No.

Outline of
The Group Training Courses
in Japan

平成元年度　集団コース　コース概要

1989 Japanese Fiscal (April, 1989 to March, 1990)

Japan International Cooperation Agency (JICA)
Tokyo, Japan

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— CONTENTS —

DEVELOPMENT PLAN 開発計画

ADMINISTRATION 行　政

PUBLIC UTILITY WORKS 公益事業

TRANSPORTATION AND TRAFFIC 交通・運輸

INFRASTRUCTURE 社会基盤

POSTAL SERVICE, TELECOMMUNICATION AND BROADCASTING 通信・放送

AGRICULTURE 農　業

ANIMAL HUSBANDRY 畜　産

FORESTRY 林　業

FISHERIES 水　産

MINING AND MINERALS 鉱　業

INDUSTRY 工　業

ENERGY エネルギー

COMMERCE AND TRADE 商業貿易

TOURISM 観　光

HUMAN RESOURCES 人的資源

SCIENCE AND CULTURE 科学・文化

MEDICAL TREATMENT 保険医療

WELFARE 社会福祉

DEVELOPMENT PLAN

No. 1

ECONOMIC DEVELOPMENT SEMINAR 経済開発セミナー

1. PERIOD

October 23, 1989 to December 17, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

3. QUALIFICATIONS

1) Government planners in economic development policy

2) Between 30 and 40 years of age

3) Have an academic background in economics or have proper experience and knowledge regarding economic policy and planning

4) Relevant working experience of at least 5 years

5) Have a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1) Country Report presentation and discussion

2) Lectures and practical training
   – Factors of Japan's economic development
   – Japan's economic development and Economic policy (Agriculture, Industry, Infrastructure, Finance etc.)
   -- Japan's international economic cooperation for development

3) Observation tours

4) Final Report presentation and discussion

5. FACILITIES AND INSTITUTIONS

International Development Centre of Japan (IDCJ)

6. REMARKS

No. 2

DEVELOPMENT ECONOMICS (GENERAL) 開発エコノミスト(一般)

1. PERIOD

October 2, 1989 to March 30, 1990 (5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) University graduates or equivalent in economics

2) Well qualified in their respective fields

3) Under 35 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
- Economic theory
- Development economics
- Introduction to formulation and evaluation of development projects
- Macro development planning
- Methods of project formulation and evaluation
- Case studies in project formulation and evaluation
- Economic development of Japan
- Development strategy
  (approaches to international, regional development)
- Seminar on development economics
- Special lectures

2) Observation tours

3) Report writing

5. FACILITIES AND INSTITUTIONS

The International Development Centre of Japan (IDCJ)

6. REMARKS

No. 3

DEVELOPMENT ECONOMICS (INDUSTRIAL PROJECT)

開発エコノミスト（工業）

1. PERIOD

June 1, 1989 to August 18, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Minimum 3 ~ 4 year's work experience in the field
2) Between 30 and 40 years of age
3) University degree and academic background in economics, finance or engineering
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Economic Development and Industrialization and Japanese Experiences
2) Financial Analysis
3) Economic Analysis and Social Economic Analysis
4) Field Trip/Study Visit
5) Workshop and Report Writing and Presentation

5. FACILITIES AND INSTITUTIONS

1) Hachioji International Training Centre, JICA
2) The International Development Centre of Japan (IDCJ)

6. REMARKS

ADMINISTRATION

No. 4

CONTROL OF NARCOTIC OFFENCES (SEMINAR) 麻薬犯罪取締セミナー

1. PERIOD

October 10, 1989 to October 27, 1989 (18 days)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18)

3. QUALIFICATIONS

1) Officers in the rank of the Director of Division in charge of Drug Law Enforcement at the central government or Operational Heads of National Drug Law Enforcement Agency

2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   – Drug control in Japan

2) General discussions
   – Countermeasures to eradicate drug offences
   – International cooperation against drug crimes

3) Presentation of country report by participants

4) Observation tours

5. FACILITIES AND INSTITUTIONS

National Police Agency

6. REMARKS

No. 5

CRIME PREVENTION (TREATMENT OF OFFENDERS) 犯罪防止（矯正保護）

1. PERIOD

April 10, 1989 to July 10, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) Persons who hold relatively senior positions in a central bureau, department or field agency concerned with the correctional treatment of offenders, and, who have at least eight-year practical experience in their field or five-year practical experience, plus a university degree or its equivalent;

2) Have a sufficient command of spoken and written English;

3) Under fifty (50) years of age;

4) In good health, both physically and mentally, to undergo the course. Pregnancy is regarded as a disqualifying condition for participation in the course;

4. DESCRIPTION OF TRAINING

1) Comparative Study on the Treatment of Offenders

2) Group Workshops on Topics Selected by the Participants

3) Lectures by Specialists

4) Visits to Several Relevant Institutions and Agencies

5. FACILITIES AND INSTITUTIONS

1) Tokyo International Centre (TIC) of JICA

2) United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI)

6. REMARKS

No. 6

CRIME PREVENTION (SENIOR SEMINOR) 犯罪防止（上級）

1. PERIOD

January 29, 1990 to March 12, 1990 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

Applicants are to:

1) Be high-ranking criminal justice administrators at the policy-making level whose duties are closely related to the main theme of the seminar, and should be ranked at director level or above in the division of the Ministry of Justice, Ministry of Interior or the Supreme Court;

2) Have a good command of spoken and written English;

3) Be between thirty-five and fifty-five years of age and likely to continue to work in this field for a minimum period of two years; and

4) Be in good health, both physically and mentally, to undergo the course. Pregnancy is regarded as a disqualifying condition for participation in the seminar.

4. DESCRIPTION OF TRAINING

1) Self-Introduction and Orientation for the seminar

2) Visiting Experts' Lectures

3) Faculty's Lectures

4) Ad Hoc Lectures

5) Individual Presentation on the main theme of the seminar

6) General Discussion and Report Back Sessions

7) Observation Visits

8) Kansai Trip (Visit to some institutions)

9) Reference Reading

10) Evaluation Session

11) Individual Interview

5. FACILITIES AND INSTITUTIONS

1) Tokyo International Centre (TIC) of JICA

2) United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI)

6. REMARKS

No. 7

CRIME PREVENTION (CRIMINAL JUSTICE ADMINISTRATION)

犯罪防止（刑事司法）

1. PERIOD

August 28, 1989 to November 27, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

Applications are to:

1) Be persons who hold relatively senior positions in the police, public prosecutors' offices, the judiciary, correctional services, probation offices and other sectors closely related to juvenile to justice administration, and who have at least eight-year practical experience in their field or five-year practical experience, plus a university degree or its equivalent;

2) Have a sufficient command of spoken and written English;

3) Be under fifty (50) years of age; and

4) Be in good health, both physically and mentally, to undergo the course. Pregnancy is regarded as a disqualifying condition for participation in the course;

4. DESCRIPTION OF TRAINING

1) Comparative Study on the CRIMINAL JUSTICE ADMINISTRATION

2) Group Workshops on the Topics Selected by the Participants

3) Lectures by Specialists

4) Visits to Several Relevant Institutions and Agencies

5. FACILITIES AND INSTITUTIONS

1) Tokyo International Centre (TIC) of JICA

2) United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI)

6. REMARKS

No. 8

LOCAL GOVERNMENT 地方行政

1. PERIOD

May 8, 1989 to July 19, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) University graduates or equivalents
2) Civil service personnel holding responsible managerial or supervisoty positions in the local or the central government
3) Occupational experience of more than 7 years
4) Between 30 and 40 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   - Local public administration
   - National public administration
   - Regional development
2) Seminars
   - Local government system in the participating countries
   - Local public personal system in the participating countries
   - Lole of local government in regional development
3) Observation tours
4) On-the-spot study in local governments

5. FACILITIES AND INSTITUTIONS

Local Autonomy College, Ministry of Home Affairs

6. REMARKS

No. 9

NATIONAL GOVERNMENT ADMINISTRATION 国家行政

1. PERIOD

May 8, 1989 to June 23, 1989 (6 weeks)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent;

2) Qualified in their fields;

3) Have professional working experience of more than 5 years at least two years in national gover or an international organization.

4) Not less than 25 not more than 35 years of age and

5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
- Comparative study on the central government of the participating countries
- Modernization Problems
- Public administration and civil service
- Policies for the economic and social development

2) On-the-spot study
- Attachment to relevant ministry offices

3) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute of Public Administration, National Personnel Authority

6. REMARKS

No. 10

NATIONAL GOVERNMENT ADMINISTRATION SEMINAR (SENIOR CLASS OFFICIALS) 上級国家行政セミナー

1. PERIOD

October 12, 1989 to November 12, 1989 (4 weeks)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent;
2) Qualified in their respective fields;
3) Occupational experience of more than 10 years (at least five years of experience) in public administration
4) Not less than 30 and not more than 45 years of age and
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   –Comparative study on the central government
   –Modernization Problems
   –Public administration and civil service
   –Policies for the economic and social development
2) On–the–spot study
   –Attachment to relevant ministry offices
3) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute of Public Administration, National Personnel Authority

6. REMARKS

No. 11

ADVANCED COURSE FOR SENIOR POLICE ADMINISTRATOR
上級警察幹部研修

1. PERIOD

June 15, 1989 to Dec. 6, 1989 (5.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

1) Assistant Director of Division or equivalent in the central police organization

2) Between 27 and 40 years

3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lecture & Discussion
- Outline of Police of Japan
- Criminal Procedure in Japan
- Criminal Investigation
- Police Communication and Information
- Police Administration and Education & Training
- Control of Drug Offenses, Firearms and Etc.
- Safety and Peaceful in Communities
- Safety and Smoothness of Road Traffic
- International Counter Terrorism

2) Field Training
- In a police box
- Sports & Arresting Techniques

3) Study tour
- Hokkaido
- Kansai

5. FACILITIES AND INSTITUTIONS

International Research and Training Institute for Criminal Investigation National Police Agency

6. REMARKS

No. 12

FIRE SERVICE FOR ADMINISTRATIVE OFFICER 消防行政管理者

1. PERIOD

July 10, 1988 to August 27, 1989 (1.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) University graduate or equivalent with occupational experience

2) Under 40 years

3) Good working knowledge of English

4) Administrative officer or candidate for administrative officer, who are presently engaged in planning/ drafting of Fire Service System

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
- Fire service administration, organization and fire personnel
- Fire prevention
- Defense system and activity

2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Fire Defense College and Fire Defense Laboratory

2) Tokyo Fire Department

3) Fire Defense Agency, Ministry of Home Affairs

6. REMARKS

TRAFFIC POLICE ADMINISTRATION SEMINAR 交通警察行政セミナー

1. PERIOD

Not conducted in 1989

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

Applicants should:

1) be a director or a chief police superintendent who supervises or is dealing with traffic police affairs in the central police organization.

2) be university graduates or their equivalent,

3) have a sufficient command of spoken and written English, and

4) be in good health, both physically and mentally.

4. DESCRIPTION OF TRAINING

1) General Subjects (Lecture) (3 sessions)
   (1) Japanese Police System
   (2) Role of Traffic Police
   (3) Application of computers by the Police

2) Specialized Subjects (Lecture) (14 sessions)
   (1) Traffic Planning Division related Subjects
   (2) Traffic Law Enforcement related Subjects
   (3) Traffic Control Division related Subjects
   (4) Expressway Administration Division related Subjects
   (5) Driver's Licence Division related Subjects
   (6) Other related Subjects

3) Technical Visit (11 sessions)
   (1) Activities of traffic police officers on streets
   (2) Traffic control & surveillance center and command room
   (3) Driver's licence examination center and safe driving school and others

4) Observation Tour

5. FACILITIES AND INSTITUTIONS

Traffic Planning Division
Traffic Bureau
National Police Agency (NPA)

6. REMARKS

The course will be conducted in 1990.
(The course is conducted every other year.)

No. 13

FIRE FIGHTING TECHNIQUE 消火技術コース

1. PERIOD

August 28, 1989 to November 15, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) be nominated by their governments in accordance with the occupational experience,
2) be university graduates or equivalent with occupational experience,
3) be presently engaged in fire service and expected to play key roles in this field,
4) be expected to become a leader in the field of fire service,
5) have a good command of English both spoken and written,
6) be in good health, both physically and mentally to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the course,
7) be able to extend their techniques systematically after returning to their countries,
8) not be serving as a military personnel presently.

