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ABSTRACT

Nippon Hoso Kyokai (NHK, Japan Broadcasting Corporation) is a viewer-supported public broadcasting corporation which currently includes five domestic broadcasting networks consisting of two radio, one FM, and two television networks. Over these networks NHK presents a total of 91.5 hours of broadcasting a day. This pamphlet outlines the aims of the corporation and the structure of its management. It details the types of programming presented by NHK: news, sports, local, educational, and entertainment. The work of Radio Japan, an overseas service operated by NHK, is also described. In addition to producing programs the NHK also keeps up a national radio and television network to facilitate reception throughout the country. Its efforts in this direction for television and radio reception and transmission are described. The work of NHK Technical Research Laboratories, which cover every aspect of broadcasting research, is outlined, as are the various services offered by NHK in the areas of public relations, reception guidance, and overseas cooperation. The pamphlet lists a brief chronology of NHK and a directory of its overseas bureaus. (JY)

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This is a picture of a Japanese garden titled the "Higoi-no Niwa" (the Garden of the Golden Carps). The author of this wood-block print is Okie Hashimoto (born in Tottori Prefecture in 1899), who is now a member of the Japan Wood-block Print Society. His works are not only exhibited at various international wood-block print exhibitions but are also included in the collections of the National Modern Art Museum and others. He has produced a number of works using Japanese castles, gardens and scenic spots as themes.

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Public Relations Bureau
Nippon Hoso Kyokai
(Japan Broadcasting Corporation)
Uchisaiwai-cho, Chiyoda-ku
Tokyo, Japan
1971

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PROFILE OF NHK

Nippon Hoso Kyokai (NHK, Japan Broadcasting Corporation) was established in 1925 to inaugurate radio broadcasting in Japan. It introduced TV broadcasting in 1953. Currently NHK has five domestic broadcasting networks consisting of two radio, one FM and two television networks, over which it conducts a total of 91.5 hours of broadcasting a day.

Broadcasting in Japan is carried out under a dual system. It is conducted by NHK, the only public service broadcasting organization under the Broadcast Law enacted in 1950, and by private commercial broadcasting stations. NHK is financed entirely with receivers' fees paid by TV receiving set owners. It does not depend on government financial aid or on any specific capital, and it is forbidden by law to engage in commercial advertising. It is a sort of "people's broadcasting organization" in which every body has made an investment. Commercial broadcasting stations, by contrast, depend for their income on advertising revenue.

As a public service broadcasting organization, NHK must make sure that its programs can be received in all parts of the nation. To ensure uniform service, it operates transmitting stations of 2,396 for TV, 311 for radio, and 295 for FM across the nation as of March 1, 1971. Its service area covered 97.0% of all households in the case of

television, 99.7% for radio, and 92% for FM. Efforts were being made to raise the percentages to 100 per cent through construction of additional broadcasting stations.

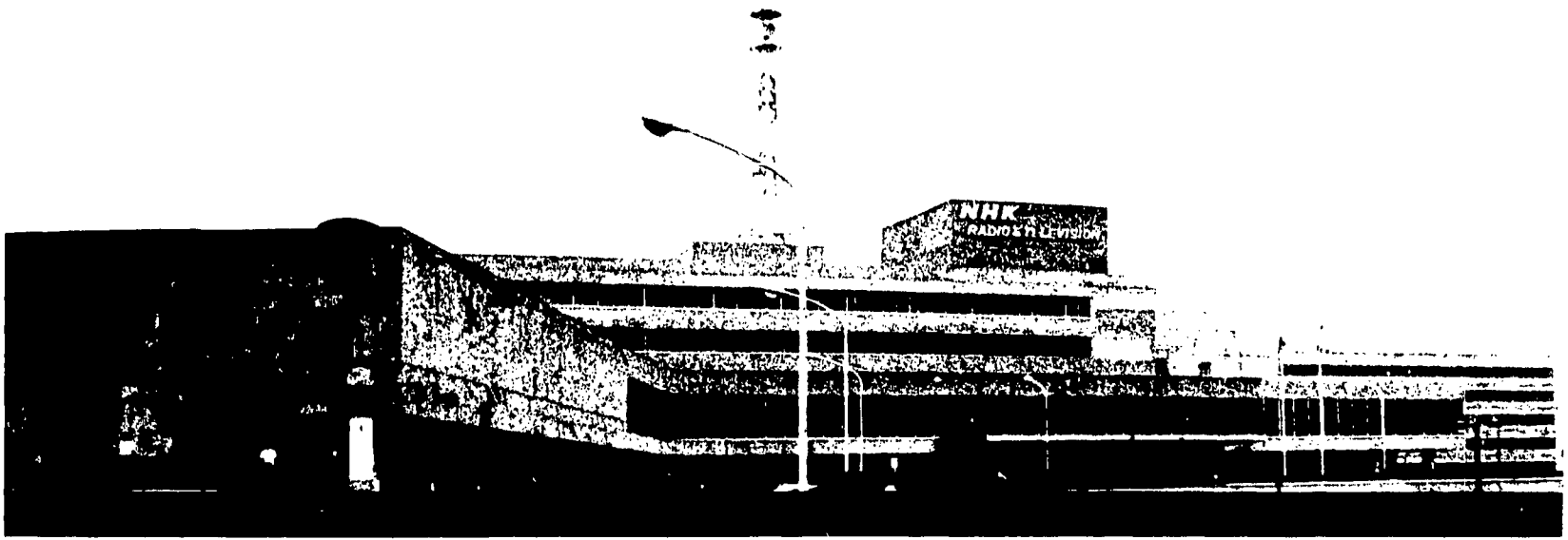
In addition to broadcasting programs, NHK tries to reflect the views of its audience in its programs. It also tries to provide a high-quality listening-and-viewing environment, and to protect and promote enhancement of Japanese culture.

NHK's broadcasting activities extend overseas. Radio Japan conducts a total of 37 hours of overseas broadcasts a day in 23 languages. NHK is also a member of ABU (Asian Broadcasting Union) and EBU (European Broadcasting Union). In addition to cooperating with various activities of the organizations, it accepts personnel from overseas broadcasting stations for training in program production and broadcasting technology. It also sends specialists overseas to conduct surveys for the construction of TV networks, and to aid in the education of broadcast technicians.

Overall arrangement program of NHK Broadcasting Center is now being implemented at NHK, with the beginning of 1973 as the target date of completion. As part of this program, a 23-story building and a great hall with a seating capacity of 4,000 are now under construction at the site of the NHK Broadcasting Center at Shibuya in Tokyo.



An artist's concept is shown of the new NHK Broadcasting Center to completed at 1973



MISSION AND BUSSINESS MANAGEMENT

ACTIVITIES AND ORGANIZATION

The fundamental mission of NHK, which was established for the purpose of contributing towards greater welfare of the people and the elevation of the cultural level of the nation, is as follows:

1. To present news, educational, cultural and entertainment programs in line with the requirements of the people and to contribute to the elevation of the cultural level of the nation.
2. To construct nation-wide networks so that the coverage will extend over the entire country and also to provide broadcasting stations for presenting local programs specifically for local communities.
3. To undertake researches and investigations necessary for the progress and development of broadcasting and reception thereof.
4. To operate an overseas broadcasting service and to provide overseas broadcasting organizations with exchange programs and technical cooperation.

To carry out its mission and wide-ranging activities, NHK is organized along the following lines (page 7). The organization as it exists today is a result of reforms carried out to keep abreast of changing times, including fast-paced expansion and sophistication of broadcasting activities. Such reforms, of course, will continue to be carried out.

Board of Governors

This is the supreme administrative body of NHK which is vested with the power and responsibility

for making decisions on important matters concerning the management and operations of NHK from the broad viewpoint of the interest of the people so that NHK may function properly in accordance with the desires of the people.

The Board of Governors deals with such important personnel matters as appointment of the President and the Auditors and it also gives consent to the appointment of the Vice-President and Managing Directors who are appointed by the President.

The Board of Governors is composed of 12 members, appointed by the Prime Minister with the consent of both Houses of the Diet as representatives of the people. It elects a chairman from among its members. Eight members of the Board are selected from throughout the country divided into eight blocs, and four other members from persons who are deemed highly in regard to public welfare and from among men of wide experience and learning representing equitably various fields of education, culture, science, industry, and others.

President, Vice-President, Managing Directors

The President, nominated by the Board of Governors, is the chief executive of NHK whose duty is to supervise the day-to-day business of NHK in accordance with the policy laid down by the Board of Governors, assisted by a Vice-President and the Managing Directors. Also, the President appoints the General Managing Directors from among the Managing Directors. The terms of office of the

President, Vice-President and Managing Directors are three years.

Important matters are referred to the Board of Managing Directors composed of the President, Vice-President and Managing Directors for thorough deliberation in formulating decisions.

Auditors

In order to ensure adequate administrative operation, auditors are appointed by the Board of Governors. The auditors supervise the business operations managed by the President and other officers, operating completely independent from the executive body, and they report their findings to the Board of Governors.

Business Organization

NHK is organized similarly to a staff-and-line organization system. The Staff Section plans, investigates and draws up policies for management, while the Line Section carries out the day-to-day business. At the NHK Headquarters in Tokyo, there are six "Bureaus" in the Staff Section. The Line Section consists of the following: the General Broadcasting Administration, which is in charge of program planning and production; the Headquarters of Technical Administration and Construction, in charge of construction of broadcasting facilities and maintenance; the General Administration of Audience Services, in charge of services and collection of receivers' fees; and the Personnel Administration, in charge of personnel placement and development of individual capabilities. Various subordinate departments and sections carry out the functions of the organization.

NHK has established a Research and Development Committee to achieve efficient management of its four research institutes namely, the Technical Research Laboratories, the Broadcasting Science Research Laboratories, the Radio and Television Culture Research Institute and the Public Opinion Research Institute as well as to promote research and development projects closely related to the management of broadcasting services, even while looking forward to possible future developments. The members of this committee include outside

persons of learning, such as natural scientists and scholars in social and cultural fields.

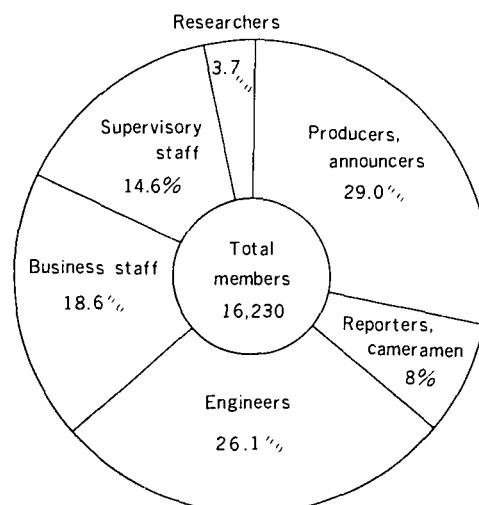
NHK operates seven regional key stations with the Tokyo Headquarters as the center. Under each of the seven regional key stations are many local stations. These regional key stations and local stations are all linked with the Tokyo Headquarters, forming a nation-wide network.

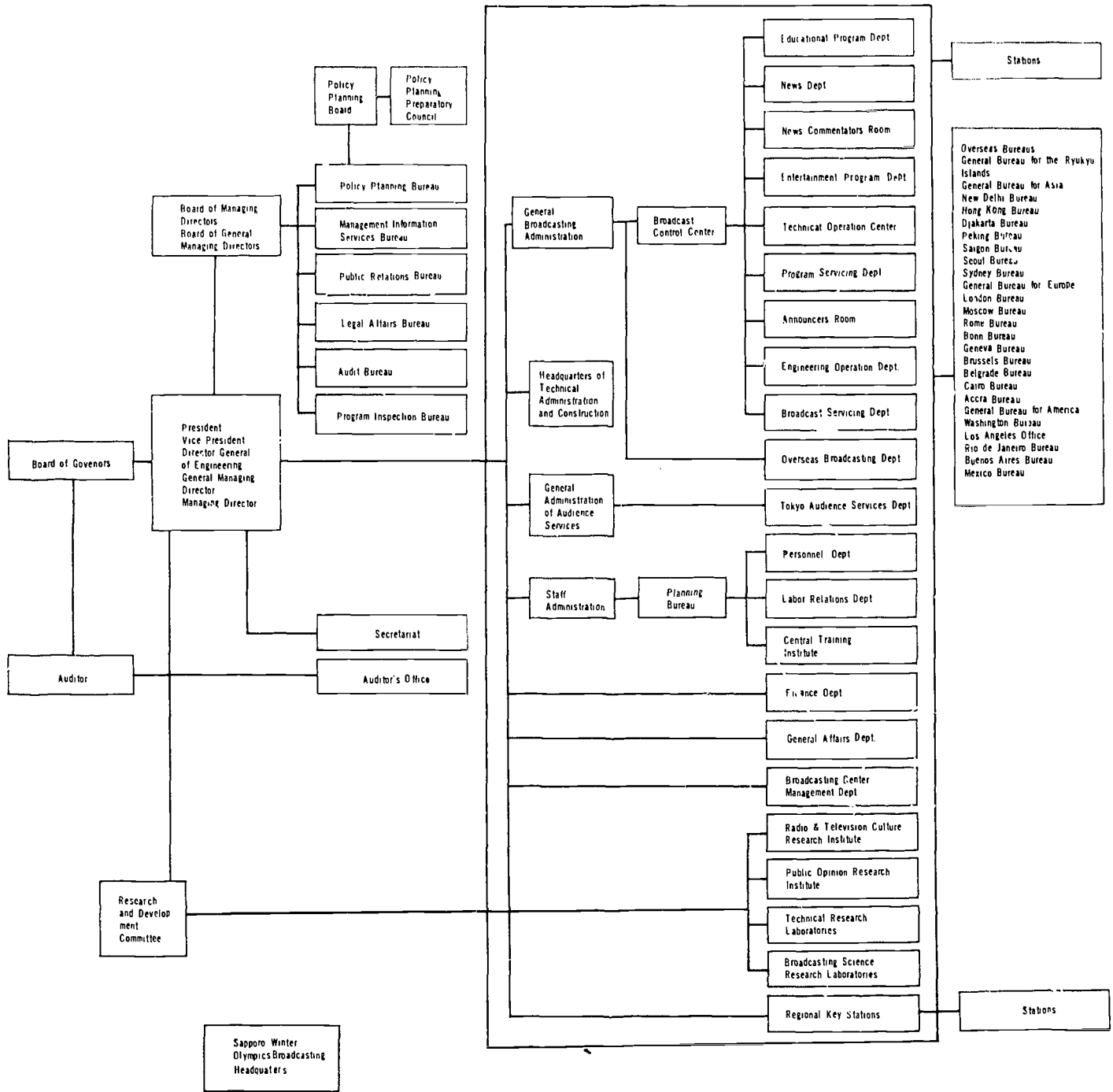
NHK also has overseas bureaus in 24 major cities where correspondents are stationed to engage in news gathering and reporting activities.

Staff Administration

NHK has efficient staff training facilities not only at its Central Training Institute but also at all its workshops to provide rational training so that each individual member, whether as producer, reporter, announcer, or engineer, can make the best use of his individual talents. In the fiscal 1971 NHK employs a total staff of 16,230.

BREAKDOWN OF STAFF MEMBER





ORGANIZATION CHART OF NHK (As of Mar. 1971)

FINANCE

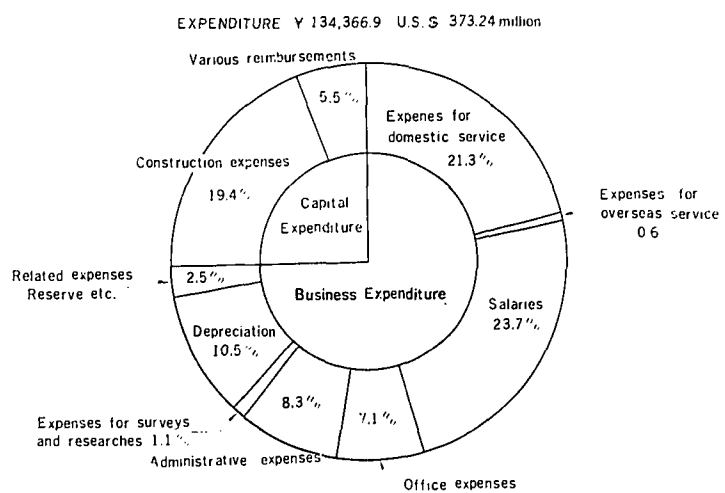
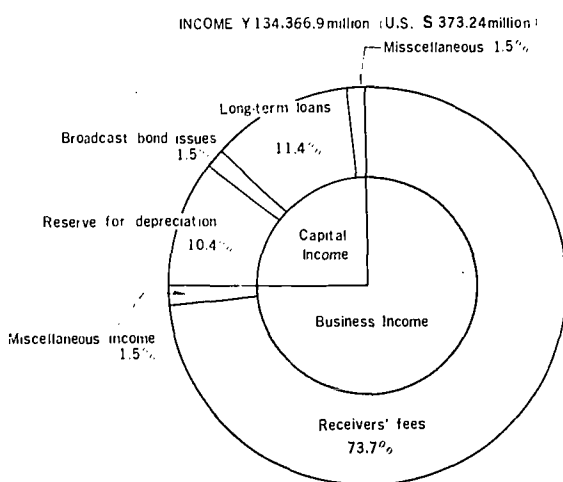
NHK depends almost exclusively on receivers' fees paid by the subscribers as its financial source. For example, of the total business income of ¥100,979 million (U.S. \$280 million) for fiscal 1971, ¥99.018 million (U.S. \$275 million) is to be accounted for by income from receivers' fees.

Under the Broadcast Law, NHK concludes contracts with receiving households in the country, and collects the receivers' fees. The monthly amount, separately collected for color television and for monochrome television, is ¥465 (U.S. \$1.25) for the former and ¥315 (U.S. \$0.87) for the latter. No charge is made for radio. The rate of collection is nearly 100%.

With the wider popularization of color television achieved in the past few years, the weight of revenues from the receiver's fee is shifting from monochrome to color television receiving contracts.

NHK's budget of revenues and expenditures, business program and financial program are voluntarily drafted by NHK. These are submitted to the Minister of Post and Telecommunications after being approved by its own Board of Governors. The Minister of Posts and Telecommunications reviews the submitted programs and then submits them to the Diet, an organ composed of representatives of the people, together with his opinions, for approval.

