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23 July 1982

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

(FOUO 15/82)

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WORLDWIDE REPORT

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CONTENTS

INTERNATIONAL AFFAIRS

UNESCO'S ROLE IN NORTH-SOUTH INFORMATION EXCHANGE EXAMINED

Paris JEUNE AFRIQUE in French 28 Apr 82 pp 100, 101

[Article by Herve Bourges]

[Text] Communication--to enable every individual, every community to hear and be heard, to promote true freedom of information, these are among UNESCO's major concerns. We must listen and see.

But the poor African peasant--even if he has the slightest change of owning a radio--hears a sales pitch in a language that is not his own from a consumer society thousands of miles away from his daily problems: a constant challenge to his poverty.

On another continent, the TDF 1 satellite will in 1984 begin infusing France with its three television channels. There will be no more areas with a poor-quality picture, no more shadow zones, but excellent reception everywhere.

The mass media explosion has precepitated decisive changes that should lead us to a society of planetary dimensions in half a century.

The first shock wave was spreading while, in the seventies, the waves of computerized communications and data processing were surging forth. The capacity to transmit, store and use information multiplied at a dizzying pace. This aggravated the problem of a balanced distribution of means of communication among nations.

When you consider that 2 million scientific and technological texts appear every year--i.e., 6,000 to 7,000 articles, reports and papers every day--you realize why new countries want to have access to this information and are very interested in international information systems.

It is quite obvious that neither the revolutions in communications nor the growing awareness of its role have made this freedom of information available to all people, but that it remains the privilege of the Western World, unilateral freedom, a tool of domination.

Now that it has become a worldwide industry, communication constantly needs more infrastructure and investment. Industrialization encourages concentration

through the formation of monopolies in the areas of gathering, storing and circulating information. As a result, the number of users must increase so that the operation is profitable, the financing of the facilities tends to be controlled by the large firms, and poor countries are left without communication systems.

How can we conceive of a free, widespread, and balanced circulation of information in an industry dominated by a small number of transnationals controlling all aspects of production and distribution--large press, television, video, film, radio and publishing agencies and conglomorates?

The flow of information, messages, programs, and cultural products basically goes from the rich to the poor countries, exerting an overwhelming influence on ideas, values and life styles in the many communities of our "planetary village."

Although it may be anecdotal to say that Kojak, the American police officer, is as well known and popular in Singapore or Guatemala City as he is in New York City, it is just as revealing to report that the Associated Press Agency sends an average of 90,000 words a day through its international telex service from New York to Asia. In the other direction, 19,000 words arrive in the United States for distribution throughout the world. A study made in Venezuela in 1977 showed that the country received 1,360 news stories a day from other countries, including 278 from the United States and Canada. At the same time, Caracas exported 71 news stories, only 20 of which went to North America.

It would be wrong to put all the blame for this one-way circulation of the news on the distributing agencies. Reporters in developing countries frequently opt for pleasing the Westernized local elite. The content of messages, the choice of subjects, value judgments, and the selection of news stories, books, and music usually illustrate this one-way flow.

The version of world events transmitted to developing countries and vice versa, and the life in these countries presented to Western viewers suffers from a frequently subconscious cultural bias that sometimes borders on denigration.

Thus, we should encourage the countries of the Third World to make their voices heard themselves. It is their own view of the situation in their countries and in the world that they should be publicizing, without impeding the right of others to obtain and publish other information. A diversity, an exchange and a conflict of messages are needed if people are to be well informed and free.

Since UNESCO has become the main forum for taking concerted action to establish a new information order, it has come under the fire of part of the Western press--especially American, but also French--that accuse it of designing a "world information censuring system," or even of covering up "totalitarian" regimes, out of complicity or ignorance.

Totalitarianism? We have to take a closer look at this. Totalitarianism brings about three types of changes--a manipulation of communications, a tendency to treat information as merchandise, and a change from a receptive subject

to a passive object. Although, at the present time, no regime openly says that it is spreading propaganda, the correlation between information and merchandise is increasingly accepted. In both cases, UNESCO intends to make a distinction and point out the dangers.