4. DESCRIPTION OF TRAINING

1) Lecture
   Basic theory
   a. Fire service system in Japan, and the present situation
   b. Fire pumps
   c. Hydraulic science
   d. Introduction to safety control (at the time of training and fire fighting)
   e. Introduction to fire fighting
   f. Building fire fighting techniques
   h. Vehicles fire fighting techniques
   i. Ships fire fighting techniques
   j. Airplanes fire fighting techniques
   k. at fireground commanding technique

2) Fire-fighting Practice

3) Quartering Study

4) Comprehensive Practice

5) Observation Visit

6) Study Trip

7) Others

5. FACILITIES AND INSTITUTIONS

Kitakyushu Fire Department, Fire Defense Agency

6. REMARKS

No. 14

RESCUE AND FIRST AID TECHNIQUE

救急救助技術

1. PERIOD

August 28, 1989 to November 27, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

1) University graduates or equivalent

2) Leader in the field of rescue service

3) Under 35 years

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Basic theory
   - Fire service system in Japan
   - Present situation of disaster and fire service activities
   - Policy to prevent hazardous materials disaster
   - Policy to prevent earthquake disaster
   - Standard on the fire service strength and educational training
   - Rescue service

2) Outline of rescue service
   - Rescue service activity
   - Theory of rescue instruction
   - Safety administration
   - Ambulance service
   - Rescue operation and rescue tools

3) Rescue practice
   - Basic activity
   - Entry skill
   - Rescue skill
   - Rescue command skill
   - Searching skill
   - Usage of rescue tools
   - First aid skill
   - Fire prevention skill

4) Quartering study

5) Observation visit

6) Study trip

5. FACILITIES AND INSTITUTIONS

1) Fire Defense College and Fire Defense Laboratory

2) Tokyo Metropolitan Fire Department

3) Fire Defense Agency, Ministry of Home Affairs

6. REMARKS

No. 15

CRIMINAL INVESTIGATION (SEMINAR) 国際捜査セミナー

1. PERIOD

November 6, 1989 to November 27, 1989 (1 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Senior police officers who are in charge of investigations of ordinary law crime and who belong to the central police organization

2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
- Organization and operation of criminal police
- Techniques of criminal investigation and identification
- Observation of criminal police facilities and equipment

2) Observation tours
Study trip to Kansai District (West part of Japan)

5. FACILITIES AND INSTITUTIONS

National Police Agency

6. REMARKS

No. 16

GOVERNMENT AUDITING SEMINAR (COMPUTER AUDITING)

政府会計検査セミナー（コンピューター会計検査）

1. PERIOD

June 29, 1989 to August 6, 1989 (1.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) Senior officials of the Supreme Audit Institution with Computer Auditing Experience
2) Nor more than 45 years of age
3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lecture and Discussion
   - Financial and Accounting System of the Government
   - Government Auditing System and the Board of Audit
   - EDP System in Japanese Government and Public Organization
   - Computer System of the Board of Audit
   - Audit Practice by Computer
2) Observation Tour

5. FACILITIES AND INSTITUTIONS

1) Hachioji International Training Centre, JICA
2) Board of Audit

6. REMARKS

No. 17

POLICY ON INTERNATIONAL TRADE AND INDUSTRY 通商産業政策

1. PERIOD

January 15, 1990 to March 9, 1990 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) Currently in charge of industrial policy or international trade policy

2) University or college graduates

3) Occupational experience of more than 5 years

4) Under 40 years of age

5) Good working knowledge of English

6) Phisically and mentally fit to attend a training course

4. DESCRIPTION OF TRAINING

1) General lectures
Transition of Japan's Industrial Structure, Transition of Japan's International Trade Policy, System of Japan's Administration, Japan's Labor Relations, International Comparisons of Scientific and Technological Policies, etc.

2) Factory visits
Iron Works. Thermal Power Station, Automobile Factory, Home Electric Appliance Factory, Small and Medium-sized Enterprize

3) Specific program on MITI's activities
Interlinked lectures and visits covering various activities of MITI will be arranged. The lectures will be given by the staff of MITI and visits to local bureau, research institutes and other organizations interlinked with the lectures will be included during 4 weeks.

5. FACILITIES AND INSTITUTIONS

1) Association for Overseas Technical Scholarship (AOTS)

2) Tokyo International Centre, JICA

6. REMARKS

Those who could be leader in the field of the industrial policy or international trade policy in the future should be selected.

No. 18

TAXATION SEMINAR (GENERAL TAX PROGRAMME) —一般租税セミナー—

1. PERIOD

August 24, 1989 to December 8, 1989 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

1) be engaged in tax administration with more than 5 years of occupational experience
2) University graduates or the equivalent academic background
3) Not more than 40 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lecture and Discussion
   – Japanese Economy, Public Finance, Tax Policy and Tax Law
   – Tax administration in Japan
2) Observation
   – Actual operation of tax administration
3) Country Report Presentation
4) Thesis Making

5. FACILITIES AND INSTITUTIONS

1) *Hachioji International Training Centre, JICA*
2) National Tax Administration

6. REMARKS

No. 19

TAXATION (SENIOR TAX PROGRAMME) (SEMINAR) 上級租税セミナー

1. PERIOD

September 18, 1989 to October 7, 1989 (3 weeks)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Presently engaged in tax planning or administration

2) Ranked senior class officials

3) Sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1) Lectures
-- Introduction of Japanese tax system and tax administration

2) Discussions
-- Comparative study on tax system and administration through presentation of country reports and round-table discussions

3) Field trips to tax offices and industry plants

5. FACILITIES AND INSTITUTIONS

National Tax Administration

6. REMARKS

No. 20

CUSTOMS TECHNIQUES 税関行政

1. PERIOD

September 4, 1989 to November 2, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (20)

3. QUALIFICATIONS

1) University graduates or equivalent

2) Qualified in their respective fields

3) Under 35 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and Discussions
   - Organizations and functions of customs administration in Japan
   - Customs and tariff policy
   - Export and import clearance
   - Customs valuation
   - Other related lectures
   - Comparative study on related items

2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Customs and Tariff Bureau, Ministry of Finance

2) Tokyo, Yokohama, Kobe, Osaka and Nagoya Custom House

6. REMARKS

No. 21

ODA LOAN PROCEDURES (SEMINAR) ＯＤＡローンセミナー

1. PERIOD

October 2, 1989 to November 2, 1989 (1 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) Senior officers in charge of matters directly related to OECF loans

2) University graduates or equivalent

3) Good working knowledge of English

4) Preferably under 45 years of age

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - OECF's role in Japan's Economic Cooperation
   - OECF's activities
   - Loan Procedures

2) Observation tour

5. FACILITIES AND INSTITUTIONS

The Overseas Economic Cooperation Fund (OECF)

6. REMARKS

No. 22

THE INTRODUCTION OF INTERNATIONAL COOPERATION ACTIVITIES

（国際協力事業紹介セミナー）

1. PERIOD

September 17, 1989 to September 30, 1989 (14 days)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1. Be officials in the rank of Director of Division in charge of International Cooperation Programme at the Central Government,
2. Have a sufficient command of spoken and written English, and
3. Be healthy enough to undergo the course of seminar. Pregnancy is regarded as a disqualifying condition for participation in the seminar.

4. DESCRIPTION OF TRAINING

1. Explanation of International Technical Cooperation (JICA)
2. Visit to the Ministry of Foreign Affairs
3. Observation of Major Training Facilities
4. Observation Trip (Typical industries etc.)
5. Exchange of the opinions concerning the International Technical Cooperation

5. FACILITIES AND INSTITUTIONS

Japan International Cooperation Agency

6. REMARKS

1) Refrain from the paticipation on the way to this course.
2) Be requested to take part in with questions or the International Cooperation Activities.

No. 23

ENVIRONMENTAL ADMINISTRATION 環境行政

1. PERIOD

October 9, 1989 to December 1, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Senior technical or administrative officials for environmental administration, and in a position to participate in planning and deciding environmental policy in either central or local, in governmental organizations

2) Be preferably between thirty five (35) and forty-five (45) years of age

3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   - Environmental issues in Japan
   - Historical background of Japan's environmental administration
   - Japanese policy for preservation of the environment
   - Environmental impact assessment in regional development plans
   - Pollution control measures taken by the private industry
   - Government organization for protection of the environment
   - Legislation for pollution control
   - Formulation of pollution control programmes
   - Environmental enforcement and quality standards
   - Surveillance and monitoring system
   - Research activities in the field of environmental science and technology
   - Relief measures for the victims of pollution
   - Conservation of natural environment
   - Environmental information

2) Observation tours

5. FACILITIES AND INSTITUTIONS

International Affairs Division, Environment Agency
Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 24

ENVIRONMENTAL ENGINEERING (WATER POLLUTION CONTROL)

環境技術（水質保全）

1. PERIOD

September 11, 1989 to November 3, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Technical officials presently in charge of water pollution control including domestic and industrial waste water management in central or local governments

2) Three years or more experience in their respective fields

3) University graduates or equivalent

4) Under 40 years of age

5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   – Planning and implementation of water pollution control
   – Technologies of water management
   – Effects of water pollution on water use and its countermeasures
   – Institutional development

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Water Quality Bureau, Environemnt Agency
Japan Society on Water Pollution Research

6. REMARKS

No. 25

ENVIRONMENTAL TECHNOLOGY (AIR POLLUTION CONTROL) 環境技術（大気保全）

1. PERIOD

January 25, 1990 to March 15, 1990 (2.0 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) Technical officials directly responsible for air pollution control administration with more than 3 years of experience.
2) University graduates or equivalent with technical qualifications in this field
3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lecture and Practice
   - Environmental pollution issues in Japan
   - Air pollution control administration
   - Planning and countermeasures
   - Measurement and assessment
2) Country report presentation
3) Field observation

5. FACILITIES AND INSTITUTIONS

1) Hachioji International Training Centre, JICA
2) Environment Agency
3) Japan Environmental Sanitation Centre (JESC)

6. REMARKS

No. 26

AIR POLLUTION CONTROL 大気汚染対策

1. PERIOD

November 13, 1989 to February 26, 1990 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1. be nominated by their government
2. be technical administrators engaged in air pollution control measures in the central or local government and have at least 3 years of experience in the related field
3. be university graduates or have equivalent knowledge
4. be between 25 years and 35 years of age
5. be in good health, both physically and mentally to undergo the course of training. Pregnancy is regardes as disqualifying condition.

4. DESCRIPTION OF TRAINING

Lectures; legislation concerning air pollution
preventive measures
measuring techniques
estimation techniques
environmental control techniques

Practice; practices of preventive measures, measuring techniques, etc., in experimental plants and working plants

Observation; treatment facilities, wind-tunnel experimental facilities, environmental control systems

5. FACILITIES AND INSTITUTIONS

Osaka City Institute of Public Health and Environmental Sciences

6. REMARKS

No. 27

MARINE ENVIRONMENT PROTECTION 海洋保全

1. PERIOD

August 17, 1989 to October 29, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) University graduates or equivalent, or have the occupational experience of more than five (5) years in the field of marine pollution prevention,

2) Presently engaged in the above-mentioned field,

3) Under forty (40) years of age,

4) Sufficient command of both spoken and written English

4. DESCRIPTION OF TRAINING

1) Organization and service of Maritime Safety Agency
2) Search and rescue operation and marine disaster prevention
3) Measures for oil clean-up
4) Laws relating to the Prevention of Marine Pollution and Maritime Disaster, etc.
5) Situation of marine pollution and preventive measures at sea around Japan
6) Control system of marine pollution and its operation
7) Investigation of violation of the laws
8) Measures for research on drifting, drifting ashore of oil balls and cause of their forming
9) Measures for research on distinction between oil balls and drifting, drifting ashore of oil
10) Measurement of oil content
11) Inspection of research on distinction of oil balls
12) Inspection of research on distinction of drifting, drifting ashore of oil
13) Training cruise 1 and 2
14) Training flight
15) Drills of spilled oil control

5. FACILITIES AND INSTITUTIONS

1) Maritime Safety Agency

2) The 11th Regional Headquarters of Maritime Safety Agency

6. REMARKS

No. 28

INDUSTRIAL POLLUTION CONTROL PRACTICE 産業環境対策

1. PERIOD

October 2, 1989 to February 2, 1990 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Occupational experience of not less than three years in industrial pollution control or environmental administration in central or provincial government or public organization
3) Under 40 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   1. Introduction (the History of Industrial Pollution Preventive Measures in Japan)
   2. Health Effects of Environmental Pollutant
   3. Environmental Engineering
   4. Atomospheric Preservation Administration
   5. Water Preservation Administration
   6. Industrial Waste Administration
   7. Environmental Pollutant Measuring Method
   8. Environmental Pollution Measures in Chemical Industry
   9. Environmental Pollution Measures in Electric Power Industry
   10. Environmental Pollution Measures in Steel Industry
   11. Environmental Pollution Measures in Cement Industry
   12. Environmental Pollution Measures in Small- and Medium-size Enterprises

2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Kitakyushu International Training Association

2) Kitakyushu Municipal Government

6. REMARKS

No. 29

INDUSTRIAL POLLUTION CONTROL RESEARCH 産業公害防止

1. PERIOD

November 20, 1989 to March 19, 1990 (4.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

0) Technical officials

1) University graduates

2) Three years experience in their respective fields

3) Under 40 years of age

4) Good working knowledge of English or Japanese

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Measuring techniques of air quality
   - Measuring techniques of water quality
   - Air pollution prevention technology at source and automobile
   - Atmospheric Chemistry
   - Biorological treatment of waste water
   - Pysico-chemical treatment of waste water
   - Assessment technology for air and water pollution

2) Field excursion
   - to related institute, municipals and companies

5. FACILITIES AND INSTITUTIONS

1) National Research Institute for Pollution and Resources, Ministry of International Trade and Industry (MITI)

2) Environmental Protection Guidance Division, MITI

3) Industrial Pollution Control Association Japan

4) Japan Machinery and Metals Inspection Institute

5) Tsukuba International Centre, JICA

6. REMARKS

No. 30

INDUSTRIAL WASTE WATER TREATMENT 産業廃水処理コース

1. PERIOD

November 13, 1989 to March 16, 1990 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) University graduates or equivalent in the fields of chemistry, machinery, electricity, or civil works,

2) Three years or more experience on actual management of industrial waste water/affluent (inc. designed to be appointed in future),

3) Technical engineers in charge of industrial waste water in line of production processes,

4) Be under forty (40) years of age

5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Introduction
   - Laws, rules, and regulation in Japan
   - Analysis on various types of industrial waste water
   - Theory on source mechanism of water contamination
   - Method of disposal of industrial waste water
   - Investigation for industrial waste water
   - Testing on disposal method of industrial waste water
   - Basic planning, designing, and implementation (soft & hard-ware),
   - Operation and maintenance on industrial waste water treatment units
   - Analysis of congested sediments, activated sludges, water quality at factories, public water/waste water treatment centres, etc.