NHK'S BUDGET OF FISCAL YEAR 1971



MODERNIZATION OF MANAGEMENT

NHK's broadcasting services have made a remarkable growth and expansion in the past dozen or so years through extension of television program hours and the inauguration of color television, educational service and FM broadcasting. Furthermore, the demand for diversification of programs and enrichment of their contents has become strong. NHK's work has not only quantitatively increased but also has become qualitatively more complex.

NHK, which depends solely on receivers' fees as its financial resources, drafted a plan in 1961 for

the modernization of management through induction of an electronic data processing system (EDPS) in order to improve the efficiency of work becoming ever more complex and diversified. And in 1967, the "audience service system," aimed at 20-million-subscribers, was commenced.

In 1965, the policy of adopting the EDPS into the work of programing, production and transmission was decided, and the NHK-TOPICS (Total On-line Program and Information Control System), a system unprecedented in the world, was put into full operation in October 1968.



Broadcast Control Center of NHK TOPICS

NHK-TOPICS

Program production, when compared with productive activities in general, (1) is more individualistic, (2) requires cooperation of various functional staffs, (3) differs in procedures because of differences in the contents, (4) permits no repetitions, and (5) is difficult to standardize because of many changes in the process. The NHK-TOPICS, developed originally at NHK in consideration of the aforementioned character of program production, is attracting the attention both domestically and abroad as a pioneering computer system.

The NHK-TOPICS is divided into two parts in accordance with the principal purposes:

1. Scheduling Management and Allocating Resources Technique (SMART). Use of computers for program scheduling, calculations and allocations of facilities, equipment and personnel.

2. Automatic Broadcast Control System (ABCS) Automation of connections to channels inside and outside the stations and operation of equipment during program recording or transmission and monitoring during trouble through computer control.

Through attainment of the above aims, those in control of program production (broadcasting and engineering staffs) can be relieved of miscellaneous tasks, the number of those assigned to simple task can be reduced, and the staff members, thus freed from unnecessary burdens, can be channeled into the "development of creativity," which is one of the basic requisites in program production.



Technical Operation Center at the Headquarters

NHK-SMART

In the program production, arrangements for facilities, equipment and personnel, and various contacts had to be executed by means of slips or telephone calls. Slips totaling more than 100 in kind had to be issued for a total of more than 5,000 a day. NHK, therefore, decided to introduce the EDPS for this work to do away with slips and make instantaneous arrangements for facilities equipment and information exchanges. The system used for this purpose is NHK-SMART.

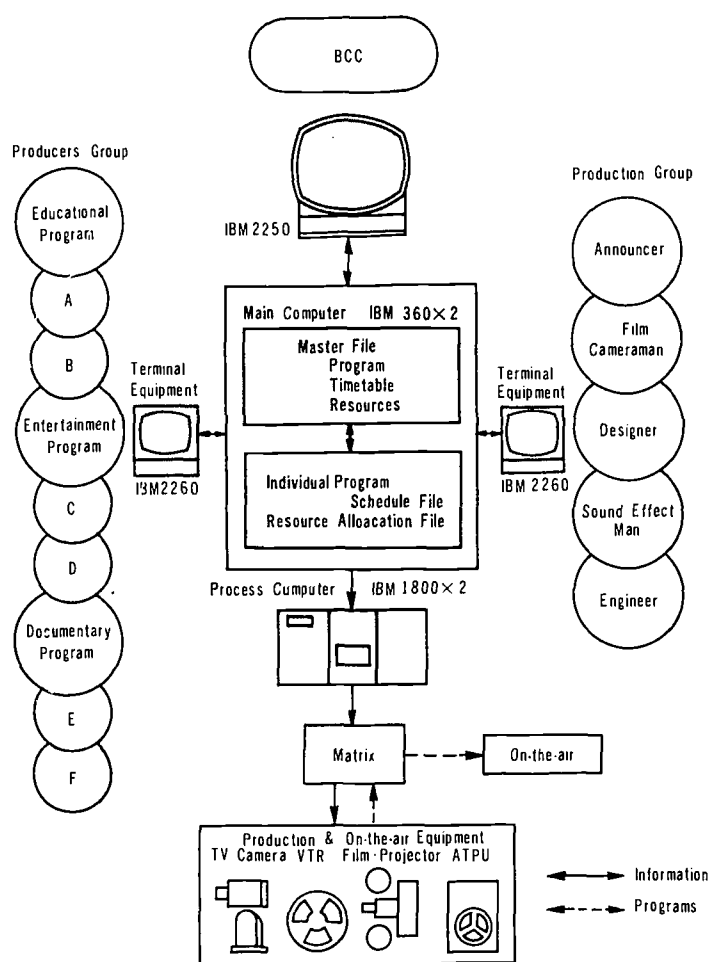
Details of NHK-SMART are as given below. Overall control of programming is executed at BCC (Broadcasting Control Center), which undertakes inputting of data, such as the titles of individual programs, program schedules, names of the producers, etc. into the computer.

Meanwhile, a production schedule is prepared under the network technique in line with the procedure of work, and the data, including the number of staff members, equipment, type, and number of machines and supplies, are put into the computer as input. The computer processes the information and immediately shows the result on terminal devices.

The types and quantities of equipment and supplies are memorized in the computer, and these are appropriately distributed in accordance with requests. In case any request cannot be filled, the matter is checked and adjusted at BCC. The result is indicated by the terminal device (IBM 2250).

Regarding personnel assignment, the staff in charge of a program instructs the computer to assign the required numbers of cameramen, lighting men, announcers, and so forth, of desired sex. The computer thereupon causes the terminal devices of various divisions to indicate the requirements. At various divisions, personnel selection is made in line with the indication and a duty schedule for the entire staff is prepared.

In the case of a schedule change, the computer speedily grasps various effects of such change and makes an indication as to whether or not a schedule readjustment is possible.



OPERATIONAL SETUP FOR TOPICS

NHK-ABCS

Programs for the five television, radio and FM services of NHK are automatically transmitted without the use of manual assistance. This is the principal function of ABCS, which is divided into the following three:

1. Automatic operation of program production equipment.
2. Automatic transmission of programs.
3. Automatic switching of channels for local stations, automatic program monitoring and an exclusive telephone exchange network.

Details of the functions of ABCS are as described below. Data on program transmission and allocation of facilities and equipment memorized in the main computer are transferred to the process computer every 10 minutes according to the schedule made with SMART. Then equipment, such as video tape recorders and film projectors, which are required for program production, are connected via the preset matrix in accordance with the data. By this manual work, which had been required for the operating room for connecting and operating equipment, has been eliminated. Only the technical personnel remotely control these equipment from the subcontrol room and produce programs.

Video tapes and sound tapes have merely to be mounted on the recorders, which automatically start and send the programs out. As the program number is provided at the beginning of the tape in electronic code, the computer verifies this number against the program schedule already fed into it as an input before the program is sent out. For this reason, there is absolutely no chance of a wrong program being transmitted.

Automatic feeding of programs is not limited to recorded programs. Live programs, such as news, commentaries, and sports relays are also automatically switched in. The computer links the News Center and the relay lines with the program line via the program feeding matrix.

NHK transmits its programs not only from Tokyo but from 53 other stations in the country, and switching of these local programs is also centrally

controlled from Tokyo. In other words, electric signals are automatically generated at the beginning and the end of each program and these are sent to all the stations. Switching from network to local, and vice versa, is made according to the type of signal. In case a special news is to be presented, local programs being broadcast from local stations are forcibly switched over to the special news from the News Center in Tokyo.

Electric signals peculiar to five radio and television services are superimposed, and these are monitored at respective local stations. If these signals do not reach the local stations, an alarm is issued. The point where the alarm is issued is then indicated at the BCC and the Technical Operation Center in Tokyo, and a step against accident is immediately taken, as a result of which an apology broadcast is made.

ABCS also includes interstation telephone channels for contacts. With regard to the Technical Operation Center, which serves as the "brains" of ABCS, details are given in the section on "Technique and Facilities" on p. 34.

Audience Service System

The audience service system which was designed to the practical stage from 1968 to 1969 is roughly as follows:

NHK's collection of receiver's fee divides roughly into two systems. One is payment through bank transfer from the subscriber's. The other is collection by a NHK staff member who visits individual households for the purpose. The computer undertakes calculations of receivers' fees, issuance of invoices and receipts and filing of subscriber lists, thus greatly assisting in the efficient processing of desk work.

For subscribers paying through the bank, the transfer amount is calculated from the file kept for them and the bill is sent direct to the bank. In billing the bank, if the bank has EDPS in operation, the bill is sent on a magnetic tape to accommodate it. To banks without EDPS, a payment application list is printed and sent.

Receipts printed by the EDPM are given to the collectors, who visit individual households. The collectors collect the fees in accordance with the area administration code. The collected receivers' fees are brought to the area service offices where they are tabulated. At the service office, tabulated data and information, such as changes in the number of subscribers, are punched on paper tapes, which are then mailed central office.

Information on the movements of subscribers is reported to the central office once a week by the local offices in the form of punched paper tapes, and on the basis of this information, the master file at the central office is adjusted. The adjustment of the master file at the central office involving some 22 million subscribers in the country is made once a week by means of computer processing.



Computer room

THE 3rd FIVE-YEAR PROGRAM

In order to accomplish the aforementioned mission as a "people's broadcasting organization," NHK is now implementing a third five-year program which commenced in 1968. The principal items included in this program are as follows:

1. Construction of about 1,000 stations for the General and Educational TV services for eliminating areas of difficult reception and thus expanding the coverage to 98.1% of the total households in the country.
2. Construction of a high-power medium-wave stations to overcome interference from broadcasting stations of neighboring countries.
3. Further efforts at enrichment and renovation of programs as well as at repletion of local programs and increase of color programs.
4. Use of UHF bands for high-level educational and cultural programs in the event of allocation thereof, and compilation of programs like "Television University for the People."
5. Use of FM Service for prefectural local programs to cover those areas having difficulty in receiving medium-wave broadcasts and to present music, entertainment and cultural programs of high sound quality. Also construction of some 240 stations to expand the coverage to 95 per cent.
6. Extension of overseas service time, more active exchange of programs with overseas broadcasting organizations and stress placed on programs via communications satellites.

NHK TV camera at the jumping approach in Sapporo



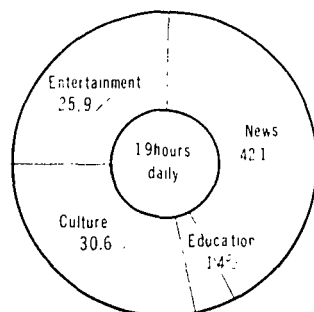
PROGRAMS OUTLINE

The Broadcast Law provides NHK's programing and broadcasting should conform to the following basic principles.

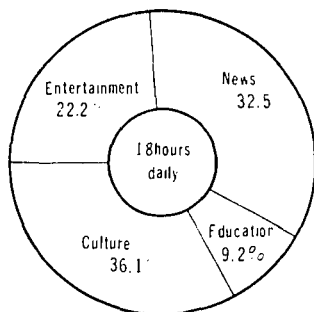
- 1) NHK should exert its utmost to meet public requirements and to contribute towards elevation of the cultural level of the people by generously broadcasting wholesome programs.
- 2) NHK should strive to preserve what is desirable of the past culture of the nation as well as to foster and disseminate new culture.
- 3) NHK should present local, as well as nationwide network programs.

NHK now operates five different nationwide networks for domestic broadcasts. These include two for television, two for radio and one FM sound. The General TV presents well-balanced programs such as news, educational, cultural, and entertainment for people at large, while the Educational TV presents educational programs for correspondence courses and for adult education.

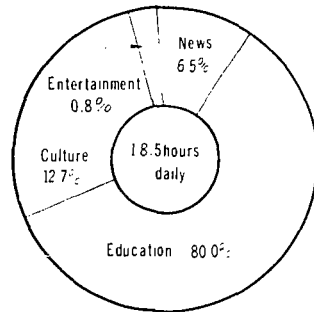
RADIO AND TELEVISION PROGRAMS CLASSIFIED BY TYPES
(As of Apr. 1971)



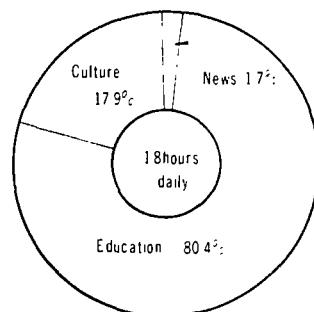
Radio 1st Network



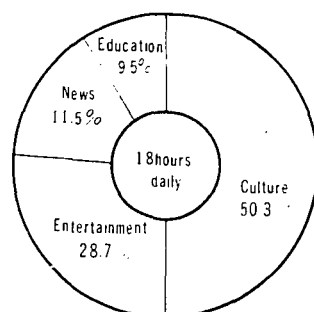
General TV Network



Radio 2nd Network



Educational TV Network



FM Network

In radio broadcasts, the First Radio Network conducts general programs, and the Second Radio Network broadcasts educational and cultural programs.

The FM network makes use of its special characteristic to broadcast fine music and a wide variety of other programs, including news, entertainment, and cultural programs, as well as local news.

In order to maintain the propriety of its domestic programs, NHK has established program councils composed of learned and experienced members. The Central Program Council is established at the headquarters in Tokyo while the Local program Council is set up in each of the eight regional stations. These program councils, as a rule, meet once a month to advise the President of NHK on matters connected with domestic program standards and fundamental programing plans prepared each year. It is also the duty of the councils to submit to the President opinions considered necessary for ensuring propriety of programs.

While presenting programs, NHK examines the contents and manner of presentation in the light of the domestic program standards.

NEWS, SPORTS AND LOCAL PROGRAMS



Newscasts

In a rapidly changing modern society, the role of broadcasting as a medium of public communications is ever-increasing in importance. Lately, with satellite transmissions of television programs becoming routine and presentations of news and information programs in color increasing, expectations for newscasts are mounting.

In the General TV Service and First Radio Network, scheduled news and information programs are presented for 13 hours 53 minutes (37.6%) out of the combined total of 37 hours program time per day as of April 1971. Flexible program compilation is also undertaken as need arises in accordance with the current situation both at home and abroad. In particular, news and forecasts in the General TV Service have principally been carried in color.

NHK's latest surveys have disclosed that some 26 million people tune in to television news presented from 7:00 a.m. Through 7:00 a.m. news and followed news show titled "Studio 102," the public is provided with information on new events and trends at the beginning of the day. Between 7:00 and 8:00 p.m. NHK presents programs including news and information related to Japan and other countries. From 9:30 p.m. the day's news round-up is presented.

In radio, news bulletins are regularly broadcast, in principle, every hour on the hour and every 30 minutes, and weather forecasts before every hour

on the hour news. Efforts are especially made for quick reports of local news, traffic conditions, market quotations of agricultural and fishery products and announcements of various functions and events of general public interest.

NHK maintains 1,291 news reporters and cameramen who form effective coverage teams throughout the country (as of April 1970). Also, for covering overseas events, NHK maintains four general bureaus and 20 bureaus throughout the world. Correspondents stationed at these bureaus undertake news coverage and gathering of materials for information programs as well as work involved in satellite transmissions.

Instead of merely presenting individual events piecemeal, news programs sometimes delve into the significance and background of certain events, undertake analysis and present them to the audience in a comprehensive manner. In 1970, special news and information programs of various types were compiled on the question of air and water pollution, which has become a world-wide problem. NHK's news programs thus played the role of a warning bell on such questions.

Political programs such as "Discussion on the Debate in the Diet" and "Relay of Diet Debates", as well as "Report by NHK's Overseas Correspondent" and "News Commentary" are regularly scheduled and presented.

The role of broadcasting during natural disasters, such as earthquakes, tidal waves and floods and storms, is highly significant. In the disaster areas, where power supply has been cut off, people depend on news received by means of transistor radio. The radio informs these people about the condition and extent of damage, provides guidance for taking refuge and tries to find missing persons. Television, which has simultaneous audio-visual appeal, presets details of disasters throughout the country and plays the role of promoting relief measures.



A scene from speed skating competition at Sapporo Winter Sports Meet

Sportscasts

One of the fields in which the immediacy and the sense of presence possessed by television can be exploited to the full is on-the-spot sports relay. NHK covers various amateur sports meets, Japanese wrestling tournaments, professional baseball games, as well as the events of the Olympic Games. NHK annually presents some 520 relayed sports programs for a total of about 1,070 hours. Special interest has been given in presenting Olympic events as has been proved by its relaying of all Olympiads since the Berlin meet.

NHK has been entrusted by the Olympic Committee with the TV transmission rights of the Sapporo Winter Olympics scheduled for 1972. In order to discharge this important duty, as in the case of 1964 Tokyo Olympics, NHK is now expediting preparations. While the events of the summer Olympic Games must take place under a hot sun, the Winter Olympic Games must occur under extremely cold weather conditions, which present various difficulties. NHK, however, spares no efforts to have the best available equipment ready for use so that the events of the Winter Olympics may be broadcast throughout the world via satellites.

Local Services

NHK has been making special efforts to strengthen its local broadcasting service by stepping up the capacity of local broadcasting stations.

As of April 1971, local services were presented for TV one hour and a half, for radio 3 hours 10 minutes and for FM 1 hour 38 minutes daily on a prefectural basis, containing local news and cultural topics of local communities. Consideration is given so that such programs may be broadcast during the most convenient hours for local people.

EDUCATIONAL PROGRAMS



The principle of attaching importance to educational and cultural programs has been consistently maintained since the beginning of the broadcasting service at NHK. At present, NHK presents a total of about 59 hours 39 minutes of educational and cultural programs on its five radio and television services a day.

NHK's school broadcasts are greatly contributing towards improving the results of classroom lessons when they are utilized under the guidance of the teachers, especially in such subjects as are more difficult for children and students to grasp merely from textbooks and lectures.

Equal educational opportunity is ideal in modern society. In an effort to promote this ideal, NHK takes advantages of the unique function of broadcasting to conduct correspondence high school courses, and, year by year, these are being made more substantial. NHK has established a correspondence high school so that better guidance may be provided to students utilizing correspondence education courses. In 1970, NHK scheduled the "Citizen's University Course" for those desiring to pursue college level courses and to acquire a deeper culture. This new program is intended principally for adults.

