuits as preparation for the last stage. The second stage should last approximately 5 years.

In the last, third stage will come implementation of the central computer system's hardware and software. Remote transmission of connecting instructions from central dispatching of the Toll Cable Administration will be replaced by remote control by the central computer. Requesting of transmissions by teletype from central dispatching will be replaced by making requests directly to the central computer.

Economic Features of the System

Preliminary analyses showed that implementation of the complete system should bring about savings of approximately 20 to 30 personnel (savings in operation of transfer switches, measurements, dispatching), which amounts to approximately Kcs 1 million in labor cost annually. Increased revenue for transmissions should amount to Kcs 3.5 million a year (higher network capacity).

The cost of equipping one broadcasting center with a satellite computer, contact units and accessories (teletype, modem MDS 200, flexible disk memory, perforated tape reader) will amount to approximately Kcs 500,000 i.e., about one-tenth of the cost of transmitting and connecting equipment of the broadcasting center.

The price of the central computer with accessories can be estimated to be approximately Kcs 1.5 million.

From the mentioned relations it is obvious that investment made into the system will be recovered in a relatively short time.

These economic advantages are accompanied by improved reliability due to elimination of handling errors--average time between defects will increase twofold even without introduction of the operational control system, after the latter's implementation the failure rate will register another substantial decrease. The stress situations during handling of peak fluctuations in operation mentioned in the introduction, will be gone. Precise and reliable automatic measurements will make it possible to preclude equipment failures in time. Additional savings will be generated as the result of the potential simultaneous automation of administrative tasks connected with ordering and billing of transmissions.

8204

CSO: 5500/3013

CZECHOSLOVAKIA

BRIEFS

INFORMATION EXCHANGE VIA TELEVISION--A regular exchange of televised information between Czechoslovakia and Afghanistan, via the Intervision Network, opened today. The reports sent from Afghanistan today showed Karmal meeting representatives of political and economic organizations, and pictures of normalization of life in the Afghan countryside. [Summary] [LD221557 Prague Domestic Television Service in Czech and Slovak 1955 GMT 21 Jul 82]

CSO: 5500/2341

GERMAN DEMOCRATIC REPUBLIC

BRIEFS

CHILDREN TRAINED IN RADIO COMMUNICATIONS--The Second Young Pioneer Championship Tournament for young radio operators in the GDR was concluded in Prerow today. The final requirement was the multiple radio operating contest generally referred to as the "fox hunt." With the help of radio direction finders the Young Pioneers attempted to locate hidden transmitters. The mission was very difficult; it was certainly no easy task for the participants to detect and locate transmitters in the Darss forest. Some 84 pupils, including 14 girls from grades 5 through 8, participated in the tournament. Yesterday the multiple-signal contest was held in which radio transmitters had to be set up within the shortest possible time. The participants had to send and receive messages quickly and reliably. The Second Young Pioneer Championship Tournament formed the high point at the second camp for young radio specialists organized and held by the FDJ and the GST. [Text] [DW110949 East Berlin Domestic Television Service in German 1730 GMT 8 Aug 82]

CSO: 5500/2236

RADIO SOLIDARITY BROADCASTS IN WARSAW AGAIN

NC132155 Paris AFP in English 2145 GMT 13 Jul 82

[Text] Warsaw, July 13 (AFP) -- Radio Solidarity broadcast again in Warsaw tonight and confirmed that several of the pirate radio station's staff had been arrested in a police operation July 5. The radio of the suspended independent trade union federation Solidarity also said it would close down for two months. After a few minutes the broadcast was suddenly cut off and replaced by pop music.

On Sunday Polish television announced officially that "Radio Solidarnosc" had been dismantled. It said seven people had been arrested, including a Belgian who was charged with giving clandestine members of Solidarity a new transmitter hidden in medical equipment.

Until tonight, Radio Solidarity, which first broadcast on April 12, had not been heard since June 8 when police seized the station's former transmitter from the top of an elevator shaft in a Warsaw residential building. Earlier today, pamphlets thrown from the top of a building in downtown Warsaw announced the new broadcast, which started at 2000 GMT.

The radio said it was going off the air for two months because of "the particular situation" in the country. This apparently was an allusion to the decision by Solidarity's underground leadership to suspend all protest activities in advance of Pope John Paul II's visit to Poland and as a show of goodwill to Polish authorities.

This was the first time a Western-made transmitter had been used by Radio Solidarity. It was operated by Polish engineers belonging to Solidarity, the radio said. Recalling that Poland had signed international conventions guaranteeing freedom of information, the radio said it aimed to break the Polish authorities' news monopoly. "Human rights are an international affair," the radio said, adding that Western nations were entitled to help Poles who wanted to make sure liberties guaranteed by the conventions were respected. "We are fighting for Solidarity's existence and for a social entente which would serve as a basis for normalizing social relations" and "which could help overcome the economic crisis," the radio said.

The radio's April 12 broadcast was not jammed. But succeeding programs, which starting in May were transmitted every Sunday, were drowned out with pop music by a powerful, unidentified transmitter. However the station was picked up in some sections of the capital.

On June 8 police seized a transmitter and arrested two people. Following that, the station went off the air. But other clandestine transmitters were functioning in various cities, particularly Gdansk and Poznan.

CSO: 5500/2236

SFRY RADIO DIRECTOR HOLDS TALKS IN TUNISIA

LD280322 Tunis TAP in French 1300 GMT 27 Jul 82

[Text] Tunis, 27 Jul (TAP)--Mr Zdravko Pecar, director general of the International Broadcasting Station Radio Yugoslavia, who is visiting Tunisia, has held talks with top-ranking officials of Tunisian Radio-Television (RTT).

The talks have been held within the framework of the cooperation agreement between RTT and Yugoslav Radio-Television (JRT), concluded last May, which is a direct outgrowth of the cooperation links, union of work and agreement advocated by the Committee for cooperation among broadcasting institutions from nonaligned countries, including Tunisia and Yugoslavia.

The talks between Mr Pecar and the management of RTT focused on technical cooperation between RTT and JRT. During the talks Mr Pecar expressed Radio Yugoslavia's intention to increase the range of its external broadcasts. In this connection, RTT promised to conduct a systematic audibility survey of Radio Yugoslavia's broadcasts to North America.

The Yugoslav side assured RTT of its full support for all actions undertaken to ensure a wider range for Voice of Tunisia broadcasts. This is why RTT will be allowed to use the technical facilities of Radio Yugoslavia to broadcast programs earmarked for Europe over shortwave transmitters in Yugoslavia as soon as they are operational.

Also discussed during this visit were all issues concerning technical coordination for the adoption of a common RTT-JRP position at international conferences devoted to planning and distribution of frequencies.

