

Outline of The Group Training Course in Japan

(昭和61年度 集団コース コース概要)

1986 Japanese Fiscal (April, 1986 to March, 1987)

**Japan International Cooperation Agency (JICA)
Tokyo, Japan**

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Tokyo, Japan**

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INTRODUCTION

This brochure is prepared to introduce the summary of content of the working plans of group training courses for participants from developing countries, as part of Japan's technical cooperation programmes for the fiscal year of 1986

Copies of "INFORMATION" on the details of those group training courses are scheduled to be provided later, however, prior to the forwarding of copies of the said "INFORMATION", it is earnestly hoped that this brochure be useful for your understanding the outlines of those group training courses.

Director,
Training Affairs Department,
Japan International Cooperation Agency (JICA)

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DEVELOPMENT PLAN

No. 1

ECONOMIC DEVELOPMENT (SEMINAR) (経済開発セミナー)

1. PERIOD

September 8, 1985 to October 22, 1985 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

- 1) Government planners in economic development policy
- 2) Under 35 years of age
- 3) Be those who have an academic background in economics or those having a proper experience and knowledge regarding economic policy and planning
- 4) Occupational experience of more than 1 year
- 5) Have a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Factors of Japan's economic development
 - Japan's economic development and Economic policy
 - International cooperation for development
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Economic Planning Agency

6. REMARKS

No. 2

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

1. PERIOD

October 6, 1986 to March 28, 1986 (6-months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- 1) University graduates or equivalent in economics
- 2) 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

May 29, 1986 to August 15, 1986 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates and academic background in economics, finance or engineering
- 2) Occupational experience of 3 to 4 years with a reasonable length of time in their present position
- 3) Between 30 and 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Planning and analysis of industrial development project with special emphasis on agriculture-related industries
 - Japanese economic development - its relevance to contemporary problems of development
 - Field workshop and field study programme
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre, JICA
- 2) International Development Center 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

September 23, 1986 to October 10, 1986 (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

**TREATMENT OF OFFENDERS: THE QUEST FOR AN EFFECTIVE AND EFFICIENT
IMPLEMENTATION OF COMMUNITY-BASED CORRECTIONS. (犯罪防止(矯正保護))**

1. PERIOD

April 11, 1985 to July 15, 1985 (3.5-month)

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 correctional treatment, preferably community-based corrections, 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. Pregnancy is regarded as a disqualifying condition for participation in the course

4. DESCRIPTION OF TRAINING

- 1) Comparative Study on Community-based Corrections
- 2) Group Workshops on Topics Selected by the Participants

5. FACILITIES AND INSTITUTIONS

- 1) Tokyo International Center (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 AND TREATMENT OF OFFENDERS: PROMOTION OF INNOVATION IN CRIMINAL JUSTICE ADMINISTRATION FOR THE PREVENTION OF NEW CRIMINALITY (SENIOR SEMINAR) (犯罪防止 (上級))

1. PERIOD

January 30, 1986 to March 17, 1986 (2-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-marking 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 English both spoken and written;
- 3) Be aged between thirty-five and fifty-five years 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 (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 and Others
- 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

**CRIMINAL JUSTICE ADMINISTRATION: IN PURSUIT OF GREATER
EFFECTIVENESS AND EFFICIENCY IN THE JUVENILE JUSTICE SYSTEM AND
ITS ADMINISTRATION (犯罪防止 (刑事司法))**

1. PERIOD

September 5, 1985 to December 9, 1985 (3.5-month)

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 Main Theme
- 2) Group Workshops on the Topics Selected by the Participants

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

LOCAL GOVERNMENT (地方行政)

1. PERIOD

April 7, 1986 to June 28, 1986 (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 supervisory 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
 - Role 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, 1986 to June 18, (6 weeks)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent;
- 2) Qualified in their fields;
- 3) Occupational experience of more than 5 years (at least two years of which must be in central or national civil service) in public service or semi-government service;
- 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

NATIONAL GOVERNMENT ADMINISTRATION SEMINAR (国家行政セミナー)

1. PERIOD

October 16, 1986 to November 14, 1986 (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 5 years (at least two years of experience in recent years in central or national civil service) in public service or semi-government service;
- 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

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

1. PERIOD

October 6, 1986 to November 5, 1986 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

- 1) A director or a chief police superintendent who supervises or is dealing with traffic police affairs in the central police organization
- 2) University graduates or equivalent
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions
 - Present situation of traffic police of Japan
 - Traffic safety countermeasures in Japan
 - Statistics and analyses of traffic accidents
 - Utilization of computers by the police
 - System of aid to victims of road traffic accidents and automobile insurance
 - Driver's license system
- 2) Observation tour and technical visits

5. FACILITIES AND INSTITUTIONS

National Police Agency

6. REMARKS

Conducted Every Other Year

No. 12

FIRE SERVICE ADMINISTRATION (消防行政)

1. PERIOD

May 22, 1986 to August 5, 1986 (2.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) Bachelors in law, politics or administration
- 2) Under 40 years
- 3) Good working knowledge of English

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

No. 13

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

1. PERIOD

November 9, 1986 to November 28, 1986 (0.5--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

GOVERNMENT AUDITING (AUDIT OF PUBLIC WORKS) (SEMINAR)

(政府会計検査セミナー)

1. PERIOD

June 26, 1986 to July 31, 1986 (1.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) Officials of the Supreme Audit Institution of each country
- 2) Those who possess good knowledge of public works
- 3) Head of audit team responsible for public works auditing with more than ten years of working experience or those who have similar experience
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

1) Lectures and Discussions

(1) Basic Information (10 days)

- a. Accounting and Financial System in Japan
- b. Profile of the Board of Audit of Japan
- c. Introduction to Public Works
- d. Accounting and Internal Control for Public Works
- e. Audit of Public Works
- f. Recruitment and Training of Staff
- g. Relationship between Audit Office and Audited Agencies

(2) Case Studies (1 week)

- a. Presentation by the Participants on Their Current Method of Public Works Auditing
- b. Presentation of Examples of Audit Findings by the Board of Audit of Japan
- c. Discussion and Presentation in a Workshop Style

2) Field Trip (1 week)

5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Center, JICA
- 2) Board of Audit (Research Division)

6. REMARKS

No. 15

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

1. PERIOD

August 28, 1986 to December 12, 1986 (4--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

- 1) University graduates
- 2) Presently engaged in tax administration or planning and have excellent performance record
- 3) Occupational experience of more than 5 years
- 4) Not more than forty (40) years of age in principle
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Country Report
- 2) Lectures and Discussions
 - Tax policy analysis
 - Tax administration
 - Special lectures on tax related matters
- 3) Theses and Round Table Discussions
- 4) Field Trips

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

No. 16

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

1. PERIOD

September 29, 1986 to October 18, 1986 (1-month)

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

CUSTOMS TECHNIQUE (税関行政)

1. PERIOD

September 4, 1986 to November 2, 1986 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

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

LOAN PROCEDURES (SEMINAR) (借款手続セミナー)

1. PERIOD

October 16, 1986 to November 9, 1985 (1--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Senior officers in charge of matters directly relative 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

6. REMARKS

ENVIRONMENTAL ADMINISTRATION (環境行政)

1. PERIOD

January 19, 1987 to March 12, 1987 (2-month)

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
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

International Affairs Division, Environment Agency

6. REMARKS

No. 20

ENVIRONMENTAL ENGINEERING (WATER POLLUTION CONTROL)

(環境技術 (水質保全))

1. PERIOD

September 11, 1986 to November 1, 1986 (2-month)

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 discussions
 - Water contamination and Ecosystems
 - Waste water treatment
 - Assessment and forecast of water quality
 - Water quality monitoring and observation
 - Analysis of water quality
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

International Affairs Division, Environmental Agency

Japan Society on Water Pollution Research

6. REMARKS

ENVIRONMENTAL TECHNOLOGY (AIR POLLUTION CONTROL)

(環境技術 (大気保全))

1. PERIOD

February 5, 1987 to March 18, 1987 (1.4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

- 1) Technical officials directly responsible for air pollution control administration at either central or local governmental organizations and have more than 3 years of experience
- 2) University graduates or those who possess equivalent technical qualifications in this field
- 3) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- Environmental Pollution Issues in Japan
- Ambient Air Quality Standards and Health Effect
- Principle of Air Pollution
- Emission Standards
- Air Pollution Control Technology
- Air Pollution Control Efforts in Private Sector
- Field visit (coal-firing power station, steel mill, cement plant, etc.)
- Others

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

MARINE PROTECTION (海洋保全)

1. PERIOD

August 21, 1985 to November 1, 1986 (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) A sufficient command of 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 Maritime Safety Headquarters

6. REMARKS

INDUSTRIAL POLLUTION CONTROL (産業環境対策)

1. PERIOD

January 8, 1987 to March 25, 1987 (2.5-months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- 1) University graduate 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 Outline of environmental pollution
 - ② Environmental engineering
 - ③ Air pollution prevention
 - ④ Water pollution prevention
 - ⑤ Disposal of Industrial wastes
 - ⑥ Environmental pollution control investment by private enterprises
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Kitakyushu International Training Association
- 2) Kitakyushu City Office

6. REMARKS

GENERAL STATISTICS (一般統計)

1. PERIOD

September 18, to March 27, 1987 (6.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirty (30)

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
- 2) Management and Coordination Agency

6. REMARKS

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

1. PERIOD

June 19, 1986 to September 24, 1986 (3.5-month)

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 offices 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

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

1. PERIOD

July 24, to November 20, 1986 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

- 1) University graduates with more than one (1) year's experience in programming or be person with more than three (3) years' experience in programming
- 2) Having experience in programming with COBOL, FORTRAN, PL/I or assembly languages
- 3) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- | | |
|---|---|
| 1) System development outline | 12) Operating system introduction |
| 2) Hardware introduction | 13) Exercise on TSS usage |
| 3) Data communication system introduction | 14) Exercise on OS usage |
| 4) Advanced computer technology | 15) Exercise on COBOL programming |
| 5) COBOL programming | 16) Exercise on database programming |
| 6) On-line database system introduction | 17) Exercise on data communication programming |
| 7) Database programming | 18) System development workshop (including presentation) |
| 8) Data communication programming | 19) Observation tour (computer manufacturers, computer system centres, research institutes, etc.) |
| 9) Program design methodology | |
| 10) TSS (Time Sharing System) usage | |
| 11) OS (Operating System) usage | |

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 27

INFORMATION PROCESSING PERSONNEL
(SENIOR PROGRAMMER (B))

(情報処理要員養成)
(シニア・プログラマー(Ⅱ))

1. PERIOD

November 8, 1986 to March 29, 1987 (5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates with more than one (1) year's experience in programming or be person with more than (3) years' experience in programming
- 2) Having experience in programming with COBOL, FORTRAN, PL/I or assembly languages
- 3) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- | | |
|---|--|
| 1) System development outline | 13) Exercise on TSS usage |
| 2) Hardware introduction | 14) Exercise on OS usage |
| 3) Data communication system introduction | 15) Exercise on COBOL programming |
| 4) Advanced computer technology | 16) Exercise on database programming |
| 5) COBOL programming | 17) Exercise on data communication programming |
| 6) On-line database system introduction | 18) System development workshop (including presentation) |
| 7) Database programming | 19) Observation tour |
| 8) Data communication programming | |
| 9) Program design methodology | |
| 10) TSS (Time Sharing System) usage | |
| 11) OS (Operating System) usage | |
| 12) Operating system introduction | |

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

INFORMATION PROCESSING PERSONNEL (情報処理要員養成)
(INSTRUCTOR) (インストラクター)