It is a proven fact that dictatorships or even authoritarian regimes abolish freedom of the press. And they do not stop at censure. Imprisonment, exile and sometimes assassination of journalists are too often part of the government's arsenal. This is why UNESCO, as an international organization, encourages conflicting stories with a view to better protecting reporters throughout the world, and why it offers its headquarters and working tools to professional agencies to coordinate their ideas and activities to this end. Its director general, Amadou-Mahtar M'Bow, does not hesitate to intervent personally in favor of journalists in danger.

The authoritarian control of information and the tendency toward propaganda are commonplace in developing countries. It is true that there are priorities, such as literacy and promoting higher education. It is understandable that a reporter would be asked to follow these priorities and use the modern technology of communications to promote "national unity." But who could fail to see the danger of slipping from this priority education into totalitarian obedience, from government regulation to confiscation of information?

When UNESCO participates in development and education programs, it always stresses the democratic virtualities and finalities of any true education system. "External" decolonization of information cannot be accomplished without "internal" decolonization. In any case, a minumum sort of consensus by default seems to have been reached today in all countries, and that is that no one dares to openly profess that information is being reduced to propaganda.

Moreover, how could anyone accept information as merchandise? Because of a lack of true reciprocity in communications, news is produced as items for consumption. This trend is strengthened and spread by the concentration of communication means, and by sensationalism and various ways of distorting the news. This type of information system corresponds to a rich or poor consumer: for the rich, increasingly sophisticated equipment and products; and, for the poor, secondary products and outdated equipment.

The totalitarianism of information as propaganda, the totalitarianism of information as merchandise. Part of the Western press believes there is only one way to resolve this dilemma: have total confidence in "freedom of the press." It is fine to mention the irrevocable principle of Western nations, provided that it is extended to cover all nations and all communities.

Is it perpetrating true freedom to further discrimination and imbalances? To be "free," the informer--whether an individual, a group or a nation--must have the material, financial and political means to prove himself and declare himself free.

As a value and a norm, freedom is indivisible and universal, but there are many different ways to achieve it, as there are many different cultures. UNESCO has

become the platform, but also the laboratory, for confrontations between different cultural and communications models. True confrontation implies the acceptance of differences. International consensus can only be achieved at this price.

The stakes are clear. Conditions of domination have been rejected in the political arena. Inequality has been denounced in the economic order. Can we allow them to exist or spread in the extremely sensitive field of communications?

During his recent trip to Africa, Pope John Paul II stated in Lagos "that the sovereignty of every country must be protected by proper use of the means of communication, which can become tools of ideological pressure. And this type of pressure is more dangerous and insidious than many forceful means." Valuable support in this controversy.

Initially, it was thought that to correct the imbalances, the most effective solution would be to arrange for a transfer of technology and information programs to the Third World. It is obvious that this is a deceptive solution, since it only strengthens the current system: the implacable market law, concentration of powers, sources and means.

The decision to set up a "new world order for information and communications," approved in Belgrade, is more an aspiration than an actual definition of a regulatory system. It reflects adherence to a few major objectives agreed by the international community: elimination of imbalances and inequalities by promoting the free circulation and a broader and better balanced distribution of information, and broader distribution of communications facilities.

It is the African continent that is benefiting this year from the main action agreed by the PIDC, namely to assist the Pan-African Press Agency (PANA). The Arab Gulf states, moreover, are going to contribute to the communications development program in Africa.

However, it was evident that the developed countries were reluctant to participate fully in the projects. The UNESCO Director General regretted that the contributions of these countries amounted to only $6 million out of the 70 under study. The American delegation explained that its country's aid would only go to bilateral activities and specific projects and it asked for guarantees that new information exchange networks, particularly in Asia and the Pacific, would not restrict the activities of international press agencies operating in the same region.

France for its part announced at the beginning of the meeting that it was planning to contribute $2 million over a number of years, $500,000 of which would be disbursed in 1982. People should not be surprised. Did Francois Mitterrand not declare last October in Mexico that he was in favor of a new rold information order? "The procedure whereby someone designs a product and then tries to sell it does not meet a need of this sort, nor does it contribute to a communication, information and education policy in large territories which are sometimes sparsely populated."

This positive contribution by France is illustrative of the new attitude in relations between the French Government and UNESCO. In this case, it is meant to "help bring information flows between the North and the South into balance," under an open policy of exchange.