CSO: 5500/2341

YUGOSLAVIA

BRIEFS

SATELLITE STATION--Ivanjica, 17 Aug (TANJUG)--Works are underway on the construction of the new "Yugoslavia II" satellite station near the existing "Yugoslavia I" station in the vicinity of Ivanjica, southwestern Serbia. The works are expected to be completed by the end of 1983. That is in time for the Winter Olympics to be held in 1984 in Sarajevo, the capital of the Yugoslav Constituent Republic of Bosnia and Herzegovina. The new satellite station will have [word indistinct] links with a satellite over the Indian Ocean. The station will enable automatic telephone, telegraph and television links between Yugoslavia and Australia and the Far East--China, Japan, Indonesia and other countries. Approximately 300 million dinars (approx. 48 dinars to the dollar) will be (?invested) in the construction of this telecommunications facility. [Text] [Belgrade TANJUG in English 1711 GMT 17 Aug 82]

CSO: 5500/2236

COLOMBIA

BRIEFS

NEW TELECOM PRESIDENT--Herman Gonzalez Sorzano has been sworn in as president of the National Telecommunications Enterprise, Telecom. He replaces (Guillermo Sagra). [Bogota Domestic Service in Spanish 1730 GMT 17 Aug 82]

CSO: 5500/2236

BRIEFS

PUBLIC SECURITY ASKS NEWS MEDIA COOPERATION--Angel Edmundo Solano, Costa Rican public security minister, has asked Costa Rican and Nicaraguan news media to cooperate with their respective governments to maintain harmonious relations. Some news media had referred to Minister Solano as making statements harmful to Nicaraguan-Costa Rican relations. This prompted Minister Solano to issue a communique in which he explained his participation in the meeting of Nicaraguan and Costa Rican authorities in Granada. One of the things I said was that the Nicaraguan authorities should try to stop reports and comments hostile and disrespectful to Costa Rica, Solano said in his communique. I have not denied at any moment the participation of the Sandinists in the Honduran Air Service, Inc--Sahsa--sabotage. I consider that the matter has been placed in the hands of the appropriate authorities to handle as quietly as possible. That is why I thought it was better not to refer to this anymore, Solano explained in his communique. He also denied that he had handed over to Nicaraguan authorities recordings containing the statements of the Nicaraguan diplomats involved in the Sahsa terrorist act. Solano also explained that one of the main objectives of the meeting with Nicaraguan authorities in Granada was to have guerrilla commander Tomas Borge officially announce the right of Costa Rica to navigate the San Juan River, as established in the Canas-Jerez Treaty and the Cleveland Ruling. [Text] [PA100413 San Jose Radio Reloj in Spanish 0100 GMT 10 Aug 82]

FORMATION OF COMMUNICATIONS COUNCIL SOUGHT--At a meeting with publicity agencies, media directors and publicity experts, President Luis Alberto Monge expressed the need to establish the Costa Rican Council for Communications as an advisory agency for the president so that he can consult, agree on and coordinate the activities of the private and public sector concerning matters of information and communication. This council would be made up of authorized representatives, professionals of communications, directors of information, publicity experts, the church's media commission, poll takers, educational centers and the government. According to Monge, it will be an organization with many members and wide representation. Monge said that the council for communications will be an organization where we can all express our views democratically. The private and public sectors as well as institutes, centers and associations of public interest devoted to the development of participative communications will be able to exchange their views. This council would draft policy options, plans and programs; conduct investigations; promote professional training; carry out studies on technical aspects of communications; and unite efforts to guarantee

the full exercise of our sovereignty in the radio sector and strengthen our democratic system [word indistinct] freedom. Monge told the publicity experts that publicity, an important aspect of modern communications, is also in crisis. He stressed that instead of having publicity geared to raising consumption, circumstances demand information that gives guidance to consumers. He said that the political dimension of publicity is more important than its commercial and economic dimension. He said that the instruments of information and the techniques for persuasion must serve moral and civic values that support our democratic culture. Monge said that in times of crisis, publicity has a crucial value as a tool for political education. [Text] [PA280434 San Jose Radio Reloj in Spanish 0100 GMT 27 Aug 82]

EFFORTS TO COUNTERACT MEDIA 'CAMPAIGN'--Costa Rican Foreign Minister Fernando Volio has announced that the government will adopt several actions to counteract a campaign to discredit Costa Rica at the international level. He said that an attempt is being made to present Costa Rica as the promoter of movements to hurt other nations. The media in several countries are being used for this, and the government is worried about it. Since this is a matter that is being orchestrated ideologically by leftist groups and governments interested in discrediting the country's good name, the government is identifying several ways to face this campaign, Volio added. However, the government is facing a great difficulty in confronting this campaign; a lack of funds. Meanwhile, those interested in presenting Costa Rica in a different way are investing millions [words indistinct] we don't have enough resources to counteract this offensive. But we will do everything possible and use every means available to the country to prove that this campaign against Costa Rica is motivated by political and ideological interests. [Text] [PA280359 San Jose Radio Reloj in Spanish 0100 GMT 27 Aug 82]

CSO: 5500/2236

ECUADOR

BRIEFS

PERUVIAN SATELLITE STATION NEAR BORDER--The international affairs committee of the legislature has received the acting manager of the Ecuadorean Telecommunications Institute, a Foreign Ministry delegate and Gen (Jose Maria Albucar), representing the armed forces, to discuss a report received by the committee to the effect that Peru has established a satellite broadcasting station near Ecuador's southeastern border. The meeting was confidential. The ground station has reportedly been installed in an area that was not demarcated under the Rio de Janeiro protocol. The officials were summoned to allay the concern that this report has generated among committee members. [Text] [PA170455 Quito Voz de los Andes in Spanish 1130 GMT 16 Jul 82]

CSO: 5500/2236

BROADCASTING SERVICE OFFICIAL EXPLAINS WORKING OF GBC

Georgetown SUNDAY CHRONICLE in English 1 Aug 82 p 5

[Text] HAVE you ever tuned in on the Guyana Broadcasting Corporation while on a trip to the North West District or some interior location?

The chances are that you did not get a good reception and that, as a result, you let go a couple of brickbats at the local radio stations. Indeed, many residents living in the hinterland have been hurling abuses at the GBC for not providing them with a good service.

But get ready for a surprise: Guyana Broadcasting Corporation's Chief Engineer Ron Case says the abuses are unfounded and based on the mistaken knowledge that the GBC serves the whole of Guyana

He explained that GBC's medium wave service extends more or less along the coastland - from somewhere above Charity, Essequibo, moving in a slight arc to as far as Skeldon, Corentyne. (See Map).

In addition, the Corporation's franchise covers Linden and Wismar, made possible because of a transmitter in the area.

Cde. Case told the "Sunday Chronicle": "It doesn't mean that people outside of these two areas won't get reception, but such reception is entirely dependent on varying factors. What GBC is concerned about is that we provide a proper service in the area that it has been designed to serve.

"In other words, GBC is not claiming to provide a service beyond the areas specified. We do not cater on the medium wave band for listeners outside this contour."

During an interview Ron Case talked about a lot of things which he felt some members of the public were not too clear about. Here are some of them:

Question: Why can't GBC serve the entire country?

Case: Because it would need either more powerful transmitters or an increase in the number of outlying transmitters. In case one the relationship between transmitter power and signal strength is such that the latter varies directly

proportional to the square root of the former, so that a fourfold increase in transmitter power will result in a two-fold increase in signal strength.

Take the case of Linden; before transmitters were installed there, the power of the Sparendam transmitter in Linden was about one-tenth of what it should be to provide satisfactory listening, so that if Linden was to be served from Sparendam the transmitter power would have to be increased 100 times. The initial costs for this would be prohibitive, but the demand on power greater.

"Additional outlying transmitters require telecommunication and other infrastructure, if anything other than a mediocre service is to be provided, he said.

What about the Short Wave?