1. PERIOD

April 3, 1986 to September 1, 1986 (5.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates with more than one (1) year's experience in programming or be person with more than (3) years' experience in programming
- 2) Having experience in programming with COBOL, FORTRAN, PL/I or assembly languages
- 3) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- | | |
|---|---|
| 1) System development outline | 16) Exercise on OS usage |
| 2) Hardware introduction | 17) Exercise on COBOL programming |
| 3) Data communication system introduction | 18) Exercise on database programming |
| 4) Advanced computer technology | 19) Exercise on data communication programming |
| 5) Database design | 20) Exercise on System Operation |
| 6) COBOL programming | 21) System development workshop (including presentation) |
| 7) On-line database system introduction | 22) Instructor Training |
| 8) Database programming | 23) Observation tour (Computer manufacturers, computer system centres, research institutes, etc.) |
| 9) Data communication programming | |
| 10) Program design methodology | |
| 11) TSS (Time Sharing System) usage | |
| 12) OS (Operating System) usage | |
| 13) Operating system introduction | |
| 14) System operation | |
| 15) Exercise on TSS usage | |

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

No. 29

INFORMATION PROCESSING PERSONNEL (情報処理要員養成)
(MANAGEMENT) (マネージメント)

1. PERIOD

May 1, 1986 to June 8, 1986 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) Persons presently engaged in management and have less than one (1) year of occupational experience as a DP manager
- 2) University graduates or have the equivalent academic background
- 3) Under forty-five (45) years of age

4. DESCRIPTION OF TRAINING

- 1) Hardware introduction
- 2) Software engineering introduction
- 3) System development outline
- 4) Advanced computer technologies
- 5) DP system planning
- 6) DP division management
- 7) Case study
- 8) Exercise on system development
- 9) Observation tour (Computer manufacturers, computer system centres, research institutes, etc.)

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

INFORMATION PROCESSING PERSONNEL (情報処理要員養成)
(PERSONAL COMPUTER (A)) (パーソナル・コンピューター(A))

1. PERIOD

June 12, 1986 to August 18, 1986 (2.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

- 1) University graduates or have the equivalent academic background
- 2) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- 1) Personal computer introduction
- 2) BASIC introduction
- 3) BASIC advanced
- 4) Business management tools
- 5) Database introduction
- 6) Database workshop
- 7) System design basic
- 8) System design workshop
- 9) Case study
- 10) Observation tour (Computer manufacturers, computer system centres, research institutes, etc.)

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

INFORMATION PROCESSING PERSONNEL (情報処理要員養成)
(PERSONAL COMPUTER (B)) (パーソナル・コンピューター(B))

1. PERIOD

August 21, 1986 to November 1, 1986 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or have the equivalent academic background
- 2) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- 1) Personal computer introduction
- 2) BASIC introduction
- 3) BASIC advanced
- 4) Business management tools
- 5) Database introduction
- 6) Database workshop
- 7) System design basic
- 8) System design workshop
- 9) Case study
- 10) Observation tour (Computer manufacturers, computer system centres, research institutes, etc.)

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

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

1. PERIOD

April 3, 1986 to September 19, 1986

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

- 1) University graduates with more than three (3) years' experience in system development
- 2) Having more than three (3) years' experience in programming with COBOL
- 3) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- | | |
|--|---|
| 1) Operating system outline | 13) Programme design methodology |
| 2) On-line database | 14) Test planning |
| 3) Programming language outline | 15) Project management |
| 4) Computer architecture | 16) DP division management |
| 5) Advanced computer technology | 17) VSAM COBOL programming |
| 6) Case study | 18) Data communication programming |
| 7) System analysis | 19) TSS (TIME Sharing System) usage |
| 8) System estimation | 20) OS (Operating System) usage |
| 9) System evaluation | 21) System operation |
| 10) Data communications network design | 22) System generation |
| 11) Reliable system design | 23) System development workshop
(including presentation) |
| 12) Software production technology | 24) Observation tour (Computer manufacture-
rs, Computer systems centres, research
institutes, etc) |

5. FACILITIES AND INSTITUTIONS

6. REMARKS

Okinawa International Centre (OIC), JICA

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

1. PERIOD

October 2, 1986 to March 29, 1987

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates with more than three (3) years' experience in system development
- 2) Having experience more than three (3) years' experience in programming with COBOL
- 3) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- | | |
|--|--|
| 1) Operating system outline | 13) Programme design methodology |
| 2) On-line database | 14) Test planning |
| 3) Programming language outline | 15) Project management |
| 4) Computer architecture | 16) DP division management |
| 5) Advanced computer technology | 17) VSAM COBOL programming |
| 6) Case study | 18) Data communication programming |
| 7) System analysis | 19) TSS (TIME Sharing System) usage |
| 8) System estimation | 20) OS (Operating System) usage |
| 9) System evaluation | 21) System operation |
| 10) Data communications network design | 22) System generation |
| 11) Reliable system design | 23) System development workshop
(including presentation) |
| 12) Software production technology | 24) Observation tour (Computer manufacture-
rs, research institutes, etc) |

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

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

1. PERIOD

April 10, 1986 to July 17, 1987

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seventeen (17)

3. QUALIFICATIONS

- 1) University graduates with more than one (1) years' experience in programming or person with more than three (3) years' experience in programming
- 2) Having experience in programming with COBOL and in system design by using conventional files
- 3) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- | | |
|---|---|
| 1) On-line database system introduction | 10) Database Programming |
| 2) System development outline | 11) System development working (including presentation) |
| 3) Advanced computer technology | 12) Observation Tour (Computer manufacturers, Computer system centres, Research institutes, etc.) |
| 4) Database design | |
| 5) Database creation | |
| 6) Project management | |
| 7) COBOL workshop | |
| 8) TSS (Time Sharing System) usage | |
| 9) OS (Operating System) usage | |

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

6. REMARKS

INFORMATION PROCESSING PERSONNEL (情報処理要員養成)
(ON-LINE SYSTEM DESIGN) (オンライン・システム設計)

1. PERIOD

December 4, 1986 to March 30, 1987 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seventeen (17)

3. QUALIFICATIONS

- 1) University graduates With more than one (1) year's experience in programming or person with more than three (3) years' experience in programming
- 2) Having experience in programming with COBOL in designing of batch system
- 3) Under thirty-five (35) years of age

4. DESCRIPTION OF TRAINING

- | | |
|---|---|
| 1) COBOL workshop | 11) Communication network design |
| 2) TSS (Time Sharing System) usage | 12) System development workshop |
| 3) OS (Operating System) usage | 13) Project management |
| 4) Data Communication system introduction | 14) On-line system development exercise |
| 5) On-line database system introduction | |
| 6) On-line programming | |
| 7) On-line system design | |
| 8) On-line system estimation | |
| 9) Performance measurement | |
| 10) System simulation | |

5. FACILITIES AND INSTITUTIONS

Okinawa International Centre, (OIC) JICA

6. REMARKS

PUBLIC UTILITY WORKS

WATER WORKS ENGINEERING (上水道施設)

1. PERIOD

May 15, 1986 to August 15, 1986 (3.5--month)

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) Between 25 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - General problems and administration
 - Water supply planning
 - Design for water works facilities
 - Hydraulics and water hammer
 - Design and construction of pipe
 - Water works management
 - Effective utilization of water and conservation use of water
 - Industrial water supply
 - Purification plant control
 - Leakage prevention
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SEWAGE WORKS ENGINEERING (下水道技術)

1. PERIOD

September 4, 1986 to December 8, 1986 (3.5-month)

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. 38

SOLID WASTE MANAGEMENT AND NIGHT SOIL TREATMENT (廃棄物処理)

1. PERIOD

May 26, 1986 to August 1, 1986 (2.5-month)

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) Planning division, Water Supply and Environment Department, Environmental Health Bureau
- 2) Department of Sanitary Engineering, The Institute of Public Health
- 3) Japan Environmental Sanitation Centre

6. REMARKS

TRANSPORTATION AND TRAFFIC

AIDS TO MARINE NAVIGATION (航路標識)

1. PERIOD

August 21, 1986 to October 25, 1986 (2.5—month)

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 Factory
 - Solar Battery Factory
 - Chain Factory

5. FACILITIES AND INSTITUTIONS

Maritime Safety Agency

6. REMARKS

AUTOMOBILE ENGINEERING ADMINISTRATION (自動車技術行政)

1. PERIOD

January 17, 1986 to March 3, 1986 (1.5-month)

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

4. DESCRIPTION OF TRAINING

- 1) Lectures and introduces Japan's public administration:
motor vehicles' inspection, maintenance, repair, and registration
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Transport
- 2) Other relevant organization

6. REMARKS

RAILWAY ROLLING STOCK ENGINEERING (鉄道車両)

1. PERIOD

July 14, 1986 to October 8, 1986 (3-month)

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 National Railways (JNR)
- 2) Japan Rolling Stock Exporter's Association
- 3) Ministry of Transport
- 4) Japan Association of Rolling Stock Industries

6. REMARKS

RAILWAY SIGNAL ENGINEERING (鉄道信号)

1. PERIOD

January 12, to April 26, 1987 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

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 National Railways (JNR)
- 3) Japan Association of Signal Industries (JASI)

6. REMARKS

**MAINTENANCE AND IMPROVEMENT
ENGINEERING OF PERMANENT WAYS (鉄道線路保守改良)**

1. PERIOD

May 12, 1986 to August 9, 1986 (3.5--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 5 years
- 4) Under 35 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) Japanese National Railways (JNR)
- 3) Japan Railway Construction Public Corporation
- 4) *Osaka International Training Centre, JICA*

6. REMARKS

RAILWAY ELECTRIFICATION (鉄道電化)

1. PERIOD

October 6, 1986 to December 6, 1986 (2.5-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 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 National Railways (JNR)
- 3) Railway Electrification Association

6. REMARKS

PORTS AND HARBOURS (SEMINAR) (港湾セミナー)

1. PERIOD

October 2, 1986 to December 1, 1986 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

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
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Bureau of Ports and Harbours, Ministry of Transport

6. REMARKS

PORT AND HARBOUR ENGINEERING (港湾工学)

1. PERIOD

April 24, 1986 to September 2, 1986 (4.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seventeen (17)

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 ports 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

SHIPPING BUSINESS (海運経営実務)

1. PERIOD

September 8, 1986 to November 6, 1986 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 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) Lectures and practical training
 - International and Japanese shipping situations
 - Shipping administration in Japan
 - Cargo transport business
 - Development of ports and harbours in Japan
 - Other related lectures
 - In-service training at shipping company
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

ADMINISTRATION FOR SEAMEN'S EDUCATION (船員教育行政)

1. PERIOD

October 2, 1986 to November 12, 1986 (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) Seafarers Bureau, Ministry of Transport
- 1) Maritime International Cooperation Centre

6. REMARKS

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

1. PERIOD

January 9, 1986 to March 13, 1986 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

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

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

1. PERIOD

April 3, 1986 to March 30, 1987 (12-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- 1) High school graduates who are engaged in maritime affairs, with the experience of more than three (3) years of on-board Navigation service, or those who have the equivalent knowledge and experience
- 2) Male, between twenty-two (22) and thirty-five (35) years of age
- 3) Good working knowledge of English
- 4) Good health, both physically and mentally

4. DESCRIPTION OF TRAINING

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

5. FACILITIES AND INSTITUTIONS

Okinawa Marine Technical College (Japan Seamen Education Service)

6. REMARKS

Programme for ASEAN countries

MARINE TECHNIQUE (ENGINEER) (航海技術(機関士))