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INTERNATIONAL AFFAIRS

NEW SATELLITE TO DETERMINE FUTURE USER NEEDS

Paris AIR ET COSMOS in French 8 May 82 p 42

[Article by Pierre Langereux: "Start of Satellite Mobile Telecommunications Project 'PROSAT' Imminent"]

[Text] The beginning of next week, 11 May, will, in principle, mark the start of the ESA's [European Space Agency's] new program "PROSAT," in which eight ESA member countries will participate: France, Germany, Italy, United Kingdom, Norway, Sweden, Belgium and Spain. The cost of the program is estimated at 5.4 million UC's [units of accounting] (1981 prices), or around 32 million francs, for its initial phase (Phase 1).

The PROSAT program is an extension of the European MARECS [maritime telecommunications satellites] program, which is to serve as a preparatory basis for participation by European industry and users in the future INMARSAT second-generation telecommunications system. In particular, it will enable a determination of the specifications of the future satellite mobile telecommunications system that is to provide operational links with maritime terminals, but also with aeronautical and land terminals (trucks), as well as links with the SAR [Search and Rescue] channels of planes and ships in distress.

The PROSAT program is divided into two successive phases. The first phase, which has just been decided upon, concerns the development of the new maritime, aeronautical, terrestrial and SAR terminals by the eight participating countries, and the testing of these various terminals with the MARECS 1 and 2 satellites; transmissions intended for mobile terminals will be relayed via the Villafranca (Spain) station, for the specific purpose of characterizing the multiple trajectories. The tests will utilize various types of terminals having a noise factor of -19 to -24 dB/°K for the three mobile applications. It is also planned to utilize simulators of the INMARSAT Standard C terminals that are to be built by Germany, the United Kingdom and the ESA (ESTEC [European Space Technology Center]).

This first phase is to start at the beginning of 1983, with the mobile terminals in place, by way of multiple-trajectory measurements; simulation tests are to be completed by the end of 1983 or early 1984. This is to assure the availability of the prototype terminals by then, except for the airborne terminals which are to be ready by mid-1984.

A second phase, consisting of conclusive tests of the new prototype terminals actually installed in the different mobile environments, is to be implemented between the beginning of 1984 and the end of 1985, upon completion of which work is to begin on the configuration of the future INMARSAT second-generation satellites that are to succeed the satellites currently in use (MARECS, MARISAT and INTELSAT 5).

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INTERNATIONAL AFFAIRS

FRG TO BE MAIN FINANCER OF ERS REMOTE SENSING SATELLITE

Paris AIR ET COSMOS in French 22 May 82 pp 34, 52

[Article by Pierre Langereux: "Startup of European Remote Sensing Satellite ERS-1 Project"]

[Text] The ESA [European Space Agency] has just obtained from its member governments the financial commitments necessary to start up the new European remote sensing satellite ERS 1 project. The satellite is to be launched around the end of 1987 by an Ariane rocket. This announcement was made officially on 17 May at Hannover (Germany) by Mr Erik Quistgaard, director general of the ESA, and Dr Lennertz, head of the Agency's earth observation program.

Ten member countries confirmed officially this week their participation in ERS 1, to a total extent of 88.22 percent, which thus exceeds the quota (80 percent) required to get the project under way. Germany is contributing the largest share (24 percent), followed by France (18.31 percent), Great Britain (13.38 percent), Italy (10.61 percent), Canada (9.10 percent), Sweden (3.90 percent), Belgium (3.72 percent), Spain (2 percent), Switzerland (1.70 percent) amd Norway (1.50 percent. Two other member countries also have yet to confirm their participation in the project: Netherlands (5 percent) and Denmark (1.99 percent). This will then assure better than 95 percent financing of the program.

The German decision to contribute the major share of the project and to accept that the ESA management group remain partly installed in Toulouse (initially) was what finally resolved the impasse. But, strictly speaking, the member states have not for the moment committed themselves to finance beyond the definitional phase (Phase B), in the amount of 25 million UC's [units of account], whereas the total cost of the ERS 1 project is estimated at 360 million UC's (1981 prices), or more than 2 billion francs.