Case: Short Wave transmission is principally for long distances, but has been adapted to national broadcasting mainly in countries where the infrastructure does not exist to support broadcasting in other bands. As soon as that infrastructure comes into being, you are supposed to change to a system of local stations either on the medium wave or VHF band. Hence national short wave broadcasting is just meant to be a stop-gap measure. It has never been intended to provide a first-class service, it is not doing that and it never will. At its best it is poor and unreliable.

Cde Case explained that the GBC is providing three services - FM (or VHF Very High Frequency), Short Wave and Medium Wave, each having very different characteristics.

FM waves travel in straight lines, and as such as limited by the horizon, therefore the service area depends on the elevation and power. The quality of this service is good but it requires expensive infrastructure and relatively high cost receiving sets.

Short wave signals are unreliable because they bound between the ionosphere and and earth, and their reception depends on the state of the ionosphere which is continuously changing. Because the signals are fired into the air and reflected from this sphere one can cover long distances with small powers.

The quality of this service is poor because apart from the above mentioned constraints, stations are packed closer on these bands, and receivers become pretty expensive if they have the ability to discriminate between the wanted and the unwanted stations.

Medium Waves follow the curvature of the earth and provide a fairly good signal until they become so weak that they can no longer overcome atmospheric and other unwanted noises and interference. This is the backbone of most broadcasting systems and requires relatively cheap receivers for their reception.

He further explained that there is technically no difference between "Channel One" and Channel Two" except that because one is a higher frequency, it covers a smaller area.

Two Thursdays ago Channel One AM went off the air and resumed service the following Sunday (Incidentally AM means Amplitude Modulation and generally relates to the Medium Wave Band).

Cde Case explained that the Channel One disruption was the result of an accumulation of problems over many years and, more recently because of frequent load-shedding. In fact this piece of equipment like most others in the GBC is obsolete and beyond economic repair. Added to this is an acute shortage of spares.

The problem he said was compounded by the accidental damage to a feeder cable which was cut by weeders. It was no question of local engineers not being able to find the fault, he emphasized. Should a new unit be obtained soon, the reliability of Channel One would be improved.

Another subject he cleared the air about was "jamming" - a term used by people when their programmes are blotted out by another radio station.

Cde Case said that there is intentional "jamming" and unintentional "jamming". He pointed out that both on the Medium and Short Wave bands, stations have to share frequencies or channels because there are many more stations than channels, and in areas where your own signal strength is weak some other station will be heard.

The interfering station does not have to be on the same channel; quite often the strength of the interfering station and the inability of the receiver to detune the unwanted signal is the problem.

Cde Case explained "Our national objective is to provide a reliable and proper service to all parts of Guyana but we cannot do this at present because of the above-mentioned constraints... It is our hope that the indirect benefits of broadcasting particularly to the rural areas would give it the priority it deserves so that plans for the expansion of the service (and a service it is) would materialize in the very near future.

"If we fail to use the frequencies which we are allocated they will be taken away, and further more those which we now have would serve an ever decreasing area as the power of transmitters in other countries increases.

CSO: 5500/7560

NICARAGUA

BRIEFS

GOVERNMENT APPOINTS TELECOMMUNICATIONS MINISTER--The Junta of the Government of National Reconstruction has appointed Capt Enrique Schmidt minister of telecommunications and postal services of Nicaragua. Schmidt was director general of the Nicaraguan Telecommunications and Postal Services Institute [TELCOR], in charge of guaranteeing Nicaragua's communications with the rest of the world. [Text] [PA152325 Managua Radio Mundial in Spanish 1730 GMT 15 Jul 82]

TELCOR OBTAINS LOAN FROM BULGARIA--Capt Enrique Schmidt, director general of the Nicaraguan Telecommunications and Postal Services Institute, TELCOR, has described his recent visit to Spain and Bulgaria as positive and beneficial for the development of the country's economy. He headed a high-level government delegation that visited those European countries. The official made the announcement today during a press conference in the sessions room of the TELCOR building in Villa Fontana. He said that the achievements of the tour include obtaining a loan from the Bulgarian electronics minister for up to \$10 million. He said that this loan will be used for the purchase of 75 electronic centrals for municipalities in the country. He added that this project will begin in about 2 months. He also announced that in Spain he signed the charter of the Hispanic-American Association of Telecommunications research and study center in which the Latin American countries and Spain participate. [Text] [PA152355 Managua Radio Mundial in Spanish 1730 GMT 15 Jul 82]

ADVANCES IN NATIONAL BROADCASTING--Edwin Zablah, who heads the Peoples Radio Broadcasting Corporation, CORADEP, held a news conference to explain the achievements made during the first year of this organization which manages stations confiscated from Somozists. The 15 stations which are part of CORADEP are in Chinandega, Matagalpa, Managua, Rivas, Jinotega, Ocotal, Chontales, Leon, Esteli and Bluefields and include the ones established by our revolution in Rio San Juan and Rosita in northern Zelaya. CORADEP also gives technical assistance and maintenance. It has set up a shop for this purpose with highly qualified technicians who also made spare parts for the transmitters. CORADEP has also implemented new methods in national broadcasting. Certain stations are targeted at specific audiences, such as radio Exito, which is aimed at youth, La Future, with popular variety programs, and La Continental, which broadcasts selected music. Zablah added that future plans include the training of announcers and directors, which it is believed will allow a great advance in quality which a new generation will share in national broadcasting. [Text] [PA172317 Managua Radio Sandino in Spanish 1830 GMT 17 Jul 82]

BRIEFS

PROPOSED MEDIA BOARD WILL HAMPER PRESS--The Media Advisory Board [junta asesora de medios de comunicacion social] will probably be the most peculiar of the strange monsters created with "revolutionary" imagination, since it is the first case we know of in which the old principle that the function creates the organization is reversed. The board has in fact been formed without any legal instrument to regulate it, and its members have been appointed in the same way. No one seems to know what this unique organization is all about, and its members have had to name a commission to determine the objectives and functions of this strange entelechy. This matter would be of little importance were it not for the grave risks involved in the functioning of an organization created to impose information policies on the media, disguising its censorship role under false moralizing intentions. The present members of the board have said that they have no intention of assuming the role of censors; however, the way the board was created, together with the fact that its functions have not been defined, gives us good reason to believe that freedom of the press--already badly hampered by the arbitrary measures "suggested" by the National Guard commander--is in danger. Under these circumstances, a media advisory board without defined functions and objectives could be used for anything and could end up being an obedient generator of new and more dangerous "suggestions."

[Text] [PA161924 Panama City LA PRENSA in Spanish 16 Aug 82 p 1A]

CSO: 5500/2236

TELCO DESCRIBES DEVELOPMENT OBJECTIVES FOR 1980'S

Port-of-Spain SUNDAY GUARDIAN in English 1 Aug 82 Telephone Company Supplement
p 13

[Text]

The Trinidad and Tobago Telephone Company, under its new, revitalised Management team, is about to embark on a massive development programme, which will give the country the most modern telephone system in the developing world by the end of the decade of the eighties.

Earlier this year, the Board of Directors set out a number of objectives for its development effort over the 1982 - 1987 period.

OBJECTIVES:

1. To provide telephone service to meet 90% of the demand in the urban areas, upon request. This would ensure a 30% penetration factor. In other words a telephone density of 30 phones per 100 population, which would mean a total of 450,000 telephones in the country and a total of 300,000 lines.
2. To pattern the Company's methods and procedures along North American standards and to standardise on equip-

ment and suppliers operating in North America.