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kyushu Institute of Technology (KIT)

Kitakyushu Municipal Government

Kankyo Engineering Co., LTD (Kitakyushu Branch Office)

Nippon Steel Corporation, Yawata Works

6. REMARKS

No. 31

GENERAL STATISTICS 一般統計

1. PERIOD

September 18, 1989 to March 27, 1990 (6.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirty (33)

3. QUALIFICATIONS

1) University graduates specialized in statistics, economics or sociology or those who have the equivalent knowledge and experience

2) Those who have a sufficient knowledge of basic mathematics

3) Between 25 and 35 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Statistical methods
   - Sampling methods
   - Statistical operations, Computing
   - National accounting statistics
   - Demographic and social statistics
   - Economic statistics
   - Food and agricultural statistics

2) Observation of field operations of statistical surveys

5. FACILITIES AND INSTITUTIONS

1) Statistical Institute for Asia and the Pacific (SIAP)

2) Management and Coordination Agency

6. REMARKS

This course is organized mainly for ESCAP countries.

No. 32

AUTOMATIC DATA PROCESSING (ADP) 自動データ処理（ＡＤＰ）

1. PERIOD

May 8, 1988 to August 14, 1988 (3.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or have the equivalent knowledge and experience

2) Upper and middle level statisticians of statistical officers whose present or intended work includes responsibility for statistical censuses, surveys or other statistical activities.

3) Over 25 but under 35 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Systems analysis and equipment selection

2) Electronic data processing and PL/I programming language

3) Large-file statistical data processing

4) Computer methods in statistical analysis

5) Statistical operations

6) Computer laboratory

5. FACILITIES AND INSTITUTIONS

1) Statistical Institute for Asia and the Pacific

2) Management and Coordination Agency

6. REMARKS

This course organized mainly for ESCAP countries.

No. 33

ELECTRONIC DATA PROCESSING FOR GOVERNMENT INFORMATION ACTIVITIES

（行政情報システム）

1. PERIOD

January 15, 1990 to March 14, 1990 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Officials who belong to
   i) a government body responsible for overall management and coordination of GIS, being engaged in relevant works
   ii) a government body planned to be responsible or considered to be suitable for the task mentioned above.

2) Knowledge and skills in data processing by computer, preferably with experiences of developing and/or managing computer systems

3) University graduates or have equivalent educational backgrounds

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Outline of Government Information System

2) Methodology of Management and Coordination of GIS

3) Computerization of Statistics

4) Technology of Database

5) Technology of Communication Network

6) Office Automation

7) Software Development

8) Other Topics on Computor Technology

9) Presentation of Country Report

10) Individual or Small Group Study

5. FACILITIES AND INSTITUTIONS

Office of Administrative Information Systems, Administrative Management Bureau, Management and Coordination Agency

6. REMARKS

No. 34

INFORMATION PROCESSING PERSONNEL (SENIOR PROGRAMMER) 情報処理要員養成（シニアプログラマー）

1. PERIOD

From October 12, 1989 to February 18, 1990 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

(1) University graduates with more than one (1) year's experience in system development and maintenance or,
be person with more than three (3) years' experience in them,

(2) (i) Having more than three (3) years' experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/1, etc.,
(ii) Being able to make a programme in COBOL,

(3) Not exceeding thirty-five (35) years of age, and

(4) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) *Hardware Introduction*
(2) OS (Operating System) Introduction
(3) Online Database System Introduction
(4) Programme Design
(5) Database Programming
(6) TSS (Time Sharing System) Usage
(7) JCL (Job Control Language) Usage
(8) Database Design
(9) Data Communication Programming
(10 Data Communication System Design
(11) Module Design
(12) Testing Method
(13) Data Communication Network Introduction
(14) System Development Outline
(15) System Development Workshop
(16) Special Lecture
(17) Personal Computer Introduction
(18) Σ System Outline
(19) External Database System Utilization
(20) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 35

INFORMATION PROCESSING PERSONNEL (INSTRUCTOR)

情報処理要員養成（インストラクター）

1. PERIOD

From May 4, 1989 to September 25, 1989 (5 months)

2. NUMBER of PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

(1) University graduates with more than one (1) year's experience in system development and maintenance or,
be person with more than three (3) years' experience in them,

(2) (i) Having more than three (3) years' experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/1, etc.,
(ii) Being able to make a programme in COBOL,

(3) Person who will be a instructor of programmers,

(4) Not exceeding thirty-five (35) years of age, and

(5) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) Hardware Introduction
(2) OS (Operating System) Introduction
(3) Data Communication Network Introduction
(4) Programme Design
(5) System Development Outline
(6) Personal Computer Introduction
(7) Online Database System Introduction
(8) Database Programming
(9) TSS (Time Sharing System) Usage
(10) JCL (Job Control Language) Usage
(11) Database Design
(12) Data Communication Programming
(13) Data Communication System Design
(14) Module Design
(15) Testing Method
(16) System Development Workshop
(17) Instructor Training I
(18) Instructor Training II
(19) Instructor Training III
(20) Special Lecture
(21) Σ System Outline
(22) External Database System Utilization
(23) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 36

INFORMATION PROCESSING PERSONNEL (MANAGEMENT)

情報処理要員養成（マネージメント）

1. PERIOD

From October 17, 1989 to December 7, 1989 (1 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

3. QUALIFICATIONS

(1) University graduates with more than one (1) year's experience in system development and maintenance or, have the equivalent background,

(2) Presently engaged in management and have less than one (1) year's experience of data processing division management.

(3) Not exceeding forty-five (45) years of age, and

(4) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) DP System Planning
(2) Case Study
(3) Project Management Game
(4) DP Division Management
(5) System Audit
(6) Special Lecture
(7) DSS (Decision Support System)
(8) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 37

INFORMATION PROCESSING PERSONNEL (PERSONAL COMPUTER PROGRAMMING A)

情報処理要員養成（パーソナルコンピュータ・プログラミングA）

1. PERIOD

From April 1, 1989 to July 21, 1989 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

(1) University graduates or, be person who has knowledge of basic statistics such as mean, deviation and summation,

(2) Being able to type,

(3) Not exceeding thirty (30) years of age, and

(4) Having sufficient command of both spoken and written English to take classes in English

4. DESCRIPTION OF TRAINING

(1) Personal Computer Introduction
(2) Wordprocessing (WORDPERFECT)
(3) Spreadsheet (Lotus1-2-3 or MULTIPLAN)
(4) Database (dBASEIII^{+})
(5) BASIC Programming
(6) Testing Method
(7) System Design
(8) System Development Workshop
(9) Special Lecture
(10) Σ System Outline
(11) External Database System Utilization
(12) OSI and LAN Technology
(13) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 38

INFORMATION PROCESSING PERSONNEL (PERSONAL COMPUTER PROGRAMMING B)

情報処理要員養成（パーソナルコンピュータ・プログラミングB）

1. PERIOD

From July 27, 1989 to November 19, 1989 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

(1) University graduates or, be person who has knowledge of basic statistics such as mean, deviation and summation,

(2) Being able to type,

(3) Not exceeding thirty (30) years of age, and

(4) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) Personal Computer Introduction
(2) Wordprocessing (WORDPERFECT)
(3) Spreadsheet (Lotus1-2-3 or MULTIPLAN)
(4) Database (dBASEIII^{+})
(5) BASIC Programming
(6) Testing Method
(7) System Design
(8) System Development Workshop
(9) Special Lecture
(10) Σ System Outline
(11) External Database System Utilization
(12) OSI and LAN Technology
(13) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 39

INFORMATION PROCESSING PERSONNEL 情報処理要員養成 (PERSONAL COMPUTER NETWORK) (パーソナル・コンピュータネットワーク)

1. PERIOD

November 23, 1989 to March 26, 1990 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) be university graduates with more than one (1) year's experience in system development and maintenance on personal computer or,
be person with more than three (3) years' experience in them above,

2) have more than three (3) years' experience in programming in any one of programming languages: such as BASIC, COBOL, FORTRAN, etc.

3) be not exceeding thirty-five (35) years of age, and

4) have sufficient command of both spoken and written English to take class in English.

4. DESCRIPTION OF TRAINING

1) Personal computer introduction
2) Wordprocessing
3) Spreadsheet
4) Database
5) Language C
6) PC LAN System Design
7) Micro-Mainframe Communication Design
8) Testing Method
9) UNIX System Usage
10) PC Network System Design
11) System Development Workshop
12) Σ System Outline
13) External Database System Utilization
14) Special Lecture
15) Observation Tour (Computer manufacturers, computer system centres, research institutes, etc.)

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 40

INFORMATION PROCESSING PERSONNEL (SYSTEM ENGINEER A) 情報処理要員養成（システム・エンジニア A）

1. PERIOD

From April 1, 1989 to September 25, 1989 (6 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

(1) University graduates with more than three (3) years' experience in system development or, have the equivalent background,

(2) (i) Having more than three (3) years' experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/1, etc.,
(ii) Being able to make a programme in COBOL,

(3) Not exceeding thirty-five (35) years of age, and

(4) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) Programme Design
(2) Online Database System Introduction
(3) Database Programming
(4) TSS (Time Sharing System) Usage
(5) JCL (Job Control Language) Usage
(6) Database Design
(7) Data Communication Programming
(8) Data Communication System Design
(9) Module Design
(10) Testing Method
(11) System Analysis
(22) System Estimation/Evaluation
(13) Reliable System Design
(14) Data Communication Network Design
(15) System Configuration Design Workshop
(16) System Development Outline
(17) Project Management Game
(18) System Development Workshop
(19) Special Lecture
(20) Personal Computer Introduction
(21) Language C
(22) Σ System Outline
(23) External Database System Utilization
(24) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 41

INFORMATION PROCESSING PERSONNEL (SYSTEM ENGINEER B) 情報処理要員養成（システム・エンジニア B）

1. PERIOD

From September 28, 1989 to March 31, 1990 (6 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

(1) University graduates with more than three (3) years' experience in system development or, have the equivalent background,

(2) (i) Having more than three (3) years' experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/1, etc.,
(ii) Being able to make a programme in COBOL,

(3) Not exceeding thirty-five (35) years of age, and

(4) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) Programme Design
(2) Online Database System Introduction
(3) Database Programming
(4) TSS (Time Sharing System) Usage
(5) JCL (Job Control Language) Usage
(6) Database Design
(7) Data Communication Programming
(8) Data Communication System Design
(9) Module Design
(10) Testing Method
(11) System Analysis
(12) System Estimation/Evaluation
(13) Reliable System Design
(14) Data Communication Network Design
(15) System Configuration Design Workshop
(16) System Development Outline
(17) Project Management Game
(18) System Development Workshop
(19) Special Lecture
(20) Personal Computer Introduction
(21) Language C
(22) Σ System Outline
(23) External Database System Utilization
(24) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 42

INFORMATION PROCESSING PERSONNEL (DATABASE SYSTEM DESIGN A) 情報処理要員養成（データベースシステム設計 A）

1. PERIOD

From April 1, 989 to August 27, 1989 (5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

(1) University graduates with more than one (1) year's experience in system development and maintenance or, be person with more than three (3) years' experience in system development,

(2) (i) Having more than three (3) years' experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/1, etc.,
(ii) Being able to make a programme in COBOL,