To provide social and vocational education to adults, NHK has such programs as "Women's Classroom," "College for People," "Language Lessons," "Vocational Courses," "Agricultural School,"

"Medium and Small Enterprises in Future," etc. These programs are compiled continuously and systematically over long periods. In broadcasting these programs, NHK places special emphasis on enhancing the effect of education by promoting the formation of listening or viewing groups for these programs and issuing textbooks for each program. NHK also directs serious attention to educational and cultural programs designed for the physically handicapped. "TV Deaf School," "For Mentally Handicapped Children," "Hour for the Blind," etc. are some examples.

School Programs

Since the radio programs for schools began in 1935, NHK has gradually increased the number of such programs. Currently (as of April, 1971), NHK transmits to schools 107 different types of programs totaling 26 hours 55 minutes a week.

These radio programs for schools include Japanese language, morals, music, English, social studies, etc., and they are transmitted to primary schools, junior and senior high schools. One of the social studies programs is produced by each of the regional stations throughout the country for its own local service.

NHK began its TV programs for schools in 1953, simultaneously with the commencement of telecasts. In 1959, with the introduction of TV Education Service, NHK expanded its TV school broadcasts. Currently (as of April, 1971), NHK transmits to schools 112 programs, totaling 33 hours 55 minutes a week.

These television programs for schools include science, social studies, morals, music, English, arts, etc., and they are transmitted to kindergartens, primary schools, junior and senior high schools. All the programs for kindergartens and most of the programs for primary education are in color.

Programming is based not only on the course of study issued by the Ministry of Education but also on advice given by the Local Advisory Committees on School Broadcasting and the Central Advisory Committee on School Broadcasting. While plans for programs are thus adopted, production thereof

is undertaken with the specialists' committees for respective series comprising competent Education Ministry officials, school teachers and educators.

One of the outstanding features of school broadcasting in Japan is that teachers, who use the service, NHK and the producers cooperate in its improvement. School teachers have voluntarily organized the National Radio and TV Education Association.

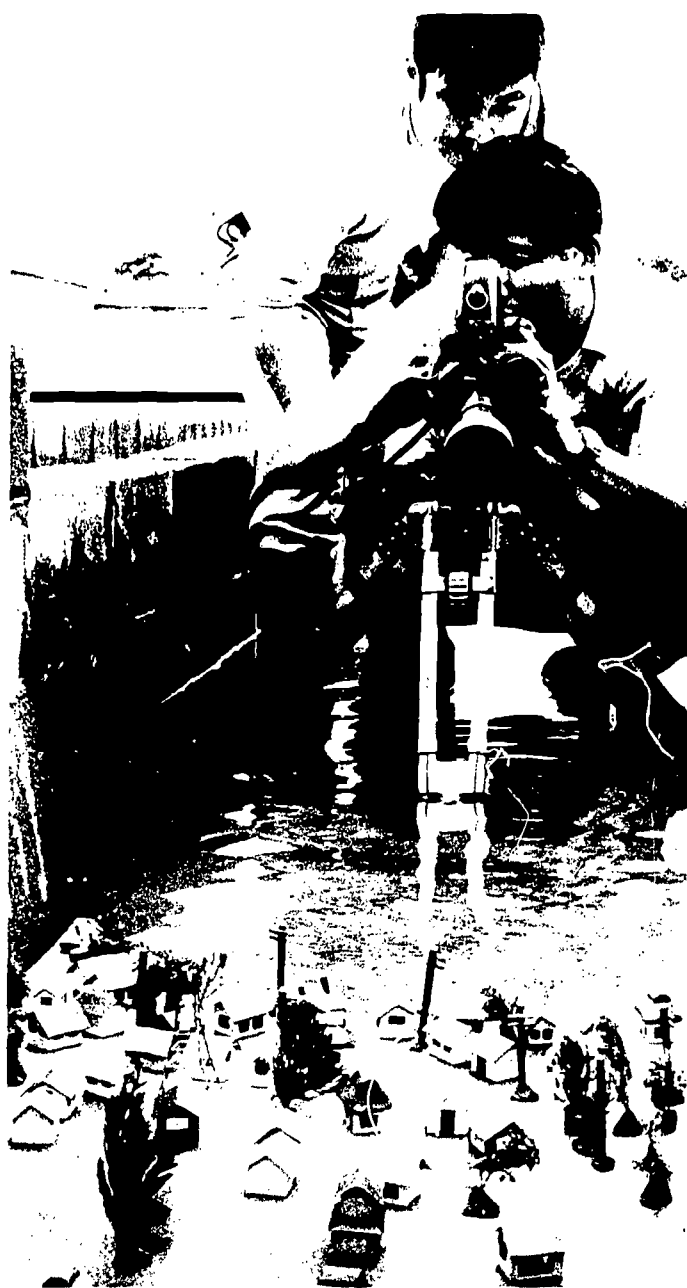
The Association was made up of eight regional Associations which comprise 54 prefectural associations. The Association, however, was re-organized in 1968 in order to meet the requirements of advancing and diversifying studies. Separate organizations were established for different categories of school, such as for primary schools and junior high schools. Its membership consists of educational institutions ranging from day-nurseries and kindergartens to high schools, totaling approximately 55,000. Since its inauguration in 1950, the Association has expanded year by year, and at present an average of 1,700 study meetings are held annually in which an aggregate of about 300,000 persons participate.

Among the schools which are equipped with both radio and television receiving sets, those which are utilizing the school programs systematically are as follows :

(As of Sept. 1973)

	TV		Radio	
	Per-centage	Number	Per-centage	Number
Kindergarten	88.1%	8,850	38.3%	3,610
Primary School	89.9%	22,360	58.2%	14,130
Junior High School	37.4%	4,000	39.1%	4,300
Senior High School	29.0%	1,140	46.0%	1,870

Television programs for social studies can enrich classroom learning activity by presenting conditions prevailing in various parts of Japan and other nations through films. The audio-visual method of teaching made possible with school programs help to promote greater interest in learning.



NHK cameraman filming the educational program

Correspondence Educational Programs

NHK established "High School Course" programs in 1959, simultaneously with commencement of television school broadcasting. This was switched to the "Correspondence High School Course" in 1963, when the NHK Correspondence High School was established.

The "Correspondence High School Course" presented on Educational TV Service and Second radio Network now includes all the requirements consisting of 33 subjects. In connection with these subjects, television presents 30 programs for 15 hours a week, while radio presents 64 programs for 21 hours and 20 minutes a week. Should correspondence high school students utilize these programs, they are exempted from schooling (personal guidance) under the course of study issued by the Ministry of Education. This measure, together with school programs, has been a real help to study activities of working young people. Out of the total of 140,000 correspondence high

school students in the country, approximately 70,000 are utilizing programs of NHK.

NHK's college correspondence education broadcasts started in radio in 1961 and in television in 1965. At present, NHK college correspondence course programs are transmitted over the radio 12 programs 4 hours, over television 13 programs 6 hours 30 minutes, a week.

Social Educational Programs

In view of the educational importance of radio and television, NHK presents the following programs parallel with school programs:

1. Educational programs for homes for the purpose of cultivating knowledge and wholesome sentiments in infants and pre-school children, as well as promoting the wholesome development of young people.
2. Lecture course in languages which directly serve in daily life; practical courses in vocational guidance.
3. Youth programs, women's programs which serve as livelihood guidance intended for group listening and viewing.
4. Programs for deaf and dumb children; special educational programs for mentally retarded children.

These are presented over the general and educational TV services and over the First and Second radio networks at hours which are best suited to the potential listeners and viewers of respective programs.

Programs for Children

Programs directed at small children provide plenty of happy dreams and hopes. In radio nursery programs, "Pippo Pippo Bon Bon," full of songs and music, is highly popular. In TV, there are numbers of programs for kindergartens and day-nurseries, as well as "With Mother" for mothers and their children to enjoy happy moments together.



Infants' hour, childrens' program

Foreign Language Lessons

NHK's foreign language lessons which have a long history cover English, French, German, Russian, Spanish and Chinese.

Vocational and Technical Courses

NHK presents various technical courses directly related to the people's daily life. These programs serve as an effective means of acquiring needed knowledge in various fields or of acquiring public licenses or qualifications for particular skills. For example, specialist instructors provide guidance in playing musical instruments, in computer operation, electrical engineering, automobile repair, etc.

Young People's Class

Since early in its history, NHK has been engaged in a long series of ambitious campaign programs designed to encourage the healthy growth of young people. From 1965, this program series was further consolidated, dealing with various problems from many angles, for the purpose of experimenting with group learning activity through the "Young Class" program.

NHK Women's Class

The "NHK Women's Class" groups were first organized voluntarily in 1955 for the purpose of systematically utilizing NHK's women programs. This program is presented in series of 2 months, each taking up one problem systematically.

Farmers' Programs

In order to contribute, under rapidly changing conditions in farming areas, the training of younger generation of farmers through such programs as "Radio Agricultural School" and "TV Agricultural Class," formation of "Agricultural Group for the Utilization of Broadcasts" is actively promoted.

Special Programs for Physically or Mentally Handicapped Children

Since the inception of the "TV Deaf School" in 1961, NHK has been placing particular emphasis on these special educational programs not only for the benefit of the unfortunate children but also for the purpose of creating public interest in the need of such education. The results achieved

so far are highly appreciated, not only by the families of handicapped children, but also by educators. In 1965, the "Merry Classroom" another TV special class for mentally retarded children was inaugurated. For stammerers, a special language training class is broadcast one week in the Educational TV Service beginning in 1966.



Flower arrangement course



An old kaleidoscope is shown on educational TV

CULTURAL PROGRAMS



Although NHK has been compiling talks and lecture courses as cultural programs since the radio service was inaugurated in 1925, these programs, including educational items, were transferred to the Second Network in 1932, when it was established for such purposes. Cultural programs of various kinds are also presented in the General and Educational TV Services.

With regard to general cultural programs, materials needed for social life are taken up in such programs as "Highlight of Japanese Lives" and "Cultural Features." In these programs, problems that lie deep are probed into from various angles. Considerable importance is also attached to such science programs as "Science for Better Life" and "Modern Science Series," which are in line with the trends of the age of technological innovations. In addition, campaign programs, designed to contribute to the elevation of national life and social welfare, such as traffic safety, public nuisance and campaign against cancer, are flexibly compiled in intensive form.

Cultural Feature

This program is considered to be most typical of all NHK's cultural programs. It is presented for one hour daily from Wednesday to Friday at the most favorable viewing hour—from 8:00 p.m. The contents of the program cover the social, economic, cultural, scientific and entertainment fields. Specialists in these fields are invited to discuss or comment on relative questions.

"Japanese Concept of Beauty"

This is a program which replaced "Traditions of Japan," and is presented once a month in color. It is designed to review Japanese works generally considered beautiful in the light of modern viewpoint, against historical and endemic backgrounds, in order to rediscover beauty.

Inquiry into Japanese History

This program takes up familiar historical events and characters as its theme and attempts to look at the history from non-stereotyped viewpoints, while presenting opinions of writers and other noted personalities and verifications of the locations and remains.

"Talk of Life"

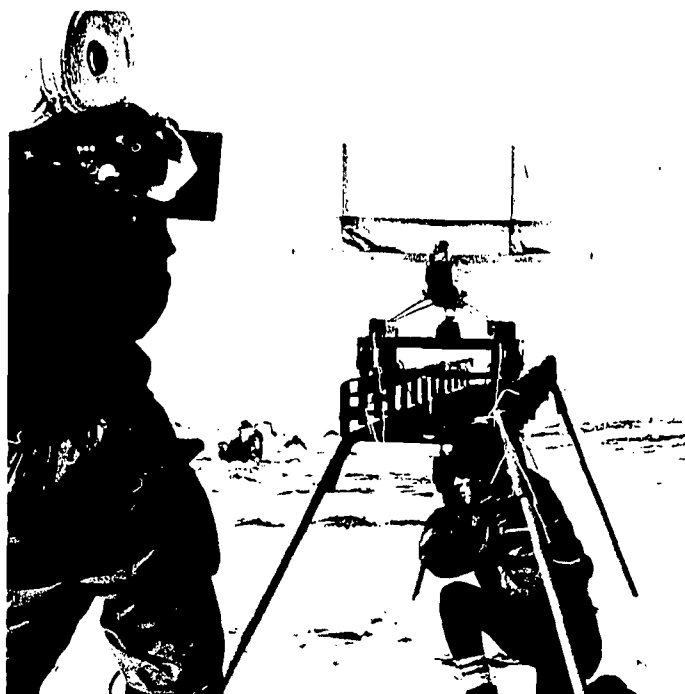
On the radio, this takes the form of a talk program in which people of all social strata with rich experience are invited to speak, in a 3-day series per person, on the lessons they have learned through experience, on wisdom for leading a rational life, and on the joys of life in the style of verbal essays. It, too, has been on the air for 11 years.

Women's Programs

Conspicuous among the women's programs are "Hello Madam," "Notebook for Women," two programs of wide coverage, including newscasters, ranging from small topics picked up at street corners to political and economic subjects to give a "flowing sensation" for comfortable viewing.

The "Women's Useful Memo" helps women broaden their vision in their social contact. Among the more practical programs is the TV cooking lesson "Today's Menu" in color. This deals not only with Japanese, Chinese and Western cooking, but also with dishes popular in particular countries or particular districts of Japan.

The "Encyclopedia for Women" gives lessons on dressmaking, handicrafts and efficient homemaking. In radio, the disk-jockey type "Your Living Room" is much appreciated as a very informative program.



A model plane carrying 16 mm film camera, science program

An old man is making "Kokeshi" doll, cultural program



ENTERTAINMENT PROGRAMS



"Bunraku" puppet show

Musical and entertainment programs play a big role in familiarizing people with broadcasts and in helping build up happy homes. NHK's public opinion surveys indicate that television and radio are the most readily available sources of entertainment for people at large. NHK, which has national networks of both radio and television, intends to provide healthy entertainment and recreation to people through the medium of its programs.

Entertainment programs are broadcast mainly on the General TV Service, First Network of radio and FM. The programs comprise dramas, quiz shows, variety shows, etc., which are devised to be wholesome in character and attractive to general audience.

The serial morning television drama that began in 1961 has already become an indispensable living room companion. This year, "Mayuko Hitori" is being presented since April. The drama is depicting the life of a young woman who lives in a small town in northern part of Japan. A 30-minute serial television drama has also been presented, every evening through Monday to Friday, since April 1969.

The large-scale television drama presented on Sunday evenings is a 45-minute serial. This type of drama has been presented ever since "Hana no Shogai" was presented in 1963. There are very substantial programs enjoying a wide popularity.



A Scene from "Mayuko hitori", the serial morning home drama

In these programs not only stage but talented younger performers and "new faces" are actively employed so that the fresh charm enveloping the programs stirs up wide interest. This series of programs was changed to color since 1969.

This year, a costume play titled "Haru-no Sakamichi" is being presented since January. This is a drama depicting the life of a great swordsman who lived during the early Tokugawa Era (1603-1867). It is attracting large numbers of viewers.



Large-scale historical play "Haru-no-sakamichi"

The series "Japanese Folk Song Festival" which commenced in 1966 takes advantage of NHK's functional nation-wide network to relay good folk songs full of locality from halls in all parts of Japan.

"Hundred Selections of Entertainment" is intended to introduce the traditional arts of the nation, such as classical Japanese music, Noh plays, Noh comedies, Kabuki dramas, Bunraku puppet shows, and rustic folk music and dances, so that the high artistic values of these native cultural art forms may be properly appreciated among our people and thus our traditional arts may be preserved and fostered for posterity. On the other hand, we have such programs as "Modern Japanese Music" and a number of others which are intended to explore new fields of musical innovatio.s.

Dramatic and theatre programs largely depend on scenarios and performers in their planning and production. Therefore, such programs are studied carefully by committees of experts concerned with planning and production. Efforts are also made to discover talented new writers and performers.

As the number of music lovers increases in the nation, NHK's musical programs become more and more appreciated by them. Therefore, while striving to lend variety to its musical programs so as to meet the interests and taste of people of various classes with programs ranging from classical Japanese to modern Western music, NHK always concentrates on cultivating a high degree of musical appreciation among its audience. Especially on its FM broadcasts, NHK prepares many good stereophonic music programs, which are playing a big



Musical show "Stage 101"

role in propagating FM broadcasts in the nation.

In order to improve the musical level of the nation, NHK is fostering its own NHK Symphony Orchestra (the oldest and one of the finest orchestras in Japan, having 120 members). On the other hand, NHK occasionally invites excellent musicians and orchestras from foreign countries.

In 1970, performances by great international artists, who visited Japan to take part in the Japan World Exposition, were relayed from the Osaka Festival Hall. These included Richter, Amalia Roderiguez, and Virtuosi di Roma.

NHK exchanges programs with overseas broadcasting organizations and presents excellent musical and dramatic programs from various countries. With the commencement, in 1969, of experimental broadcasting of sound multiplex broadcasting for television programs through the efforts of NHK's engineering staff, it has become possible to present foreign programs simultaneously in the original language together with the Japanese translation. At present, an American dramatic program titled "Judd for the Defence" and "Nanny and the Professor" are being presented by means of the sound multiplex Broadcasting system. This is favorably received by foreign nationals residing in Japan.

Musical variety and musical shows are programs expected to gain popularity in the future. However, since production of these programs is greatly affected by the functions of studios, NHK has endeavored to establish a program production system through the construction of the NHK Broadcasting Center. Presentation of large-scale musical shows under some new production and directing systems is now under taken in the 1,150-squaremeter studio at the Center.

It is also noteworthy that NHK is making steady endeavors in the presentation of avant-garde type programs useful in evolving new artistic fields. These include "Creative Ballet" and "Creative Dance" in the "Art Theatre" series and "Modern Japanese Music" and stereo dramas in FM.

NHK's musical programs are always highly appraised at various international contests, as shown in the several times winning of the Italia Prize. And these prize-winning programs are constantly being requested by various stations in Europe and America.



Hiroyuki Iwaki in NHK Concert Hall

OVERSEAS



30

SERVICE

NHK's Overseas Broadcasting Service, known under the name of Radio Japan, was begun in 1935 and hence it has a history of 36 years. It is now on the air for a total of 37 broadcasting hours conducted daily in 23 different languages. Its programs, comprising quick and accurate newscasts, commentaries, information introducing Japanese culture, social and industrial conditions of Japan, musical and entertainment programs featuring Japan, are all highly appreciated by listeners in various countries.