This was because:-

- (a) Trinidad and Tobago falls within the 809 North American exchange area.
 - (b) This would eliminate a number of interfacing and other problems faced with a mixture of other types of equipment and suppliers.
 - (c) The North American telephone system is undoubtedly among the most efficient in the world.
3. To deal only with suppliers with proven track records.
 4. To ensure that all new switches would use digital technology since this is the latest state of art.
 5. To retire much of its step by step equipment currently in use because of the difficulty in obtaining spare parts for that type of equipment and the increased maintenance effort required as the equipment gets older.
 6. To embark on a vigo-

rous training programme of the Company's employees to ensure that they would be able to adequately manage and maintain the enlarged system with the new technology.

Once these objectives were laid down, the Company decided that the INITIAL thrust of the Development Programme would be in District 1, which encompasses the North-West peninsula of Trinidad, or the areas currently served by the Nelson, West, Belmont, Maraval, Diego Martin and Chaguaramas Exchanges.

The Board made it clear however, that although the initial thrust would be in District 1, the intention is to extend activities to Districts 2 and 3, which make up the rest of the country, even prior to the completion of the proposed District 1 operations.

The main reason for the decision was the fact that District 1 was the most sensitive because of the problems caused by the fire at the Nelson Exchange, and because that was the area of highest-density demand.

The Company's Planners, after conducting a series of in-depth surveys, and collating information acquired from a number of sources, including the Central Statistical Office and the Town and Country Planning Department, forecast that District 1 showed a requirement of 92,000 lines by the end of

1987. This was expected to rise to 125,000 by 1993. There are currently 22,000 lines in the area in question.

A comprehensive review was then made of all the major Central Office equipment manufacturers to select the Company best suited for our needs.

After the evaluation, it was agreed that Northern Telecom of Canada was most suitable for our needs.

Northern Telecom is among the largest manufacturers of telecommunications equipment in the world. It develops, designs and manufactures the major elements required for the modern telecommunications network, plus a range of data processing and advanced office systems.

Since 1976, it has been the leader in the manufacture of digital switching systems. In that same year, Northern Telecom became the first manufacturer in the world to announce a complete hierarchy of digital switching systems:

- DMS 10 - a digital community dial office or small local switch.
- DMS 100 - a local switch.
- DMS 200 - a toll switch.
- DMS 300 - an international gateway switch.

Northern Telecom has successfully installed its switches in countries all over the world, including the Caribbean (Bermuda, the Bahamas, Barbados).

Negotiations were then started with Northern Telecom, which resulted in the signing of an agreement on Monday,

July 19.

The Agreement guarantees that:

- (a) Subscribers in Trinidad and Tobago must begin to see results in the shortest possible time.
- (b) The equipment to be installed must be provided at reasonable cost, and must be of the type that the entire development programme becomes self-financing in the shortest possible time.
- (c) There must be heavy emphasis on training of Telco personnel to ensure a meaningful transfer of technology.
- (d) Telco personnel must be involved in all stages of the planning and implementation of the development programme.
- (e) That the Telephone Company will purchase Central Office and Transmission equipment from Northern Telecom at fixed prices for the duration of the contract.

In addition, substantial portions of the Contract costs are tied to the successful operation of the Central Office equipment.

At Monday's signing ceremony at the Trinidad Hilton, the Telephone Company's Chairman, Mr. Fenrick De Four, noted that he was extremely happy to have reached agreement with a Company, which is undoubtedly one of the world's leaders in the field of telephone technology.

He said he hopes this is just the beginning of a re-

lationship that would be mutually beneficial to the Trinidad and Tobago Telephone Company and Northern Telecom.

In reply, Northern Telecom's President, Mr. B.A. Beneteau, assured Mr. De Four that his Company will do all within its power to satisfy the need of the people of Trinidad and Tobago.

He stressed that proof of this will come as early as December 1983 by which time District 1 will enjoy a telephone service second to none in the developing world.

Mr. Beneteau also noted that his Company was very pleased to have entered into yet another contract with a Caribbean country.

Northern Telecom has already successfully installed their DMS digital switches in the Bahamas, Bermuda and Barbados.

IMPLEMENTATION

a. Nelson Exchange - Installation of new Operator positions. 1st Quarter 1983.

- Installation of new tandem switch to permit subscriber growth. 3rd

Quarter 1983.

- Installation of a new Central Office for Port of Spain with a capacity of 32,000 lines. 3rd Quarter 1983.

b. West Exchange - Installation of a 5,000 line Central Office to serve Woodbrook, St. James and St. Clair, and to replace old equipment. 3rd Quarter 1983.

- Extension of that Switch to provide an additional 12,600 lines. 1st Quarter 1984.

c. Diego Martin - Installation of a new Switch to replace the existing step by step exchange.

- Extension of that Switch to provide an additional 9,300 lines. 1st Quarter 1984.

Apart from new costly digital switching equipment, the entire Development Programme will necessitate major cable plant activities in every major switching centre in Trinidad and Tobago.

- There will be major duct and manhole work required to allow for the large feeder cables to be placed out of sight.

All existing cable facilities areas currently served by the West and Belmont Exchanges are to be replaced. This will guarantee an improvement in the quality of service to subscribers who have been working on deteriorating equipment for some time.

The majority of cable facilities in Port of Spain, and, to a lesser extent, Diego Martin, will also be reinforced.

These works will ensure that service will be readily available when and where requested.

The provision of additional service will also require house wiring and provision of telephone instruments in all currently unserved residences and business establishments. And, the cost of support services (vehicles, tools, etc.) will be enormous.

The Management and staff of the Telephone Company are committed to the success of the Development Programme, which will ensure an expanded and improved telephone service for the people of Trinidad and Tobago.

CSO: 5500/7560

VENEZUELA

BRIEFS

NEW RADIO STATIONS--According to official reports, two new radio stations will soon begin operating in Monagas State. One of the stations will be located in Maturin and will probably be called (Ondas del Guarapiche). The other station will be located in Temblador, where exploitation of the Orinoco oil belt will begin soon. [Caracas Radio Continente Network in Spanish 2100 GMT 25 Aug 82]

CSO: 5500/2236

INTER-ARAB AFFAIRS

BRIEFS

FORUM DISCUSSES MEDIA ROLE IN LEBANON--Kuwait, 13 Jul (KUNA)--Arab news agencies are ineffective because they are directed to serve regimes and 99 percent of foreign agencies are biased, KUNA Director-General Barjas Mahmud al-Barjas said. Addressing a panel sponsored by the Popular Committee for Solidarity With the Palestinian and Lebanese Joint Forces, Al-Barjas said contrary to Israelis, Arab individuals are lacking personal freedom. The Arab world is endangered by a new colonialism as a result of the current war between the Palestinian and Lebanese joint forces and Israel, Dr Muhammad al-Rumayhi, chief editor of AL-'ARABI said. The forum, at Kuwait Graduates Centre, was called to discuss the role of information in the face of the Israeli invasion of Lebanon. Official Arab information failed to serve the cause of liberation and continued to propagate policies of regimes, Sulayman Fulayhan of AL-WATAN pointed out. With the exception of Lebanon and Kuwait, the Arab world is completely lacking independent newspapers, he said. While 250 foreign correspondents are now in Beirut to cover developments, not a single Arab journalist is reporting from the Lebanese capital, he added. [Text] [GF151258 Kuwait ARAB TIMES in English 14 Jul 82 p 7]