(3) Having experience in system design using conventional files,

(4) Not exceeding thirty-five (35) years of age, and

(5) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) File System Design
(2) Programme Design
(3) Online Database System Introduction
(4) Database Programming (NDB, RDB)
(5) TSS (Time Sharing System) Usage
(6) JCL (Job Control Language) Usage
(7) Database Design (NDB, RDB)
(8) Database Creation
(9) Data Communication Programming
(10) Data Communication System Design
(11) Recovery Design
(12) Module Design
(13) Testing Method
(14) Project Management
(15) System Development Workshop
(16) Special Lecture
(17) Personal Computer Introduction
(18) Σ System Outline
(19) External Database System Utilization
(20) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 43

INFORMATION PROCESSING PERSONNEL 情報処理要員養成
(DATABASE SYSTEM DESIGN B) (データベースシステム設計 B)

1. PERIOD

September 28, 1989 to May 5, 1990 (7 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

(1) University graduates with more than one (1) year's experience in system development and maintenance or, be person with more than three (3) years' experience in system development,

(2) (i) Having more than three (3) years' experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/1, etc.,
(ii) Being able to make a programme in COBOL,

(3) Hiving experience in system design using conventional files,

(4) Not exceeding thirty-five (35) years of age, and

(5) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) File System Design
(2) Programme Design
(3) Online Database System Introduction
(4) Database Programming (NDB, RDB)
(5) TSS (Time Sharing System) Usage
(6) JCL (Job Control Language) Usage
(7) Database Design (NDB, RDB)
(8) Database Creation
(9) Data Communication Programming
(10) Data Communication System Design
(11) Recovery Design
(12) Module Design
(13) Testing Method
(14) Project Management
(15) System Development Workshop
(16) Special Lecture
(17) Personal Computer Introduction
(18) Σ System Outline
(19) External Database System Utilization
(20) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 44

INFORMATION PROCESSING PERSONNEL (ONLINE SYSTEM DESIGN) 情報処理要員養成（オンラインシステム設計）

1. PERIOD

From May 11, 1989 to October 5, 1989 (5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

(1) University graduates with more than one (1) year's experience in system development and maintenance or, be person with more than three (3) years' experience in system development,

(2) (i) Having more than three (3) years' experience in programming in any one of programming languages: such as COBOL, FORTRAN, PL/1, etc.,
(ii) Being able to make a programme in COBOL,

(3) Having experience in system design in batch processing system,

(4) Not exceeding thirty-five (35) years of age, and

(5) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) Programme Design
(2) Online Database System Introduction
(3) Database Programming
(4) TSS (Time Sharing System) Usage
(5) JCL (Job Control Language) Usage
(6) Database Design
(7) Data Communication Programming
(8) Data Communication System Design
(9) Data Communication System Creation
(10) Module Design
(11) Testing Method
(12) System Estimation/Evaluation
(13) Reliable System Design
(14) Data Communication Network Design
(15) System Configuration Design Workshop
(16) Project Management
(17) System Development Workshop
(18) Special Lecture
(19) Personal Computer Introduction
(20) Σ System Outline
(21) External Database System Utilization
(22) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 45

INFORMATION PROCESSING PERSONNEL (PROGRAMMER)

情報処理要員養成（プログラマー養成）

1. PERIOD

From December 7, 1989 to March 18, 1990 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

(1) University graduates with less than one (1) year's experience in programming or, have the equivalent background,

(2) Not exceeding thirty (30) years of age, and

(3) Having sufficient command of both spoken and written English to take classes in English.

4. DESCRIPTION OF TRAINING

(1) Computer Introduction
(2) Software Introduction
(3) Programme Design
(4) Personal Computer Introduction
(5) TSS (Time Sharing System) Usage
(6) COBOL Introduction
(7) COBOL Advanced
(8) COBOL File Access
(9) System Development Workshop
(10) Data Communication System Design
(11) Observation Tour

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 46

MICRO-ELECTRONICS ENGINEERING マイクロエレクトロニクス技術

1. PERIOD

November 27, 1989 to March 13, 1990 (3.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

Applicants should:

(1) be university or college graduates who have majored in electricity, electronics and information processing or have the equivalent academic background and also have a basic knowledge of computer and electronic circuits.

(2) have a good command of spoken and written English.

(3) be under forty (40) years of age (in principle).

4. DESCRIPTION OF TRAINING

Lectures, Exercises and Experiments, Practical training, Observations

Lectures:
- Electronic circuits and digital circuits
- Micro-computers
- Interface techniques
- Data stracture and software techniques
- Assembler and C-language

Practical training will be put into practice for one or two weeks in the related agencies and institutions.

5. FACILITIES AND INSTITUTIONS

Sapporo Electronics Center

6. REMARKS

PUBLIC UTILITY WORKS

No. 47

WATER WORKS ENGINEERING 上水道施設

1. PERIOD

May 15, 1989 to August 11, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Occupational experience of more than 3 years
4) Between 26 and 45 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Water supply planning
   - Water works management
   - Water purification and quality
   - Pipeline
   - Mechanical and electrical installation
   - Personal programme
   - Financial cooperation
   - Technical cooperation
2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Ministry of Health and Welfare
2) Japan Water Works Association

6. REMARKS

No. 48

SEWAGE WORKS ENGINEERING 下水道技術

1. PERIOD

August 24, 1988 to November 27, 1988 (3.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Senior technical officers
4) Good working knowledge of English
5) Under 40 years of age

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Basic concept of sewage works
   - Collection system
   - Wastewater treatment
   - Sludge handling
   - Case study
   - Water quality monitoring
   - Advanced wastewater treatment
2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) City Bureau, Ministry of Construction
2) Japan Sewage Works Agency

6. REMARKS

No. 49

SOLID WASTE MANAGEMENT AND NIGHT SOIL TREATMENT 廃棄物処理

1. PERIOD

May 22, 1989 to July 27, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent

2) Three years or more experience in their respective fields

3) Technical officials in charge of solid waste management (domestic and industrial solid waste management including night soil treatment) in central or provincial government or in local bodies

4) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Introduction
   - Planning
   - Refuse collection and transportation
   - Solid waste disposal
   - Night soil treatment
   - Country report
   - Introduction of solid waste analysis

2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Environmental Health Bureau, Ministry of Health and Welfare

2) Department of Sanitary Engineering, The Institute of Public Health

3) Japan Environmental Sanitation Centre

4) Tokyo International Centre (Hatagaya), JICA

6. REMARKS

TRANSPORTATION AND TRAFFIC

No. 50

AIDS TO MARINE NAVIGATION 航路標識

1. PERIOD

August 24, 1988 to October 28, 1988 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

1) High school graduates or equivalent with sufficient knowledge on physics
2) Middle class officers in the field of aids to marine navigation service
3) Under 45 years of age
4) Have a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Maritime Traffic in Japan
   - Aids to Navigation System in Japan
   - Visual Aids to Navigation
   - Outline of Buoys
   - Outline of Radio Aids to Navigation
   - Treatment of Lighthouse Monitoring Equipment
   - Automatic Control for Lighthouse
   - Treatment of Lighting Equipment

2) Observation tours
   - Maritime Safety Agency Research Centre
   - Maritime Safety School
   - Omega Data Analysis Centre
   - Tokyo Lighted Beacon
   - Decca Station
   - Loran Station
   - Tokyo Bay Traffic Advisory Service Centre
   - Vessel Traffic Information Station
   - Hesaki Lighthouse
   - Tidal Stream Signal Station
   - Omega Station
   - Aids to Navigation Research Vessel
   - Buoy Tender
   - Wave Activated Generator Factory
   - Buoy Factory
   - Air Cell Facotry
   - Solar Battery Factory
   - Chain Factory

5. FACILITIES AND INSTITUTIONS

Maritime Safety Agency

6. REMARKS

No. 51

AUTOMOBILE ENGINEERING ADMINISTRATION 自動車技術行政

1. PERIOD

January 18, 1990 to February 28, 1990 (1.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in the field of motor vehicles' administration
3) Occupy a responsible position at present in the governmental or public organization
4) Good working knowledge of English
5) Under 50 years of age

4. DESCRIPTION OF TRANING

1) Lecture
   Outline of legal system of motor vehicle in Japan
   Regulation of motor vehicle safety and pollution control measures
   Motor vehicle maintenance and repair
   Motor vehicle registration
   Motor vehicle inspection
   Motor vehicle transport
   Controlling traffic operation and reporting traffic accidents
   Motor vehicle insurance
   Driver's licence
   Motor vehicle safety and pollution control
   Standard and production activities on motor vehicle
   Road service, adequacy of drivers and traffic control
2) Observation and study tours

5. FACILITIES AND INSTITUTIONS

Automobile Inspection & Registration Association

Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 52

MODERNIZATION OF PHYSICAL DISTRIBUTION 物流近代化

1. PERIOD

January 4, 1990 to March 11, 1990 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Occupational experience of more than 3 years
3) Between 30 and 40 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Administration of physical distribution
   - Planning and coordination for physical distribution
   - Modernization for physical distribution
   - Strategy for physical distribution

5. FACILITIES AND INSTITUTIONS

1) Ministry of Transport
2) Universities and public institutes
3) Related industries

6. REMARKS

No. 53

RAILWAY ROLLING STOCK ENGINEERING 鉄道車両

1. PERIOD

June 12, 1988 to September 3, 1988 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Occupational experience of more than 7 years
4) Under 40 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Railways and rolling stocks in Japan
   - Planning and administration of rolling stock
   - Design and specification of rolling stock
   - Procurement and inspection of rolling stock, administration and repair of rolling stock
   - Planning on maintenance and repair of rolling stock
   - Rolling stock maintenance and repair engineering
   - Rolling stock maintenance and repair programme control: railway workshop management
   - Rolling stock manufacturing engineering
   - Rolling stock manufacturing process control and factory management
   - Train utilization
   - Industries and facilities related to rolling stock

2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Japanese Railways (JR)
2) Japan Rolling Stock Exporter's Association
3) Ministry of Transport
4) Japan Association of Rolling Stock Industries

6. REMARKS

No. 54

RAILWAY SIGNAL ENGINEERING 鉄道信号

1. PERIOD

January 11, 1990 to April 25, 1990 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Occupational experience of more than 7 years
3) Qualified in their respective fields
4) Under 45 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   – Types and functions of railway signal used in Japan
   – Control and administration of signal facilities
   – Communication for train operation
2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Ministry of Transport
2) Japanese Railways (JR)
3) Japan Association of Signal Industries (JASI)

6. REMARKS

No. 55

MAINTENANCE AND IMPROVEMENT ENGINEERING OF PERMANENT WAYS

鉄道線路保守改良

1. PERIOD

May 15, 1989 to August 12, 1989 (3.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

1) University graduates or equivalent

2) Qualified in their respective fields

3) Occupational experience of more than 5 years

4) Under 40 years of age

5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   – Outline of railway in Japan
   – Construction of railway in Japan
     planning for construction work, stations designing of track, permanent way structure, etc.
   – Maintenance of track and structure
     modern method and techniques of track maintenance for higher speed and low cost, reinforcement of structure, inspection of track, etc.

2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Ministry of Transport

2) East Japan Railway Company

3) West Japan Railway Company

6. REMARKS

No. 56

RAILWAY ELECTRIFICATION 鉄道電化

1. PERIOD

October 12, 1989 to December 12, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Occupational experience of more than 7 years
4) Under 45 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Planning of railway electrification
   - Economic effects by railway electrification
   - Facilities and equipments for railway electrification
   - Planning of train operation
   - Measures for train's speed-up and permanent way
   - Industries concerned and others
2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Ministry of Transport
2) Japanese Railways (JR)
3) Railway Electrification Association

6. REMARKS

No. 57

PORTS AND HARBOURS (SEMINAR) 港湾セミナー

1. PERIOD

September 28, 1988 to November 27, 1988 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seventeen (17)

3. QUALIFICATIONS

1) University graduates or equivalent

2) Qualified in their respective fields
(Senior administrative work)

3) Occupational experience of more than 8 years

4) Between 35 and 45 years of age

5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
- Administration and management of ports and harbours
- Technical aspects of port development
- Port planning in general
- Port management and operation
- Cargo handling operation
- Discussion on the present situation and problems of ports and harbours in the participating countries
- Discussion on the port administration, port operation and port planning
- Intensive case study of a port

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Bureau of Ports and Harbours, Ministry of Transport

Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 58

PORT AND HARBOUR ENGINEERING 港湾工学

1. PERIOD

May 16, 1989 to September 24, 1989 (4.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Occupational experience of more than 3 years
4) Under 40 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   – Outline of ports and harbours in Japan
   – Planning techniques of ports and harbours
   – Design techniques of port and harbour facilities
   – Execution techniques of port and harbour works
   – Basic theory of port and harbour engineering
2) Exercise
   Design of port and harbour facilities
3) Intensive study on harbour works at Onahama Port
4) Discussions on technical problems in ports and harbours in participating countries
5) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Bureau of Ports and Harbours, Ministry of Transport
2) Port and Harbour Research Institute
3) District Port Construction Bureaus