The ESA officials also emphasized that the choice of prime contractor for the ERS 1 satellite will be made around the end of July, based on competitive bidding between the German firms Dornier and MBB [Messerschmitt-Baldow-Blohm], it now being definitely settled that the prime contractor will be German. But the fact

is that a real competition will be very hard, if not impossible, to come by for the ESA, since the preliminary study of the project has up to now been conducted solely by Dornier, the platform will be that of the SPOT [Earth Observation Probe System] satellite developmed by MATRA [Mechanics, Aviation and Traction], and the principal instrument (microwaves) has been studied by Thomson-CSF [General Radio Company] and Marconi!

There can be no doubt therefore that Dornier, which will submit its proposal on 7 June, will be chosen as the prime contractor of the ERS 1 satellite. The ESA's industrial policy committee could hardly do otherwise without risking a complete upset of the delicate industrial "balance" that has been worked out among the European firms for their participation in the ESA's new programs.

Thus, the definitional phase is to begin in August and be completed by the end of 1983, after which the plan calls for 4 years of developmental work on the satellite and its instruments, which are to be integrated and ready for launching by the end of 1987. Operation of the experimental satellite ERS 1 would thus begin the following year, in 1988. ERS 1 will be essentially an oceanographic satellite, positioned in a circular orbit at an altitude of 675 km and controlled via the Kiruna (Sweden) station. The satellite will be equipped with an "AMI" [active microwave instrument] and a radio altimeter that will operate in the Ku (13.7 GHz) band to measure wave heights. The AMI will be a synthetic-aperture and SLAR [side-looking airborne radar] system operating in Band C (5.3 GHz) in either of two modes: One radar mode to provide a high-resolution (30 m) image of the surfaces of the earth and the oceans, and one scatterometric mode to measure the direction and speed of winds (between 4 and 24 meters/sec) on the surface of the oceans.

The European ERS 1 satellite will be one of the rare oceanic satellites, other than the American SEASAT 1 satellite (which operated only 90 days) and the future Japanese MOS 1 satellite, which is to be launched some years hence.

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ESA ANNOUNCES 2 ARIANE LAUNCHES FOR 1982, DELAY PENALTIES

Paris AIR ET COSMOS in French 22 May pp 44, 52

[Article by Pierre Langereux: "Only Two Ariane Launches in 1982"]

[Text] The ESA [European Space Agency] has just announced that the next launch (L5) of the European launcher Ariane, carrying the MARECS 2 and SIRIO 2, has now been postponed to 10 September 1982 and will be followed by launch L6 during the second half of November (probably around 25 November) carrying the European satellite EXOSAT(1). This confirms then (see AIR ET COSMOS, No 904) that there will be no more than two Ariane rocket launches this year. The European rocket having been officially qualified since December 1981, it could have carried out three or four launchings this year, the first of which could have been in February 1982! Ariane's first payloads, however, consisted of European satellites that ended up running behind the original schedule, leaving the Ariane rocket without a payload. Despite the delay (of 1 year) experienced by the launcher following the failure of its flight-test launching (LO2), the European satellites still did not show up to meet it. The first operational launching had been set for April 1982, which was already a delay but still an acceptable one. But the technical problems encountered with the first MARECS 1 satellite in orbit (spontaneous electrostatic discharges perturbing the operation of the satellite) have caused successive delays in the launching of MARECS 2, until September. No other satellite will be ready before then (except SIRIO 2), since the modifications to be made to MARECS 2 will also have to be made to the ECS satellites, which use the same platform. This has all resulted in delaying the putting of the European launcher into operational service at the crucial moment when launchings of new payloads, particularly in the telecommunications satellite sector, are being negotiated. These 7 months of inactivity for Ariane cannot be retrieved! The available facilities at Kourou--human as well as hardware--are insufficient to enable an adequate speedup in the launching rate, at least for another 3 years (when the second launching facility will be in service). The ESA, as the responsible agency for the MARECS program, and British Aerospace (Great Britain), as prime contractor, bear a heavy burden in this situation.

The default on the part of the MARECS satellites(2) is all the more disturbing for its impact on other telecommunications satellites, a sector in which Europe is trying to position itself alongside the big American builders.