CSO: 5500/2236

IRAN

BRIEFS

NEW TELEVISION TRANSMITTERS--According to the Central News Unit, with the help of the network expansion and engineering unit and the staff of the Voice and Vision of the Islamic Republic of Iran two new television transmitters have started operation in Baluchestan region. One of the transmitters is located in Khash, covering Kahnuj, Dehpa'in, Eslamabad and (Nikabad). Another transmitter has also been earmarked to cover Qasr-e Qand, Chahbahar region, the installation and operational aspects of which are nearing completion. [Text] [Tehran Domestic Service in Persian 2030 GMT 22 Aug 82]

TV RELAY STATION REPLACED--According to the central news unit, the operations for replacing the (?Golshakrak) relay station and the Bafq relay serio have been completed thanks to the efforts of the expansion unit of the network of the Voice and Vision of the Islamic Republic of Iran, in order to overcome the existing shortcomings in the TV reception in the Bafq and (?Mehriz) areas and also to prepare the grounds for the installation of the [names indistinct] TV relay stations. With the completion of these operations, the inhabitants of (?Mehriz) and [name indistinct] will be able to receive the programs of the Vision of the Islamic Republic of Iran on channel 11 and those of Bafq on channel 5 without difficulty. [Text] [LD020648 Tehran Domestic Service in Persian 0730 GMT 1 Sep 82]

CSO: 5500/2341

IRAQ

BRIEFS

NEW RADIO, TV COMPLEX--Tariq 'Aziz, Revolution Command Council member and deputy prime minister, today inaugurated the first stage of the new radio and television complex that began transmission today. The inauguration ceremony was attended by Latif Nusayyif Jasim, minister of culture and information; the director general of the radio and television corporation; the ATH-THAWARAH newspaper editor in chief; a number of Information and Culture Ministry officials and the representatives of the company which is implementing the project. Jasim praised the efforts that were exerted to complete the first stage of the project on schedule. He said the project will develop media services in Iraq. [Text] [Baghdad Voice of the Masses in Arabic 1700 GMT 1 Aug 82]

CSO: 5500/2236

PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

BRIEFS

NEW TV, RADIO TRANSMITTER--A station for television and local radio retransmission was inaugurated in the directorate of (Shaht) yesterday. [Aden Domestic Service in Arabic 1630 GMT 25 Aug 82]

CSO: 5500/2236

SUDAN

BRIEFS

TELECOMMUNICATIONS PROJECT--International companies from Japan, the Netherlands, France and the FRG have agreed to contribute to a 9-year project to improve telecommunications in the Sudan. The cost of the program will be \$850 million. SUNA reports that the government is currently contacting friendly states to seek financing for the project. [Text] [EA260056 Omdurman Domestic Service in Arabic 1700 GMT 25 Jul 82]

CSO: 5500/2341

RADIO STATIONS TO BE SET UP IN EMIRATES

GF101241 Dubayy KHALEEJ TIMES in English 10 Jul 82 p 3

[Excerpt] The Ministry of Information and Culture is implementing projects to set up radio stations in Ash-Shariqah and Fujairah and a television center at Ras Al Khaimah.

The projects are part of the ministry's development programme being executed at a cost of DH 322 million, of the total, projects costing DH 262 million, are being implemented by the Ministry of Information directly and projects worth DH 60 million have been assigned to the Ministry of Works.

The Ministry of Information has allocated DH 50 million for its development schemes during the current year.

The proposed broadcasting stations at Ash-Shariqah and Fujairah will cost DH 13 million while the new television center at Ras Al Khaimah will be set up at a cost of DH 26 million.

A medium-wave transmitting station at Sa'Diyat will also be set up at a cost of DH 14.5 million.

Another project for modernising the development laboratory in Abu Dhabi which will cost DH 4 million.

Other development projects of the ministry included extension of Abu Dhabi TV building costing DH 25 million and a transmission centre of the news agency at Al Maqta' costing DH 7 million.

According to the report issued by the Department of Annual Programmes and Follow-up at the Ministry of Planning, among the projects executed by the Ministry of Information directly are developed of radio transmission rooms and studios costing DH 10 million, film production unit costing DH 20 million, furnishing of Ash-Shariqah cultural centre laboratory costing DH 12 million, Abu Dhabi TV channel II scheme costing DH 14 million, building of video tapes control department costing DH 5 million, development of outdoor transmission vehicle, costing DH 2 million, and installation of phone sets for the outdoor transmission vehicles costing DH 2.5 million dirhams.

Besides these projects, the Ministry of Public Works and Housing is executing a number of projects for the Ministry of Information at a cost of DH 60 million.

These included construction of buildings for six cultural centres at Dubai, Ras Al Khaimah, Bid'zayed, Umm Al Qaiwain and Fujairah, costing DH 40 million and building project for the local news agency costing DH 3.3 million.

CSO: 5500/2341

BRIEFS

NEW FM TRANSMITTER--THE DEPUTY Director of Information & Broadcasting, Mr Dave Harris has announced the commissioning of a new Radio Botswana five kilowatt FM transmitter serving Gaborone and the surrounding area. The transmitter, which has cost around P100 000 to install, will provide VHF/FM service over a radius of about 60 km from the Sebele transmitting station. This includes Mochudi, Molepolole, Ramotswa, Thamaga and of course Gaborone, together with large parts of the Kgatleng District, South-East Kweneng, and parts of Southern and South-Eastern districts. A signal should also be receivable in parts of Kanye, and with a good external aerial - up to 100km or even more from the transmitter, he told a BOPA reporter. Engineering tests on the new transmitter were completed this week, although the service will still be liable to interruption occasionally as work progresses on the short-wave improvements at Sebele. The new transmitter broadcasts on 90.7 Megahertz, like the old Gaborone FM transmitter and joins the recently commissioned Selebi-Phikwe facility in bringing FM to an estimated 30% of the population. A relay transmitter is planned for Lobatse before the end of this year, and this will be followed by a number of other VHF/FM stations to cover the major towns and villages over the next few years. The engineering staff of Radio Botswana would be pleased to receive reports of reception of the new FM services, particularly from listeners who live some distance from the transmitters at Sebele and Selebi-Phikwe. [Text] [Gaborone DAILY NEWS in English 2 Aug 82 p 1]

CSO: 5500/5896

ETHIOPIA

BRIEFS

TIME DIVISION AUTOMATIX TELEX--ASSAB--An automatic telex system installed by the Ethiopian Telecommunications Service Authority has become operational here. The Authority, as part of its programme of expanding and modernizing its services, had earlier installed a mechanical apparatus called "time division" in Asmara, Dire Dawa and Massawa. The mechanism makes automatic telex exchange possible both in the country and internationally. The Authority said the newly installed system in Assab, the hub of commercial activity, will make instant communication possible for subscribers at the port. [Text] [Addis Ababa THE ETHIOPIAN HERALD in English 19 Aug 82 p 6]

CSO: 5500/5905

GHANA

BRIEFS

LONDON TELEPHONE LINK INTERRUPTED--The Posts and Telecommunications Corporation announces that Ghana's telephone link with London has been interrupted. A statement by the corporation in Accra yesterday says the interruption is due to circuit changes being made in London by the British Telecommunication International. The statement explained that the public will be notified as soon as the situation is rectified. [Text] [AB270941 Accra Domestic Service in English 0600 GMT 27 Aug 82 AB]