Fundamental Policy for Programing

The Broadcast Law provides in regard to the compilation of the Overseas Broadcasting Programs: "The Corporation shall . . . exert its efforts in contributing to the promotion of international friendship and to the development of economic interchange with foreign countries; at the same time, it shall endeavor to provide appropriate entertainments to our nationals in foreign countries." NHK is conducting overseas broadcasting service independently from the standpoint of political neutrality and public utility among the above basic principles in accordance with the spirit of the Broadcast Law and the Standards of NHK's Overseas Broadcasting Programs.

NHK's Overseas Broadcasting Service is briefly divided into the General Service and Regional Service, on the basis of the difference in purpose and the contents of programs. The General Service may be considered the world-wide service directed to all parts of the world, and mainly news and commentaries are transmitted both in English and Japanese for a total of 30 minutes every hour, except for three occasions on which it is on the air for one hour. Thus the General Service occupies a total of 13 hours and 30 minutes daily. The Regional Service is beamed to specific regions, including Southeast Asia, Europe, North and Latin

America and Africa, etc. The programs are arranged in full consideration of the specific condition in the respective regions, political, religious, social and economic, so that the programs may conform with the interests of the listeners in each region. At present, these broadcasts are conducted in 23 languages for a total of 23 hours 30 minutes daily. In compiling the programs, NHK has the Overseas Broadcast Program Deliberation Council composed of outside experts who are persons of learning and experience in order to seek their views. Also, NHK periodically conducts surveys of overseas listeners, soliciting their opinions with a view to improving its programs as much as possible.

Contents of the Programs

In the overseas service, emphasis is placed on newscasts and commentaries which constitute more than half the entire broadcasting time. While it is being endeavored to report correct and objective news speedily, efforts are made also to promote the prestige of Japan among the countries of the world through such commentary programs as "Current Affair," "Weekly News Review," etc. Radio Japan also disseminates news about Asian countries in its program "Asian News," which is compiled on the basis of news reports received by Radio Japan from various other broadcasting stations in Asia.

As information programs which are meant to convey a correct view of Japan in her various aspects of industry, life of the people, culture, nature, science and the way of thinking of Japanese people, Radio Japan beams such programs as "One in a Hundred Million," "Tourists' Guide," "Trade and Industries," etc. These programs are contributing toward the improvement of knowledge about this country.

The programs of entertainment are broadcast for the benefit of Japanese nationals living mostly in North America, Hawaii and Latin America, and Japanese seamen aboard ships on voyages. The light music programs as "My Hit Song Album" and "Sunday Theater," and various sports programs enjoy much popularity among Japanese listeners abroad.

Letters from overseas listeners of Radio Japan are yearly increasing and they now average about 3,000 monthly. These indicate how Radio Japan is increasing the number of its listeners abroad.

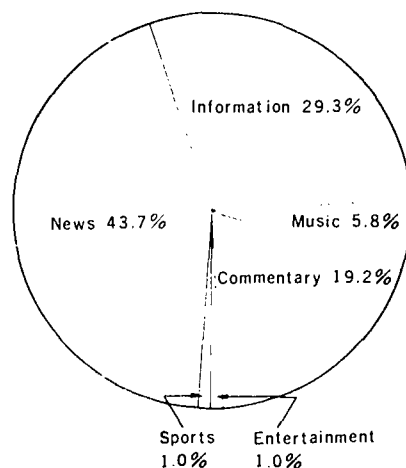
Improvement of Reception Conditions

While it is important to make efforts for the improvement of the programs, it is also required particularly for the Overseas Broadcasting Service to improve all means for the reception conditions. For this purpose, NHK is striving to have correct information regarding reception conditions of Radio Japan periodically from its listeners at various places of the world, program monitors assigned in each region and foreign broadcasting stations which are cooperating this task. On assessment of these reports, NHK is constantly striving to improve transmission facilities and adjust the frequency bands and broadcasting hours.

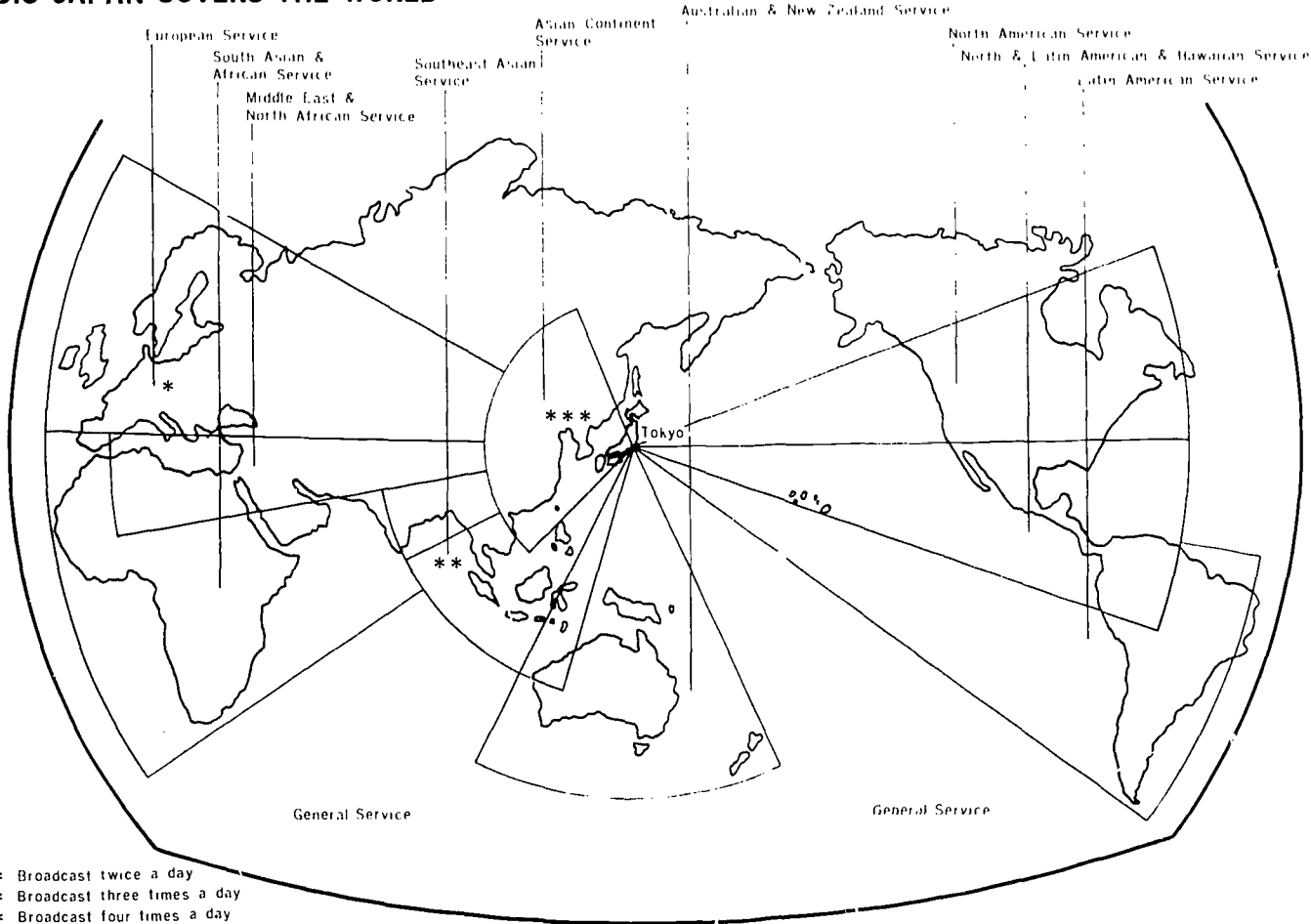


Foreign personnel announcing Radio Japan Program

THE BREAKDOWN OF THE PROGRAMS OF RADIO JAPAN (As of April 1971)



RADIO JAPAN COVERS THE WORLD



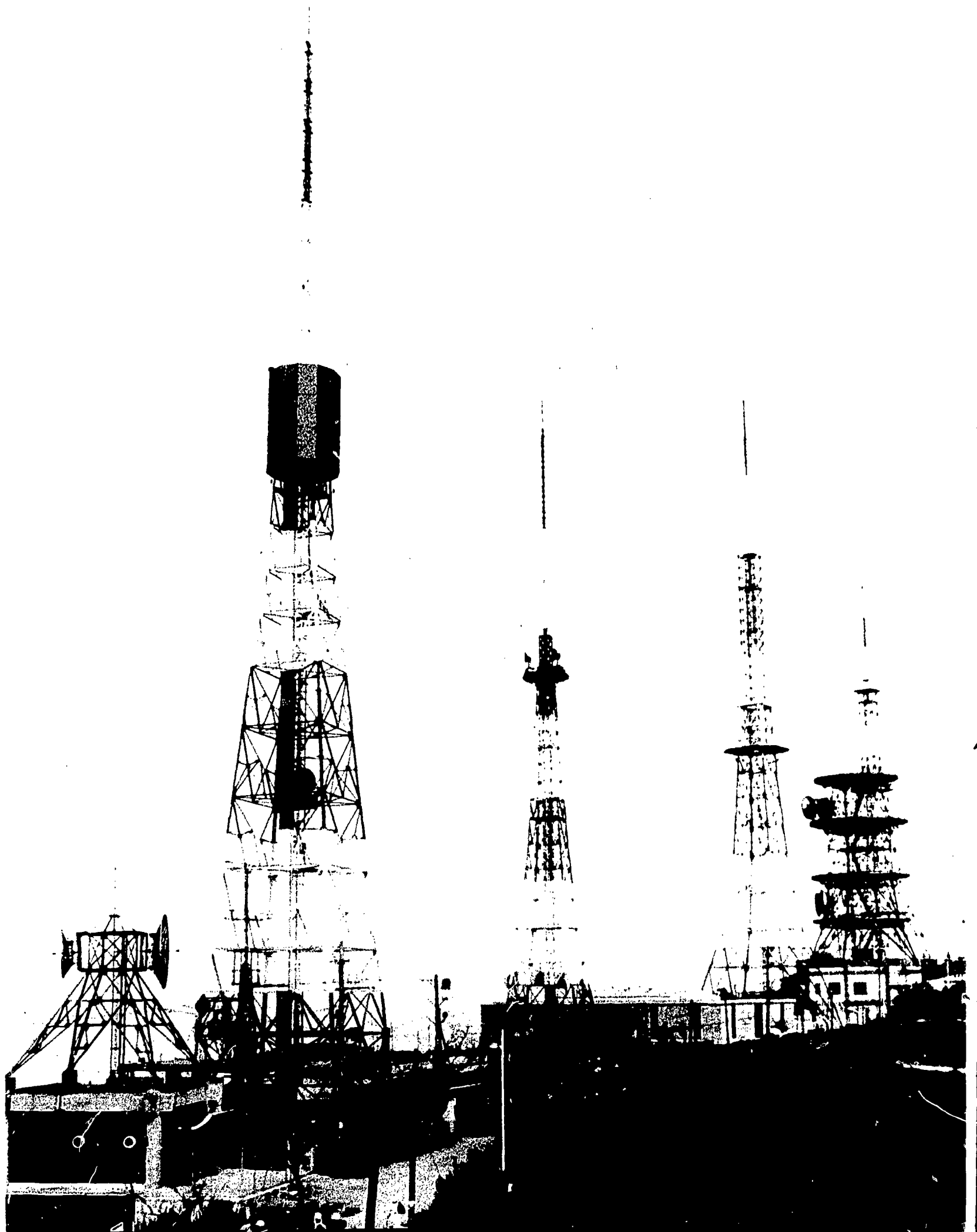
* Broadcast twice a day
 ** Broadcast three times a day
 *** Broadcast four times a day

REGIONAL SERVICE

TRANSMISSION	TIME (GMT)	BROADCAST HOURS PER DAY	LANGUAGE		
North American Service	2345-0045	1 hr.	English		
North & Latin American & Hawaiian Service	0100-0300	2 hrs.	Japanese, English & Spanish		
European Service (I)	0645-0845	2 hrs.	Swedish, German, French, English & Italian		
(II)	1930-2100	1 hr. 30 min.	Russian, German & English		
Middle East & North African Service	1745-1915	1 hr. 30 min.	English, French & Arabic		
Australian & New Zealand Service	0930-1030	1 hr.	English		
Southeast Asian Service (I)	0945-1115	1 hr. 30 min.	Standard Chinese, Fukienese, Cantonese & Vietnamese		
(II)	1045-1215	1 hr. 30 min.	English, Indonesian & Malay		
(III)	1200-1530	3 hrs. 30 min.	French, Vietnamese, Burmese, Thai, Indonesian, Standard Chinese, Fukienese & Cantonese		
South Asian & African Service	1430-1730	3 hrs.	Bengali, Hindi, Urdu, Swahili, English & French		
Asian Continent Service (I)	1230-1330	1 hr.	Russian & Standard Chinese		
(II)	2300-2330	30 min.	Standard Chinese		
(III)	1130-1215	45 min.	Korean		
(IV)	2200-2245	45 min.	Korean		
Latin American Service	0900-1100	2 hrs.	Japanese, Portuguese & Spanish		
	0000-0030	0600-0630	1200-1230	1800-1830	
	0100-0130	0700-0730	1300-1330	1900-1930	
	0200-0230	0800-0830	1400-1500	2000-2030	
	0300-0330	0900-0930	1500-1530	2100-2130	English & Japanese
	0400-0430	1000-1100	1600-1630	2200-2230	
	0500-0530	1100-1130	1700-1730	2300-2400	

GENERAL SERVICE

English & Japanese



TECHNIQUE AND FACILITIES

OUTLINE

It is incumbent upon NHK to complete its national radio and television networks to facilitate reception throughout the country. In line with this important mission, NHK is also striving to maintain and strengthen its broadcasting facilities so that its broadcasts may always be of high quality. For this purpose, NHK is much concerned about the improvement of its broadcast engineering to give fullest satisfaction to its viewers and listeners by modernizing its facilities and operation.

Television

NHK completed its first nation-wide television network with 525 lines standards on February 1, 1953. Research in television began at the Technical Research Laboratories of NHK in March 1931, and, in March 1939, Japan's first experimental television signals were beamed from the Laboratories. Work on television was later suspended because of the war, but on March 21, 1950, an experimental television service was inaugurated in Tokyo. This was followed by the establishment of services in Osaka and Nagoya in 1952. Shortly thereafter, the first microwave link was established connecting Tokyo, Nagoya and Osaka. This laid the foundation for a full-scale nation-wide television service.

On January 10, 1959, the Educational Television Service was established, and together with the General Television Service, television started on

its way to rapid development. On February 20, 1968, Japan's first UHF station was built in Tokushima. Since then, construction of stations was promoted at a rapid pace for areas experiencing difficulty in the reception of VHF signals, which had become extremely crowded. On January 4, 1971, experimental UHF television services commenced in Tokyo and Osaka. This actually brought to Japan an age of mixed UHF-VHF television.

Researches in color television, which started in December 1950, led to a successful experimental colorcasting in 1954 under the NTSC system in the UHF band. In 1960, colorcasting under the NTSC system in the VHF band was inaugurated in Tokyo and Osaka.

In July 1970, NHK commenced experimental services under the sound multiplex broadcasting system in Tokyo and Osaka. By means of this system, scenes of the Japan World Exposition 1970, were presented in both English and Japanese. At present, two foreign drama programs are being presented every week under the sound multiplex television system. In this system, sub-carrier wave (31.5 kHz) is used as the second sound signal, and the sound carrier wave is modulated together with the main sound wave.

Radio

NHK's commenced radio broadcasting in Tokyo on March 22, 1925. In June of the same year, radio broadcasting was started also in Osaka and Nagoya. In 1928, radio spread to Sapporo, Kumamoto, Sendai and Hiroshima. Linking of these stations established the foundation of a nation-wide network.

Experimental stereo broadcasting began in 1952, and, in November 1953, the world's first stereo broadcasting service was established, simultaneously using First and the Second Radio networks.

In 1957, an experimental FM service was implemented. In 1963, FM-stereo broadcasting began under the pilot tone system. Today, the FM Service covers the entire nation.

TECHNICAL OPERATION CENTER

The pivotal facility of the broadcasting automation is the Technical Operation Center (TOC). There is one TOC at the Tokyo Headquarters and another at the Broadcasting Center, but these are linked with cables so that they form a single operational unit. The TOC at the Headquarters is for program transmission and the one at the Broadcasting Center is for program production.

The center of the TOC is the display unit, which indicates information on program transmission and production. The program transmission display unit is provided, in addition to the air monitors for television, with CRT display units indicating the program on the air and of the next program in letters and numerals for the five television and radio services. The indication includes the title of the program, the time broadcasting begins, the originating station, and the condition of the network. On the production data display unit, availability of VTR, film projector, audio tape playback unit, etc. can be seen at a glance. The availability of interconnected equipment, more-

over, is indicated by flickering of the lamp operated by means of a button on the operation console.

The TOC is provided with large numbers of equipment. These include the transmitting matrix, preset matrix, lumped equipment group (VTR, film projector, camera control unit, audio tape playback unit), offering equipment (announce machine, FSS) and an exclusive telephone exchange.

The transmitting matrix consists of a group of switches for switching the transmitting programs from VTRs and studios to the transmitting stations or to the local stations in accordance with the schedule. The preset matrix is not only for program switching but also for simultaneous switching of the remote control line, sync line and lines for reading the material code recorded on the tape automatic transmission.

The outstanding feature of lumped equipment group is that all of them can be remotely controlled



Technical Operation Center

or controlled with the electronic computer. The audio tape playback unit, in particular, has a capacity for playing 42 reels of tape, set in the order.