1. PERIOD

April 3, 1986 to March 30, 1987 (12-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- 1) High school graduates who are engaged in maritime affairs, with the experience of more than three (3) years of on-board Engineering service, or those who have the equivalent knowledge and experience
- 2) Male, between twenty-two (22) and thirty-five (35) years of age
- 3) Good working knowledge of English
- 4) Good health, both physically and mentally

4. DESCRIPTION OF TRAINING

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

5. FACILITIES AND INSTITUTIONS

Okinawa Marine Technical College (Japan Seamen Education Service)

6. REMARKS

Programme for ASEAN countries

AERODROME (SEMINAR) (空港セミナー)

1. PERIOD

August 22, 1985 to October 13, 1985 (2-month)

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
 - Economic cooperation and technical assistance of Japan by CAB
 - Airport planning
 - Airport administration
 - Airport development
 - Airport design and construction
 - Present status of air transportation in his country
 - Any other subjects related to civil aviation of his country
- 2) Discussion on the subjects of country reports
- 3) Observation tours

5. FACILITIES AND INSTITUTIONS

Civil Aviation Bureau, Ministry of Transport

6. REMARKS

AIRPORT MANAGEMENT AND AVIATION SECURITY (空港管理・保安セミナー)

1. PERIOD

January 26, 1987 to March 7, 1987

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

- 1) University graduate, or equivalent with occupational experience of more than 5 years
- 2) Presently engaged in airport management and aviation security in Ministry of Transport and Airport Authority.
- 3) Under 45 years of age
- 4) Good working knowlege 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) Ministry of Transport
- 2) Japan Transport Consultants Association

6. REMARKS

URBAN TRANSPORT (SEMINAR) (都市交通セミナー)

1. PERIOD

May 19, 1986 to July 11, 1986 (2--month)

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 preferably 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

Ministry of Transport

6. REMARKS

COMPREHENSIVE URBAN TRANSPORTATION PLANNING

(総合都市交通施設計画)

1. PERIOD

October 10, 1985 to December 7, 1985 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduate 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

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

SEISMOLOGY AND EARTHQUAKE ENGINEERING (地震工学)

1. PERIOD

September 8, 1986 to August 17, 1987 (12-month)

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 (IISSE), Building Research Institute, Ministry of Construction
- 2) Tsukuba International Centre, JICA

6. REMARKS

METEOROLOGY (気 象 学)

1. PERIOD

September 1, 1986 to December 22, 1986 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Under fifty (50) years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Disturbances in middle and low latitudes
 - Typhoon forecasting practice, long-range forecasting of tropical storm, data exchange
- 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

INFRASTRUCTURE

BRIDGE ENGINEERING (橋梁工学)

1. PERIOD

August 15, 1985 to November 1, 1985 (3-month)

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

HIGHWAY CONSTRUCTION (SEMINAR) (ハイウェイセミナー)

1. PERIOD

September 25, 1986 to November 16, 1986 (2--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Graduated from any educational institute (technical) 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
 - 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

6. REMARKS

No. 59

CONSTRUCTION ENGINEERING (CIVIL WORKS) (建設施工)

1. PERIOD

September 1, 1986 to December 20, 1986 (4.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University or college graduates who are specialized in civil engineering, or equivalent
- 2) Occupational experience of more than 5 years in planning, design, execution and project control of construction
- 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. 60

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

1. PERIOD

September 29, 1986 to December 15, 1986 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates in science or technology with occupational of more than seven years in the field of disaster prevention administration
- 2) Under 40 years of age
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions
 - Seismology and earthquake damage mitigation
 - Earthquake engineering
 - Prevention against tsunami and fire induced by an earthquake
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) National Research Center for Disaster Prevention
- 2) Tsukuba International Centre, JICA

6. REMARKS

SOIL ENGINEERING AND FOUNDATION (土質及び基礎工学)

1. PERIOD

October 20, 1986 to December 17, 1986 (2.5—month)

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) General Orientation on Japan
- 2) 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
- 3) Discussions with the guidance of Japanese lecturers
 - Soil improvement planning, foundation design, project feasibility, etc.
- 4) Practice
 - Soil survey method
 - Soil test method
 - Foundation design
- 5) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

REGIONAL DEVELOPMENT PLANNING (SEMINAR) (国土開発セミナー)

1. PERIOD

October 20, 1986 to December 3, 1986 (2-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

6. REMARKS

RIVER and DAM ENGINEERING (河川及びダム工学)

1. PERIOD

July 18, 1986 to November 21, 1986 (4.5-month)

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 river administration or water resources development
- 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 (Erosion 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.

CITY PLANNING (都市計画)

1. PERIOD

August 7, 1986 to October 18, 1986 (2.5--month)

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

6. REMARKS

URBAN DEVELOPMENT (都市整備)

1. PERIOD

February 9, 1987 to March 27, 1987 (1.6-month)

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) General Orientation 5 days
- 2) Lectures 15 days
 - (a) Outline of urban development and redevelopment measures
 - (b) Land readjustment (L/R) for urban development and redevelopment
 - (c) Urban Renewal (U/R)
 - (d) New town development
- 3) Presentation and Discussion of Country Report 3 days
- 4) Free Discussion 1 day
Evaluation of various development and redevelopment measures and discussion on the applicability of each measures.
- 5) Observation and Study Trip 10 days

5. FACILITIES AND INSTITUTIONS

Ministry of Construction

6. REMARKS

HOUSING (住宅建設)

1. PERIOD

October 23, 1986 to December 15, 1986 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

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 and land policy
 - Development of residential area
 - *Industrialization 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

BUILDING ENGINEERING (建築技術)

1. PERIOD

May 29, 1986 to July 28, 1986 (2--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalents with occupational experience of more than five years
- 2) Be officers 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
 - Foreign aids
 - 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. 68

SURVEYING AND MAPPING (GEODETIC SURVEYING) (測量技術)

1. PERIOD

May 12, 1986 to November 16, 1986 (3.5 month)

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 occupational experience of more than 7 years in the field of geodetic surveying
- 2) Good working knowledge of English
- 3) Under thirty-five (35) years of 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 geodesy
- 3) Theory of geodesy
- 4) Geodetic surveying
- 5) Individual training

5. FACILITIES AND INSTITUTIONS

- 1) Geographical Survey Institute (GSI), Ministry of Construction
- 2) Tsukuba International Centre, JICA

6. REMARKS

HYDROGRAPHIC SURVEY (水路測量)

1. PERIOD

May 1, 1986 to November 6, 1986 (6-month)

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) General aspect of hydrographic survey | 13) Geomagnetism |
| 2) Geodesy | 14) Gravity |
| 3) Map projection | 15) Outline of computer programming |
| 4) Control survey | 16) General aspect of photogrammetric survey |
| 5) Coastlining | 17) Automatic data logging and processing system |
| 6) True north survey | 18) Field training of harbour and coastal surveys, including tidal observation |
| 7) Electronic survey | 19) Field training of ocean survey |
| 8) Sounding | 20) Field training of geomagnetic observation |
| 9) Harbour survey planning | 21) Data processing of harbour and coastal surveys |
| 10) Submarine topography and geology | 22) Data processing of ocean survey |
| 11) General aspect of ocean survey | 23) Observation and study tour |
| 12) Tide | |

5. FACILITIES AND INSTITUTIONS

Hydrographic Department, Maritime Safety Agency

6. REMARKS

PHYSICAL OCEANOGRAPHIC SURVEY (海洋物理調査)

1. PERIOD

October 30, 1986 to March 14, 1987 (5--month)

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) Lectures and practical training
 - 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

POSTAL SERVICE, TELECOMMUNICATION AND BROADCASTING

RADIO FREQUENCY MONITORING (電波監視)

1. PERIOD

August 11, 1986 to October 4, 1986 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

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

- | | |
|--|---|
| <ol style="list-style-type: none">1) Lecture<ul style="list-style-type: none">--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--Maintenance of Monitoring Equipment--Aeronautical Radio Station--Land Radio Communication Station (I), (II)--Maritime Radio Station--System for Telecommunications Administration Real-Time Service (STARS) | <ol style="list-style-type: none">2) Practice<ul style="list-style-type: none">--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 Bureau3) Observation tours |
|--|---|

5. FACILITIES AND INSTITUTIONS

Ministry of Posts and Telecommunications

6. REMARKS

POSTAL EXECUTIVES' SEMINAR (郵政幹部セミナー)

1. PERIOD

February 22, 1987 to March 8, 1987 (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

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

1. PERIOD

August 25, 1986 to November 10, 1986 (3-month)

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

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

1. PERIOD

April 24, 1986 to July 7, 1986 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Presently engaged in traffic and commercial 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
 - Introduction (KDD's Telecommunication Systems, Microcomputer, Programming Exercise by BASIC)
 - Services, Operation and Systems (Telegraph, Telex, Telephone)
 - Other Services and Systems (Leased Channel, AUTOMEX, Data Communication, Submarine Cable System, Satellite System)
 - Traffic Demand Forecast
 - Circuit Planning
 - Tariff System
 - Accounting Procedures (Billing and Collection, International Accounting, Business Computerization)
- 2) Field Practice

Field Practice will be conducted at relevant KDD field offices.

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

INTERNATIONAL TELEPHONE COMMUNICATION ENGINEERING (国際電話通信技術)

1. PERIOD

January 12, 1987 to March 30, 1987 (3-month)

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: General, Semi-automatic operation and ISD Service
 - Considerations in telephone switching system planning
 - (1) Planning of international telephone switching system
 - (2) Traffic management
 - (3) Telephone network;
Network structure, Numbering plan, Routing plan and Signalling systems
 - (4) General requirements;
Switching machine, switchboard and Accessory equipment
 - Fundamental of electronic telephone switching system
 - (1) Basic computer technology
 - (2) Programming technology
 - (3) Basic concepts of electronic switching system
 - Stored-programme-controlled switching system
General, Features, Trunking scheme, System performance, Hardware system, Software system and Operation maintenance
 - Digital switching system
- 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

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

1. PERIOD

January 12, 1987 to March 23, 1987 (2.5-month)

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 (Present and Trend of International Data Communication, Structure of International Data Network, etc.)
 - Data Transmission Engineering
 - Data Switching Systems
 - Data Communications Protocol
 - Data Terminal Equipments
 - Data Communications Services in Japan
 - Data Communications Services in Foreign Countries
 - VENUS
 - Envision of Future 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

DEGITAL SWITCHING SYSTEMS ENGINEERING (REGULAR) (デジタル交換技術基礎)

1. PERIOD

April 3, 1986 to July 13, 1986 (3.5-month)

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 switching system
e.g. Routing, numbering, signaling, charging plan and outline of traffic theory
 - Electronic switching system (ESS)
 - Practical exercise using D70
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

DIGITAL SWITCHING SYSTEMS ENGINEERING (ADVANCED)(デジタル交換技術 [上級])

1. PERIOD

August 1, 1986 to November 9, 1986 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

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

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Basic and theoretical technology for switching system
The basic concept of a telephone 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 telephone switching system composing a part of a telephone network.
 - Electronic switching systems (ESS)
 - (1) Stored programme characteristics, switching process, hardware and software configuration of the D70 ESS (Digital) will be explained.
 - (2) A series of procedures from traffic forecasting to plant-design of the D70 system via equipment estimation 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 School, 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. 79

DIGITAL LINE TRANSMISSION SYSTEMS ENGINEERING (デジタル有線伝送技術)

1. PERIOD

May 5, 1986 to August 10, 1986 (3.5—month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalent.
- 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 studies based on PCM-24B system and CP-12M coaxial cable 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.