CSO: 5500/5908

LIBERIA

BRIEFS

NEW RADIO STATION--A 10 kw transmitter radio station is to be constructed in Grand Bassa County shortly. It will cost \$150,000. The community radio station is expected to broadcast in both English and local languages and will cover a radius of 60 miles. [Excerpt] [AB272100 Monrovia Domestic Service in English 1900 GMT 27 Aug 82]

CSO: 5500/2341

MOZAMBIQUE

BRIEFS

PROVINCES REJOIN TELEX SYSTEM--Mozambique's northern provinces of Tete and Zambezia have been (?restored) to the country's telex system. An official of the state communications firm said that extending the telex system to the northern provinces became possible when a new telex center was opened in Maputo earlier this year. Tete Province has been without telex communication since 1976 when facilities at Chicualacuala and Gaza Province were destroyed by the Rhodesian Air Force. Zambezia Province has never had telex communications. [Text] [MB261009 Maputo International Service in English 0400 GMT 26 Aug 82]

CSO: 5500/5901

BRIEFS

RADIO STATIONS CALLED ILLEGAL--COMMISSIONERS from the 12 "progressive" states have declared the establishment of FRCN stations in each state of the federation as illegal. They urged the National Assembly to take immediate measures to stop the establishment of such radio stations since it was not in line with the law establishing radio stations. In a communique issued at the end of their seventh regular meeting in Maiduguri, the information commissioners accused the federal-controlled information organs of allowing themselves to be manipulated and monopolised by the National Party of Nigeria (NPN). The commissioners reiterated their call on the Federal Government to give additional television channels to states for effective coverage of their areas. They further urged the Federal Government to exclude broadcast equipment from import restrictions. It was also their view that the Minister of Information should take appropriate steps to reactivate the National Council on Information interest of the nation. [Text] [Kaduna NEW NIGERIAN in English 7 Aug 82 p 1]

CSO: 5500/5893

SOUTH AFRICA

BRIEFS

TELSAF TAKEOVER--TELKOR, the South African signalling and electronic engineering company, is looking to increasing group turnover in 1982/83 to R60-million. Latest development in the company's progress as a major force in the electronics industry is its acquisition of the majority shareholding in Telsaf (Telettra South Africa), which specialises in microwave and multiplex equipment. The minority holding is retained by the international division of Telettra, Italy, a member of the giant Fiat group and that country's largest privately-owned supplier of telecommunications and transmission equipment (current turnover R200-million, employment roll 5 000). The South African company has the rights, under an exclusive agreement, for the manufacture and distribution of the entire Telettra product range. Telsaf, which was established in South Africa in 1973, is particularly strong in the field of digital transmission, with Excom and SA Transport Services (SATS) as major customers--the company installed the first digital microwave network in South Africa for SATS. Telsaf will continue to operate independently and autonomously from its existing premises at Wynberg, Sandton, and will now become a South African-owned company with the considerable manufacturing, technical and systems capabilities of Telkor at its disposal. Managing director Mr Silveria Boccetti says: "We do not expect an immediate increase in turnover and profits as a result of the merger, since it has come at a difficult time during an economic downturn. However, we certainly look forward to positive benefits emerging in 1984." [Text] [Johannesburg THE CITIZEN in English 17 Aug 82 p 25]

CHRISTIAN RADIO--The mayor of Johannesburg yesterday plugged into--and gave an official plug to--Radio Pulpit which broadcasts Christian programmes from Bophuthatswana. Mr Danie van Zyl, the mayor, hosted a luncheon at the Civic Centre for Afrikaans-speaking businessmen. Officially known as Trans World Radio (RSA) Radio Pulpit, the station transmits from 7 am to 10.30 am on Sundays and from 7 am to 8.55 am on other days to most parts of South Africa. Mr Van Zyl said he had been approached for financial help but since the City Council's coffers were so depleted, he felt businessmen could be sympathetic. He said he would arrange a similar luncheon for English speaking businessmen in Johannesburg. Among those present yesterday was Dr Carel de Wet, a former Cabinet Minister and former South African Ambassador in London. The managing director of Radio Pulpit, Dr Willie Marais, said the cost of building the medium-wave facility was R400 000. Most of the funds had been provided by listeners and well-wishers but a shortfall of about R140 000 remained. Medium-wave broadcasts started last month. Until then, religious programmes had been beamed on short-wave in 26 languages from Manzini in Swaziland. "Our programmes are non-political and uncontroversial, we have no commercials, and 18 churches subscribe to our Christian message of spreading the truth," Dr Marais said. [Text] [Johannesburg RAND DAILY MAIL in English 6 Aug 82 p 3]

GOVERNMENT URGED TO HALT INSTALLATION OF PIRATE SATELLITE RECEIVERS

Mbabane THE TIMES OF SWAZILAND in English 19 Aug 82 pp 1, 20

[Article by James Dlamini]

[Text]

THE Government was yesterday urged to introduce tight controls against people who install pirate satellite receivers.

Mr. S.M. Dlamini said fines for such offenders were too lenient. According to the relevant legislation, maximum fines are E500 or six months' imprisonment, or both.

Mr. Dlamini said the government should pass tough legislation with stiff sentences for people who install pirate receivers in their premises.

"My worry stems from the fact that crime is becoming more sophisticated and there should be deterrent penalties to discourage people from trying," Mr. Dlamini said. "People may install their own satellite receivers and then receive TV broadcasts from other countries; some such broadcasts may be those which are not desirable in Swaziland. In that case, you will still have people tuning into them without bothering to consult the relevant authorities," he said.

The Deputy Minister in the Deputy Prime Minister's Office, Prince

Bhekimpi, said satellite were still under the Department of Telecommunications. He said, however, that measures would soon be devised to deal with such a situation.

Prince Bhekimpi said if a need arises, the law can always be amended.

Swaziland has a satellite loan agreement with the Canadian government. The agreement is for the erection of a satellite receiver in Swaziland which would receive TV broadcasts from any part of the world.

Satellite receivers can be installed in private homes at enormous expense, according to our own source, possibly for more than E10,000.

Equipment

That may randomly pick up sounds without pictures or vice versa and the pictures may be blurred unless more money is used to obtain filters.

In order to get it to work reliably one would have to spend even much more money to erect equipment. It can be very bulky and difficult to hide, according to the source.

LIGHT-WAVE LINK TO BOOST ZBC QUALITY

Harare THE HERALD in English 19 Aug 82 p 7

[Text]

A \$30 000 fibre optic system has been commissioned by the Zimbabwe Broadcasting Corporation for their Pockets Hill complex in Harare.

The corporation will become the first organisation in this country to use the system.

Mr David Woodward, director of engineering at the ZBC, said the system might start work next month.

"The system is very important because it is totally immune to electrical disturbances. One cable can carry a lot of information," he said.

The optical system was supplied by Electro Technologies, a joint venture of Siemens AG of West Germany and the Industrial Development Corporation of Zimbabwe.

In a statement, the senior manager of the corporation, Mr Lindsay Goldie, said: "The system handles all video signals between the studios, control room and transmitters in the form of an optical wave guide.

"This will electrically separate the transmitter and towers from the studios and control room."

In summer the control room and studios would not be in danger of being affected if lightning struck the towers.

The system was also easy to handle, Mr Goldie said.

The optical transmitter and receiver were connected by an optical fibre approximately one millimetre thick. Flexible and unaffected by electromagnetic fields, the low-weight fibre is an insulator which could also be used to connect points of different electric potentials.