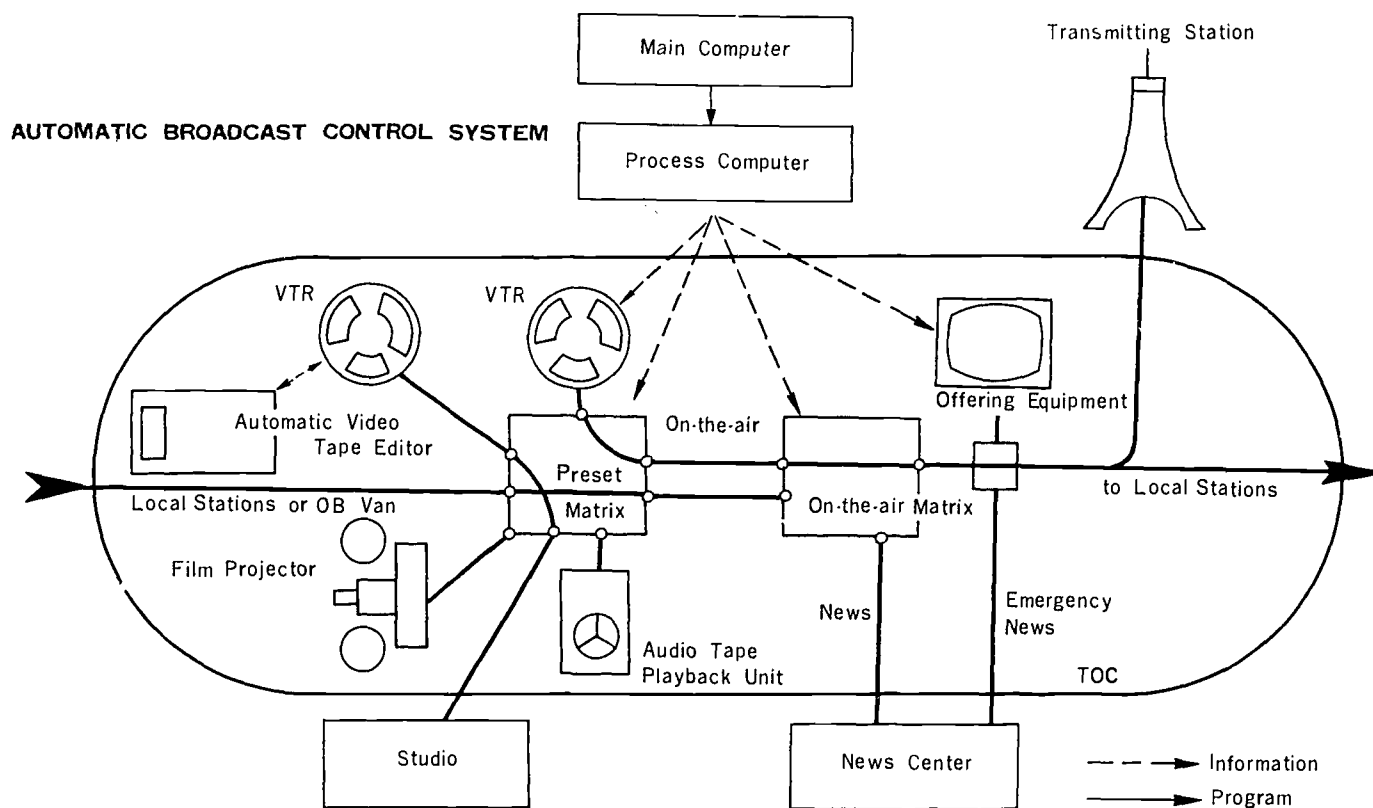
In case any trouble develops in the function of the TOC, the trouble must be quickly discovered from among these numerous equipment and must be repaired. A special line printer prints out information from the computer regarding the trouble, or it can input the information conversely into the computer. It can also cut off the equipment in which trouble has developed. If any trouble develops in the computer or the matrix, transmissions and production can be continued by manual operation, since a system-down backup unit, which is independent from the automatic control system, is provided for the purpose.

There is a video tape automatic editing room in the TOC. Unlike films, editing of video tapes is very difficult. This work has been made as easy as film editing and recording of cuts in dramas has been made possible by means of this video tape automatic editor. The device consists of two sets of standard VTRs, a simplified VTR for recording and editing, a simplified VTR for editing, an editing table, an address signal generator, an electronic computer, and a magnetic memory device.

At the time of recording, recordings are made both at the standard VTR and the simplified VTR for editing. At this time the respective address signals are recorded in the cue track. Then at the time of editing, the editing VTR reproduces in slow-motion or still pictures. And when the button is pressed on the editing table at the beginning and the end of each cut, the respective address signals are recorded on the memory drum.

Furthermore, the two sets of standard VTRs for reproduction and dubbing are automatically operated by the address signals recorded on the memory device, and the final tape exactly arranged as the program scripts is produced from the original tape recorded at random order.

The editing room can edit four programs simultaneously and automatically dub two programs in parallel.



NEWS CENTER

NHK's news have been broadcast from the highly automated news Center since August 1968. The News Center constitutes a part of NHK-TOPICS instituted for modernization of operations. Here computers and other electronic techniques are used for covering, editing and presenting news.

Essential features of this system include :

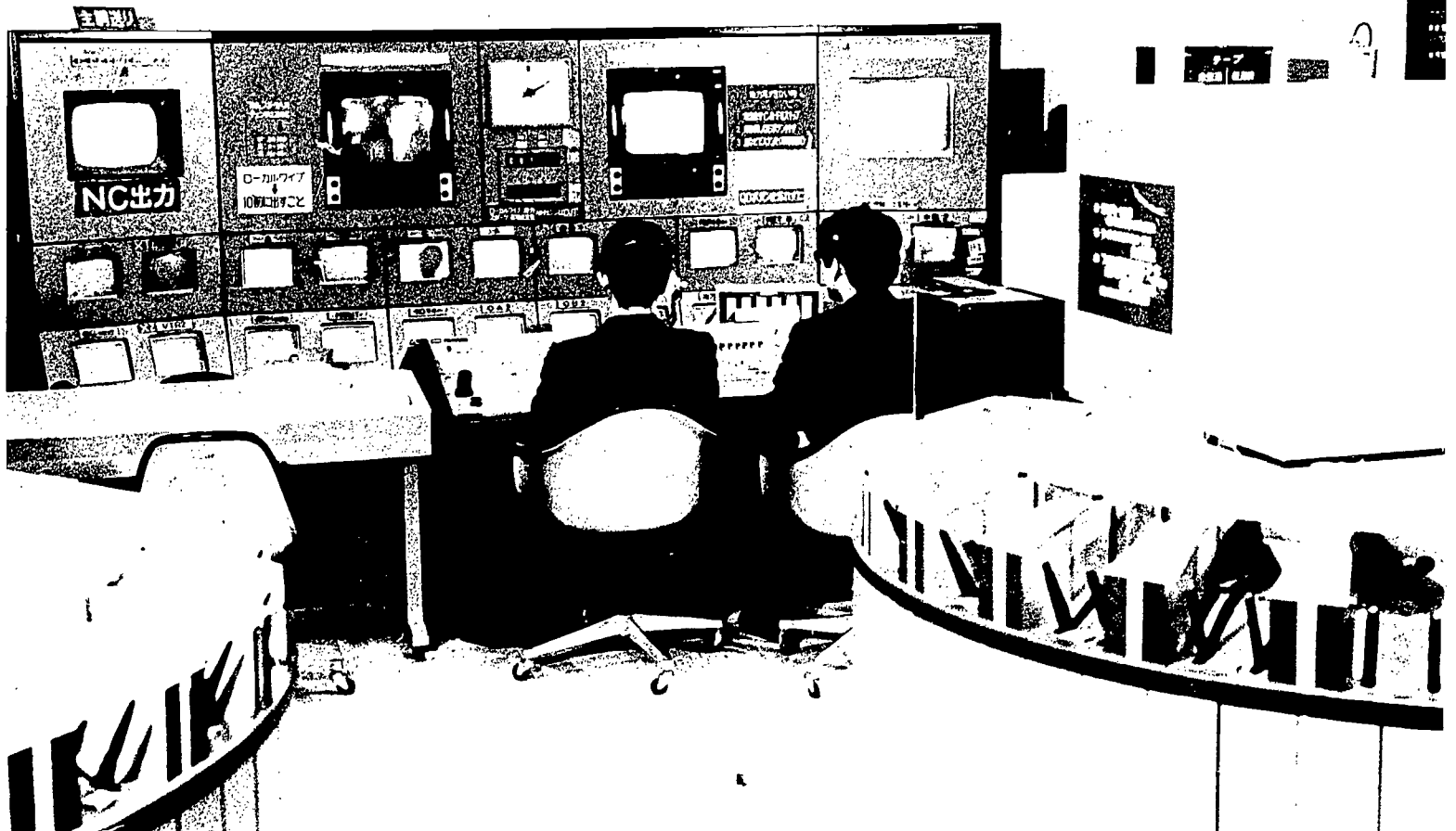
1. Transmission of news, which had previously required a large personnel, has been automated.
2. For back-and-forth contacts and instructions among the coverage, editing and transmitting staffs, electronic techniques using ITV, facsimile, etc., have been adopted.
3. Gathering of news materials, delivery of scripts and transmission of news are now done by means of machines and equipment.
4. The studio, editing room and transmitting

equipment have been concentrated in a single area so that news can be transmitted directly from the editing room.

As a result, the technical staff directly concerned with news transmission has been limited to those who check the equipment.

Also, as the production staff becomes adapted to the new system, complex procedures up to the transmission have been simplified and the energy formerly required for the work has been transferred to the work of improving the contents of news and of conceiving new ideas for program production and presentation.

The most important parts of this automated system include the resources random selector and the order arrangement control and display desk built



News Center

around the control logic equipment unit comprising more than 4,000 integrated circuits.

Following is a description of the operation of the automated system; the desk selects the collected materials and arrangement control and display desk.

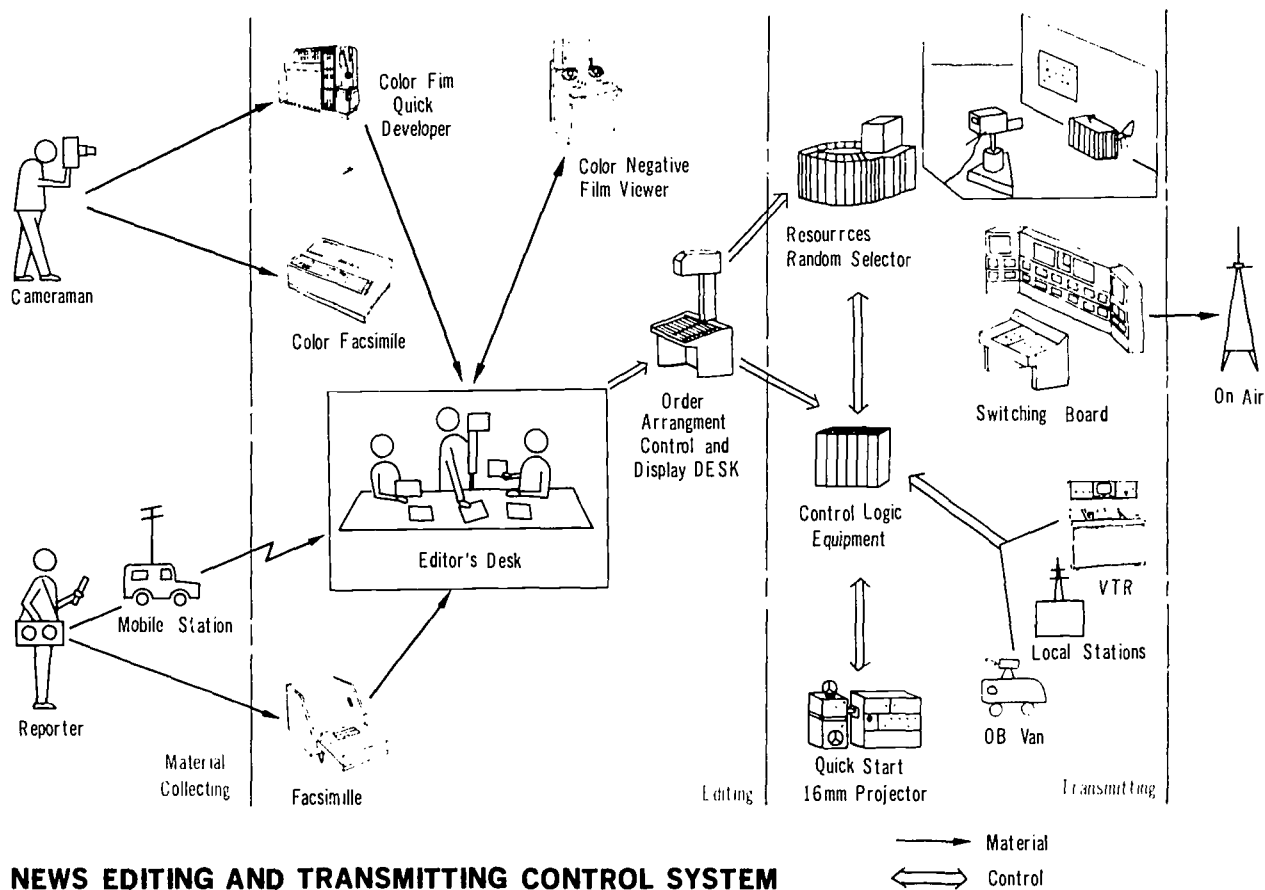
When the titles of news items to be broadcast are written down and set to the allotted time scale, the lap time and total time are automatically indicated. The news items and the time are also shown on ITV monitors placed in various parts of the News Center.

The news order thus set transmitted to the resources random selector through the electronic brain of the control logic equipment.

The producer arranges sign cards indicating instructions for production, such as the film, studio live camera, video tape recorder, etc., according to the production plan, and have them preset in the resources random selector.

As the instructions on the sign cards are read off by the resources random selector beforehand, the producer presses merely a button to switch among the studio live camera, quick starting film projector, video tape recorder, transmission from a local station, or a satellite.

In case a change in the order of items is desired, changing of the order of item indication plastic plates on the order arrangement control and display desk notifies the resources random selector of it. This allows even an emergency change of order without any mistakes or confusion.



NEWS EDITING AND TRANSMITTING CONTROL SYSTEM

BROADCASTING CENTER

NHK's Broadcasting Center in Shibuya, Tokyo is the biggest and by far the most highly sophisticated of its 68 broadcasting houses located in the main cities in the nation. At the Broadcasting Center, a total of 855 TV and radio programs are produced each week.

It is an eight-storied building occupying a total floor space of 112,500 square meters and covering 82,650 square meters in area. The building contains 20 television studios, ten of which are used for color and 23 audio studios, as well as a total of about 50 dubbing studios, echo rooms, rehearsal rooms and filming studios. Most of NHK's educational, cultural and entertainment programs are produced in these studios.

The distinctive features of this Center include the concentrated arrangement of the rooms related to TV production on the first floor and rooms related to technical matters on the second floor, and, to assure that programs will be produced smoothly and efficiently, equipment is controlled centrally, and operation and maintenance made more efficient.

On the first floor, television studios are located in the center around which, at one side, are the waiting and makeup rooms and at another side, stage-setting shops, forming layers of circles with one central point. The studios have convenient entrances through walls adjacent to the internal rooms as well as the external rooms relative to them, leading to the performers' and producers' rooms. These also facilitate the handling of necessary properties and stage settings. Construction of a 23-story building and a large hall with a seating capacity of 4,000 is now in progress at the NHK Broadcasting Center. The work is expected to be completed in 1973 (see envisaged drawing on p. 3).

TV STUDIO CT-101

This is the largest studio at NHK. Its floor space totals 1,197 m² (47.85 m × 25.58 m) and the ceiling is 15.4 meters above the floor. This studio was built for color program production. Its floor is jointless and achromatic. It is provided with lighting equipment capable of changing the color filters by remote control. It also has a camera crane 5 meters high, which can be moved about by remote control. A maximum of five cameras can be used in this studio, where musical and variety programs are produced.



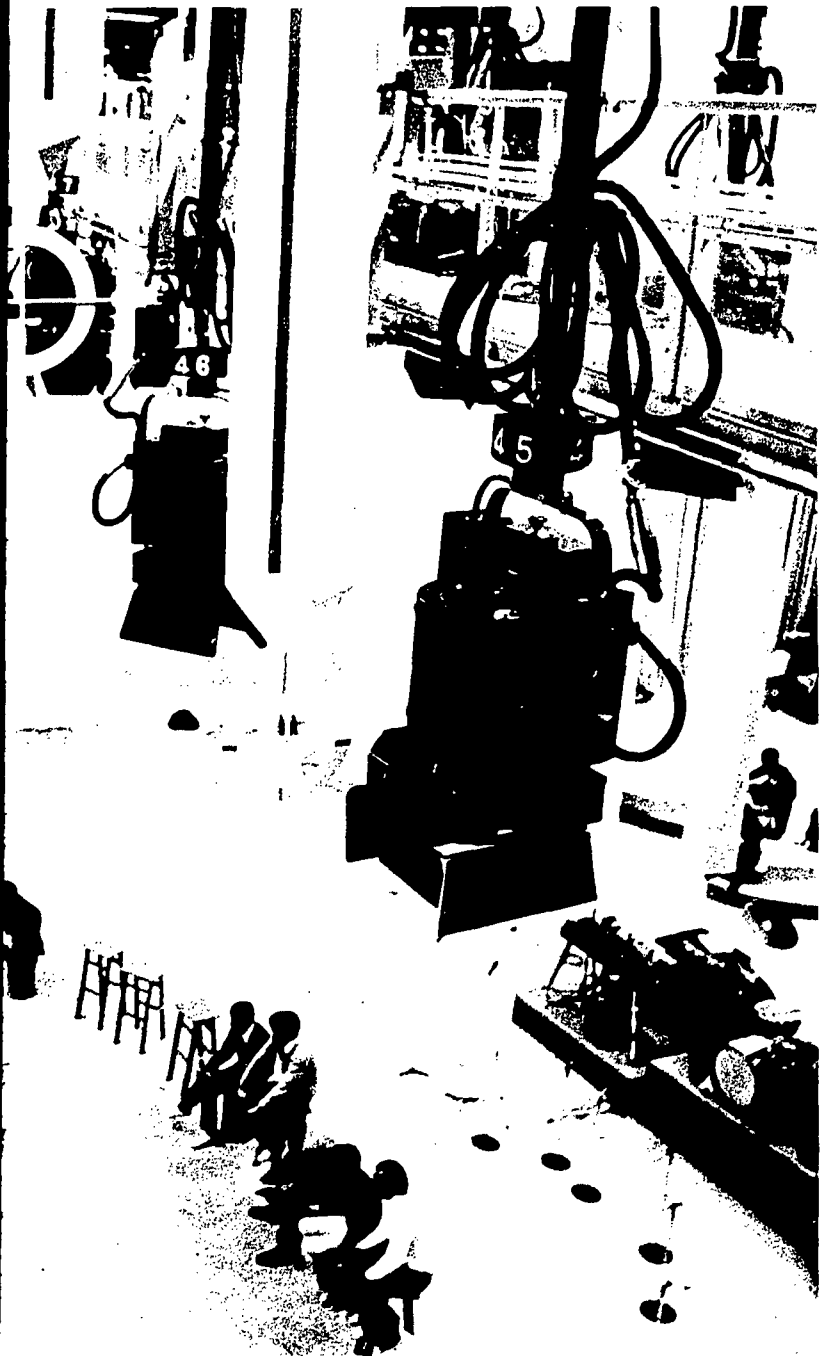
TV studio (CT 101)

NHK HALL

Completed in 1955, the NHK Hall has been used for presenting television and radio programs. This is the only hall where audience-participation programs are produced. It was designed, therefore, with stressed placed on acoustic effects. For this reason, it is also frequently used for concerts by foreign and Japanese orchestras. Since the hall is built so that the attending audience forms a unified whole with the performers on the stage, it has been used to produce large numbers of highly popular programs. In the near future, this hall is to be demolished and the programs will be transferred to a new hall now under construction at the NHK Broadcasting Center. The new hall will be provided with far improved equipment.