Considering the duration of the launch windows (35 working days), it will not be possible to carry out more than five launchings in 1983, as planned. The necessary modifications to the interface between the launcher and its payloads (reconfiguration of wiring, etc), moreover, have yet to be done. The first of next year's launchings (L7) is therefore now scheduled for the end of January 1983, carrying the European ECS 1 satellite (which normally was to have been launched in 1982). Three more launchings (L8, L9 and L10), in principle, will orbit three further INTELSAT 5 satellites for the Intelsat organization (two of which were normally to have been launched in 1982), if the satellites are actually ready on time (Ford Aerospace has already incurred delays in their deliveries); it appears, however, that at least two INTELSAT 5 launchings are assured for 1983. The last of next year's launchings (L11), scheduled for November or December, will carry the ECS 2 satellite or the French TELECOM 1A satellite, whichever is available first.

For, once the series of operational launchings is under way, there will be no further waiting for payloads, as this would completely disrupt launching operations at Kourou. The rule will be simple and severe: The first to be ready will be the first to be launched. And costly penalties will be levied against those who are late (as is being done, after all, in the case of American rockets). This should induce stricter observance on the part of the satellite builders with respect to delivery schedules on the satellites for which they are the contractors. The fact is that we have now entered an era of operational and commercial exploitation of rockets. This marks the success of this activity, but inevitably imposes a certain number of new constraints.

The use of satellite launchers has become a space transportation "service," with everything that concept involves (punctuality, costs, guarantees, etc.).

FOOTNOTES

1. This satellite must necessarily be launched between 8 October 1982 and 15 January 1983

2. Despite knowledge of "prior experiences" with phenomena of this nature encountered in American satellites (MARISAT and FLEETSATCOM).

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BRIEFS

MARECS 1 OPERATIONAL--The international space telecommunications organization INTELSAT put into service a new telecommunications satellite, INTELSAT 5, over the Indian Ocean on 1 May 1982. Another INTELSAT 5 satellite will soon be orbited in the same vicinity to handle that region's traffic. The international maritime satellite telecommunications organization INMARSAT has just announced the putting into service, also on 1 May, of the first European maritime telecommunications satellite MARECS 1, which was launched on 19 December 1981 by Ariane on the latter's fourth and final flight test launching. INMARSAT states that the satellite is operating normally. The putting into operational service of MARECS 1, it will be recalled, which was originally scheduled for 1 February 1982 (see AIR ET COSMOS, No 886), was scratched because of radioelectric disturbances affecting the satellite in geostationary orbit. This development moreover compelled the ESA and British Aerospace, the satellite's prime contractor, to modify the MARECS 2 satellite and the ECS satellites--which use the same platform --to avoid the recurrence of such disturbances to future satellites. The ESA was supposed to announce this week the new launching date for MARECS 2, confirming that this could not be before the first half of September 1982 and that therefore there can only be two Ariane launchings this year. [Article by Pierre Langereux: "MARECS 1 and INTELSAT 5 Satellites in Service 1 May"] [Paris AIR ET COSMOS in French 8 May 82 p 42] [COPYRIGHT: A. & C. 1982] 9399

THOMSON STUDIES HIGH FREQUENCY PAYLOADS--The ESA [European Space Agency] has just entrusted Thomson-CSF [General Radio Company] with a definitional study of future high-capacity telecommunications-satellite payloads utilizing the new high frequencies in the 20-30 GHz band. Thomson-CSF is to analyze different satellite configurations and their impact on payloads. SAGATEL [expansion unknown], a telecommunications and telematics consultant company, is associated with this study to evaluate the potential market for wideband telecommunications services (video-conferences, etc) during the 1990's. Three other European firms--TICRA [expansion unknown] (Denmark), HSA [Dutch Telecommunications Equipment] (Netherlands) and SAAB [Swedish Airlines Inc.] (Sweden)--are also participating in this study ordered by the ESA. [Text] [Paris AIR ET COSMOS in French 8 May 82 p 42] [COPYRIGHT: A. & C. 1982] 9399