OPTICAL

Among the company's optical waveguide links already supplied to the German Federal Post Office and to private customers is a 22-km section with six fibres allowing the simultaneous transmission of 1 440 telephone conversations in both directions.

Mr Goldie said the company's current research programmes involved the simultaneous transmission of almost 8 000 conversations over a single pair of optical wave guides.

CSO: 5500/5904

BRIEFS

BROADCASTING DIRECTOR--The ZBC [Zimbabwe Broadcasting Corporation] Board of Governors has appointed Comrade Tirivafi John Kangai as director general of the Zimbabwe Broadcasting Corporation with effect from 1 July 1982. [Excerpt] [Harare Domestic Service in English 0500 GMT 28 Jun 82]

ZTV COLOR--A LARGE consignment of colour television equipment, worth \$3,5 million has arrived here from France. The equipment will be installed at the ZTV centres in Harare and Bulawayo with assistance from French engineers, viewers were told on yesterday evening's main ZTV news. The installation of the equipment is expected to be completed by January, the statement said. The consignment included colour studio equipment, telecines, mixers, video recorders, cameras and transmitters. The new transmitters should give a better quality picture. The Boeing 747 which brought the equipment also carried 30 tonnes of steam pipes for the thermal power station at Hwange and six tonnes of electrical equipment for the National Railways. [Text] [Harare THE HERALD in English 24 Aug 82 p 7]

CSO: 5500/5907

MOSCOW VIEWS CIA ROLE IN EXTERNAL BROADCASTING

LD192000 Moscow Radio Peace and Progress in English to Asia 1300 GMT 19 Aug 82

[Text] The Reagan administration has allocated another \$40 million for expanding the broadcasting time of the Voice of America to foreign countries. The power of the transmitting stations in Liberia, Sri Lanka and the Philippines has been greatly increased. Consequently the United States is accelerating its ideological attacks on the peoples of the Asian, African and Latin American countries. These continents are conducting a liberation struggle against imperialism and neocolonialism and that is precisely why the United States is reorganizing its undermining propaganda means, expanding the personnel and increasing allocations for their activities. These additional allocations to the VOA, as its director recently admitted, will be utilized also for keeping closer coordination in the broadcasts made by the CIA-financed radio stations, the Voice of Free Asia and the Voice of Free Africa. Each of these stations has a set job to do, a job -- needless to say -- that has been given them by the CIA. The broadcasts of the Voice of Free Asia, for instance, contain slanderous interpretations of events occurring in Afghanistan, in Vietnam, Laos and Kampuchea. The radio station tries very hard to distort the essence of the progressive socioeconomic transformations going on in a number of Asian countries to compromise the leaders of the national liberation movement.

The VOA and the Voice of Free Asia conducting broadcast to the Arab countries round the clock try to slander and attack those public forces in the Near and Middle East countries that come out against Washington's imperialist policy. These so-called voices stop at nothing, at no underhand means and slanders to try whitewashing the Israeli aggression and Nazi-type atrocities in Lebanon. The undermining United States propaganda also spreads the fairy tale of a non-existing Soviet threat to the Muslim nations and under cover of these outright lies, Washington is carrying out plans to create more military bases in the Indian Ocean and the Persian Gulf region. The Americans are striving to foment clashes between Iran and Afghanistan, between Iran and Iraq, playing up certain religious differences between them and ascribing various hostile schemes in their mutual relations.

In broadcasts to Pakistan, anti-Afghan and anti-Indian sentiments are constantly underscored so that the Islamabad regime could be tied still closer to Washington's policy in Asia. In the psychological war of American imperialism against the developing countries, the CIA occupies the leading role. Not so long ago Washington sanctioned what was called regular ties between the CIA and representatives of the mass media. The materials prepared by members of the CIA concerning the internal affairs of various countries are published in what is passed off as neutral publishing houses in third countries. Actually, however, they are totally controlled by the American Central Intelligence Agency. Operatives of the CIA are working in all African departments of the International Communications Agency, or the ICA, and also as correspondents of the ASSOCIATED PRESS and the UNITED PRESS INTERNATIONAL. Spreading slander and misinformation, they are striving to incite differences amongst the African people, to instill ideas in their minds that are favorable to Washington.

The understanding is growing in the world that the ideological struggle must not turn into a psychological war, that it must not be used as a means for interfering in the internal affairs of countries and peoples or lead to political and military confrontation.

BRIEFS

KIRGIZ TELEVISION RELAY--Frunze--A television relay has gone into operation in the (Baum) District of Kirgiziya. Thanks to the network of television stations, people in all the cities and 98 percent of the rural population of the republic can watch television. [Moscow Domestic Service in Russian 2300 GMT 21 Jul 82]

TV COMMUNICATIONS STATION--A satellite television communications station has begun operation in (Dursan), a town in the Kyzylkum Desert in Uzbekistan. The Moscow television broadcasts will now reach the Virgin Land workers in this area. Similar stations for television reception via satellite are presently being set up in a number of other remote regions in the republic. [Moscow Domestic Service in Russian 1530 GMT 14 Aug 82]

DIRECT-DIAL LINKS TO WEST CUT--Moscow, 15 Jul (AFP)--The Soviet Union today suspended direct-dial telephone links with the outside world. Countries affected by the suspension, decided on last 1 July but never officially announced, include Britain, France, West Germany and Switzerland. Soviet authorities blame technical difficulties, but Western diplomats here see the move as intended to tighten supervision of telephone links with the West. They say that the multiplication of telephone circuits in the Soviet Union, particularly the introduction of direct dialing during the 1980 Moscow Olympics, made wiretapping a lot more complicated for the security police. [Text] [NC152007 Paris AFP in English 2001 GMT 15 Jul 82]

UZBEK SATELLITE TELEVISION--A satellite television communication station has been commissioned in Gulistan. Inhabitants of Syrdarya and Dzhizak oblasts can now receive on their televisions images transmitted through space from the capital. At the same time as receiving Orbita-4 programs, the possibility has arisen of relaying experimental broadcasts of the second all-union and second republican programs. As the Uzbek Ministry of Communications reported, similar stations for receiving television broadcasts from space are now being installed in a number of other regions of the republic. The town of Zarafshan will be provided with a television "space bridge," after that Nukus will receive one. [Tashkent Domestic Service in Russian 1200 GMT 9 Aug 82]

SATELLITE TV RECEIVING STATION OPENS--Another receiving station for the Moskva satellite television system began working today in an oilworkers' settlement in Mangyshlaks kaya Oblast. Virtually all the oblast inhabitants can now receive television broadcasts from the capital. The USSR Ministry of Communications reports that 86 percent of the country's population can now receive central television first programs in color. Over 2,500 (?TV stations) and repeater stations are now operating. The Orbita system has 90 ground stations. [Summary] [LD171640 Moscow Domestic Service in Russian 1630 GMT 17 Aug 82]

SATELLITE COMMUNICATION WITH SHIPS--The first transmissions on information to ships of the merchant fleet have been successfully carried out in Vladivostok using the INMARSAT organization's system of international communication satellites positioned over the Pacific, Indian and Atlantic Oceans. The All-Union Association Morsvyazsp putnik has been formed at the Ministry of the Maritime Fleet. It is responsible for building shore stations and for satellite communication equipment on the country's passenger, trading, fishing and scientific research ships. The first two stations are already being built. The first is near Odessa and the other near Nakhodka in the Maritime Kray. Most ships will be fitted with marine communication satellite equipment during the current 5-year plan. [Text] [LD200034 Moscow Domestic Service in Russian 2100 GMT 18 Jul 82]