NHK Hall



BROADCASTING EQUIPMENT

NHK's broadcasting hours now total 91.5 hours a day, including programs on the General TV and Educational TV Services, Radio First and Second Networks, and the FM Service. Average 14 hours 07 a day colorcasts will be 21 hours a day at end of 1971 while sound multiplexed television broadcasts total 1 hours 19 minutes a week. In order to service the audience with programs of high quality throughout these long broadcasting hours, NHK spares no efforts to improve its broadcasting equipment, in the operation of such equipment, and in further studies related to them.

NHK in Tokyo has provided itself with 26 television (16 color) studios, 18 OB van (10 color), 44 television cameras (27 color). Color equipment are similarly in use at all regional key stations, such as those in Osaka and Nagoya, and even at local stations in order to promote colorcasting of local programs.



Cameras

Among NHK's television cameras, the majority of color cameras use plumbicon pickup tubes. Improvement work for better performances of color cameras is also being conducted at all times. Such work has resulted in the development of cameras using enlarged target image orthicon tubes and plumbicon tubes together, and of the residual-image suppression system using bias light for improving the poor Residual image characteristics, which had been considered a defect of the plumbicon cameras. Efforts are also being made to develop new pickup tubes.

Study of camera weight reduction and increased mobility is also an important subject to effect diversification of programs. NHK also developed a helicopter-mounted television camera which can be controlled from the ground. This camera served well in the relays of scenes in the course of Japan World Exposition, 1970.

Remote-controlled color camera capable of quickly and smoothly selecting ten preset shots by button operation has been developed for news and weather forecasts.

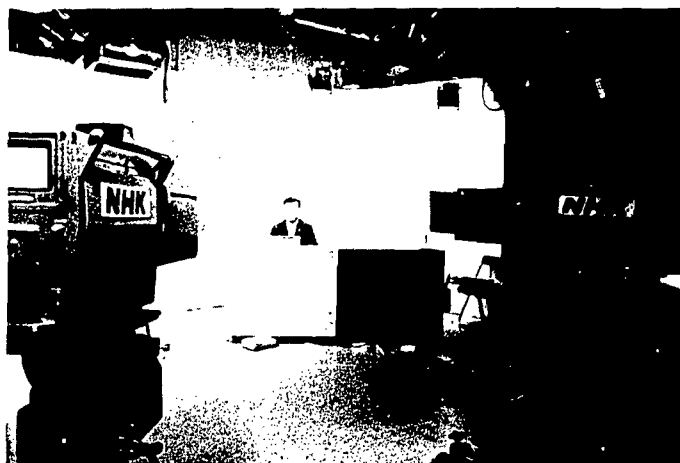
Camera Control System

Since large numbers of color programs are produced in separate studios using different equipment, achievement of a unified color tone for all the programs is extremely difficult. NHK, therefore, has solved this problem through the use of standard color slides.

In this method, the white balance of the monitor is first adjusted by the use of the white balance checker developed by NHK. White balance of the color camera is then taken, after which the face of a girl illuminated at 3000°K on a slide is picked up with a camera at close range. The picture appearing on the monitor illuminated at 9300°K is compared with the same slide, and then the necessary adjustment is made.



Helicopter-mounted TV camera

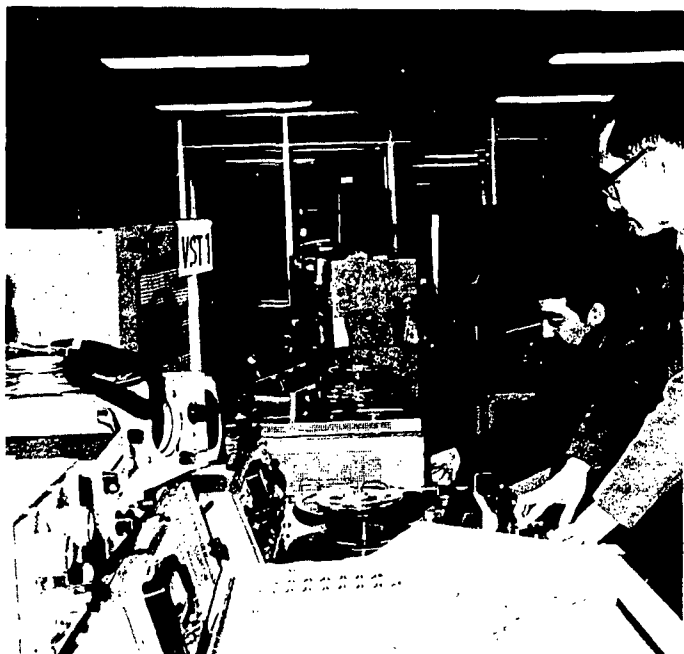


Remote control color camera

Sound Equipment

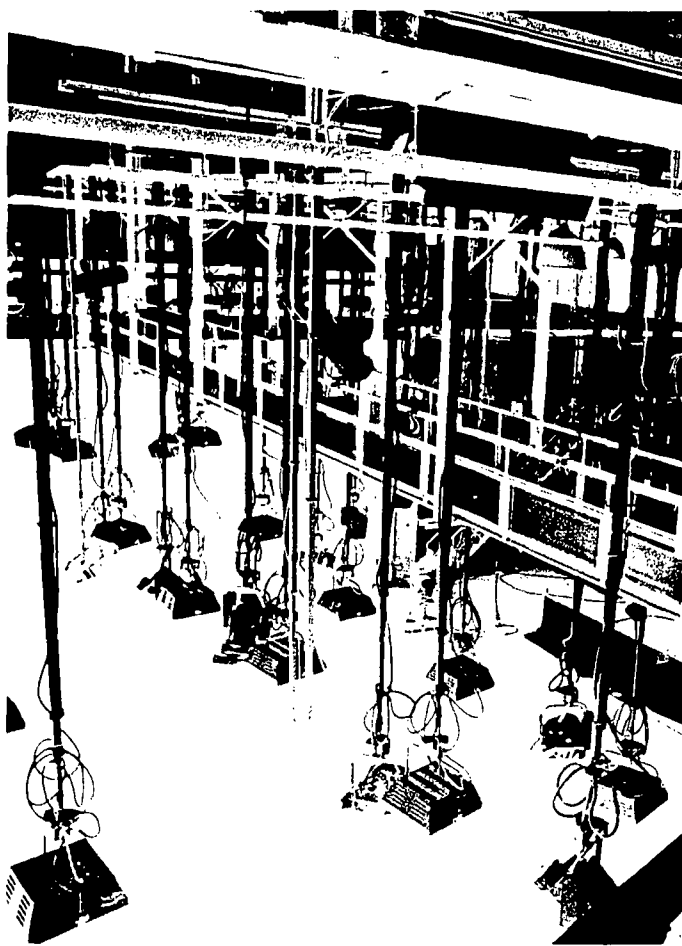
Research in and improvement of sound equipment have been continuously conducted since the establishment of NHK. A typical sound technique developed by NHK is electronic music. During the Japan World Exposition, 1970, NHK's electronic music engineers cooperated with various pavilions in enhancing their displays and stage effects. Also developed was a mixing device of multiple functions and compact dimensions for use with outside broadcasting equipment. This mixer is playing an important role in program production.

Studio for electronic music



Lighting Equipment

Lighting equipment is being improved from time to time along with the increasing number of color programs. As Studio CT101 is used for producing exclusively musical and variety programs, three filters are mounted on the spotlight. On the horizon light, red, green and blue glass filters are mounted at all times, and color changes are executed by remote control. For the control units, SCR and crossbar switch are used for facilitating scene changes.



Lighting equipment at CT 101

Outside Broadcasting Equipment

New color OB van, Field pickup units, close talking microphones, time display units and the device for synchronizing signal generation and color TV field pickup signal multiple synchronization have been developed. These were used for the Sapporo International Winter Sports Meet held in February 1971 and are to be used for the Sapporo Winter Olympics scheduled for February 1972.

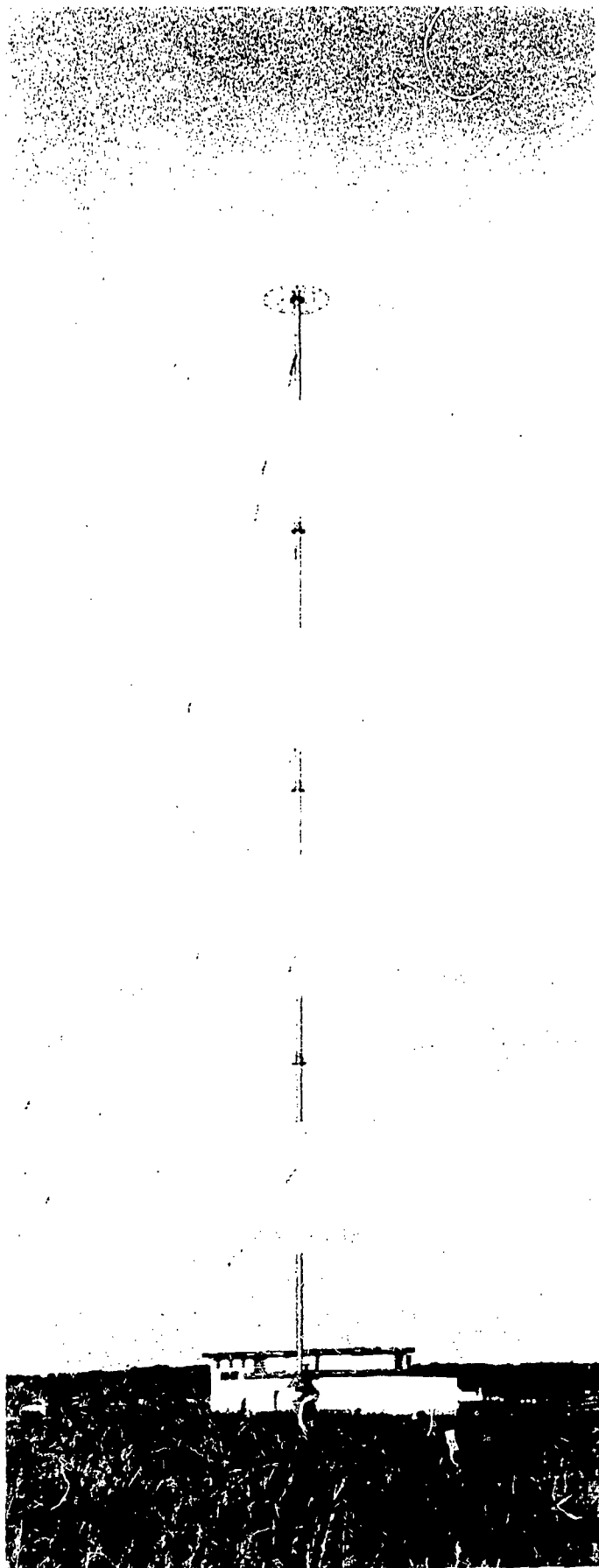
TV Standard Converter

TV broadcasting has been internationalized as a result of the completion of satellite relay networks. Nevertheless, differences in the color television standards between Japan and European nations have been rendering program exchange some what difficult. NHK, therefore, developed a standard system converter to facilitate satellite relays of programs among various countries. This device has made possible the adjustment of differences between the NTSC, on the one hand, and the PAL and SECAM systems, on the other. Also, montage synthesis of foreign pictures and Japanese pictures is possible, since the device is capable of generator locking.



OB van and field pickup unit

TRANSMITTING ENGINEERING



500 kW AM transmitting antenna in Akita Prefecture

NHK, as of March 1, 1971, had 3,002 transmitting stations. They included 1,198 General TV stations, 1,198 Educational TV stations, 170 First Radio Network stations, 141 Second Radio Network stations, and 295 FM stations, and 2 UHF Experimental stations. Despite the large number of transmitting stations, TV coverage in the mountainous regions had not yet attained 100%.

Meanwhile, automation systems and unattended operation systems of broadcasting equipment have also been expedited since 1958. In particular, since many of the television transmitting stations are located on mountain tops and are not easily accessible, 99.7% of them, including two 10 kW stations, have been provided with automated equipment requiring no attendance. Also 96.5% of the radio transmitting stations have been automated. Even the 300 kW Osaka Transmitting Station, built in February 1969, and the 500 kW Akita transmitting station built in April 1971 are operated by remote control and monitoring from a studio.

Reliability of equipment poses important problems in automation and unattended operation. In this connection, NHK has been endeavoring to improve the reliability of equipment on the basis of the development of new technique. Transistorization and use of IC (integrated circuits) have also been actively promoted. Translator using IC may be considered the results of such efforts.

Compact Transmitter Utilizing IC

Two television rebroadcasting stations, which opened for service in March 1969, are provided with the world's first compact transmitters using integrated circuits. The transmitting and receiving units are only 3.5 cm wide, 16.5 cm high, and 18 cm deep (the UHF transmitting unit is only 12.5 cm wide). The UHF unit contains 10 integrated circuits made of 6 types of components, while the VHF unit contains 18 circuits made of 15 types of components. The UHF units have output of 1 W, 3 W, and 10 W and the VHF unit, 100 mW.

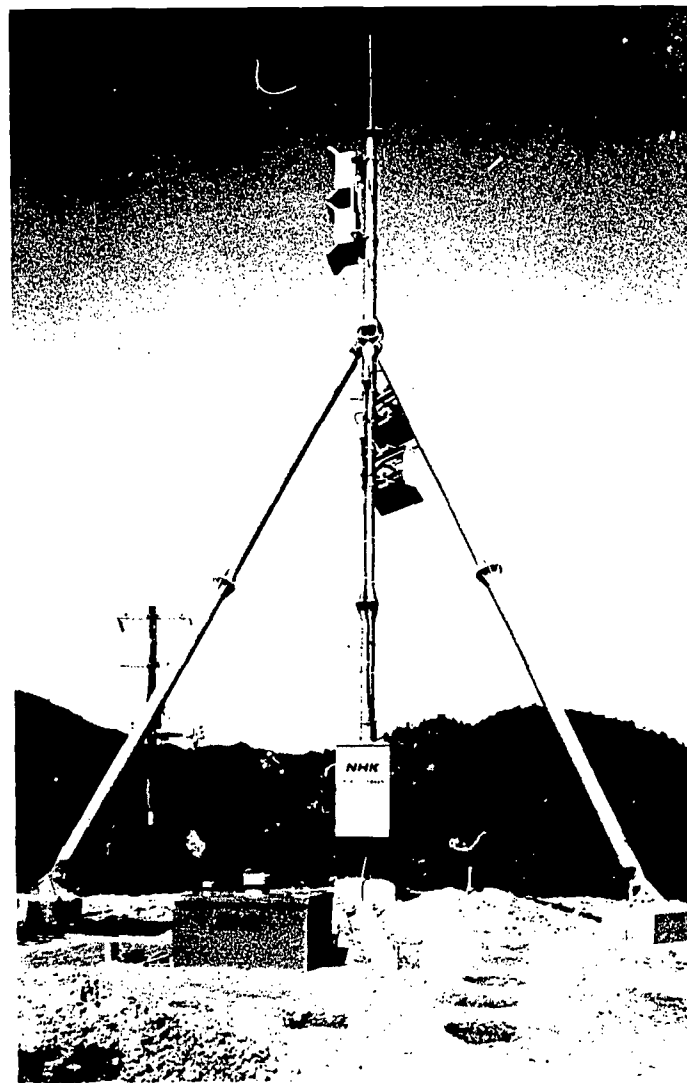
Transmitting stations located where no commercial power is available are provided with home power generators using hydrogen. At present, two such stations are in operation.