ARIANE PRODUCTION SCHEDULE--The new schedule of Ariane launchings published this week by Arianespace shows practically a full booking to the end of 1986. Sixteen European and American clients have already booked reservations on Ariane's launch windows for the orbiting of 35 satellites (including the three already orbited during the qualification launchings) and the future Brazilian satellites [as published]. The ESA and Arianespace have put 19 Ariane rockets into production for these launchings, which will use the Ariane 1 version of these rockets to the end of this year, then the improved Ariane 2 and 3 versions beginning next year. Provisions have also been made for the fabrication of seven additional rockets, for a total of 26 Ariane rockets, to fulfill requirements to the beginning of 1986. Ariane rockets are currently being built at the rate of 4 to 5 rockets a year; this rate will continue throughout next year. But it is planned that by 1985 the rate will be 8 rockets a year. By then, Arianespace will have put the second launching facility, ELA 2, at Kourou into service, enabling the rate of Ariane launchings to be increased to 8 or ten launches per year and providing a redundancy of launching facilities in case of accidental damage to one of the launch pads. The new ELA 2 launching facility will also be compatible with the new Ariane 4 rocket, which will have double the performance ratings of the present rocket and which will be the true competitor of the American Shuttle during the 1980's. [Article by Pierre Langereux: "Twenty-six Ariane Rockets in Production"] [Text] Paris AIR ET COSMOS in French 22 May 82 p 44] [COPYRIGHT: A. & C. 1982] 9399

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FEDERAL REPUBLIC OF GERMANY

SPACE RESEARCH, SATELLITE PLANS FOR 1982-1985

Paris AIR ET COSMOS in French 15 May 82 pp 51-53

[Article by Pierre Langereux: "New Objectives of German Space Plan for 1982-1985"]

[Text] The new objectives of the German space plan for the period 1982-1985 were released recently by Dr Herman Strub of the BmFT [Ministry for Research and Technology]. The new plan, which is now officially adopted by the BmFT and due to be published shortly, has already been debated and approved by the entities concerned (governmental administrations and business organizations) on the basis of the plan drawn up in June 1981 by the DFVLR [German Research and Experimental Institute for Aeronautics and Astronautics] and of the final recommendation submitted to the BmFT in October 1981.

The major objectives of the plan are: Promotion of basic research, technological innovations with a view to their application to public services, a bolstering of the German aerospace industry's competitiveness particularly in the market domain of commercial application of space systems (launchers, satellites and ground equipment), and development of international cooperation with Europe and the United States.

The new 1982-1985 plan calls for a moderate growth in German space expenditures within a ceiling of 800 million DM by 1985, which is slightly higher than that of 1982(1). It is to be noted however that to this direct subvention by the BmFT must be added the additional credits granted by other organizations, such as the Max Planck Institute for space research, the Bundespost for domestic direct-TV satellite (TV-SAT) and telecommunications satellite (DFS) projects, and the Deutsche Wetterdienst (Meteorological Service) for German participation in the European network of operational weather satellites of the future EUMETSAT [expansion unknown] organization.

The new German space programs are articulated along three main axes: Space research, commercial applications (telecommunications, direct TV, meteorology, navigation and remote sensing), and launchers and orbital systems of the future.

(1) The BmFT's 1982 "research" budget totals 6,578.5 million DM, of which 945 million DM are for aeronautical and space research.

Space Research

Dr Strub underscored the magnitude of the German participation in scientific projects concerned with aeronomy, astrophysics, geophysics, space biomedicine and the new experiments in microgravity.

The most costly of the German space projects, involving probe rockets, will be its participation in the MAP [Middle Atmosphere Program] project and in its extension MAP-WINE [expansion unknown], concerned with wintertime observations over northern Europe by means of atmospheric soundings at altitudes ranging from 10 to 100 km carried out from three sites: Andoya (Sweden), Lista (Norway) and Thule (Greenland). Germany will also participate, this summer, in the ionospheric soundings project HERO and, in 1984, in the CAESAR project to study the polar magnetosphere and ionosphere. During the summer of 1984, Germany will also participate in the INTER ZODIAK project on measurements of solar radiations at vacuum ultraviolet wavelengths and of zodiacal light, by means of probe rockets launched from Natal (Brazil).

In addition, Germany has furnished equipment (AEROS-type spectrometer and trajectory-measuring system) for the new Italian scientific satellite SAN MARCO D, which is scheduled to be launched this year-end by an American SCOUT rocket at the Italian test site in Kenya (Africa).