ARCHANGEL COLOR PROGRAMMING--Archangel television studios have changed to color programming. Reconstruction has been carried out there. Most viewers will be able to receive two color channels. New minirelays are being built in outlying villages. They receive signals from earth satellites through the Moskva space communications system. [Text] [LD170548 Moscow Domestic Service in Russian 1030 GMT 16 Jul 82]

CSO: 5500/2341

INTERNATIONAL AFFAIRS

BRIEFS

FRG-FRENCH TV SATELLITES--Bonn, 13 Jul (DPA)--The construction of the long-planned German-French television satellites has been agreed. Andreas von Buelow, German minister for research, told the press on Monday evening (12 July) that he and his French counterpart, Jean-Pierre Chevenement, had approved the relevant contract with the German-French "Eurosatellite" industrial consortium. It is to be signed this month. The joint project provides for the construction, launching and testing, over a period of 2 years, of one German (SAT) and one French (TDF-1) satellite, which are to operate three television-radio channels each. They are to be launched in 1985. The cost will be borne by the German Research Ministry and the German Post Office. The latter will contribute DM70 million in 1984 and in 1985. The minister was optimistic about possible export chances for the satellites. The first success was that an order is to be placed with "Eurosatellite" for the Scandinavian telex radio satellite trial in which Sweden, Norway and Finland cooperate. The satellite project agreed by Bonn and Paris in 1980 is part of the new space program to be adopted by the German Federal Cabinet on Wednesday (14 July). It provides for the allocation of about DM3.5 billion from federal funds until 1985 to promote space research. [Text] [LD132348 Hamburg DPA in German 0744 GMT 13 Jul 82]

CSO: 5500/2236

FEDERAL REPUBLIC OF GERMANY

FRG CUTS FUNDS FOR INFORMATION PROGRAMS IN U.S.

DW281203 Frankfurt FRANKFURTER ALLGEMEINE in German 28 Jul 82 p 4

[Dispatch signed K.B.: "Funds for Information in America Declined"]

[Summary] Bonny, 27 Jul--Minister of State in the Foreign Office Hamm-Bruecher has obviously failed to obtain the additional funds she required for her task as the coordinator of German-American relations. Early this year Mrs Hamm-Bruecher had asked for about DM4.5 million out of the 1982 budget to provide information about the FRG in the south, midwest and west of the United States. When the finance minister at the time rejected this demand, the foreign office rearranged its own budget to fund activities in the United States. As for Mrs Hamm-Bruecher's request for the 1982 budget, there are indications that the amount requested for her coordinating activities, presumably nearly DM20 million, has been disapproved by the cabinet on the grounds of the precarious budget situation.

"In the same context the planned informational with a Deutsche Welle Television program in the United States has been postponed. It had been planned to start broadcasting 3 hours of programming a week regionally via U.S. cable networks in 1983. Initial aid from the Federal Government was to have been DM4 million."

CS0: 5500/2341

FINLAND

BRIEFS

USSR REDUCES TELEPHONE LINKS--The Soviet Union has announced that it will reduce the total number of telephone links with Finland from the beginning of July. The number of outgoing lines from Finland to the Soviet Union will decrease from 24 to 21 and the number of incoming lines from 24 to 16. The Soviet Ministry of Communications says the reductions are for technical reasons, it is said by the Foreign Affairs Office of the General Directorate of Posts and Telecommunications. The restrictions on telephone traffic announced by the Soviet Union apply to several Western countries, including Austria, the Federal Republic of Germany, France, Britain and the United States. In the correspondence between the Finnish and Soviet telecommunications administrations, Finland has said it does not desire such reductions. On the contrary, Finland would need to increase the number of telephone lines to at least 31, according to the General Directorate of Posts and Telecommunications. [Text] [LD291304 Helsinki Domestic Service in Finnish 0930 GMT 29 Jun 82]

CSO: 5500/2236

FRANCE

BRIEFS

'AFP' PHOTOGRAPH TRANSMISSIONS--Paris, 9 Jul (AFP)--Agence France-Presse has launched a world first by using a new numerical system in transmitting news photographs from the football World Cup in Spain. The new process consists of a coder-decoder called "SYTIN" which decomposes photographs into a series of dots--each given a binary number--which are analysed line by line during transmission. At the point of reception the binary numbers are "translated" into dots of various shades of gray, thus reconstructing the photograph. The process can also be used for transmission of color pictures, with the luminosity of the three basic colors changed into black and white as the photograph is received. [Text] [NC092134 Paris AFP in English 1308 GMT 9 Jul 82]

CSO: 5500/2341

GREECE

BRIEFS

ZAKINTHOS RADIO BEGINS OPERATIONS--The Zakynthos Radio Station began operations yesterday. The station will broadcast programs every Monday, Wednesday and Friday from 0830 to 2100 [0530 to 1800 GMT]. [Text] [NC242004 Athens Domestic Service in Greek 0400 GMT 24 Aug 82]

COMMUNICATIONS WITH TURKEY--Automatic telephone. This was announced by the Greek Telecommunications Organization. [Text] [NC162137 Athens Domestic Service in Greek 2100 GMT 16 Jul 82]

CSO: 5500/2341

PORTUGAL

BRIEFS

NEW NEWS AGENCY--Fourteen [as heard] public and private news media organizations today signed a charter for a new news agency, "NOTICIAS DE PORTUGAL," which could begin operating in the second half of September. Formalities for a 150,000 contos subsidy from the government have first to be completed. Macedo e Cunha, chairman of the inaugurating committee, said that a veto by President Ramalho Eanes of the government decree closing down the ANOP news agency would pose no problem for the new agency. He said "NOTICIAS DE PORTUGAL" is neither the successor nor the inheritor of ANOP. [Excerpt] [LD252332 Lisbon Domestic Service in Portuguese 2200 GMT 25 Aug 82]

CSO: 5500/2236

UNITED KINGDOM

BRIEFS

TELEPHONE LINES WITH USSR REDUCED--Moscow--Moscow is cutting by two-thirds telephone lines between Russia and Britain. Plugs are also to be pulled on other links with the West. The reason given is "technical work" which the Russians say will last until 1984 but Western diplomats suspect that the Kremlin's true intention is to reduce the growing number of direct-dial facilities. These have enabled Russian emigres to maintain close contact with relatives and friends. At the same time Western lobbyists, newspaper men and public interest groups have been able to speak directly to Russians in their homes. According to sources British Telecom has been informed of deep cuts in telephone links from July. Lines to Britain will be reduced from 46 to 14 while those to Russia will be cut from 42 to 14 until the end of 1984. The Soviet authorities have promised further explanations of the work they say is necessary. But it is not known when such explanations will be given. Telephone lines with Austria are also being slashed, from 24 to four it is believed. The Austrian case is particularly suggestive of Soviet motives because there are thousands of Russian emigres in Vienna. British officials say there have been no moves so far by London to raise the phone lines issue with the Russians. Other reports indicate that lines are also to be cut with France and West Germany. American diplomats have heard nothing officially about a reduction of lines. [Text] [PM291203 London THE DAILY TELEGRAPH in English 29 Jun 82 p 1]

END

CSO: 5500/2236