High-power AM Transmitters

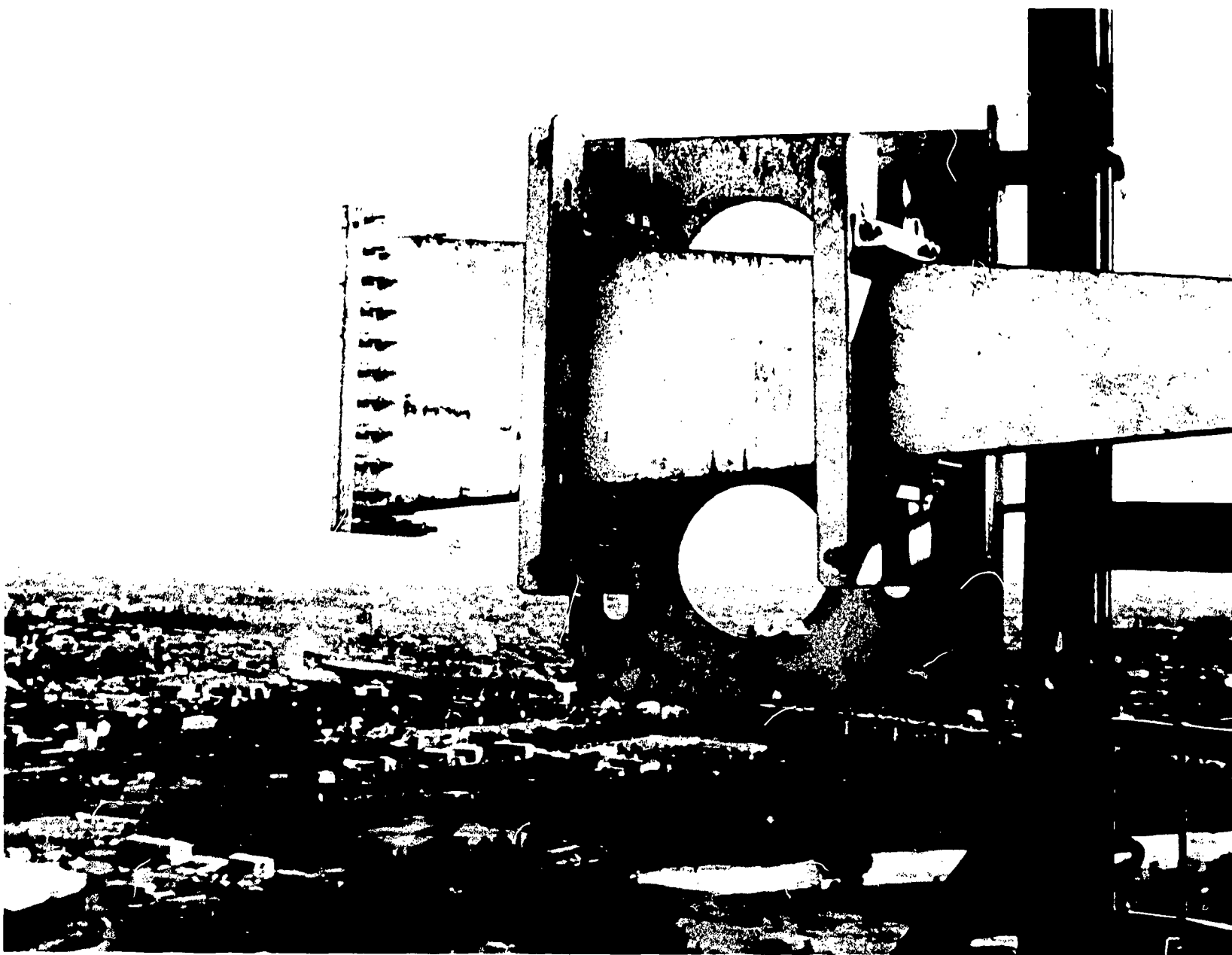
NHK also endeavors to work out means of preventing interference by signals originating in overseas countries and of improving technology related to AM transmitters. In April 1, 1971, NHK constructed a 500 kW AM transmitter—Japan's highest output—in Akita Prefecture some 500 kilometers north of Tokyo. This is a completely unattended transmitting station.

High-Power UHF Experimental Station

NHK commenced experimental UHF services in Tokyo and Osaka on January 4, 1971. UHF broadcasting has been implemented where VHF signals fail to reach, such as mountainous areas and isolated islands, and where VHF signals interfere with each other. However, the experimental services were started for the purpose of assisting in the popularization of UHF TV receivers, and of studying the effect of high-rise buildings on the propagation of UHF signals. The Tokyo station operates on an output of 10 kW, while the Osaka operates on 50 kW.



TV Translator with fuel cell power supply



Experimental SHF antenna at NHK Technical Research Laboratories

RESEARCH AND INVESTIGATION

48

TECHNICAL RESEARCH

NHK Technical Research Laboratories, which is probably the world's only institution covering every aspect of broadcasting in research work, was established in 1930.

The principal subjects of research in the early stages comprised radio broadcasting and reception, acoustics, radio wave propagation, investigations into patents and television systems.

Later, the Laboratories have made notable contributions to radio, television and FM broadcasting and satellite relaying of television programs. In 1965 the institution was reorganized into the present Technical Research Laboratories and the Broadcasting Science Research Laboratories, in order to achieve further development of the broadcasting engineering and also to be prepared for the age of technological innovations.

The two laboratories endeavor to contribute towards progress and development of broadcasting engineering, while maintaining close collaboration.

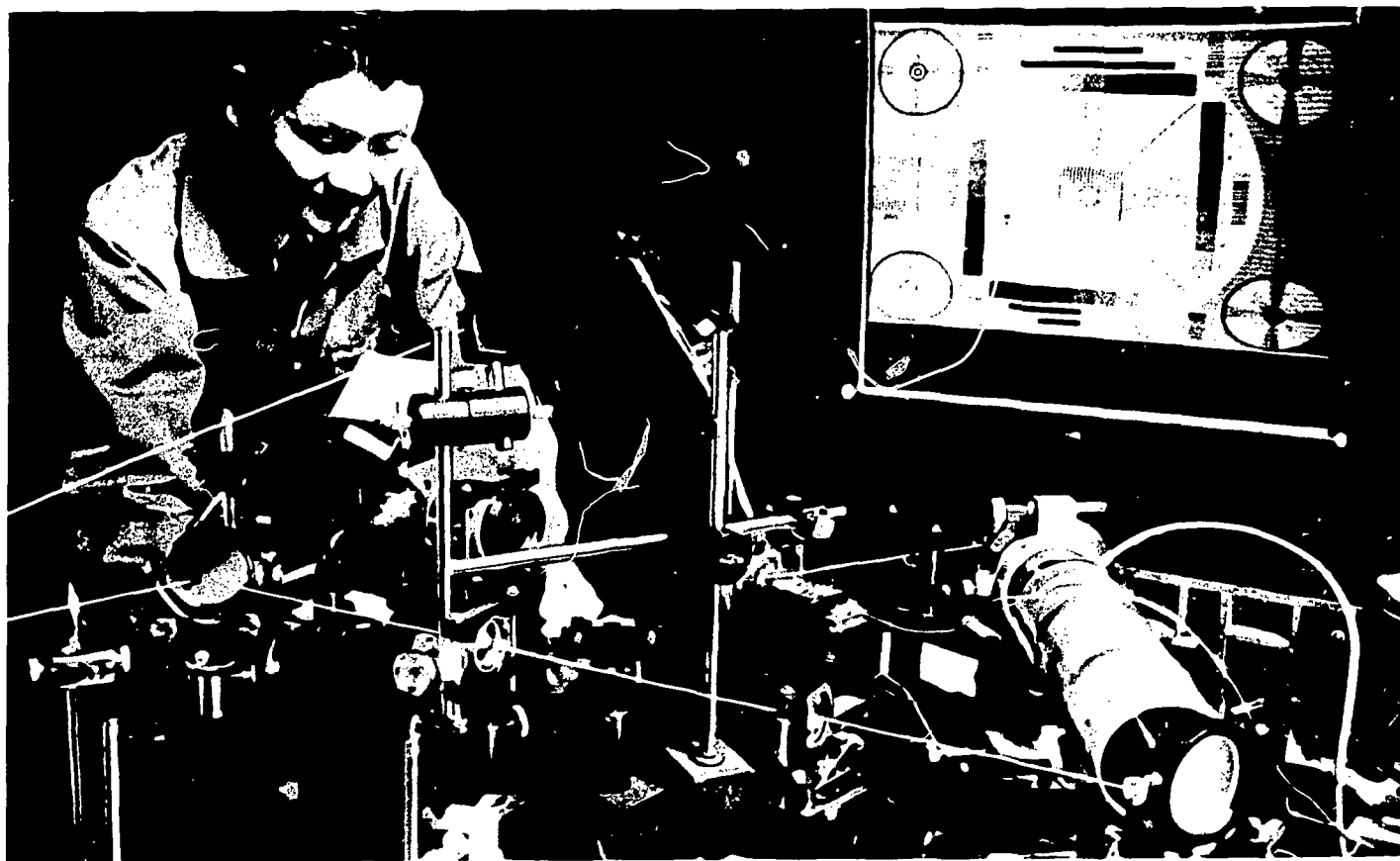
Technical Research Laboratories

In addition to researches related to color television cameras, improvement of the quality of color television reception and high-power UHF techniques, which are intended to contribute towards consolidation and improvement of existing broadcasting, the Technical Research Laboratories undertakes work on the advanced broadcasting systems, including high-quality telecasting using wide screen, new type educational broadcasting and satellite broadcasting, as well as on new broadcasting technique, including data processing, recording and acoustic technique, which form the foundation for future broadcasting. Research and development related to materials and elements are also undertaken.

Broadcasting Science Research Laboratories

The Laboratories takes up basic scientific questions related to the development of broadcasting.

In the field of the audio-visual science, the audio-visual system is studied from psychological, physiological and electronic engineering viewpoints

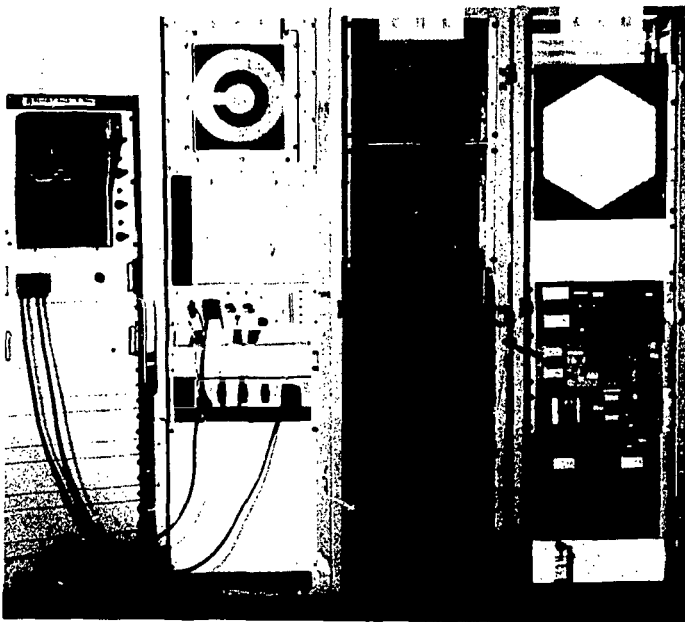


Study of LASER beam

for the purpose of repleting basic data for the development of some new television system, as well as of establishing the basic technique related to recognition of letters and sounds.

In the field of solid state properties, crystalline, photo-optical and magnetic properties and quantum optics are taken up with the object of establishing the basic techniques for developing materials and elements needed for future broadcasting.

The results achieved are not only utilized in broadcasting but are publicized widely through organ papers and academic societies so that they may contribute towards progress of related technologies. Technical guidances are also provided by request of other broadcasting organizations or manufacturers.



A model of human "eye"

RADIO AND TV CULTURE RESEARCH

In order to improve broadcasting programs, it is essential that efforts be made to properly reflect public opinion at all time in the compilation of broadcasting programs. For this purpose, researches and studies on various phases of broadcasting are most indispensable for the development of broadcasting. In this field, NHK has its Radio and Television Culture Research Institute and Public Opinion Research Institute which are contributing to broadcasting progress through researches and studies.

The two institutes started out in 1946 as the "Broadcast Culture Research Institute" and have conducted various researches and investigations related to broadcasting. In 1965, the institute was divided into the aforementioned two organizations. Following is a brief outline of the work conducted by both.

Research in Broadcast Programs

In this field, studies on the evaluation of program contents, the principle of educational and cultural program production, children's life and the role of television, television in relation to young people's thinking patterns, and utilization of school broadcasts are undertaken continually.

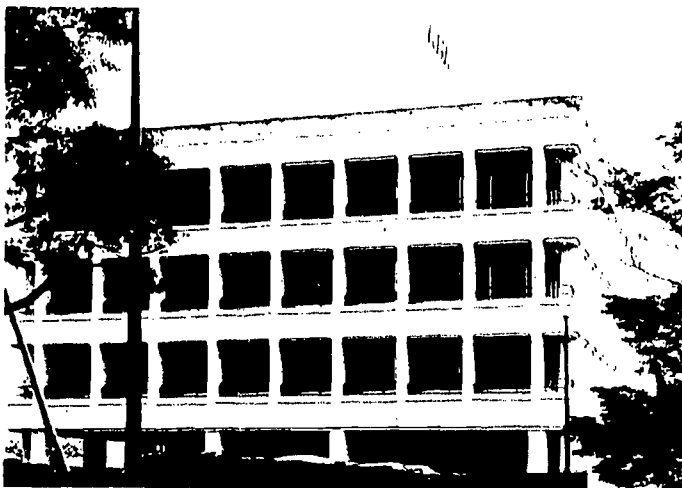
In particular, the utilization and effect of school broadcasts and correspondence education courses are investigated, and the results are used not only as data for program compilation and production but also as basic data on researches in the educational methods and the effects of education.

Research and Studies of Broadcast Language

NHK is always striving through its broadcasts to popularize an accurate Japanese spoken language among our people. For this purpose, NHK has established the Broadcast Language Committee to make studies of the broadcast language centering around oral language, orthography for TV and technical terms.

Research of Broadcasting Affairs

For the progress of our broadcasting world, it is necessary to grasp an accurate picture of broadcasting both at home and abroad. For this purpose, NHK exchanges relevant materials and information



with broadcasting organizations in other countries, as well as with research institutes, foreign diplomatic missions in Japan, and the like, so as to investigate the broadcasting system and programs now prevailing both in Japan and in foreign countries to utilize such findings for cultivating new fields of broadcasts, to improve its own programs, and also to rationalize its management.

Studies of Broadcasting Science

Since broadcasting has become an indispensable part of the people's life at present and its influence has become very significant, it is very important in view of its social impact to tackle scientifically the inherent nature of broadcasting and its social functions and to bring it under systematic study. For this purpose, NHK, in collaboration with various universities and research institutes, carries out an exhaustive analytical study of the science of broadcasting.

Compilation of the History of Broadcasting

NHK has already published, in Japanese, "The History of Broadcasting in Japan", compiled in three volumes. An English version has also been published. The "NHK Yearbook" (in English, "NHK Handbook") containing accurate records of its business operations has also been published.

Broadcasting Museum

The Broadcast Museum was established in 1956 in commemoration of the 30th anniversary of broadcasting in this country. It was located in the JOAK station building, where the first radio broadcasts were begun in 1925. However, as the building became superannuated, a new one was constructed on the same site in 1968. The exhibit room, with an area of about 300 square meters, contains radio equipment made both in Japan and abroad, broadcasting scripts and photographs. These are exhibited in chronological order to show the progress of broadcasting since its inception. Also available are exhibits showing the principles of radio and television techniques and an experimental model studio that can be operated by visitors.

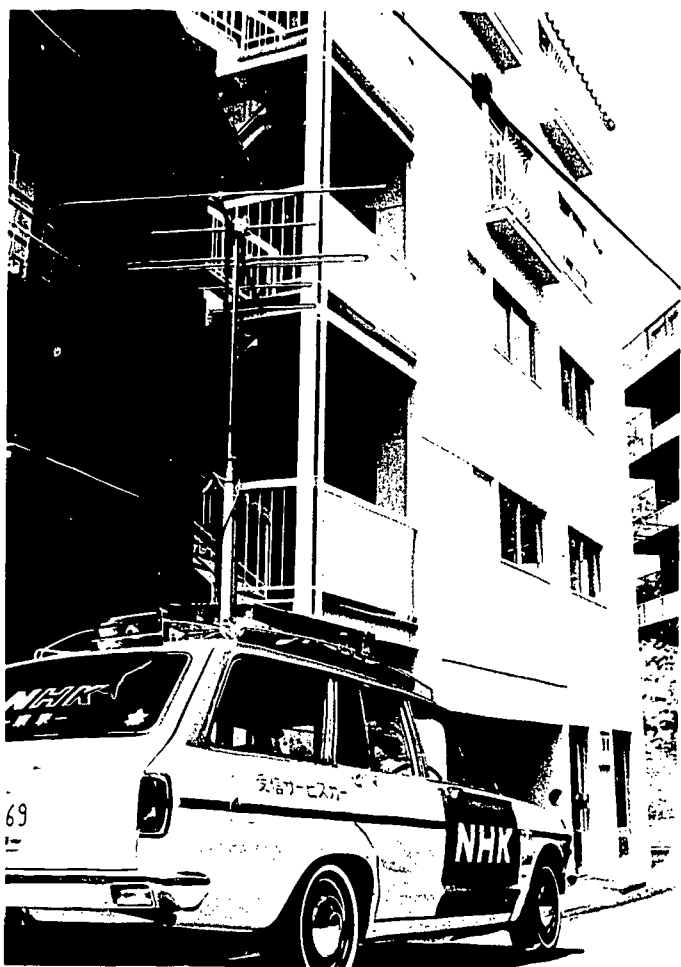
Public Opinion Research Institute

The Public Opinion Research Institute undertakes various public opinion surveys on broadcasting, the results of which are utilized as data for programming. At the end of 1970, results of the "How-Do-People-Spend-their-Time Survey" were announced. These contain details of the people's time budgeting during a 24-hour day. NHK is one of the very few cases of a single broadcasting organization undertaking such large-scale nation-wide surveys. The survey, therefore, is a focus of attention not only by other broadcasting organizations but also by government agencies and private enterprises.

The principal tasks of the Public Opinion Survey Institute comprise the following three:

1. Public opinion surveys on programs. Nation-wide program rating surveys are undertaken several times a year by the personal interview method. In addition, surveys of opinions regarding broadcasts are also undertaken.
2. Surveys related to public opinion on politics, economy and social affairs. Up to now, surveys on elections, home life, education, occupation, etc. have been undertaken.
3. The how-do-people-spend-their-time survey. In this survey, time spent in a day for certain behaviors by the samples during various times of the day are investigated. The survey has been conducted every five years since 1960.

AUDIENCE SERVICES



Service car for better reception

Public Relations

NHK's basic obligations include presentation of programs of high quality under favorable receiving conditions. At the same time, NHK must also spare no efforts to enlarge the number of its subscribers in order to increase the revenue derived from receivers' fees, which constitute the financial basis of NHK. For this purpose, NHK expanded its Audience Services Department in 1970, adding the Service Promotion Division, Headquarters for Reception Improvement, and the System Division, thus further reinforcing the means of collecting receiver's fees and of providing better services for the the audience. NHK also maintains the "NHK Consultation Room" in 68 stations throughout the country to process requests and complaints regarding programs and receiving conditions, as well as to extend advice on matters connected with receivers' fees and other problems. Improvements are introduced into everyday conduct of affairs on the basis of such reactions of the audience towards the broadcasting services.

It is an important prerequisite for NHK as a public service broadcaster to publicize its mission, administration and details of programs as widely as possible among the audience. For such purposes, NHK utilizes all sorts of media.

As a means of public relations through broadcasting, NHK presents radio and television programs, such as the "Audience and NHK," a roundtable forum in which the President of NHK answers questions put to him by these present. Publicity through newspapers and magazines, as well as various other types of printed matter, is also actively undertaken.

There are also informal conferences with audience. Such conferences were established in various parts of the country in 1961 and are continued for the purpose of presenting the actual state of NHK and reflecting frank opinions of the audience regarding NHK's management. Such meetings were held for a total of 4,597 times up to January 1, 1971. The total attendance at these meetings was 87,257.