Germany will also furnish one of the three satellites for NASA's AMPTE [Active Magnetospheric Particle Tracer Explorer] project, which will also involve a British satellite. The German Oberpfaffenhofen Control Center will take part in the mission for the tracking of the AMPTE satellites, which are to be launched in 1984. German scientists are participating moreover in European GIOTTO comet-probe and the ESA's ISPM solar-probe projects; these probes are to be launched, respectively, in 1985 and 1986 by Ariane and the Shuttle. They are also participating in the new HIPPARCOS astrometry satellite due to be launched in early 1987 by the ESA, and in the large astronomic telescope project--NASA's SPACE TELESCOPE which is to be orbited in early 1985 by the Shuttle. Germany's participation in the latter will consist of furnishing one of Space Telescope's main sensors: The FOC [Faint Object Camera] developed by Dornier with the aid of MATRA [Mechanics, Aviation and Traction Company] (France). Germany is also sharing substantially in NASA's GALILEO probe project; this probe is to be launched toward Jupiter in 1985, and the propulsion module that is to brake the probe upon its arrival is being built by MBB [Messerschmitt-Boelkow-Blohm]. Germany also plans to participate in future European scientific satellite projects (to be chosen in 1983) and American ones (SOT [expansion unknown]). Germany, in particular, has studied a national project of a large infrared observatory--GIRL--which could be launched and retrieved by the Shuttle.

Dornier is currently at work on a new German scientific satellite project: The ROSAT satellite for the study of X-rays, which is to be launched in early 1987. On the other hand, operation of the Helios 2 solar probe is to end this summer after 7 and 1/2 years of operation.

Microgravity

But the foremost German national scientific project is Germany's SPACELAB D1 mission which has now been postponed to April 1985. This mission, in which the ESA, France and Italy will also participate, will cost Germany 405 million DM. The D1 mission will be oriented essentially toward metallurgy under microgravity. The principal equipment used will be: The instruments already developed for SPACELAB's first payload (isothermal oven, temperature-gradient oven, reflector oven and fluid-physics module), as well as an experimental chamber for the study of transfers and the MEDEA [expansion unknown] setup. This is an experimental setup consisting of a new "ELLI" [Mono Ellipsoidal Reflector Furnace] oven, a temperature-gradient oven with a quenching device and a high-temperature thermostatic shield. The ESA will also furnish the "BIORACK"[expansion unknown] and the "SLED" [expansion unknown] vestibular sleigh (taken from the "ESLP" flight) for biomedical experiments in weightlessness.

Space Teledetection

Germany is also showing an active interest in earth observation, with optical and microwave instruments aboard the Shuttle and Spacelab.

An MOMS [Modular Optoelectronic Multispectral Scanner] is to be used on the first flight of the German SPAS 1 platform planned for the beginning of 1983 aboard the seventh flight of the Shuttle. A metric camera and an MRSE [Microwave Remote Sensing Equipment] will also be part of the first payload aboard Spacelab, which is due to fly in September 1983. The DFVLR has moreover undertaken the development of an SAR [synthetic-aperture radar] for remote-sensing satellites. This project is already being carried in cooperation with Norway, and negotiations are under way with Italy, who is also interested in this technique. But Germany's biggest effort in the domain of space teledetection is its share, as the majority participant, in the European ERS 1 oceanic observation satellite project. This project is to get under way within the next few weeks under the prime contractorship of a German firm, Dornier, if Germany agrees that the project's staff remain installed at Toulouse (France).

On the other hand, the DFVLR is installing in Germany a National Teledetection Center, which is to centralize all the remote sensing, meteorological and climatological data. A climatic research program is to get under way in 1982, using new space sensors.

TV-SAT and DFS Satellites

Significant developments are in progress in space telecommunications. Germany and France have undertaken the joint construction of the German TV-SAT direct-TV satellite and the French TDF 1, which are scheduled for delivery, respectively, 15 February and 15 April 1985 to be launched by Ariane 2. The building of these satellites has been entrusted to the Franco-German group Eurosatellite GmbH, made up of AEROSPATIALE [National Industrial Aerospace Company], MBB [Messerschmitt-Boelkow-Blohm], Thomson-CSF [General Radio Company] and AEG-Telefunken,

with participation by Belgian and Swedish industries. The prime contract for the building of the TV-SAT and TDF 1 satellites is due to be released to Eurosatellite shortly by the French and German authorities.