MICROWAVE COMMUNICATION ENGINEERING (マイクロ波通信技術)

1. PERIOD

July 10, 1986 to October 19, 1986 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Qualified in their respective fields
- 2) University or college graduates or equivalent who majored in telecommunication or electrical engineering
- 3) Working for telecommunication administrations or common carrier organizations and have sufficient practical experience on their own radio communications
- 4) Under 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Basic microwave communication engineering;
FM Transmission theory, digital transmission theory, and microwave propagation
 - Microwave communication systems
 - Microwave communication equipment;
Repeater, power plant, antenna and components & devices
 - Practical experiments and system design
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

RADIO COMMUNICATION ENGINEERING (無線通信技術)

1. PERIOD

August 21, 1986 to November 30, 1986, (3.5--month)

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
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Basic radio communication engineering; FM transmission theory, digital transmission theory, *microwave propagation*
 - Radio communication systems; line-of-sight FM and digital systems, trans-horizon systems, satellite systems, mobile radio-systems and rural telecommunication system
 - Radio communication equipment; repeater, power plant antenna and components & devices
 - Practical experiments and system designing work
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

TELECOMMUNICATION OUTSIDE PLANT ENGINEERING (通信線路技術)

1. PERIOD

June 12, 1986 to September 21, 1986 (3.5--month)

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 English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Fundamental Knowledge of Outside Plant Engineering
 - Outside Plant Engineering
 - Design Engineering
 - Maintenance Engineering
 - Construction Engineering
 - Method of Measurement
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

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

1. PERIOD

October 12, 1986 to October 26, 1986 (0.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

- 1) *Qualified in their respective fields*
- 2) Directors general or high-ranking 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. 84

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

1. PERIOD

April 24, 1986 to July 28, 1986 (3.5—month)

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 satellite communications
 - Review of microwave engineering
 - Transmission system
 - Communication satellite (IS-IV A and IS-V)
 - Earth station facilities
 - System Design
 - Operation and Maintenance
- 2) Observation tours
 - Earth station system configuration
 - Earth station facilities

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

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

1. PERIOD

August 25, 1986 to November 3, 1986 (2.5-month)

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
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

TELECOMMUNICATION NETWORK PLANNING AND DESIGNING (通信網計画設計)

1. PERIOD

October 13, 1986 to January 25, 1987 (4--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalent majored in telecommunication or electrical engineering
- 2) Working in telecommunications 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) Fundamental telecommunication network design
In this study, the following techniques required in the design of telecommunication systems are dealt with. Such capabilities are indispensable not only when the telecommunication network is designed, but also when manual exchange systems are shifted into nation-wide toll dialing systems. They include (i) routing, (ii) numbering, (iii) rating, (iv) signaling, and (v) transmission standards.
 - (2) Outline of various systems
Brief explanations are given on switching system, outside plant facilities, radio and line transmission systems, including applications.
 - (3) Telecommunication network planning
Forecasting methodology and procedures for telecommunication network planning are covered. Study items are (i) demand forecasting, (ii) traffic forecasting, (iii) toll trunk line expansion programme, (iv) toll switching system expansion programme, (v) transmission system expansion programme and (vi) economic study.
Case studies are also included on in planning procedure.
- 2) Observation tours to Kansai Area

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Corporation (NTT)

6. REMARKS

DATA COMMUNICATION ENGINEERING (データ通信技術)

1. PERIOD

October 30, 1986 to February 8, 1987 (3.5-month)

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 35 years of age

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Basic and Theoretical Technology for Data Communication Systems
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

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

1. PERIOD

July 21, 1986 to October 6, 1986 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) Be engineers serving in a broadcasting organization with a few years of practical experience 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

- | | |
|---|---|
| <ol style="list-style-type: none">1) Lecture<ol style="list-style-type: none">a. Color television and the television standard system (NTSC, PAL, and SECAM)b. Television Measurementc. TV studio facility and TV camera equipment (Studio camera, hand-held camera, and integrated VTR-camera)d. VTR and Telecine equipment (1-inch C-format, 3/4-inch U-matic, 1/2-inch B-cam, etc.)e. Digital engineering and micro-computerf. Antenna and propagation, and TV transmitterg. Outside broadcastingh. Program production techniquei. Satellite broadcasting | <ol style="list-style-type: none">2) Field Training<ol style="list-style-type: none">a. VTR and Telecineb. Program productionc. Television transmitter3) Study and observation tour<ol style="list-style-type: none">a. NHK Broadcasting Center and NHK Shiba Transmitting Stationb. NHK Science and Technical Research Laboratoriesc. NHK local stations and othersd. Manufacturers' factories |
|---|---|

5. FACILITIES AND INSTITUTIONS

- 1) NHK Communications Training institute
- 2) NHK Broadcasting Center

6. REMARKS

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

1. PERIOD

January 19, 1987 to March 9, 1987 (2.0--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Be engineers serving in a broadcasting organization with a few 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) Lectures and practical training
 - Television Broadcast Systems
 - Color Television Standards
 - Color Television Cameras
 - Video Tape Recorders
 - Program Control Room Facilities
 - Master Control Room Equipment
 - Digital Engineering for Color Television
 - Maintenance and Planning and other Color Television Engineerings
 - Application of Microcomputer System to Color Television Engineering
- 2) Observations
 - NHK Broadcasting Center
 - NHK Technical Research Laboratories
 - Manufacturers
- 3) Observation tours
 - NHK Local Station
 - Kansai District

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Posts and Telecommunications
- 2) NHK Communications Training Institute
- 3) Other NHK facilities

6. REMARKS

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

1. PERIOD

August 4, 1986 to October 6, (2.5-month)

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) Occupational experience of 5 to 10 years
- 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 educational television
 - The fundamental production technique for educational programmes
 - The applied production technique for educational programmes
 - Practical training at NHK programme production site.

- 2) Observation tours
 - An observation trip to local station of NHK

* 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 a report (written in English within 2,000 words) and TV programmes which was produced by your own TV station to NHK Communications Training Institute upon their arrival Tokyo.

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

1. PERIOD

January 19, 1987 to March 9, 1987 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) Be serving in a broadcasting corporation directly and continuously 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 a report (written in English within 2,000 words) and TV programmes which was produced by your own TV station to NHK Communications Training Institute upon their arrival in Tokyo.

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

1. PERIOD

May 8, 1986 to June 20, 1986 (1.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) College or university graduates or equivalent
- 2) Staffs higher than division-chiefs engaged in administrative or planning departments of television broadcasting organizations
- 3) Between 30 and 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions
 - Outline of Broadcasting Administration
 - Present Broadcasting Situation
 - Management of NHK
 - Subscription Fee System
 - Public Opinion Research
 - News Programme
 - Educational Television Programme
 - Personnel Training System
 - Broadcasting Engineering
 - Present Situation of Commercial Broadcasting
 - Management of Commercial Broadcasting Stations
 - Commercial Programme
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Center, JICA
- 2) Ministry of Posts and Telecommunications

6. REMARKS

The study programme is designed to cover overall subjects concerning television broadcasting management such as its system, engineering, finance, programme planning, etc. in view of the fact that such a wide range of knowledge is indispensable to managing staff in running television broadcasting.

Therefore, the participants are expected to follow up the schedule throughout the course in order to learn solutions to the problems of television broadcasting management, regardless of one's interests or specialities.

However, it is desirable that those who are interested particularly in studying more specialized field of production methods of television programmes or television engineering should apply for "Education Television Programme Course" or "Television Engineering Course" which are also organized by the Government of Japan.

All participants are requested to submit a report written in English within 1,000 words on the brief summary of present conditions and problems on TV broadcasting in their respective countries including the chart of the participant's organization to the Ministry of Posts and Telecommunications upon arrival in Japan (preferably type-written).

BROADCASTING EXECUTIVES' SEMINAR (放送幹部セミナー)

1. PERIOD

March 15, 1987 to March 29, 1987 (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
 - Free Discussion using the Country Reports
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Radio Regulatory Bureau, Ministry of Posts and Telecommunications

6. REMARKS

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

RADIO BROADCASTING ENGINEERING (RADIO TRANSMITTING) (ラジオ放送技術)

1. PERIOD

July 21, 1986 to September 15, 1986 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) College graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Good working knowledge of English
- 5) Between 23 and 45 years of age

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Transmitting system in general
 - Basic theory
 - Outline of MW transmitter
 - Transmitter circuit
 - Outline of MW antenna
 - MW antenna
 - Field practice at MW transmitting station
 - FM broadcasting transmission
 - FM transmitter
 - FM antenna and VHF propagation
 - Full solid-state transmitter
 - Solid-state TX circuits
 - MW propagation and field strength measurement
 - Shortwave transmitter and antenna
 - Practical training and observation
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) NHK Communications Training Institute
- 2) Other NHK facilities

6. REMARKS

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

AGRICULTURE

AGRICULTURAL CO-OPERATION (農業協同組合)

1. PERIOD

May 8, 1986 to July 6, 1986 (1-months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

- 1) University graduates or equivalents
- 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
 - General aspects of agricultural co-operatives in Japan
 - Practical operation of primary society
 - Studies in detail of co-operative business
 - Co-operative management and organizational problems
 - Studies on various kinds of co-operative activities
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute for the Development of Agricultural Cooperation in Asia

6. REMARKS

AGRICULTURAL EXTENSION SERVICE (農業普及)

1. PERIOD

April 3, 1986 to July 27, 1986 (4--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalents
- 2) Engaged in extension work for farmers or those engaged in a training of extension advisers, subject matter specialist (sms) or administration officer related to the agricultural extension with more than three years of experience
- 3) Under 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Agriculture and its extension services in Japan
 - Basic theory of extension method
 - Extension activities in the countries of participants
- 2) Observation tours
 - Extension offices and farm houses
 - Experimental research facilities
- 3) Field study
 - Administration and management of extension service and education by the local government
 - Visit to extension stations, experimental research institutions and private companies, etc.