Reception Guidance

NHK also makes endeavors in the field of reception so that the audience may receive its programs in good picture and sound quality.

NHK holds some 2,000 technical courses a year in various parts of the country in order to help improve the skill of repair technicians employed by radio and television service shops. In addition, NHK provides pertinent advices for telephone consultations from the audience; it also sends out visiting servicing teams to diagnose troubles and to provide guidance in the improvement of reception.

In cases of natural disasters NHK not only presents

pertinent bulletins and information on the state and progress of disasters but also provides repair services for damaged receivers in cooperation with local repair shops.

For remote hilly areas and urban districts between all buildings, where reception is not satisfactory, NHK, in cooperation with radio and television service shops, provides mobile repair services; it also assigns servicing cars to all important stations in the country to provide adequate repair services for the benefit of the audience.

NHK, which decided in 1971 to build community antenna TV (CATV) system in poor reception areas in mountainous districts, was able to improve about 1,000 locations over a year's period reception for about 68,000 households. Until recently, people in poor reception areas built community antennas, with the aid of NHK which provided technological guidance and subsidies. Now NHK and receivers have grouped efforts for joint construction of CATV.

Obstructions caused by high-rise buildings and elevated speedways have become a social problem. NHK extends assistance to builders responsible for the obstructions to improve reception for its receivers. But since there are cases when responsibility cannot be laid at the door of any single person or company, it has undertaken research to improve conditions through establishment of CATV.

As for obstructions caused by concentrated use of receivers and electrical appliances in buildings and apartment blocks, NHK has carried out research on a reception system for such cases. As a result, it has succeeded in developing a series-type unit system for CATV which is cheaper and can be built faster than conventional CATV systems. It has also developed a branch junction using a circulator which contributed to good color-TV reception when used with CATV in buildings. Also researched by NHK are cables and other equipment necessary for joint UHF and VHF reception in buildings. Such research is carried out because an increasing number of UHF and VHF now coexist in various parts of the country.



CATV antenna in the rural area

OVERSEAS COOPERATION

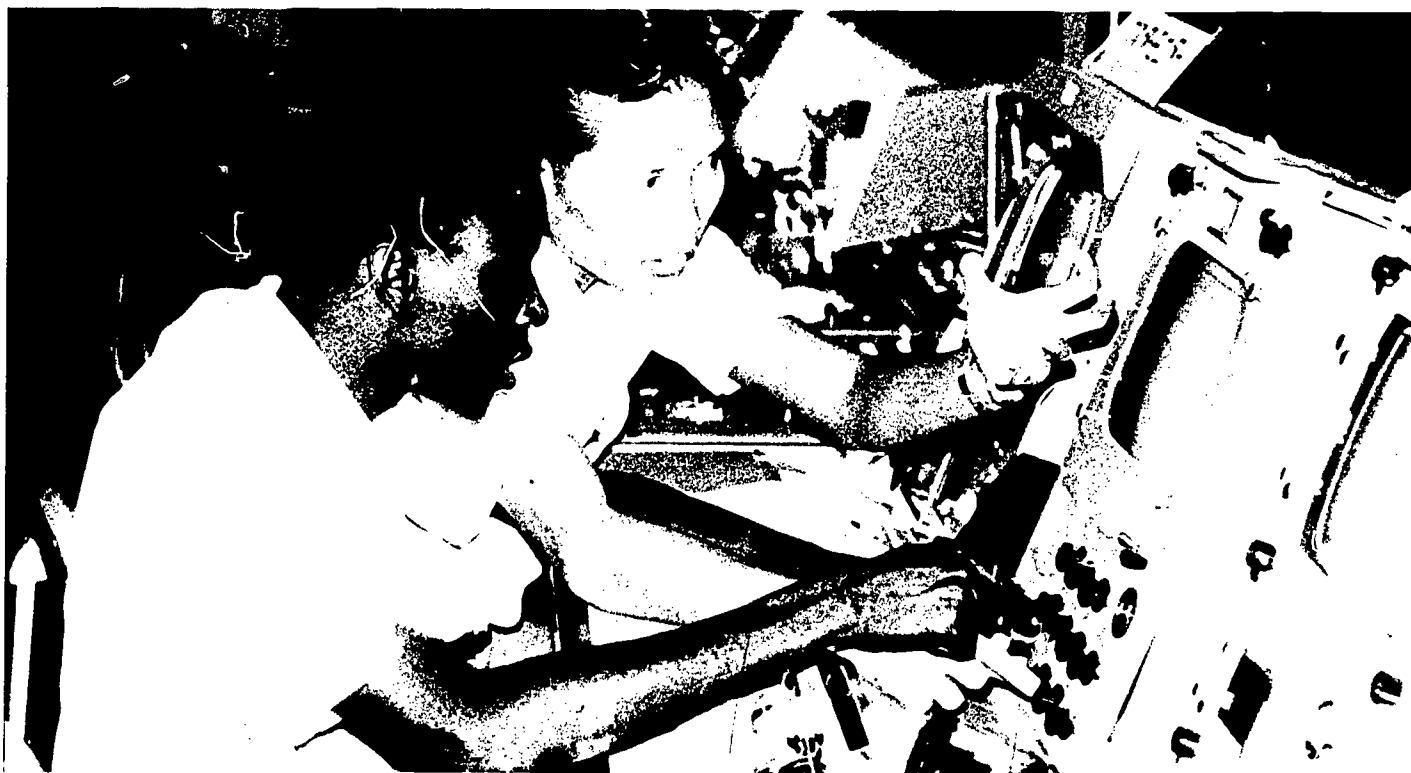
NHK is cooperating with overseas broadcasting stations to keep-up with internationalization of broadcasting. It introduces foreign countries and events to its domestic audience, and also broadcasts Japanese news and topics to overseas nations. NHK also participates in international broadcasting organizations, extends technical guidances and sponsors other activities such as the "Japan Prize" contest.

Cooperation with Overseas Broadcasting Organizations

NHK is active as a member of various international broadcasting organizations. Through mutual cooperation it endeavors to promote an interchange of broadcasting culture.

NHK is an associate member of the European Broadcasting Union (EBU), the largest international broadcasting organization. It exchanges information, data and programs with the EBU, and also attends many of its meetings.

NHK became a full member of the Asian Broadcasting Union (ABU) when it was organized in 1964, and had promoted its establishment ever since 1957. The president of NHK is the president of ABU.



Training of staff from foreign broadcasting organization

NHK has concluded various agreements with broadcasting organizations in all parts of the world to exchange programs and cooperate in various undertakings. It currently has agreements with broadcasting stations in Spain, the United Arab Republic, Argentina, Rumania, the Soviet Union, Hungary and Poland.

Interest in television has been greatly stimulated in Southeast Asian and Latin American countries. At the same time, utilization of satellite transmissions has become active and frequent. And with rising hopes for rational utilization of satellites as the turning point, establishment of a coordination center for satellite utilization materialized at the ABU General Assembly held in Istanbul last year. This came about largely at the request of NHK. Therefore, it was decided that a provisional center be set up for a period of one year at NHK.

Technical Assistance

Interest in television has been rising recently in developing countries in Southeast Asia and Central and South America. In such countries where construction of television networks has been launched, NHK is extending technical assistance.

Requests for technical assistance have been forwarded to NHK through the Japanese Government, and NHK has responded by sending specialists to developing countries, and also by accepting trainees for study in Japan.

So far NHK has sent investigation teams and helped in drawing up blueprints for TV networks in such countries as Cambodia, Thailand and Uganda. It has also sent specialists to various countries to train engineers in the operation and maintenance of broadcasting equipment. Such countries include Malaysia, Singapore, Pakistan, Indonesia, Colombia, El Salvador, and Nigeria.

A total of 475 trainees from 35 countries have been accepted for training in Japan since 1961. The trainees came from Thailand, China, the Philippines, South Korea, India, Ghana, Bolivia and other countries. NHK's training program, which ranges from basic studies to program production

technology and broadcasting technology, has proved extremely beneficial to the overseas students.

Among NHK's acclaimed technologies are the TOPICS (Total On-line Program and Information Control System). This has attracted the attention of overseas broadcasting organizations.

Program Exchange

NHK exchanges radio and television programs with stations in many countries to promote mutual understanding and also to add variety to its own domestic programs.

The Program Exchange Service of NHK edits domestic and overseas broadcast programs of its own to be sent to broadcasting stations abroad. These programs are being utilized by many countries. Requests from foreign broadcasting stations for NHK's programs including those winning international awards, such as the Italia Prize, or those programs which have been entered in various international contests, are received by NHK in ever-increasing numbers every year.

For educational programs, of Educational NHK Library Films has been organized and is available for developing nations.

At present, NHK exchanges radio programs with 110 broadcasting organizations in 70 countries and television programs with 40. Radio programs exchanged or provided amount to about 4,000 tape recordings a year and the television programs to about 3,000 films a year.

“JAPAN PRIZE” CONTEST



On the occasion of the 40th anniversary of radio broadcasting in Japan and of the Second World Conference of Broadcasting Organizations on Sound and Television School Broadcasting held in Tokyo in 1964, NHK established the “Japan Prize” International Educational Program Contest aimed at improvement of educational programs. The first contest was held in 1965. This is the world’s only annual contest for the purpose of improving educational programs.

For the present contest the following categories are established for entries in sound broadcasting and television :

1. School Broadcasting Program directed for Primary Education and Educational Programs intended for Kindergartens and Nursery schools.
2. School Broadcasting Program directed for Secondary Education.
3. Educational Program designed for Adults (including programs designed for higher professional and university education).

The “Japan Prize” Contest is open to all broadcasting organizations, or groups of such organizations, which are authorized to operate a broadcasting service by the competent authority in a country or territory that is a member or associate member of the International Telecommunication Union (I.T.U.).

“Japan Prize” Contest Participants :

		Place	Country	Organi- zation	Program
1st	1965	Tokyo	46	70	185
2nd	1966	Osaka	54	84	161
3rd	1967	Nagoya	61	86	202
4th	1968	Tokyo	53	75	167
5th	1969	Hiroshima	56	87	178
6th	1970	Sendai	55	84	188

Entries in this Contest are judged by a panel of 10 members selected by NHK from the regions of the participating countries, and by an additional four member chosen from among scholars and experienced persons.

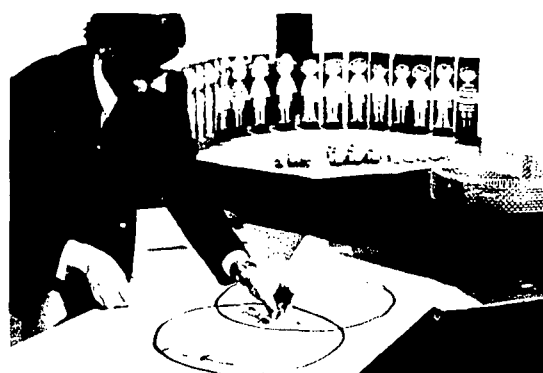
The Japan Prize is awarded to programs that possess high educational value, and that prove the important role and potentialities of broadcasting in the field of education. There are two Japan Prizes. One goes to the best sound broadcasting program and one to the best television program.

High Merit Prizes are awarded to the two best programs, excluding the Japan Prizes, in both the radio and TV sections. The radio prizes are the Minister of Education Prize and Prize of the Governor or Mayor of the locality where the Contest is held; the TV prizes are the Minister of Posts and Telecommunications Prize and the Abe Prize.

In addition, prizes offered by overseas broadcasting organizations and international organs are also made available at the Japan Prize Contest. These include the UNICEF and Argentine prizes.

Special Prizes are also awarded, three for radio, and three for TV programs. They are awarded after considering the economic-sociological conditions, and the special program-production circumstances of the broadcasting organizations. They are given to programs that show evidence of hard effort, and possess high educational merit.

Serious interest in the "Japan Prize" contest is particularly evident among the developing nations, where radio and television programs as being widely utilized to disseminate education. It is hoped that this annual contest will serve to improve educational programs in many countries, and contribute to better international understanding and cooperation.



Scenes from foreign program entries



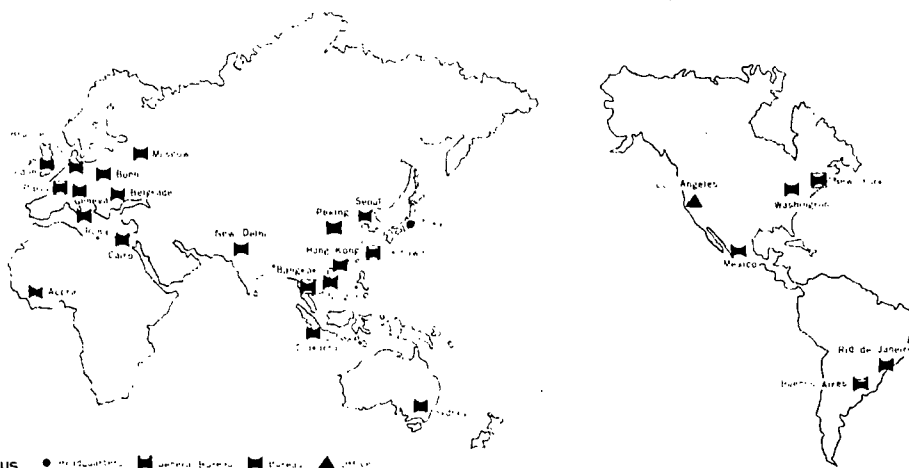
The awarding ceremony of the 6th Japan Prize Contest

BRIEF HISTORY OF NHK

- Mar. 1925** Initial radio waves were emitted in Japan (March 22 has since 1934 been set as Broadcast Day).
- Oct. 1925** Japan's first outside broadcast (on-the-spot coverage of the parade).
- Aug. 1926** NIPPON HOSO KYOKAI or Japan Broadcasting Corporation, a corporate juridical person, was established.
- Aug. 1927** First on-the-spot broadcast of a baseball match.
- Nov. 1928** First nation-wide relay broadcast (on-the-spot broadcasting of the Enthronement Ceremony of the Emperor).
- Feb. 1930** First successful long-distance short wave relay broadcast from London.
- Jun. 1930** NHK Technical Research Laboratories was established, research on TV began.
- Dec. 1930** First Japan-U.S. short wave exchange of Christmas programs.
- Apr. 1931** The Second Radio Network was put into operation.
- Jul. 1932** Deferred broadcasts of highlights of the 10th Olympic Games were relayed from Los Angeles.
- Nov. 1932** Japan's first recorded broadcast (speech of Ambassador Sato) beamed from Geneva.
- Apr. 1935** Nation-wide transmission of school broadcast began.
- Jun. 1935** Regular overseas broadcasts were inaugurated.
- Jun. 1936** On-the-spot broadcasts of the 11th Olympic Games in Berlin were successfully carried out.
- May 1939** Experimental telecast was successfully conducted by Technical Research Laboratories.
- Nov. 1941** First recorded relay broadcasting of a parliamentary session.
- Aug. 1945** Broadcast of the recorded decree by H.I.M. the Emperor stating the end of the Pacific War.
- Jun. 1946** Radio and Television Culture Research Institute was established.
- Jun. 1949** Use of magnetic tape-recorders began.
- Jun. 1950** Under the Broadcast Law, the corporate juridical person, Nippon Hoso Kyokai turned to a special juridical person. Board of Governors established.
- Nov. 1951** The Sound Library established within NHK.
- Mar. 1952** Dispatch of overseas representative to Paris. NHK succeeded in trial wireless color telecast.
- Jul. 1952** On-the-spot broadcasts from the 15th Olympic Games in Helsinki.
- Dec. 1952** First stereophonic broadcast using two radios.
- Feb. 1953** NHK's Tokyo Television Station inaugurated regular television broadcasting in Japan.
- Jun. 1953** On-the-spot broadcast of the Coronation Ceremony of Queen Elizabeth II in a tie with BBC.
- Oct. 1954** First practical application of kinescope recording in a TV relay of a Kabuki drama.
- Nov. 1955** First broadcast of electronic music.
- Mar. 1956** Broadcast Museum opened in Radio and TV Culture Research Institute.
- Nov. 1956** On-the-spot broadcast of the 16th Olympic Games in Melbourne.
- Feb. 1957** Experimental short wave broadcasts to the Antarctic region started (suspended in February 1962).
- Jul. 1957** First Asian Broadcasters' Conference was held in Tokyo.
- Dec. 1957** Experimental FM broadcast on VHF band inaugurated in Tokyo area.
- Jul. 1958** Use of video tape recorder began.
- Jan. 1959** NHK inaugurated Educational TV Network in the Tokyo area.
- Apr. 1959** Special broadcast of the Wedding Ceremony of H.I.H. the Crown Prince.
- Nov. 1959** Dispatch of NHK's special overseas coverage teams was started.
- Aug. 1960** On-the-spot radio and TV broadcasts of the 17th Olympic Games in Rome.
- Sep. 1960** Regular color television broadcasts were commenced in Japan.
- Jun. 1961** Central Training Institute was established.
- Nov. 1962** NHK completed its TV broadcasting network across Japan.
- Apr. 1963** NHK Correspondence Senior High School was opened. Construction of NHK Broadcasting Center began.
- Nov. 1963** First experimental transmission by the communication satellite was conducted successfully (between Japan and U.S.A., Europe).
- Apr. 1964** The 2nd International Conference of Broadcasting Organizations on Sound and TV School Broadcasting was held in Tokyo by NHK.
- Oct. 1964** Broadcasting of the 18th Tokyo Olympiad.
- Oct. 1965** The first period of construction of NHK Broadcasting Center was completed. NHK established "Japan Prize" International Educational Program Contest (annually). 2nd General Assembly of ABU was held in Tokyo by NHK as host organization.
- Mar. 1966** Nation-wide color network completed.
- Jun. 1966** 1st ABU Administrative Council was held in Tokyo.
- Jun. 1967** First global live TV program "Our World" was broadcast jointly by 14 nations through 4 satellites.
- Jun. 1968** The 2nd period construction of NHK Broadcasting Center was completed.
- Oct. 1968** Colorcast of the 19th Olympic Games in Mexico with three other broadcasting organizations. NHK-TOPICS started its operation.
- Sep. 1969** First telecast of political view.
- Jan. 1970** Experimental regular sound multiplex TV broadcasts.
- Mar. 1970** Colorcast of EXPO '70.
- Jan. 1971** Experimental UHF broadcast inaugurated in Tokyo and Osaka.

OVERSEAS BUREAUS

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