The German PTT has also undertaken recently the study of a domestic telecommunications services satellite operating in the new 20-30 GHz frequency band. This DFS [expansion unknown] project of the Bundespost provides for the building of a satellite to furnish conventional communications services (telephone, facsimile) and new services (telematics) inside the FRG. The DFS satellite is being targeted for launching in 1986 (see AIR ET COSMOS, No 901).

EURECA

Germany is also planning to maintain a certain level of activity in the domain of launchers and orbital systems, notably by increasing its participation in the development of the new versions of the European launcher (Ariane 2, 3 and 4). Germany's participation in Ariane 4 is to be 20 percent, said Dr Strub. And Germany is also participating actively in the definitional studies on the "future European launcher" of the 1990's, which is currently under way at the ESA and the CNES [(French) National Center for Space Studies] (see AIR ET COSMOS, Nos 891, 892 and 893), in particular with respect to the new 100-ton cryogenic motor that has been entrusted to the SEP [European Propellant Company] (France) in association with MBB.

On the other hand, commitments to future Spacelab developments are less evident, particularly in view of the high cost of operation of the orbital laboratory. Germany is participating, however, as main financer (40 percent), in the development of a new self-powered, recoverable platform under the ESA's EURECA project (see AIR ET COSMOS, No 905). The platform is currently being studied by ERNO [Development Association North]-MBB and Dornier. The initial flight of this self-powered satellite, with a payload dedicated to experiments under microgravity, is targeted for the end of 1986-beginning of 1987.

9399
CSO: 5500/2251

FRANCE

NEW RADIO FORMAT SEEKS TO INCREASE AFRICAN COVERAGE

Paris JEUNE AFRIQUE in French 5 May 82 p 71

[Article by C. D.: "Echo from the Savannas"]

[Text] Exit the NAP, enter the MFI! Behind these barbarous acronyms--for NOUVELLE AGENCE DE PRESS and MEDIAS FRANCE INTERCONTINENTS--lies one of the most meaningful aspects of the R-FI [RADIO-FRANCE INTERNATIONAL] reform (JEUNE AFRIQUE, No 1106). The "cooperation" sector will be one of the principal beneficiaries of the major upheaval in R-FI, which has as its goal nothing less than to go the international services of the BBC and the DEUTSCHE WELLE one better, by way of a fivefold increase in its budget between now and 1987, and by playing to its advantage the card of the new world information order.

Staffed by some 10 persons (only two of whom were journalists), the NAP expired quietly on 31 March. It had been supplying written press information on a daily basis to some hundred African newspapers. The Ministry of Cooperation--which had been paying for the subscriptions--put an end to the experiment, taking thus a backward step for a longer leap forward.

R-FI already operated a small broadcast service that furnished audio material to the African media. Another service compiled for the Quai d"Orsay (Ministry of External Relations) bulletins for transmission to French embassies. A dispersion of effort that had to be ended! These different services were merged with the erstwhile NAP, and so the MFI came into being, its name having been registered officially by mid-April.

Now operational with a staff of some 20 journalists, the new written- and spoken-press agency had to have as its managing editor... none other than a former editor of JEUNE AFRIQUE. It was in fact Philippe Gaillard who was approached by Herve Bourges, general manager of R-FI. "We will endeavor to do what the other press agencies are not doing," affirmed the latter.

Reporting, documentaries, economic analyses, followups on the activities of the international organizations: Up to this point the advance is over familiar terrain. But MFI intends to go further. Herve Bourges, former spokesman for Amadou-Mahtar M'Bow, is not forgetting UNESCO's fight for a new information

order. MFI is not going to be content with merely informing Africa. It is going to try also to institute a inverse information flow: The newspapers and radio stations of that continent will be encouraged to send us their own productions. "No one speaks of Africa until a coup d'etat takes place," says Herves Bourges. The time has come to make known the other African realities. The system of exchanges will be put in place gradually. But it will undoubtedly require a great deal of steadfast perseverance to break through the Western public's wall of indifference to any information that is not laced with folklore."

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END