6. REMARKS

No. 59

SHIPPING BUSINESS 海運経営実務

1. PERIOD

May 11, 1989 to July 9, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Engaged in shipping authorities or business
3) Occupational experience of more than 3 years
4) Under thirty five (35) years of age
5) Good working knowledges of English

4. DESCRIPTION OF TRAINING

1) Lecture
   - Shipping administration in Japan
   - International shipping
   - Shipping legislations
   - Liner business
   - Containerization
   - Tanker business
   - Marine Insurance
   - Ship building
   - Other related lectures
2) On-the-job-training
3) Observation and study tour

5. FACILITIES AND INSTITUTIONS

1) Shipping Bureau, Ministry of Transport
2) Maritime International Cooperation Centre

6. REMARKS

No. 60

ADMINISTRATION FOR SEAMEN'S EDUCATION 船員教育行政

1. PERIOD

October 19, 1989 to November 29, 1989 (1.5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Occupational experience of more than 3 years
4) Between 25 and 45 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and observations
   - Seamen's education and training
   - Qualification for ships officer
   - Labor standards of seamen
   - Seamen's welfare
   - Employment system for seamen
   - Mariners' insurance system
   - Present situation and the future of shipping
2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Maritime Technology and Safety Bureau, Ministry of Transport
2) Maritime International Cooperation Centre
3) Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 61

SHIPBUILDING MANAGEMENT SEMINAR 造船経営管理セミナー

1. PERIOD

September 25, 1989 to November 27, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

1) University graduates or equivalent

2) More than 8 years occupational experience in the field of management in the governmental, public, or shipyards organization

3) Between 35 and 50 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) General Orientation on Japan

2) Lectures
   - Japanese shipbuilding industries
   - Planning, business and financial system of shipyards
   - Production management of shipyards
   - Problem of future strategy in shipbuilding industry

3) Discussion on the present situation of shipbuilding management

4) Observation tours to major shipyards

5. FACILITIES AND INSTITUTIONS

1) Ministry of Transport

2) Overseas Shipbuilding Co-operation Centre

6. REMARKS

No. 62-1

MARINE TECHNIQUE (NAVIGATOR) 航海技術（航海士）

1. PERIOD

April 6, 1989 to December 4, 1989 (8 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) High school graduate with more than three years of seatime, or those who have the equivalent knowledge and experience, preferably including an experience as an officer and should not be in possesion of a certificate of STCW III or higher.
2) Male, between twenty-two (22) and thirty-five (35) years of age
3) Have a sufficient command of spoken and written English
4) Good health, both physically and mentally

4. DESCRIPTION OF TRAINING

1) General Orientation
2) Japanese Language
3) Nautical Instrument
4) Terrestial and Celestial Navigation
5) Radar Navigation and Electronic Navigation Aids
6) Voyga Planning
7) Ship Construction, Stability and Damage Control
8) Watchkeeping
9) Meteorology and Oceanography
10) Ship Manoeuvering and Handling
11) Ship Power Plant
12) Cargo Handling and Stowage
13) Fire Prevention and Fire Fighting Appliances
14) Emergency Procedures
15) Medical Care and Aid
16) Life Saving
17) Search and Rescue
18) Communication by Radio and Visual Signalling
19) Maritime Laws and Regulations
20) IMCO Standard Maritime Navigational Vocabulary
21) Personal Computer

5. FACILITIES AND INSTITUTIONS

Okinawa Branch of Japan Educational Institute for Seamen (JEIS)

6. REMARKS

No. 62-2

MARINE TECHNIQUE (ENGINEER) 航海技術（機関士）

1. PERIOD

April 6, 1989 to December 4, 1989 (8 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) High school graduate with more than three years of seatime, or those who have equivalent knowledge and experience, preferably including an experience as an engineer officer and should not be in possesion of a certificate of STCW III or higher.

2) Male, between twenty-two (22) and thirty-five (35) years of age

3) Have a sufficient command of spoken and written English

4) Good health, both physically and mentally

4. DESCRIPTION OF TRAINING

1) General orientation
2) Japanese Language
3) Diesel Engines
4) Steam Turbines
5) Gas Turbines
6) Propeller and Propulsion Systems
7) Main and Auxiliary Boilers
8) Auxiliary Machineries
9) Refrigerator
10) Ships' Work-shop
11) Automatic Control Systems
12) Electric and Electronic Equipment
13) Fuels and Lubricants
14) Basic Knowledge of Engineering
15) Naval Architecture and Ship Construction
16) Jobs in Ship-yards and Watchkeeping
17) Procedures for Protection of Marine Environment
18) Fire Prevention and Fire Fighting Appliances
19) Prevention for Flood and Emergency Procedures
20) Medical Care and Aid
21) Life Saving
22) Prevention for Health Hazards
23) Maritime Laws and Regulations
24) Personal Computers

5. FACILITIES AND INSTITUTIONS

Okinawa Branch of Japan Educational Institute for Seamen (JEIS)

6. REMARKS

No. 63

DEVELOPMENT OF CONTAINER TERMINAL コンテナ埠頭整備計画

1. PERIOD

January 15, 198 January 15, 1990 to March 10, 1990 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) University graduates or equivalent with more than 8 years of occupational experience in development and management of terminal

2) Engaged in the field of development and management of container terminal of the government or related public organization

3) Between 30 and 45 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   – Containerization and development of container terminals
   – Planning method of container terminal
   – Development of container terminal

2) Intensive study (Case study)
   – Management and maintenance of terminal (Kobe port)

3) Observation tours
   -- Container terminal of Tokyo, Yokohama, Shimizu, Osaka and Nagoya Port

5. FACILITIES AND INSTITUTIONS

Bureau of Ports and Harbours, Ministry of Transport

6. REMARKS

No. 64

MARINE DISASTER PREVENTION AND RESCUE OPERATION 救難防災

1. PERIOD

September 18, 1989 to December 14, 1989 (3.0 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) University graduates or equivalent with occupational experience of more than five (5) years in the field of marine disaster prevention and rescue operation
2) Those who are presently engaged in the above-mentioned field
3) Under forty (40) years of age
4) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- Outline of Organization and Service of Maritime Safety Agency (Japan)
- Operation of Patrol Vessel and Aircraft
- System and Service of Search and Rescue Operation
- Case Study of Rescue Operation and Casuality Examples
- Safety Navigation Measures (Measures for Marine Accident Prevention)
- System of Information Collection (Marine Disaster Message Communication , etc.)
- Situation of Marine Pollution and Preventive Measures at Sea around
- System of Marine Disaster Prevention
- Case Study of Marine Disaster Prevention and Casuality Examples
- Measures for Marine Pollution Prevention
- Marine Disaster Prevention Center
- Special Rescue Team, Aqualung-Equipped Vessel (Training System)
- Training Practice on Rescue and Disaster Prevention
- Boarding Patrol Vessel and Aircraft

5. FACILITIES AND INSTITUTIONS

1) Japan Maritime Safety Agency (JMSA)
2) Maritime Disaster Prevention Training Centre

6. REMARKS

No. 65

AERODROME (SEMINAR) 空港セミナー

1. PERIOD

August 17, 1989 to October 8, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Occupational experience of more than 3 years
4) Under forty (40) years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Introduction to Civil Aviation in Japan
   - Airport development
   - Airport planning
   - Airport construction and maintenance
   - Management of operation of airport
2) Discussion on the subjects of country reports
3) Observation tours

5. FACILITIES AND INSTITUTIONS

Civil Aviation Bureau, Ministry of Transport

Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 66

AVIATION SECURITY SEMINAR 航空保安セミナー

1. PERIOD

January 25, 1990 to March 5, 1990 (1.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

1) University graduates, or equivalent with occupational experience of more than 5 years

2) Presently engaged in airport management and aviation security in the Ministry of Transport or Airport Authority.

3) Under 45 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   – Present Situation of Civil Aviation in Japan
   – Airport Management
   – Aviation Security

2) Presentation of country report

3) Observation Tours

5. FACILITIES AND INSTITUTIONS

1) Civil Aviation Bureau, Ministry of Transport

2) Japan Transport Consultants Association

3) Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 67

SEMINAR ON AIR TRAFFIC CONTROL 航空管制セミナー

1. PERIOD

October 16, 1989 to December 1, 1989 (1.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University or college graduates or equivalent
2) Occupational experience of more than 3 years
3) Presently engaged in said field or in administration of said field
4) Under 45 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

Lectures and study-tours

Lectures:
Air Traffic Control Services and Air Traffic Services,

Study-tours:
Study-tours to Airports, Area Control Center and Aeronautical Safety College, etc.

5. FACILITIES AND INSTITUTIONS

1) Civil Aviation Bureau, Ministry of Transport

6. REMARKS

This course is initiated in 1989.

No. 68

URBAN TRANSPORT (SEMINAR) 都市交通セミナー

1. PERIOD

May 18, 1989 to July 10, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Occupational experience of more than three (3) years
3) Presently engaged in urban transport administration perferably in the field of railway
4) Under forty (40) years of age

4. DESCRIPTION OF TRAINING

1) General orientation on Japan
2) Lectures
   - *Outline of urban transport in Japan*
   - Specific characteristics of each mode
   - Method of general urban transport planning
   - Case study of the actual railway project
3) Discussion on the subjects of country reports
4) Observations

5. FACILITIES AND INSTITUTIONS

International Transport and Tourism Bureau, Ministry of Transport
Japan Transport Consultants Association
Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 69

COMPREHENSIVE URBAN TRANSPORTATION PLANNING

総合都市交通施設計画

1. PERIOD

October 9, 1989 to December 6, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

1) University graduates or equivalent with occupational experience of more than three (3) years
2) Presently engaged in urban transport administration
3) Under 35 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Presentation of country reports and discussions
2) Lectures
   - Viewpoint of urban transportation planning
   - Socio-economic system and urban transportation planning
   - Urban transport survey system
   - Comprehensive urban transportation planning
   - Urban transport facilities planning
3) Observation tours
4) Practices
   - Urban transportation planning

5. FACILITIES AND INSTITUTIONS

City Bureau, Ministry of Construction

Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 70

SEISMOLOGY AND EARTHQUAKE ENGINEERING 地震工学

1. PERIOD

September 4, 1989 to July 30, 1990 (10.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

1) University graduates or equivalent with professional experience of more than 3 years

2) Well versed in basic mathematics
(Differential and integral calculus, etc.)

3) Under 35 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
– Both of courses: General seismology, basic programming of computer, etc.
– Seismology course: Seismological application computer, elasticity, etc.
– Earthquake engineering course: Earthquake resistant design of building structure, etc.

2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) International Institute of Seismology and Earthquake Engineering (IISEE), Building Research Institute, Ministry of Construction

2) Tsukuba International Centre, JICA

6. REMARKS

SEISMOLOGY AND EARTHQUAKE ENGINEERING (SEMINAR) 地震工学セミナー

1. PERIOD

Not conducted in 1989

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

1) Preferably ex-participants in Group Training Course in Seismology and Earthquake Engineering or their equivalent

2) Engaged in the field of Earthquake Engineering more than 10 years

3) More than 35 years of age

4) Having a sufficient command of spoken and written English

5) Good health

4. DESCRIPTION OF TRAINING

1) Attend the 9th World Conference on Earthquake Engineering

2) Seminar on present conditions of structures which have suffered many earthquake damages in recent earthquakes and their main causes

3) Disaster-prevention countermeasures for structures which have suffered earthquake damages.

5. FACILITIES AND INSTITUTIONS

1) International Institute of Seismology and Earthquake Engineering, Ministry of Construction

2) Tsukuba International Centre, JICA

6. REMARKS

The course will be conducted in 1990.
(The course is principally conducted every other year.)

No. 71

METEOROLOGY 気 象 学

1. PERIOD

August 31, 1989 to December 21, 1989 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Be presently engaged in meteorological observation or forecasting, of the governmental or related public bodies
3) Occupational experience of more than 3 years
4) Under forty (40) years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   – Practical meteorology, mateorological observation, data processing, telecommunication systems, meteorological analysis forecasting, satellite data application, marine meteorological service, and aviation weather service.
2) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Japan Meteorological Agency
2) Meteorological Research Institute of JMA
3) Meteorological Satellite Centre of JMA
4) Meteorological College of JMA

6. REMARKS

No. 72

VOLCANOLOGY AND VOLCANIC SABO 火山学・火山砂防工学 ENGINEERING

1. PERIOD

January 16, 1990 to June 13, 1990 (6 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University or college graduated or equivalent
2) Occupational experiment of more than 3 years
3) Qualified in their respective fields
4) *Under 35 years of age*
5) Good working Knowledge of English or Japanese

4. DESCRIPTION OF TRAINING

Participants shall be introduced basic and modern concepts of volcanology and mitigation volcanic disasters through lectures, practice and field study.

The course is divided into three categories of Common Course, Volcanology and Volcanic Sabo Engineering Course.

Participants cna select either Volcanology or Volcanic Sabo Engineering Course after completing the Common Course.