5. FACILITIES AND INSTITUTIONS

- 1) Extension and Education Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries
- 2) Japan Agricultural Development and Extension Association

6. REMARKS

RICE CULTIVATION (GENERAL) (稲作(一般))

1. PERIOD

March 5, 1987 to October 9, 1987 (7.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Presently engaged (or will be engaged,) in Agricultural training or extension service in the field of rice cultivation
- 3) Good working knowledge of English
- 4) Within 25 to 35 years of age

4. DESCRIPTION OF TRAINING

- 1) Lecture
 - Agriculture in general
 - Rice agronomy
 - Soil and fertilizer
 - Varietal improvement
 - Rice physiology
 - Plant protection
 - Economy of rice farming and extension
- 2) Experiment and field practice
- 3) Study tour

5. FACILITIES AND INSTITUTIONS

Tsukuba International Agricultural Training Centre, JICA

6. REMARKS

RICE CULTIVATION (ADVANCED) (履作(専修))

1. PERIOD

February 5, 1987 to November 8, 1987 (10-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduates with an occupational experience of more than five years in the field.
- 2) Presently engaged in the research work or education in the field of rice
- 3) Between twenty seven (27) and forty (40) years of age
- 4) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Lecture
 - Agriculture in general
 - Rice agronomy
 - Soil and fertilizer
 - Varietal improvement
 - Rice physiology
 - Plant protection
 - Experimentation and data processing
- 2) -Experiment and field practice
- 3) -Study tour

5. FACILITIES AND INSTITUTIONS

Tsukuba International Agricultural Training Center, JICA

6. REMARKS

HOME-LIFE IMPROVEMENT EXTENSION (生活改善普及)

1. PERIOD

May 26, 1986 to August 10, 1986 (3--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) Female
- 2) Qualified in their respective fields
- 3) Under 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Outline of agriculture and home-life in Japan
 - Agricultural improvement extension activities
 - Home-life improvement extension activities
 - Technique for home-life improvement
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Agriculture, Forestry and Fisheries
- 2) The Rural Home and Family Living Improvement Study Association

6. REMARKS

AGRICULTURAL STATISTICS (農林統計)

1. PERIOD

July 17, 1986 to October 13, 1986 (3--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Governmental officials engaged in planning and administration in agricultural statistics
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Agricultural situation and statistics in Japan
 - Method of statistical survey
 - Survey for the basic structure on agriculture
 - Survey on agricultural economics
 - Outline of Forestry, Fishery survey and Marketing information service
 - Utilization of computer

5. FACILITIES AND INSTITUTIONS

- 1) Statistics and Information Department, Economic Bureau, Ministry of Agriculture, Forestry and fisheries
- 2) National Federation of Statistics Association on Agriculture & Forestry

6. REMARKS

VEGETABLE CROPS PRODUCTION (野菜生産)

1. PERIOD

February 5, 1987 to November 8, 1987 (10-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates with the occupational experience of more than three years in their specialities
- 2) Presently engaged in the extension service or research work, or be training officers in charge of vegetable horticulture or agronomists who are to work in the said field having a good knowledge of vegetable cultivation
- 3) Between twenty seven (27) and thirty seven (37) years of age
- 4) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

The course deals with the following subjects through lectures, experiments, practices and observations in study tours, on major vegetable crops in Japan

- 1) Applicable method of intensive cultivation of major vegetable crops
- 2) Fundamental knowledge on plant physiology, plant protection and soil in relation to high yielding in vegetable crops
- 3) Principal matters pertaining to rationalization of vegetable marketing and circulation

The following major subjects will be covered in the course.

1. Lecture
 - (1) Agriculture in general
 - (2) Cultivation in general
 - (3) Cultivation in particular
 - (4) Soil and fertilizer
 - (5) Plant protection
 - (6) Post harvest technology
2. Experiment and practice
3. Study tour

5. FACILITIES AND INSTITUTIONS

Tsukuba International Agricultural Training Centre, JICA

6. REMARKS

VEGETABLE SEED PRODUCTION (野菜採種)

1. PERIOD

February 5, 1987 to November 8, 1987 (10--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates with the occupational experience of more than three years in their specialities
- 2) Presently engaged in the vegetable seed production or varietal improvement who are to work in the said field
- 3) Between twenty seven (27) and thirty seven (37) years of age
- 4) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

The course deals with the following subjects through lectures, experiments, practices and observations in study tours, on major vegetable crops in Japan

- 1) Seed production method of major vegetable crops
- 2) Seed technology on sorting, drying, storage, and germination of vegetable seeds
- 3) Applicable method of varietal improvement of major vegetable crops

The following major subjects will be covered in the course.

1. Lecture
 - (1) Agriculture in general
 - (2) Cultivation in general
 - (3) Seed production method
 - (4) Seed technology
 - (5) Varietal improvement
2. Experiment and practice
3. Study tour

5. FACILITIES AND INSTITUTIONS

Tsukuba International Agricultural Training Center, JICA

6. REMARKS

CONTROL OF RICE DISEASES AND INSECT PESTS (稲病虫害防除)

1. PERIOD

June 2, 1986 to December 9, 1986 (7-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

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 and practical training
 - General view on rice cultivation in Japan
 - General principles of rice diseases and insect pests control
 - Rice diseases
 - Rice insect pests
 - Pesticides and Application methods
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Hyogo Prefectural Agricultural Research Centre
- 2) Department of Plant Protection, Faculty of Agriculture, Kobe University

6. REMARKS

PESTICIDE UTILIZATION FOR PLANT PROTECTION (農薬利用)

1. PERIOD

January 12, 1987 to June 4, 1987 (5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Under 35 years of age
- 5) Good working knowledge of English
- 6) Request to attain skill to operate Gas Chromatograph during their stay in Japan

4. DESCRIPTION OF TRAINING

- 1) Orientation on Specific Subject
- 2) Training on Specific Subject Matters
 - Lecture
 - Experiment
 - Field Practice
 - Observation Tours and Visits
 - Evaluation

5. FACILITIES AND INSTITUTIONS

- 1) Hyogo International Center, JICA
- 2) Agricultural Experiment Station, Hyogo Prefectural Agricultural Research Center
- 3) Department of Plant Protection, Faculty of Agriculture, Kobe University
- 4) National Institute of Hygienic Sciences, Osaka Branch

6. REMARKS

PLANT GENETIC RESOURCES (植物遺伝資源)

1. PERIOD

April 28, 1986 to July 6, 1986 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or the equivalent
- 2) *Presently engaged in conservation or management of plant genetic resources*
- 3) Under 45 years of age
- 4) Good working Knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Introduction
- 2) Exploration and collection of plant genetic resources
- 3) Germplasm preservation
- 4) Elimination of diseases and pests from genetic stocks
- 5) Management of information
- 6) Individual training
- 7) Observations

5. FACILITIES AND INSTITUTIONS

- 1) National Institute of Agrobiological Resources (NIAR), Ministry of Agriculture, Forestry and Fisheries
- 2) Tsukuba International Centre, JICA

6. REMARKS

1. PERIOD

June 26, 1986 to February 28, 1987 (8--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Presently engaged in research work or extension services in the field of sugar cane cultivation
- 3) Under thirty-five (35) years of age
- 4) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- Sugar Cane Breeding
- Soil Management in Sub-tropical Regions
- Sugar Cane Insect Pests and its Control

5. FACILITIES AND INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) Okinawa Prefectural Agricultural Experiment Station

6. REMARKS

EFFECTIVE UTILIZATION OF TROPICAL AGRICULTURE AND FORESTRY RESOURCE

(熱帯農林資源の有効利用)

1. PERIOD

July 24, 1986 to March 30, 1987 (8--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates with more than three (3) years' research experience in their specialized field of training, or equivalent
- 2) Under forty (40) years of age
- 3) Have a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Subcourse A -- Effective utilization of agricultural materials by agricultural and biochemical procedures
- 2) Subcourse B -- Effective utilization of agricultural products by improving the way of harvesting, handling, transportation and storage
- 3) Subcourse C -- Investigation and practical application to nourishing foods or medicines of plant resources

5. FACILITIES AND INSTITUTIONS

- 1) College of Agriculture, University of the Ryukyus
- 2) Okinawa International Centre (OIC), JICA

6. REMARKS

IRRIGATION AND DRAINAGE (灌溉排水)

1. PERIOD

February 5, 1987 to November 28, 1987 (10-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalents
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Between 27 and 37 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Principle of irrigation and drainage (Land improvement, meteorological measurement, hydraulic experiment, etc.)
 - Applied knowledge of irrigation and drainage (Planning, design of canals, head-work, fill-type dam, etc.)
 - Experiment (Hydraulics, concrete and soil mechanics)
- 2) Observation tours
 - National Research Institute of Agricultural Engineering, and construction sites, etc.
 - Land Improvement Projects
 - Dam Site (including underground dam)

5. FACILITIES AND INSTITUTIONS

Tsukuba International Agricultural Training Center, JICA

6. REMARKS

No. 109

AGRICULTURAL LAND AND WATER RESOURCES DEVELOPMENT (農地水資源開発)

1. PERIOD

July 7, 1986 to September 6, 1986 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

3. QUALIFICATIONS

- 1) Be presently engaged in the said field
- 2) University graduates or the equivalent academic background with occupational experience of more than 5 years
- 3) Under 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Outline of Japan's agriculture and land improvement project
 - Land reclamation and consolidation
 - Irrigation and Drainage System
 - Design criteria
 - Operation and maintenance facilities and water management
- 2) Observatin tours
 - Present situation of agricultural land utilization and water resources development in Japan

5. FACILITIES AND INSTITUTIONS

- 1) Agricultural Structure Improvement Bureau, Ministry of Agriculture, Forestry and Fisheries
- 2) The Japanese Institute of Irrigation & Drainage

6. REMARKS

RICE PRODUCTION MECHANIZATION (稲作機械化)

1. PERIOD

February 5, 1987 to November 28, 1987 (10-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalents
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Between 27 and 37 years of age
- 5) A sufficient command of spoken & written English

4. DESCRIPTION OF TRAINING

- 1) Lecture and practical training
 - Rice production mechanization: Effective introduction of farm machinery (inspection and selection), its utilization and systematic mechanized farming connected with rice production
 - The related subject to mechanization: Rice cultivation, land consolidation, administration of mechanization and co-operative of farm machinery in Japan
- 2) Observation tours
 - Experimental and Research Institutes and other related organs

5. FACILITIES AND INSTITUTIONS

Tsukuba International Agricultural Training Centre, JICA

6. REMARKS

AGRICULTURAL MACHINERY MAINTENANCE AND REPAIR (農業機械整備)

1. PERIOD

June 5, 1986 to December 20, 1986 (7-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) College graduates preferably Agricultural Engineers
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Under 40 years of age (Male only)
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Items relevant to maintenance and repair of agricultural machinery such as principle, structure, function, performance, method of testing, adjustment and inspection of various kinds of prime movers and agricultural machines
 - Fundamentals of mechanical engineering such as materials, machine elements, thermodynamics
 - Items related to agricultural machinery such as farm mechanization, its administrative policy in Japan, machinery utilization for rice cultivation as well as agricultural machinery production, inspection and management system
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Member plants of Japan Farm Machinery Manufacturers Association and Other plants
- 2) Osaka International Training Centre, JICA (theoretical lecture)

6. REMARKS

FARM MACHINERY DESIGN (農業機械設計)

1. PERIOD

March 5, 1987 to October 9, 1987 (7--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates from faculty of agricultural engineering or mechanical engineering
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Between 27 and 40 years of age
- 5) A sufficient command of spoken & written English

4. DESCRIPTION OF TRAINING

- 1) Lecture and Practical training
 - Design engineering: Machine design technology such as drawing & design of machine elements, its parts and simple farm machinery
 - Trial-make of simple farm machinery
 - Materials: Physical properties of metallic
 - Strength of materials, and heat treatment of metal. Physical property of plant and soils.
 - Technology in common
- 2) Observation
 - Experimental and Research Institutes and other related organs

5. FACILITIES AND INSTITUTIONS

Tsukuba International Agricultural Training Centre, JICA

6. REMARKS

POST-HARVEST RICE PROCESSING (初処理精米加工)

1. PERIOD

August 25, 1986 to November 24, 1986 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalents
- 2) Senior technical administrators in the government or the public organizations engineering in planning and promoting improvements of all post-harvesting process of rice such as paddy drying, storage, rice milling, etc.
- 3) Under 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Food situation of Japan and Importance of rice
 - Production and export of agricultural machinery
 - Rice Control System
 - Activities of agricultural co-operatives
 - Characteristics of Japonica and Indica
- 2) Observation tours of machine making factory

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Agriculture, Forestry and Fisheries
- 2) Japan Rice Millers Association

6. REMARKS

ANIMAL INDUSTRY HUSBANDRY

POULTRY DEVELOPMENT (養 鶏)

1. PERIOD

May 8, 1986 to September 8, 1986 (5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Occupational experience of more than 2 years
- 3) Between 26 and 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Feeding and management for layers and broilers
 - Breeding and improvement of strains
 - Incubation
 - Brooding and rearing
 - Hygiene and diseases
 - Feed
 - Poultry facilities and equipment
 - Extension work
 - Technical consultation
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Okazaki National Poultry Breeding Station, Ministry of Agriculture, Forestry and Fisheries
- 2) Nagoya International Training Centre (NITC), JICA

6. REMARKS

ARTIFICIAL INSEMINATION FOR CATTLE (家畜人工受精)

1. PERIOD

April 24, 1986 to November 8, 1986 (7-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) University 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) Lectures and practical training
 - Breeding of cattle
 - Adjustment of feed
 - Feed management for dairy cattle
 - Artificial insemination
 - General aspect of livestock industry
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Fukushima National Livestock Breeding Station, Ministry of Agriculture, Forestry and Fisheries

6. REMARKS

EMBRYO TRANSFER FOR CATTLE (受精卵移植技術)

1. PERIOD

September 29, 1986 to December 20, 1986 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- (1) Be university graduates or have the equivalent academic background;
- (2) Hold veterinarian's license, or artificial inseminator's license and have over one (1) year's experience in the field of the specialization;
- (3) Have a good command of English both spoken and written;
- (4) Be under forty (40) years of age in principle;

4. DESCRIPTION OF TRAINING

The purpose of the course is to provide the latest ET techniques in Japan for livestock breeding personnel in countries faced with the necessity of it, and ultimately to contribute to the progress of animal industry by the application and improvement of the techniques under their respective countries' condition.