5. FACILITIES AND INSTITUTIONS

1) Department of Erosion and Sediment Control, Ministry of Construction
2) Japan SABO Association
3) Hatagaya International Centre, JTCA
4) Tukuba International Centre, JICA
5) Volcanology Observatories and Research Institutes concerned

6. REMARKS

This Course is newly established in fiscal year 1989.

INFRASTRUCTURE

No. 73

BRIDGE ENGINEERING 橋梁工学

1. PERIOD

August 17, 1989 to November 4, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University graduates or equivalent with occupational experience of more than 3 years
2) Qualified in their respective fields
3) Presently engaged in highway construction
4) Under 35 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Structural analysis of bridges
   - Bridge design theory
   - Design and construction of reinforced concrete bridge
   - Design and construction of prestressed concrete bridge
   - Design and construction of composite beams
   - Design and construction of foundation
   - Aerodynamic design
   - Maintenance of bridge
2) Observation

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

No. 74

HIGHWAY CONSTRUCTION SEMINAR ハイウェイセミナー

1. PERIOD

September 21, 1989 to November 12, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields
3) Occupational experience of more than 5 years
4) Under 45 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Road system planning
   - Maintenance and repairs
   - Pavement earth work
2) Observation tours
   - Road Traffic Information Centre
   - Kansai district

5. FACILITIES AND INSTITUTIONS

1) Road Bureau, Ministry of Construction
2) Tokyo International Centre (Hatagaya)' JICA

6. REMARKS

No. 75

CONSTRUCTION ENGINEERING (CIVIL WORKS) 建設施工

1. PERIOD

August 31, 1989 to December 11, 1989 (4 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University or college graduates who specialized in civil engineering, or equivalent

2) Occupational experience of more than 5 years in planning, design, execution and project control of civil works

3) Good working knowledge of English

4) Under 40 years of age

4. DESCRIPTION OF TRAINING

1) Lectures
   - International Construction Project
   - Basic engineering
   - Construction Management
   - Construction Technology (Road and Others)

2) Observation
   - Visit and observation to construction site
   - Study tour

5. FACILITIES AND INSTITUTIONS

1) Ministry of Construction

2) Faculty of Engineering, Kyoto University

3) Osaka International Training Centre, JICA

6. REMARKS

No. 76

PROJECT MANAGER (CONSTRUCTION) 建設施工管理者

1. PERIOD

February 5, 1990 to April 21, 1990 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

10 (ten)

3. QUALIFICATIONS

1. be nominated by their government
2. be university graduates majoring in civil engineering or related fields
3. have practical experience of at least 10 years

4. DESCRIPTION OF TRAINING

1. Design and plan of construction works
2. Execution plan
3. Control of construction works (quality control, process control, safety control)

5. FACILITIES AND INSTITUTIONS

Japan Construction Training Center (Foundation)

6. REMARKS

No. 77

SEMINAR ON ADMINISTRATION FOR DISASTER PREVENTION

防災行政管理者セミナー

1. PERIOD

February 7, 1990 to March 2, 1990 (24 days)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) Presently engaged in the field of disaster prevention administration

2) Under forty-five (45) years of age

3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   - Disasters in the world and worldwide disaster prevention systems
   - Basic framework of disaster prevention in Japan
   - Disaster countermeasures; research and development, disaster preparedness, national land conservation, disaster emergency and recovery measures, information and tele-communication system, etc.
   - Japan's international cooperation and IDNDR

2) Observation tours

5. FACILITIES AND INSTITUTIONS

National Land Agency

Tokyo International Center, JICA

6. REMARKS

No. 78

TECHNOLOGY FOR DISASTER PREVENTION SEMINAR 防災技術セミナー

1. PERIOD

September 25, 1989 to December 11, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

1) University graduates in the related sciences or technologies, or those who have equivalent qualification in the field of disaster prevention administration

2) Should have experiences of more than seven (7) years in this field

3) Under 40 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   - Seismology and earthquake damage mitigation
   - Prevention against tsunami and fire induced by an earthquake
   - Rainfall disaster and flood control
   - Prevention against slope failure and other geological hazards

2) Advanced study

3) Observation tours

5. FACILITIES AND INSTITUTIONS

1) National Research Center for Disaster Prevention, Science and Technology Agency

2) Tsukuba International Centre, JICA

6. REMARKS

No. 79

SOIL ENGINEERING AND FOUNDATION 土質及び基礎工学

1. PERIOD

October 16, 1989 to December 13, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

1) University graduates or equivalent (soil engineering)
2) More than 8 years practical experience in central or local governments
3) Under 45 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   - Outline of earth structures
   - Outline of foundation of structures
   - Site exploration and laboratory soil test
   - Outline of ground water
   - Improvement of soil engineering properties
   - Evaluation of soil foundation design-case study
   - Others

2) Discussions with the guidance of Japanese lecturers
   - Soil improvement planning, foundation design, project feasibility, etc.

3) Practice
   - Soil survey method
   - Soil test method
   - Foundation design

4) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

No. 80

REGIONAL DEVELOPMENT PLANNING SEMINAR 国土開発セミナー

1. PERIOD

October 12, 1989 to November 25, 1989 (1.5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

1) Presently engaged in the planning or implementation of national or regional development projects and policy

2) Under forty (40) years of age

3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   - History of regional development policy in Japan
   - Population problems and regional development planning
   - Urban and rural area development planning
   - Land use plan, water resources development plan, transportation plan and housing plan
   - Disaster countermeasure in Japan
   - Theory and method of regional development planning

2) *Observation tours*

5. FACILITIES AND INSTITUTIONS

National Land Agency

Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 81

RIVER and DAM ENGINEERING 河川及びダム工学

1. PERIOD

July 13, 1989 to November 12, 1989 (4.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

1) University graduates specialized in civil engineering or equivalent
2) Occupational experience of more than 3 years in the field of construction project management of flood control works or water resources development projects
3) Under 35 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Introduction (Characteristics of river and the outline of river works in Japan)
2) Hydrology (Statistical procedure of hydrological data and the run-off analysis)
3) River Planning (only for River group) (techniques for river planning and design of river facilities)
4) Dam engineering (only for Dam group) (techniques for planning, design, construction, operation and maintenance of dam)
5) SABO (Erotion and sediment control) works
6) Individual training
7) Observation tours

5. FACILITIES AND INSTITUTIONS

1) Ministry of Construction
2) Tsukuba International Centre, JICA

6. REMARKS

Participants will be separated into two groups, namely River Group and Dam Group
River Group will learn the river improvement, and Dam Group will learn the techniques for dam project

No. 82

CITY PLANNING 都市計画

1. PERIOD

August 3, 1989 to October 14, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

1) University graduates or equivalent with occupational experience of more than 3 years
2) Present engagement in city planning
3) Under 40 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   - Urban problems in Japan
   - Regional planning system in Japan
   - City planning system in Japan
   - Land-use planning and building regulations
   - Planning and development of transportation facilities
   - Planning and development of Parks and Greens
   - Planning and development of sewage system and water supply
   - Urban development project
   - Development of new resident cities
   - Housing plan

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 83

URBAN DEVELOPMENT 都市整備

1. PERIOD

May 8, 1989 to June 27, 1989 (1.6 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

1) University graduates or equivalent with occupational experience of more than 3 years
2) Presently engaged in planning and/or implementation of urban development and redevelopment
3) Under forty (40) years of age
4) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1)	Lectures and observations – Present situation of Japanese cities – Japanese policy for urban areas – Japanese administrative system and budget for urban development – Outline of city planning – Outline of Urban Development and Urban Facility Improvement – KUKAKU-SEIRI (Land Readjustment Project) – Urban Area Renewal Project – New Town Development Project	15 days
2)	Presentation and Discussion of Country Report	4 days
3)	Free Discussion – Evaluation of various development and redevelopment measures and discussion on the applicability of each measures.	1 day
4)	Observation tours	9 days

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

No. 84

HOUSING 住宅建設

1. PERIOD

October 19, 1989 to December 11, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

1) Mid-career officers in charge of housing policy
2) University graduates or equivalent
3) Between 30 and 40 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   - Housing conditions and policies in Japan
   - Public housing supply
   - Housing finance
   - Urban planning system
   - Development of residential area
   - Modernization of housing production
   - Planning and development of new town
   - Housing problem and housing policy in developing countries
2) Group study
3) Presentation of country reports
4) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

No. 85

IMPROVEMENT OF HOUSING AND LIVING ENVIRONMENTS SEMINAR 住宅・住環境改善セミナー

1. PERIOD

February 1, 1990 to March 4, 1990 (1 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) *University graduates or equivalent,*

2) Be experienced officials in charge of executing various developmental projects on housing and living environment at the central or local government, or at the related governmental organization,

3) Be between thirty (30) and forth-five (45) years of age,

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
- Housing problems and countermeasures in Japan
- Improvement projects on housing and living environment
- History of the housing policy and technological development in Japan
- Rural development in housing and living environment
- Housing problems and countermeasures in the third world countries

2) Special Discussion based on Country Report

3) Group Study

4) Study Tour

5. FACILITIES AND INSTITUTIONS

Housing Bureau, Ministry of Construction

Tokyo International Centre (Hatagaya), JICA

6. REMARKS

No. 86

BUILDING ENGINEERING 建築技術

1. PERIOD

April 13, 1989 to June 14, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

1) University graduates or eqivalents with occupational experience of more than five years
2) Be officials of the government or the related government organization
3) Under 45 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   - Introduction
   - Building standard law
   - Public building activities
   - Private building activities
   - Research and educational activities
   - Building planning technique
   - Standards, standardization and experiment
   - Building construction technique
2) Observation tours
3) Country report
4) Group study

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

No. 87

SURVEYING AND MAPPING (GEODECY) 測量技術（測地測量）

1. PERIOD

September 4, 1989 to February 25, 1990 (5.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) be engaged in geodetic surveying at present or in the near future, and have the knowledge of mathematics and physics of university graduate level or equivalent with coupation experience of more than 7 years in the field of geodetic surveying,

2) Good working knowledge of English.

3) Under thirty-five (35) years age.

4. DESCRIPTION OF TRAINING

1) Introduction (Current activities for surveying and mapping in Japan and the activities for geodetic surveying of GSI).

2) Mathematics for geodecy

3) Geodecy

4) Applied geodecy

5) Information processing

6) Technical report

5. FACILITIES AND INSTITUTIONS

1) *Geographical Survey Institute (GSI), Ministry of Construction*

2) Tsukuba International Centre, JICA

6. REMARKS

1) This course is conducted to focus each of three themes mentioned below in turn every year.
   a) Geodecy
   b) Map Conpilation and Reproduction
   c) Photogrammetry

2) In Japanese fiscal year 1990, the theme of this course will be "Map Conpilation and Reproduction".

No. 88

HYDROGRAPHIC SURVEY 水路測量

1. PERIOD

April 13, 1989 to November 7, 1989 (6.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalents with some occupational experience in hydrographic services
2) Present employment at national hydrographic office or other related organization
3) Under forty (40) years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures
   Computing
   Physics: Theory
   Applied Physics
   Hydrography: Control
   (Geodesy, Projections, Horizontal Control, Vertical Control, Astronomy, etc.)
   Hydrography: Practice
   (Positioning at Sea, Track Control, Measurement of Tide, Determination of Depth, etc.)
   Environmental
   (Meteorology, Oceanography, Tides, etc.)
   Nautical Science
   (Navigation, Seamanship, etc.)
   Legal Aspects
   Nautical Charting Surveys
   (*Sweeping, Tides and Tidal Streams, Photo*grammetry, Data Processing, Law of the Sea, etc.)
   Port and Harbour Surveys
   (Control Surveys, Determination of Position, Special Purpose Survey and Operations, Sedimentology, etc.)
2) Practice
   Data Processing of Harbour and Coastal Surveys
   Computer Programming
   Control Surveys
   Astronomy
   Cartography
3) Field Training
   Field Training of Harbour and Coastal Surveys
   Field Training of Navigation, Seamanship, Submarine Geology, etc. on board Survey Vessel SHOYO, 1,900 tons
4) Observation and Study Tours

5. FACILITIES AND INSTITUTIONS

Hydrographic Department, Maritime Safety Agency

6. REMARKS

PHYSICAL OCEANOGRAPHIC SURVEY 海洋物理探査

1. PERIOD

Not conducted in 1989

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) College graduates or equivalent

2) Qualified in their respective fields

3) Under 40 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) College graduates or equivalent
   - Dynamics of ocean current
   - Tide and tidal current
   - Field training of oceanographic observation
   - Data processing of oceanographic observation
   - Field training of tide and tidal current observation
   - Data processing of tidal current observation

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Hydrographic Department, Maritime Safety Agency

6. REMARKS

The course will be conducted in 1990.
(The course is conducted alternately with the Nautical Cartography).