The course provides basic theory and practical use of ET as well as its administration.

5. FACILITIES AND INSTITUTIONS

Hidaka National Livestock Breeding Station, Ministry of Agriculture, Forestry and Fisheries.

6. REMARKS

ANIMAL HEALTH RESEARCH (家畜衛生研究)

1. PERIOD

May 26, 1986 to November 20, 1986 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Qualified veterinarians in principle
- 2) Technicians or researchers. High priority is given to those who serve in veterinary colleges or national central veterinary institutions,
- 3) Not more than 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Outline of animal husbandry and health administration in Japan
 - Bovine, swine, avian and other livestock diseases
- 2) Specialized study will be conducted according to the participants' individual requests at the laboratories of the National Institute of Animal Health in principle or other institutes concerned in special cases
- 3) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) National Institute of Animal Health (NIAH), Ministry of Agriculture, Forestry and Fisheries
- 2) Tsukuba International Centre, JICA

6. REMARKS

FORESTRY

REFORESTATION TECHNIQUES AND FOREST MANAGEMENT (森林造成技術者)

1. PERIOD

August 18, 1986 to November 27, 1986 (3.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Engaged in planning work in the governmental forestry organizations
- 3) Occupational experience of more than 5 years
- 4) Under 40 years of age
- 5) Good working knowledge of English
- 6) Congenial to Japanese dishes because a part of training is given in the countryside

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Forestry planning, breeding, nursery practice, regeneration tree tending and forest conservation in Japan
 - Administration and management of the national forest in Japan
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Forestry Agency, Ministry of Agriculture, Forestry and Fisheries

6. REMARKS

WOOD INDUSTRIAL MACHINERY (木材工業機械)

1. PERIOD

October 30, 1986 to March 27, 1987 (5.5-month)

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 5 years
- 4) Between 28 and 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Lumber cutting and its equipment
 - Plywood machineries
 - Woodworking machineries
 - Wood processing techniques
 - Sawmill machinery
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Industrial Research Institute, Aichi Prefecture
- 2) Nagoya International Training Centre (NITC), JICA
- 3) Industries

6. REMARKS

No. 120

FORESTRY AND FOREST PRODUCTS RESEARCH (林業林産研究)

1. PERIOD

August 18, 1986 to December 1, 1986 (3.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

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

4. DESCRIPTION OF TRAINING

Lectures and practical training

Forest management, forestry economy, remote sensing, forest inventory and agro-forestry, Forest machinery, forest road and forest operations, seeds production, tree tending, regeneration, tree physiology, free breeding and bamboo cultivation, Nursery soil, forest soil and fertilization, forest pathology, mushrooms, pesticide, forest entomology and wildlife, Headwater conservation, soil conservation and disaster prevention.

5. FACILITIES AND INSTITUTIONS

- 1) Forestry and Forest Products Research Institute, Ministry of Agriculture, Forestry and Fisheries
- 2) Tsukuba International Centre, JICA

6. REMARKS

FISHERIES

FISHERY COOPERATIVES (漁業協同組合)

1. PERIOD

June 26, 1986 to December 2, 1986 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduate or equivalent
- 2) Fishery cooperative experience of more than 3 years
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Outline of fishery cooperatives, fish marketing, fisheries finance, fishery cooperatives management, accounting of fishery cooperatives
 - Fisheries legislation, Fishery Cooperatives Law
 - Fisheries administration, Fisheries economics
 - Other essential subjects related to fishing industry
- 2) Observation tours
 - Fishery cooperative associations
 - Fishing companies
 - Agriculture cooperatives
 - Fish markets

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

No. 122

COASTAL FISHERIES EXTENSION I (PRACTICE) (沿岸漁具漁法 I (実技))

1 PERIOD

June 26, 1986 to December 12, 1986 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

3. QUALIFICATIONS

- 1) Senior high school graduates or equivalent
- 2) Fishery experience of more than 3 years
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practice
 - Fishing gear and methods of coastal fisheries in Japan
 - On board training by training vessels
 - Fishing practice by commercial fishing boats
 - Net handling practice
 - Model net construction
 - Engine handling practice
- 2) Observation tours
 - Fishing ports
 - Fish markets
 - Fishing operations by commercial fishing boats
 - Fish processing plants

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

COASTAL FISHERIES EXTENSION II (THEORY) (沿岸漁具漁法Ⅱ〔理論〕)

1. PERIOD

January 15, 1987 to June 12, 1987 (5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Fishery experience of more than 3 years
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practice
 - Fishing gear and methods of coastal fisheries in Japan
 - Designing of fishing gear
 - Relation between fish behaviour and fishing gear
 - Model fishing gear construction
 - Net forming experiment
- 2) Observation tours
 - Fishing ports
 - Fish market
 - Fisheries universities
 - Fishing operations by commercial fishing boats

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

GENERAL AQUACULTURE (養殖一般)

1. PERIOD

January 15, 1987 to June 12, 1987 (5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Aquaculture experience of more than one year
- 3) Under 35 years of age
- 4) Good working knowledge of English
- 5) Engaging in Aquaculture Education

4. DESCRIPTION OF TRAINING

- 1) Lectures and practice
 - Basic information about fisheries in Japan
 - Aquaculture techniques in general
 - Fresh water and sea water fish culture
 - Shell-fish and sea algae culture in sea water
 - Induced spawning by hormone injection on
 - Water quality analysis
 - Analysis of feed composition
- 2) Observation tours
 - National and regional fisheries research laboratories
 - Prefectural fisheries experimental stations
 - University of fisheries
 - Private fish farms

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

No. 125

HULL AND ENGINE MAINTENANCE OF SMALL FISHING BOAT

(小型漁船の船体・機関保守)

1. PERIOD

January 15, 1987 to June 12, 1987 (5—month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

- 1) Senior high school graduates or equivalent
- 2) Fishery boat or engine experience of more than 3 years
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practice
 - Basic information about fisheries in Japan
 - Hull maintenance
 - Diesel engine and outboard engine
 - Marine auxiliaries
 - Knowledge and handling of FRP
- 2) Observation tours
 - Shipyards
 - Fishing ports
 - Marine engine factories
 - Marine engine operation by commercial fishing boats

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

PRAWN PROPAGATION TECHNIQUE (エビ増養殖技術)

1. PERIOD

November 21, 1985 to August 29, 1986 (9.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

Applicants should:

- (1) Be nominated by their government in accordance with the procedures mentioned in B-2 below,
- (2) Be presently engaged either in refractory production or research and have more than one (1) year of occupational experience in this field,
- (3) Be junior college graduates or have the equivalent academic background,
- (4) Have a sufficient command of spoken and written English,
- (5) Be not more than thirty-five (35) years of age,
- (6) Be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.

4. DESCRIPTION OF TRAINING

- 1) Biology of *penaeus japonicus*
- 2) Aqua propagation in general
- 3) Basic aquaculture of *penaeus japonicus*
- 4) Technique of *penaeus japonicus* culture
- 5) Aquaculture and natural environment

5. FACILITIES AND INSTITUTIONS

Ube Junior College

6. REMARKS

No. 127

MARINE FOOD PROCESSING AND TECHNOLOGY (水産食品加工)

1. PERIOD

January 12, 1987 to June 4, 1987 (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) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Japanese eating habits, Food supply in Japan, Food self-supply through technical advancement, Food packaging and storage, Food distribution and its problems, Law concerned with food, Agricultural products, Livestock products, Marine products, etc.
 - In-plant training (Meat products, Frozen food, Marine products operation and application of analytical instruments, Analysis of food)
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Hyogo International Center, JICA
- 2) Public Research Institutions
- 3) Food Processing Factories (Food Manufacturing Plants)
- 4) Kagoshima University (Dept. of Fisheries)

6. REMARKS

MINING AND MINERALS

GROUNDWATER RESOURCES DEVELOPMENT (地下水資源開発)

1. PERIOD

August 18, 1986 to December 15, 1986 (4.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University or college graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

I. INTRODUCTION (two weeks)

- 1) General orientation by JICA
- 2) Country report presentation by participants

II. LECTURE ON BASIC TOPICS (one week)

- 1) Geology of Japan
- 2) Hydrogeology
- 3) Geochemistry of groundwater
- 4) Geophysics related to groundwater

III. LECTURES, OBSERVATION AND PRACTICE

1. Groundwater Exploration (three weeks)

- 1) Groundwater survey
- 2) Photogeology
- 3) Geophysical exploration

2. Water Well Engineering and Evaluation (three weeks)

- 1) Drilling technique
- 2) Water well logging
- 3) Water well design
- 4) Aquifer test
- 5) Pumps

3. Utilization of Groundwater (one week)

- 1) Water quality
- 2) Microorganism
- 3) Others

4. Groundwater Management (two weeks)

- 1) Water balance
- 2) Water management
- 3) Groundwater simulation

IV. SPECIAL TOPICS (one week)

V. STUDY TOUR (three weeks)

5. FACILITIES AND INSTITUTIONS

- 1) Geological Survey of Japan, Ministry of International Trade and Industry
- 2) Tsukuba International Centre, JICA

6. REMARKS

Well drilling practice is not included in the training programme.