No. 89

NAUTICAL CARTING 海図作製

1. PERIOD

November 9, 1989 to March, 1990 (3.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) Junior college or special school graduates or equivalent

2) Qualified in their respective fields

3) Under 35 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Nautical chart in general
   - How to use chart
   - Principle of cartography
   - Collection and evaluation of chart information
   - Computer assisted cartography including practice
   - Practical training of planning, compiling, drafting and printing of chart

2) Observation tours

5. FACILITIES AND INSTRUCTIONS

Hydrographic Department, Maritime Safety Agency

6. REMARKS

The course will not be conducted in 1990
(The course is conducted alternately with the Physical Oceanographic Survey)

POSTAL SERVICE, TELECOMMUNICATION AND BROADCASTING

No. 90

RADIO FREQUENCY MONITORING 電波監視

1. PERIOD

August 14, 1989 to October 7, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Be those who have practical experience in the field of radio regulatory administration (radio frequency monitoring, frequency management, etc.) or those who may engage in this field of work within a year,

2) Be college graduates or those who have the equivalent knowledge,

3) Have a sufficient command of spoken and written English,

4) Be under forty (40) years of age

4. DESCRIPTION OF TRAINING

1) Lecture
- –Outline of Radio Regulatory Administration Laws and Regulations of Radio Regulations
- –Frequency Management
- –Practice of Frequency Allocation
- –Radio Operators Qualification System
- –Organization and System of Monitoring Activities
- –Practical Rules of Monitoring Activities (Inspection, Detection of Illegal Frequency, Investigation of Interference and International Monitoring)
- –Site Selection of Monitoring Stations
- –Outline of monitoring facilities
- –Maintenance of Monitoring Equipment
- –Aeronautical Radio Station
- –Land Radio Communication Station (I), (II)
- –Maritime Radio Station
- –System for Telecommunications Administration Real-Time Service (STARS)

2) Practice
- –Monitoring Equipment
- –Operation of Monitoring Equipment (Measurement of Frequency and Frequency Band Width, Automatic Frequency Spectrum Recorder and Measurement of Field Strength, Direction Finder and Movie Monitoring VAN)
- –Practical study at the Telecommunications Dept. of the Kanto Telecommunications Administration Bureau
- –Practical study at the International Monitoring Dept. Kanto Telecommunications Administration Bureau

3) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Posts and Telecommunications

6. REMARKS

No. 91

POSTAL EXECUTIVES' SEMINAR 郵政幹部セミナー

1. PERIOD

March 4, 1990 to March 18, 1990 (0.5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

1) Directors or high-ranking officials in charge of postal administration in governmental organizations

2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions on problems concerning the management of postal services

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Postal Bureau, Ministry of Posts and Telecommunications

6. REMARKS

No. 92

POSTAL SAVINGS AND POSTAL MONEY ORDER EXECUTIVES' SEMINAR郵便貯金・郵便為替幹部セミナー

1. PERIOD

October 15, 1988 to October 29, 1988 (14 days)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) Directors or high-ranking officials responsible for management of postal savings in governmental or *operational organizations*

2) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1) Lectures and discussions
   - *Outline of the Postal Banking System*
   - Present situation and future of the Postal Banking Services
   - Outline of the Postal Savings Service
   - Outline of the Remittance and Settlement Services
   - Postal Personnel Training of the Postal Banking Services
   - On-line system of the Postal Banking Services
   - Management of the Postal Banking Services
   - *Promotion and Publicity Activities of the Postal Banking Service*
   - The role of National Savings Institutions and their Problems

2) Observation Tours

5. FACILITIES AND INSTITUTIONS

International Service Division, Postal Savings Bureau, Ministry of Posts and Telecommunications

6. REMARKS

No. 93

INTERNATIONAL TELEX COMMUNICATION ENGINEERING 国際テレックス通信技術

1. PERIOD

August 28, 1989 to November 12, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) Be university graduates who majored in telecommunications and/or electrical engineering, or those who have the equivalent technical knowledge,

2) Be currently engaged in international telex communication engineering work,

3) Have a sufficient command of spoken and written English,

4) Be under forty-five (45) years of age

4. DESCRIPTION OF TRAINING

1) Lectures
   - Fundamental of computer
   - Latest telecommunication technology
   - Consideration in Telex switching system planning
   - Stored Program control switching system
   - Other

2) Field practice at relevant KDD field offices

3) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

No. 94

INTERNATIONAL TELECOMMUNICATION SERVICES (ADMINISTRATION AND COMMERCIAL) 国際通信業務管理

1. PERIOD

May 8, 1989 to July 17, 1989

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) University graduates or equivalent

2) Presently engaged in traffic and commerical work of international telegraph or telephone services

3) Occupational experience of more than 5 years in the field of international telecommunication services

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures

– Management	Traffic Demand Forecast
	International Accounting
	Billing & Collection
	Circuit Planning
	Tariff
	Personnel Management
	Employees' Training in KDD
	Customer Relations Activities
	Audio-visual Training Method
– System	KDD's Telecom Facilities
	Fundamentals of Computers
	Telegraph Automation System
	Telex Switching System
	Telephone Switching System
	Submarine Cable
	Business Computerization
	Satellite Communication System
	Outline of ISDN
	Network Management
– Service & Operation	Trend of New Services
	Leased Circuit
	Telephone
	Telex
	Date Systems
	VENUS-P
	TV Transmission

2) Field Practice
Field Practice will be conducted at relevant KDD field offices.

3) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

No. 95

INTERNATIONAL TELEPHONE COMMUNICATION ENGINEERING 国際電話通信技術

1. PERIOD

January 8, 1990 to March 25, 1990 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) University graduates or equivalent, majoring in telecommunications and or electrical engineering
2) Under 45 years of age
3) Good working knowledge of English
4) Basic knowledge of telephone switching technology, and to be currently engaged in or expected to be engaged in the field of establishment and maintenance of international telephone switching network

4. DESCRIPTION OF TRAINING

1) Lectures
   - International Telephone Service Operation in Japan
   - Telephone Networking
     - International Telephone Switching System Planning
     - Numbering Plan
     - Signalling Systems
     - Network Planning
     - Network Management
   - ISDN
   - Telephone Switching System
     - Electronic Switching
     - Digital Switching
   - Digital Transmission System
     - PCM Communication
   - Computer Technology
     - Fundamentals of Computers
     - Introduction to C Programming
   - System Application
     - XE-20 Digital Switching System (Hardware & Software)

2) Field practice
   Field practice will be conducted at relevant KDD field offices.

3) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

No. 96

INTERNATIONAL DATA COMMUNICATIONS ENGINEERING 国際データ通信技術

1. PERIOD

January 8, 1990 to March 18, 1990 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent, majoring in telecommunication and/or electrical engineering

2) Have a basic knowledge of Computer

3) Currently engaged or expected to engage in the engineering field of International Data Communication Services

4) Under 40 years of age

5) Have a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1) Lectures
   - Introduction to Data Communications
   - Data Transmission
   - Data Switching
   - International Data Communications Technologies
   - Data Communications Systems
   - New Communications Services
   - Current Status of Data Communications

2) Field practice
   Field practice will be conducted at relevant KDD field offices

3) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

No. 97

DIGITAL SWITCHING SYSTEMS ENGINEERING (Fundamental)

ディジタル交換技術（基本）

1. PERIOD

May 8, 1988 to July 13, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) Qualified in their respective fields
2) University graduates or equivalent
3) Working for telecommunication administrations or common career organizations
4) Sufficient practical experience on their own switching systems
5) Under 40 years of age
6) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Basic and Theoretical Technology for Telecommunications
     Basic telephone switching technology, Integrated services digital network, Telecommunication processing technology
   - Electronic switching system (ESS)
   - Practical exercise using D70
2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

No. 98

DIGITAL SWITCHING SYSTEMS ENGINEERING (Application)

ディジタル交換技術（応用）

1. PERIOD

January 11, 1990 to March 22, 1990

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University graduates or equivalent majored in telecommunication or electrical engineering.
2) Working for telecommunication administrations or common career organizations at least five (5) years.
3) Sufficient practical experience on their own switching systems
4) Under 40 years of age
5) Good working knowledge of English

4. DESCRIPTION ON TRAINING

1) Lectures and practical training
   –Basic and theoretical technology for Telecommunications
   The basic concept of a digital switching system, which consists of routing, numbering, signaling, charging plan and an outline of traffic theory, will be explained. This information will give the participants background data on fundamental functions regarding operations of a digital switching system composing a part of a telephone network.

   –Electronic switching systems (ESS)

   (1) Switching process, hardware and software configuration and signaling of the D70 ESS (Digital) will be explained.

   (2) A series of procedures from traffic forecasting to equipment estimation of the D70 System will be explained, including a case study. Maintenance philosophy will be briefly presented.

   –Practical studies
   Participants will conduct practical exercise, using D70 installed at NTT's Central Training Institute, to increase the knowledge acquired during lectures as well as emphasizing practical applications of this data.

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

All participants are requested to submit a brief report written in English on the present situation of telecommunications, its future programs and its problems in applicants' country.

No. 99

DIGITAL TRANSMISSION SYSTEMS ENGINEERING (Fundamental)

ディジタル伝送技術（基本）

1. PERIOD

July 13, 1989 to September 21, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University graduates or equivalent majored in telecommunication or electrical engineering

2) Working for telecommunication administrations or common carrier organizations

3) Under 40 years of age

4) A sufficient command of spoken or written English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - –Transmission system basic and theoretical knowledge
     In this subject, transmission techniques or concepts which intensify the understanding of transmission system are dealt with such as various amplifier circuits, modulator & demodulator and pulse circuits.
   - –Frequency division multiplex systems
     Various kind of FDM systems are briefly explained, including the latest development trends.
   - –Time division multiplex systems
     General knowledge of TDM, from the principles to introductions for actual systems, are dealt with.
   - –Application technique
     Application technique required for transmission system is also given, such as transmission planning, plant designing and so forth.
   - –Practical excercise
     PCM-24, Digital Multiplexer, Optical Fiber Transmission System, Micro Communication System.

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

All participants are requested to submit a brief report written in English on the present situation of telecommunications, its future programs and its problems in applicants' country.

No. 100

DIGITAL TRANSMISSION SYSTEMS ENGINEERING (Application)

ディジタル伝送技術（応用）

1. PERIOD

September 18, 1989 to December 7, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Qualified in their repective fields
2) University or college graduates or equivalent who majored in telecommunication or electrical engineering
3) Working for telecommunication administrations or common carrier organization at least for five (5) years
4) Under 40 years of age
5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training

1. Digital Line Transmission System	1.1 Optical Fiber Cable Transmission System	4. Administration Techniques	4.1 Economic Studies and Comparisons
	1.2 Digital Subscriber System		4.2 Planning and Plant Engineering
	1.3 Video Transmission System	5. Practical Study	5.1 Transmission Standards
2. Microwave Communication System	2.1 Digital Microwave Communication Technique		5.2 Transmission System Design
	2.2 Satellite Communication System		5.3 Microwave Relay System Design
3. Practical Exercise	PCM-24, Digital Multiplexer, Optical Fiber Transmission System, Microwave Communication System, Video Transmission System		

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

All participants are requested to submit a brief report written in English on the present situation of telecommunication, its future programs and its problems in applicants' country.

No. 101

RADIO COMMUNICATION ENGINEERING 無線通信技術

1. PERIOD

May 22, 1989 to August 3, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

1) University graduates or equivalent majored in telecommunication or electrical engineering

2) Working for telecommunication administrations or common career organizations except broadcasting stations

3) Under 40 years of age

4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training

1. Fundamental Knowledge of Digital Transmission	1.1 Basic of Digital Transmission 1.2 Digital Microwave Communication Technique 1.3 Radio Propagation & Diversity Technique 1.4 Optical Fiber Transmission 1.5 Digital Subscriber System	3. Microwave Communication Equipments	3.1 Antenna 3.2 Power Plant
		4. Practical Study	4.1 Transmission Standards 4.2 Microwave Relay System Design
		5. Administration Techniques	5.1 Economic Studies and Comparisons 5.2 Planning and Plant Engineering
2. Microwave Communication System	2.1 Satellite Communication System 2.2 Rural Telecommunications 2.3 Mobile Communication System 2.4 TV Transmission System	6. Practical Exercise	Optical Fiber Transmission System, Microwave Communication System, Mobile Communication System, TV Transmission System

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

All participants are requested to submit a brief report written in English on the present situation of telecommunications, its future programs and its problems in applicants' country.

No. 102

TELECOMMUNICATION OUTSIDE PLANT ENGINEERING 通信線路技術

1. PERIOD

August 17, 1989 to November 2, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) Qualified in their respective fields
2) University graduates or equivalent
3) Working for telecommunication administrations or common carrier organizations
4) Sufficient practical experience on telephone outside plant system
5) Under 40 years of age
6) Good working knowledge of Egnlish

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Digital Line Transmission System Engineering
   - Design Engineering
   - Maintenance Engineering
   - Construction Engineering
   - Method of Measurement
2) Observation tours
   - Tour through a Factory
   - Procticing in Telephone Office
   - Kansai-Chugoku Tour

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

All participants are requested to submit a brief report written in English on the present situation of telecommunication, its future programs and its problems in applicants' country.