OFFSHORE PROSPECTING (沿海鉱物資源探査)

1. PERIOD

May 12, 1986 to December 15, 1986 (7.5—month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Geophysicists, geologists or engineers presently engaged in geoscience
- 3) Occupational experience of more than 3 years
- 4) Not more than forty (40) years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Geology (marine geology, petroleum geology, mineral deposits, etc.)
 - Geophysics (Seismic, gravitational, magnetic, electric and logging methods, etc.)
 - Applied mathematics, computer use
 - Laboratory and field work
 - Petroleum exploration
 - Remote sensing, etc.
- 2) Observation tours
 - To related facilities

5. FACILITIES AND INSTITUTIONS

- 1) Geological Survey of Japan, Ministry of International Trade and Industry
- 2) Tsukuba International Centre, JICA

6. REMARKS

MINING ENGINEERING (鉱山)

1. PERIOD

August 14, 1986 to November 4, 1986 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or the equivalent with basic knowledge of mineral mining
- 2) Qualified in their respective fields with more than three (3) years of practical experience
- 3) Under 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
- Technology, policy and administration of mining industry in Japan
- 2) Observation tours
Visits to:
 - * Mines and Smelters
 - * A geothermal Power Plant
 - * Manufacturers of Related Equipments
 - * National Research Institute for Pollution and Resources
 - * Geological Survey of Japan

5. FACILITIES AND INSTITUTIONS

- 1) Japan Mining Industry Association (JMIA)
- 2) Institute for International Mineral Resources Development (IIMRD)

6. REMARKS

No. 131

MINE SAFETY (鉱山保安)

1. PERIOD

March 2, 1987 to May 30, 1987 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent who have basic knowledge of mine safety with occupational experience of more than 3 years
- 2) Under 35 years of age in principle
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
Outline of Mining in Japan; Administration and Mine Safety Law; Approval Test Methods of Mine Appliances; Rock Mechanics, Ventilation; Gas, Coal and Dust Explosion; Mine Fire; Gas Detections; Explosion Proof; Dust Measurement; Explosives and Blasting
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) National Research Institute for Pollution and Resources
- 2) Tsukuba International Centre, JICA

6. REMARKS

MINERAL PROCESSING AND METALLURGY (選鉱精錬)

1. PERIOD

July 24, 1986 to August 14, 1987 (13-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) Engineers or researchers who have graduated from universities, majoring in mining and metallurgy programmes or similar subjects or those who have an equivalent academic background, with more than three years of occupational experience in the related field.
- 2) Between twenty-five (25) and thirty-five (35) years of age.
- 3) Presently engaged in the research work at universities, vocational institutes, research and development divisions in industries.
- 4) A sufficient command of spoken and written English.

4. DESCRIPTION OF TRAINING

- 1) Course covers the following subjects.

- (1) Applied Mineralogy
Physical Chemistry of Minerals, Mineral Engineering, Resource and Environment Management.
- (2) Mineral Processing
Crushing and Grinding of Ore, Particulate Technology, Physical Chemistry of Flotation
- (3) Ferrous Extractive Metallurgy
Pretreatment of Ore, Ironmaking, Steelmaking, Solidification
- (4) Non-ferrous Extractive Metallurgy
Pyrometallurgy, Hydrometallurgy, Electrometallurgy, Environmental Chemistry
- (5) Process Analysis and Simulation of Metallurgical Process
Transport Phenomena, Process Simulation, Optimum Design of Processes
- (6) Materials Science for Metallurgist
Introduction to Materials Science, Ceramics and Metal Processing.
- (7) Selected Topics in Mineral Processing and Metallurgy
Energy Resources, Data Bank System, System Engineering, Seminar.

- 2) Group Study with Lectures

- a) Physical Chemistry of Minerals and Mineral Processing*
- b) Fundamentals in Metallurgical Thermodynamics*
- c) Fundamentals in Metallurgical Kinetics*
- d) Applied Mineralogy and Mineral Processing I* and II
- e) Ferrous Extractive Metallurgy I* and II
- f) Non-Ferrous Extractive Metallurgy I* and II
- g) Transport Phenomena and Process Analysis I* and II
- h) Japanese Language and Culture*

- 3) Group Study with Lectures and Practice

Instrumental Analysis (Principle and Experiments)

- X-ray Diffraction*
- X-ray Fluorescent Analysis*
- Atomic Absorption Spectroscopy*
- Electron Probe Microanalysis*
- Calorimetry (DSC, DTA) (on demand)
- Materials Testing (on demand)
- Computer Training (on demand)
- Chemical Analysis (on demand)
- Laboratory Automation (on demand)

- 3) Independent Study

For participants who are studying a specific advanced area in Mineral Processing and Metallurgy along with the faculty supervisor's consent.

*: All participants may be suggested to have the credit of this subject.

- 4) Observation tours

5. FACILITIES AND INSTITUTIONS

Research Institute of Mineral Dressing and Metallurgy (SENKEN), Tohoku University

6. REMARKS

Japanese language lesson is also offered in this course.

INDUSTRY

SMALLER ENTERPRISE DEVELOPMENT (SEMINAR) (中小工業開発セミナー)

1. PERIOD

July 4, 1986 to August 15, 1986 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Senior administrative officials in development works for smaller enterprises
- 3) Occupational experience of more than 7 years
- 4) Between 30 and 55 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Economic development and smaller enterprise
 - Smaller enterprise development measures in Japan
 - Position of smaller enterprises in the developing countries and the government measures taken for their development
 - Entrepreneurship development & characteristics of Japanese corporate management
 - Management consultation & business diagnosis for smaller industries
 - International & domestic trade of smaller enterprises and their marketing
 - Transfer of technology
 - Subcontracting system
 - Technology and human resources development
 - Local traditional industries (localized industries)
 - Smaller enterprises and economic development in developing countries
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Chu-San-Ren (Central Japan Industries Association)

6. REMARKS

MEASURES FOR SMALLER INDUSTRY (中小企業対策)

1. PERIOD

January 8, 1987 to March 31, 1987 (3-month)

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 5 years
- 4) Under 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions
- Japanese measures pertaining to promotion of small business, especially particulars of development of smaller businesses and practices in financing, grouping, structural improvement and managerial/technical guidance
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Osaka International Training Centre, JICA

6. REMARKS

**CONSULTANCY SERVICE FOR THE PROMOTION OF
SMALL INDUSTRIES** (中小企業振興指導者訓練)

1. PERIOD

April 3, 1986 to September 28, 1986 (6.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

- 1) Be such personnel as assigned to business diagnostic services, management consultancy, and extension services at the organization engaged in the assistance for development and promotion of small scale industries
- 2) University graduate or those who have equivalent academic background and/or professional experience
- 3) Have at least three years of experiences
- 4) Between 30 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) System & measures for small industries promotion in Japan
- 2) Basic understanding of business management
- 3) Techniques & methods of business diagnosis
- 4) Program implementation & training
- 5) Observation tours
- 2) Central Japan Industries Association (CHU-SAN-REN)

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) CHU-SAN-REN (Central Japan Industries Association)

6. REMARKS

INDUSTRIAL STANDARDIZATION AND QUALITY CONTROL (工業標準化)

1. PERIOD

July 3, 1986 to September 14, 1986 (2.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

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, mutual discussions and seminars

Standardization

- Fundamentals in industrial standardization
- Administration of national standardization
- Standardization at international level
- Legal metrology & measurement standards
- JIS marking system and other certification systems
- Company standardization
- Value engineering and standardization

Quality control

- Outline of quality control
- Statistical methods
- Q.C. circle activities

- 2) Technical visits
- 3) Observation tour

5. FACILITIES AND INSTITUTIONS

- 1) Standard Department, Agency of Industrial Science and Technology, Ministry of International Trade and Industry
- 2) Japanese Standards Association (JSA)

6. REMARKS

INDUSTRIAL STANDARDIZATION AND QUALITY CONTROL (SEMINAR)

(工業標準化・品質管理シニアセミナー)

1. PERIOD

November 3, 1986 to November 28, 1986 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

- 1) Senior-class officials (directors of departments) in charge of decision-making for the administration of industrial standardization
- 2) University graduates or equivalent
- 3) More than 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Industrial Standardization and Quality Control
 - Certification and Inspection System
 - Development of Japanese Industries
 - Industrial Standardization Activities based on Industrial Policy
 - International Standardization and National Standardization
 - National Standardization and Company Standardization
 - Prospective Standardization Tactics
 - Introduction and Promotion of Total Quality Control
 - Mutual Exchange of Opinions with QC Promoters from Companies
- 2) Technical visits
- 3) Observation tour

5. FACILITIES AND INSTITUTIONS

- 1) Standard Department, Agency of Industrial Science and Technology, Ministry of International Trade and Industry
- 2) Japanese Standards Association (JSA)

6. REMARKS

METROLOGY AND MEASUREMENT STANDARDS (計量標準)

1. PERIOD

June 16, 1986 to December 15, 1986 (6.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Presently engaged in measurement or inspection of measuring instruments at governmental, semi-governmental or local metrology services
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Essentials of metrology and measurement standards
 - International system of units
 - Regulations related to metrology
 - Standardization related to metrology
 - Export inspection system
 - Fundamental theory of measurement
 - Maintenance of measurement standards
 - Specialized practical training
- 2) Observation tours
 - To related institutions

5. FACILITIES AND INSTITUTIONS

- 1) National Research Laboratory of Metrology (NRLM)
- 2) Japan Measuring Instruments Federation
- 3) Tsukuba International Centre, JICA

6. REMARKS

BUSINESS FEASIBILITY STUDY AND MANAGEMENT PRACTICE

(工業開発計画実務)

1. PERIOD

September 25, 1986 to March 27, 1987 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

- 1) University graduates or those who possess equivalent professional qualifications in this field. In addition, the basic knowledge to prepare financial statements of a business corporation is prerequisite.
- 2) More than three year experience in this field
- 3) Under 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Methods & techniques of planning
- 2) Necessary functions for business feasibility examination and techniques of study in preconstruction
- 3) Techniques of project execution in construction
- 4) Operations & improvement for better performance in post-construction
- 5) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) CHU-SAN-REN (Central Japan Industries Association)

6. REMARKS

CERTIFICATION SYSTEMS (認証検査制度)

1. PERIOD

January 8, 1987 to March 8, 1987 (2.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or the equivalent
- 2) Experience for more than 3 years
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Introduction to different certification systems in Japan
 - Summary of JIS certification mark system
 - Summary of export inspection system
 - Review of basic knowledge on standardization and quality control
 - In-laboratory training
- 2) Technical visits
- 3) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Standard Department, Agency of Industrial Science and Technology, Ministry of International Trade and Industry (MITI)
- 2) International Trade Administration Bureau, MITI
- 3) Japanese Standards Association (JSA)

6. REMARKS

INDUSTRIAL PROPERTY SYSTEM (工業所有権制度)

1. PERIOD

August 28, 1986 to October 24, 1986 (2--months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) Officers with experience as an examiner in the respective fields
- 2) University graduates or the equivalent
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Brief introduction to Industry Property Systems
 - Promotion of Inventive activities and the role of Industrial Property System
 - Industrial Property Information Services
 - Transfer of technology and licencing
 - Consultation and agential activities
 - Practical use of Industrial Property System in enterprises
 - Outline of the Japanese Patent Law and Utility Model Law, the Japanese Design Law, and the Japanese Trademark Law
- 2) Practical training
 - Examination practice (Group and Individual)
- 3) On-the-spot training
 - At Japanese Patent Office (JPO), and Japan Institute of Invention and Innovation (JII)
- 4) Case studies
 - Actual development of new products, industrial property management in large enterprises and in medium and smaller enterprises
- 5) Observation tour
 - Private Enterprises

5. FACILITIES AND INSTITUTIONS

- 1) Patent Office, Ministry of International Trade and Industry
- 2) Japan Institute of Invention and Innovation

6. REMARKS

INDUSTRIAL PROPERTY SYSTEM (SEMINAR) (工業所有権セミナー)

1. PERIOD

November 4, 1986 to November 28, 1986 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) Senior-class officials (directors of departments) in charge of decision-making for the administration of industrial property
- 2) University graduates or equivalent
- 3) Between 30 and 50 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Promotion of inventive activities and effective use of patent information
 - Actual maintenance of documents and retrieval of patent documentation in JPO
 - Industrial property information services
 - The role of patent in transfer of technology
 - Consultation and agential activities
 - The use and economic value of patents
 - The role of patent information in promotion of inventive activities
- 2) Observation
 - Patent Office
 - Japan Institute of Invention and Innovation
 - Private Enterprises