No. 103

TELECOMMUNICATION LINEMAN TECHNICAL TRAINING
(On the job training) 通信線路技術指導者養成

1. PERIOD

Dec. 5, 1989 to Mar. 14, 1990 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

10 or less

3. QUALIFICATIONS

i) Presently work for telecommunication or common carrier organization
ii) University graduates or those who have equivalent technical knowledge
iii) Have a sufficient practical experience on their own telephone outside plant systems
iv) under thirty five (35) years of age and have over three years of practical experience
v) in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for the participation in the training.

4. DESCRIPTION OF TRAINING

i) Fundamental knowledge of outside plant engineering
ii) Safety training activity of foreseeing dangerous work
iii) Construction engineering
iv) Maintenance engineering
v) Design engineering
vi) Optical fiber engineering
vii) Telephone construction and maintenance
viii) Civil engineering
ix) Elective training
x) Observation tours

5. FACILITIES AND INSTITUTIONS

i) NTT Kitakyushu District Headquarters Training Room
ii) NTT Kyushu Training Center

6. REMARKS

No. 104

TELECOMMUNICATION EXECUTIVES' SEMINAR 電気通信幹部セミナー

1. PERIOD

October 1, 1989 to October 15, 1989 (0.5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

1) Qualified in their respective fields

2) Directors general or equivalent officials responsible for management or administration of telecommunications in government or operational organizations

3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Management of telecommunications
   - Introduction to telecommunication management in Japan
   - Present situation and future telecommunication management
   - Problems of telecommunication management particularly in participating countries
   - Various related institutions and manufacturing plants

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Posts and Telecommunications

6. REMARKS

No. 105

SATELLITE COMMUNICATION ENGINEERING (REGULAR) 衛星通信技術(普通)

1. PERIOD

May 8, 1989 to August 6, 1989 (3.0 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) Qualified in their respective fields
2) University graduates or equivalent majored in telecommunications or electric/electronic engineering
3) Fundamental knowledge of microwave engineering such as microwave propagation, microwave elements and microwave communication system
4) Experience in the field of INTELSAT satellite communications service
5) Engaged in the field of satellite communication service
6) Good working knowledge of English
7) Under 40 years of age

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Outline of Microwave Communication Technology
   - INTELSAT System
   - Satellite Communication System
   - Facilities of Satellite Earth Station
   - Operation and Maintenance of Satellite Earth Station
2) Observation tours
   - Earth station system configuration
   - Earth station facilities

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

No. 106

SATELLITE COMMUNICATION ENGINEERING (ADVANCED) 衛星通信技術（上級）

1. PERIOD

August 28, 1989 to November 12, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

(1) Be university graduates who majored in telecommunications or electric/electronics engineering, or have completed the Group Training Course in the Satellite Communication Engineering (Regular) conducted by the Government of Japan, and have had experience of not less than three years in the field of INTELSAT satellite communication service since then.

(2) Have a sufficient command of spoken and written English,

(3) Be under forty-five (45) years of age,

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
- -INTELSAT System
- -Satellite Communication and Radio Wave Transmission
- -INTELSAT Communication System and Related Technology
- -Facilities of Satellite Earth Station
- -Maritime Satellite Communication
- -Maintenance Management
- -Field Practice

2) Observation tours
- -KDD Facilities
- -NTT Television Relay Center
- -Mitsubishi Electric Kamakura Plant

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

No. 107

TELECOMMUNICATION NETWORK PLANNING AND DESIGNING 通信網計画設計

1. PERIOD

October 19, 1989 to December 21, 1989 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

1) University graduates or equivalent majored in telecommunication or electrical engineering
2) Working for telecommunication administrations or common carrier organizations
3) Under 40 years of age
4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

(1) Lectures and practical training
   1) Telecommunication network design
      This study deals with design techniques required to establish a nation-wide telecommunication network.
   2) Outlines of various facilities
      Brief explanations of various facilities making up the network are given.
   3) Expansion planning techniques
      Yearly and long term expansion planning techniques, including practical exercises, are deals with.

(2) Observation tours to Kansai Area

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

All participants are requested to submit a brief report written in English on the present situation of telecommunications, its future programs and its problems in applicants' country.

No. 108

DATA COMMUNICATION ENGINEERING データ通信技術

1. PERIOD

January 15, 1990 to March 8, 1990 (2.0 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Working for data communication services, such as in digital switching, digital transmission or digital processing

2) University graduates or equivalent

3) Have a sufficient command of spoken and written English

4) Under 40 years of age

4. DESCRIPTION OF TRAINING

1) Lectures
   - Basic and Theoretical Technology for Data Communication Systems of Domestic Services.
     The basic concept of a data communication system consisting of information network, data transmission, transmission control procedures and computer technology will be explained.
   - Digital Data Switching Systems
     The switching process, and the hardware and software of the D-50 system will be explained.
     This will include an outline of the various digital data switching systems in the world.
     Maintenance philosophy will be briefly presented.

2) Practical studies
   Participants will conduct practical exercises, using the D-50 system installed at NTT's training school, to increase knowledge acquired from lectures.

3) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

No. 109

OPTICAL FIBER CABLE TRANSMISSION TECHNOLOGY

光ファイバーケーブル伝送技術

1. PERIOD

February 8, 1990 to March 24, 1990 (1.5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

1) University graduates or equivalent

2) Sufficient practical experience on their own transmission system

3) Under 40 years of age

4. DESCRIPTION OF TRAINING

1) Lectures and practical training
   - Fundamental of transmission technology
   - Optical fiber cable
   - Optical fiber transmission system
   - Latest optical fiber transmission systems
   - Field practice
   - Measuring technic

2) Observation tours
   Kansai observation tour

5. FACILITIES AND INSTITUTIONS

Japan Telecommunications Engineering and Consulting Service

6. REMARKS

No. 110

COLOR TELEVISION ENGINEERING (FUNDAMENTAL)

テレビジョン放送技術（基礎）

1. PERIOD

July 17, 1989 to October 1, 1989 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

1) Be engineers serving in a broadcasting organization with practical experience of more than 3 years and less than 5 years in TV engineering or those who have knowledge of TV engineering enough to undergo this training course,

2) Be college or university graduates or those who have the equivalent technical knowledge in electronic engineering,

3) Have a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

1) Lecture and Practice
   a) Color television fundamentals and operation of equipment and materials for broadcasting use.
   b) Programme production technique.
   c) Fundamental of digital technique.
   d) Measurement of broadcast equipment.
   e) Recent technical development

2) Field Training
   a) VTR and VTR editing
   b) Programme production
   c) Television transmitter
) option

3) Study and observation tour
   – Various facilities of NHK
   – Broadcast-equipment manufacturers etc.

5. FACILITIES AND INSTITUTIONS

1) NHK Communications Training institute

2) NHK Broadcasting Center

6. REMARKS

No. 111

COLOR TELEVISION ENGINEERING (ADVANCED) テレビジョン放送技術（上級）

1. PERIOD

January 15, 1990 to March 4, 1990 (2.0 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Be engineers serving in a broadcasting organization with at least five years of practical experience in TV engineering or those who have knowledge of TV engineering enough to undergo this training course

2) Be college graduates or those who have the equivalent technical knowledge in electronic engineering

3) Have a sufficient command of spoken and written English

4) Be healthy enough to undergo the course of training

4. DESCRIPTION OF TRAINING

1) Lecture and Practice
   a) Color TV standard system (NTSC, PAL, SECAM, etc.)
   b) TV studio equipment
   c) Color TV cameras and solid-state imaging devices
   d) Application of digital technique.
   e) Video tape recording and video tape editing
   f) Direct satellite broadcast
   g) Transmission and reception
   h) Latest trends of broadcast technique

2) Observations
   – NHK Broadcasting Center
   – NHK Technical Research Laboratories
   – Manufacturers

3) Observation tours
   a) NHK Regional Station and others
   b) Other NHK facilities

5. FACILITIES AND INSTITUTIONS

1) NHK Communications Training Institute

2) Other NHK facilities

6. REMARKS

No. 112

EDUCATIONAL TELEVISION PROGRAMME (FUNDAMENTAL)

教育テレビジョン番組（基礎）

1. PERIOD

July 17, 1989 to September 17, 1989 (2.0 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) University graduates or equivalent
2) Qualified in their respective fields (as a programme director)
3) be serving in a broadcasting corporation directly and continuously as a producer or director with practical experience of more than 2 years and less than 7 years in the field of television programme production.
4) Under 35 years of age
5) Good working knowledge of English
6) Continue working in the above mentioned field after returning to home countries

4. DESCRIPTION OF TRAINING

1) Lectures, discussions and practical training
   - General idea of educaitonal television
   - The fundamental production technique for educational programmes
   - The applied production technique for educational programmes
   - Practical training in programme production.
2) Observation tours
   - An observation of local NHK stations, schools using school program and historical sites

* Besides the above-mentioned, observation studies on programming at studios, discussions with producers and exchanges of opinions with specialists in broadcasting for education in Japan, are also scheduled in the training course.

5. FACILITIES AND INSTITUTIONS

1) NHK Communications Training Institute
2) Other NHK facilities

6. REMARKS

All participants are requested to submit TV programmes which was produced by you or your own TV station to NHK Communications Training Institute upon their arrival Tokyo.

No. 113

EDUCATIONAL TELEVISION PROGRAMME (ADVANCED) 教育テレビジョン番組（上級）

1. PERIOD

January 15, 1990 to March 4, 1990 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

1) Be serving in a broadcasting corporation directly and continuosly as a producer or director with practical experience of more than 7 years and less than 12 years in the field of educational television programme production.

2) Be under forty (40) years of age,

3) Be graduates of college or universities,or have an equivalent educational background,

4) Continue working in the above mentioned field after returning to their home countries,

5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures, discussions and practical training
   —General idea and role of Educational Television to get a general outlook of the current situation of ETV in the world.
   —Practice of Programme Production to acquire the know—how of producing programme.
   —*Observation of Actual Production Site to get acquainted with the production system of NHK.*
   —Introduction to New Technology/New Media surrounding broadcasting

2) Observation Tour to local station of NHK and primary school.

5. FACILITIES AND INSTITUTIONS

1) NHK Communications Training Institute

2) NHK Broadcasting Center

6. REMARKS

All participants are requested to submit TV programmes which was produced by you or your own TV station to NHK Communications Training Institute upon their arrival Tokyo.

No. 114

TELEVISION BROADCASTING MANAGEMENT テレビジョン放送管理

1. PERIOD

May 12, 1989 to June 24, 1989 (1.5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

1) Staff with ranks higher than division-chief engaged in administrative or planning department of a television broadcasting organization.

2) College or university graduates, between 30 and 40 years of age

3) Good working knowledge of English.

4. DESCRIPTION OF TRAINING

1) Lecture and discussion
   - Television broadcasting
   - Management system of public and private broadcasting
   - The latest engineering system of broadcasting
   - The comprehensive activities of television broadcasting system

2) Field observation and study tour

5. FACILITIES AND INSTITUTIONS

1) Hachioji International Training Centre, JICA

2) Ministry of Posts and Telecommunications

6. REMARKS

No. 115

BROADCASTING EXECUTIVES' SEMINAR 放送幹部セミナー

1. PERIOD

November 19, 1989 to December 3, 1989 (0.5 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

1) Directors general or equivalent high-ranking officials responsible for management or administration of broadcasting in government or operational organizations

2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and Discussion
   - Outline of Broadcasting in Japan
   - Management and Organization of Broadcasters in Japan
   - New Media of Broadcasting
   - Personnel Management and Training
   - Utilization of Broadcasting Programs in Education
   - Free Discussion using the Country Reports

2) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Posts and Telecommunications

6. REMARKS

All applicants are requested to submit a report written in English on the present situation of broadcasting and its problems in an applicant's country

No. 116

SOUND BROADCASTING ENGINEERING 音声放送技術

1. PERIOD

October 12, 1989 to December 17, 1989 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

(1) Be engineers who have practical experience in the field of audio broadcasting enough (more than three (3) years) to undergo this training course

(2) Be between twenty-five (25) and thirty-five (35) years of age

(3) Be college graduates or those who have the equivalent technical knowledge in audio broadcasting

(4) Continue working in the above mentioned field after returning to their home countries

(5) Have a sufficient command of spoken and written English and (this item will be checked strictly)

(6) Be in good health, both physically and mentally, to undergo the course of training. Pregnancy is regarded as disqualifying condition for the participation in the course

4. DESCRIPTION OF TRAINING

General orientation of broadcasting of Japan

Audio broadcasting system

MW transmitting

FM transmitting

Latest broadcasting technique

Observation Tours

5. FACILITIES AND INSTITUTIONS

1) NHK Communications Training Institute

2) Other NHK Facilities

6. REMARKS