5. FACILITIES AND INSTITUTIONS

- 1) Patent Office, Ministry of International Trade and Industry
- 2) Japan Institute of Invention and Innovation

6. REMARKS

CERAMIC ENGINEERING (窯業技術)

1. PERIOD

April 3, 1986 to December 26, 1986 (9-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) More than 3 year practical experience at educational and research institute
- 3) Between 25 and 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Introduction to ceramics
 - Ceramics in Japan
 - Body preparation
 - Glaze preparation
 - Raw materials
 - Analysis of raw materials
 - Kiln and firing
 - Quality control
- 2) Practice
 - Body preparation and Glaze preparation
 - Measurement and experiment on the properties properties on materials and body
- 3) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Government Industrial Research Institute, Nagoya
- 3) Others

6. REMARKS

GLASS TECHNOLOGY (ガラス工学)

1. PERIOD

January 8, 1987 to March 27, 1987 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Engineers who have been engaged in the glass production for more than three (3) years or researchers who are desirous to obtain practical knowledge of glass production.
- 3) Between 25 and 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lecture and practical training
 - Machinery and mold
 - Furnace
 - Batch handling
 - Sheet glass
 - Container glass
 - Other products
- 2) Observation tour

5. FACILITIES AND INSTITUTIONS

- 1) Government Industrial Research Institute, Osaka
- 2) Osaka International Training Centre, JICA

6. REMARKS

PLASTICS (プラスチック)

1. PERIOD

September 4, 1986 to December 19, 1986 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) University or college graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Between 25 and 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Compression molding, transfer molding and injection molding of thermosets
 - Extrusion and blow molding
 - Injection molding of thermoplastics, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Osaka Municipal Technical Research Institute (OMTRI)

6. REMARKS

REFRACTORY MANUFACTURING TECHNOLOGY (耐火物製造技術)

1. PERIOD

September 25, 1986 to March 27, 1987 (6.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Be presently engaged in refractory production or research work
- 3) Occupational experience of more than 3 years
- 4) Between 26 and 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Raw materials
 - Testing of raw materials
 - Testing of one component bricks
 - Trial manufacturing of refractory bricks
 - Testing of refractory bricks
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Technical Research Laboratory of Mino Yogyo Co., Ltd.

6. REMARKS

CERAMIC GLAZE AND DECORATION (釉・着彩技術)

1. PERIOD

April 3, 1986 to September 28, 1986 (6--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

- 1) University 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) Lectures and practical training
 - Ceramic materials & bodies
 - Glaze preparation & its application
 - Pigment making & colouring
 - Decoration techniques (screen printing etc.)
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Tajimi City Pottery Design and Technical Centre
- 3) Government Industrial Research Institute, Nagoya
- 4) Gifu Prefectural Ceramic research Institute
- 5) Ceramic Industries

6. REMARKS

TILE MANUFACTURING TECHNOLOGY (タイル製造技術)

1. PERIOD

August 14, 1986 to March 27, 1987 (8--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 26 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Body preparation
 - Forming
 - Analysis and evaluation of raw materials for the better-suited tile manufacturing
 - Kiln and firing
 - Quality control
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Government Industrial Research Institute, Nagoya
- 2) Ina Seito Co., Ltd.
- 3) Nagoya International Training Centre (NITC), JICA

6. REMARKS

PETROCHEMICAL INDUSTRY FOR MIDDLE EAST COUNTRIES

(石油化学工業)

1. PERIOD

January 22, 1987 to March 7, 1987 (1.5--months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

3. QUALIFICATIONS

- 1) University graduates or the equivalent
- 2) Presently engaged in responsible assignment or development planning in the field of petrochemical industry
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- Characteristics of petrochemical industry
- Products and plant technology of petrochemical industry
- Requirements for petrochemical industry substantialization
- Schemes and planning
- Petrochemical industries in Japan
- The role of Japan in the establishment of petrochemical industries in developing countries
- Technical Meeting with lectures
- Plant observations and field trips to relevant industries

5. FACILITIES AND INSTITUTIONS

- 1) Tokyo International Centre (TIC), JICA
- 2) The member companies of the Association of Petrochemical Industries in Japan

6. REMARKS

ENZYME TECHNOLOGY (酵素工学)

1. PERIOD

April 3, 1986 to October 3, 1986 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- 1) Master's or Doctor's degree and have majored chemistry, biochemistry, agricultural chemistry, food chemistry or applied microbiology
- 2) 3 or more years of experience in fermentation technology or enzyme technology
- 3) Between 25 and 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and experimental training
 - Cultivation of microorganisms for enzyme production
 - Purification of enzymes
 - Properties of enzyme
 - Action of enzyme
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Osaka Municipal Technical Research Institute (OMTRI)

6. REMARKS

RESEARCH ON CHEMICAL TECHNOLOGY (化学技術研究)

1. PERIOD

September 8, 1986 to September 7, 1987 (12.0--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduates or equivalent in the field of chemical technology, most preferably holders of Ph. D. or M. A.
- 2) Occupational experience as researchers of more than (3) years in respective fields of chemical technology
- 3) Between 25 and 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Orientation at JICA and the Laboratory
- 2) Individual Study Subjects
 - a) NMR Spectroscopy
The techniques of the measurement and the analytical methods of the spectra for organic compounds
 - b) DNA Chemical synthesis and structure analyses by NMR spectroscopic methods
 - c) Determination of molecular weight and molecular weight distribution of polymers
 - d) Trace analysis by atomic absorption and emission spectroscopy
 - e) Synthetic organic chemistry
 - f) Petroleum chemistry
 - g) Basic techniques for the synthesis and analysis of inorganic materials
 - h) Catalysts for hydrogenation and hydrocracking
 - i) Catalysts for oxydation in liquid phase
 - j) Oil and fat chemistry
 - k) Biomass chemistry
 - l) Photochemistry and photographic chemistry

Applicant must choose only one from the above and indicate your choice to appropriate column of the application form

- 3) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) National Chemical Laboratory for Industry, Ministry of International Trade and Industry
- 2) Tsukuba International Centre, JICA

6. REMARKS

FOUNDRY ENGINEERING (鑄造技術)

1. PERIOD

August 14, 1986 to March 27, 1987 (8-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Presently engaged in foundry engineering at research institutes, educational institutes or industries
- 3) Occupational experience of more than 2 years
- 4) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Foundry sands
 - Mould properties and sand mixtures
 - Moulding processes
 - Foundry raw materials
 - Fuels
 - Melting furnaces and melting
 - Casting design
 - Modernization of foundry shops
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Government Industrial Research Institute, Nagoya
- 3) Aichi Prefectural Industrial Research Institute
- 4) Metal Industries Institute, Mie Prefecture
- 5) Foundry Industries

6. REMARKS

METAL FINISHING ENGINEERING (金属表面处理技術)

1. PERIOD

April 3, 1986 to September 28, 1986 (6-month)

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 2 years
- 4) Under 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Basis metals
 - Electroplating
 - Electroless plating
 - Aluminium anodising
 - Pollution control
 - Physical and chemical vapour deposition
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Industrial Research Institute, Aichi Prefecture
- 2) Nagoya Municipal Industrial Research Institute
- 3) The Plating Industrial Association of Aichi Prefecture
- 4) Nagoya International Training Centre (NITC), JICA
- 5) Industries

6. REMARKS

METAL WORKS AND ENGINEERING (金属加工技術)

1. PERIOD

September 25, 1986 to June 28, 1987 (9.5--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent (mechanical engineering)
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 3 years
- 4) Between 26 and 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Metallic materials and practical metallurgy
 - Heat treatment
 - Foundry
 - Welding
 - Mechanical engineering
 - Plastic forming of metals
 - Industrial management
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Government Industrial Research Institute, Nagoya
- 3) Industrial Research Institute, Aichi Prefecture
- 4) Metal Working Industries
- 5) Universities
Nagoya University and other related university

6. REMARKS

WELDING TECHNOLOGY (溶接技術)

1. PERIOD

April 3, 1986 to December 26, 1986 (6--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Between 26 and 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) *Lectures and practical training*
 - Introduction to classified welding processes
 - Arc Welding:
 - Welding machinery and equipment, and their application
 - Aluminum alloys welding processes
 - Welding theory, design and inspection method
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Tokai Branch, The Japan Welding Society
- 2) The Faculty of Engineering, Nagoya University
- 3) The Japan Welding Engineering Society

6. REMARKS

ELECTRICAL STEEL MAKING (電気製鋼技術)

1. PERIOD

January 8, 1987 to June 7, 1987 (4.5—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 2 years
- 4) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Introduction of current situation of electrical steel making in Japan
 - Management of electrical furnaces, dissolution method, material control
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Government Industrial Research Institute, Nagoya
- 2) Daido Steel Corporation, Aichi Steel Co., Ltd.
- 3) Nagoya International Training Centre (NITC), JICA

6. REMARKS

No. 157

PROPERTIES AND TESTINGS OF STEEL PRODUCTS (鉄鋼材試験検査技術)

1. PERIOD

August 14, 1986 to November 25, 1986 (3.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates in metallurgy, mechanics or chemical engineering
- 2) Practical experience of more than 2 years in production or fabrication of steel
- 3) Under 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Introduction of steel production
 - Properties of steel products
 - Fundamental properties of steel
 - Testing and inspection technics of steel products
- 2) Observation tours
 - Producers of various kinds of steel products

5. FACILITIES AND INSTITUTIONS

Nippon Steel Corporation

6. REMARKS

HEAT TREATMENT TECHNOLOGY (熱処理技術)

1. PERIOD

January 8, 1987 to June 28, 1987 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8) /

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Occupational experience of over 2 years
- 3) Mechanical or metallurgical engineer
- 4) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Theory of metallic materials
 - Fundamental practice on heat treatment
 - Related technology
 - Applied technology of heat treatment
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) Nagoya Municipal Industrial Research Institute

6. REMARKS

TOOLING AND PRODUCTION FACILITY PRACTICAL ENGINEERING

(治工具生産技術)

1. PERIOD

September 25, 1986 to March 27, 1987 (6.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Occupational experience of more than 5 years
- 3) In charge of tool engineering, production management, production engineering, etc.
- 4) Under 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Basic knowledge of machining
 - Process design for product manufacturing
 - Materials for making jigs and tools, and heat treatment
 - Design work management and control for tools and jigs
 - Basics for jigs and tools designing
 - Theories of tools and jigs design
 - Tool making equipment and measuring instruments
 - Practical knowledge of tools
 - Tools and factory management
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre (NITC), JICA
- 2) CHU-SAN-REN (Central Japan Industries Association)
- 3) Industries

6. REMARKS

SHIPBUILDING (A) (船舶技術 (A))

1. PERIOD

April 10, 1986 to March 29, 1987 (12--month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

eleven (11)

3. QUALIFICATIONS

- (1) be presently engaged in the field of maritime industries or its related industries.
- (2) meet one of the following requirements:
 1. be university graduate who majored in Engineering, and have more than three (3) years of occupational experience in Shipbuilding industries. (But, he who majored in naval architecture is not required this occupational experience.)
 2. have the academic background equivalent to the above.
- (3) be male and be not more than thirty (30) years of age.

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Japanese Language
 - Orientation on Shipbuilding Industries
 - Lectures on Shipbuilding Engineering*
 1. Ship calculation I & Drawing and Mold loft
 2. Ship calculation II & Applies ship dynamics
 3. Hull design & Hull construction process
 4. Welding process
 5. Outfitting design & process
 6. Ship repair
 7. Marine engine & electricity
 8. Production control & Shipyard management
 9. Fishig boat, work boat
 10. Harbour & Shipping
- 2) Observation and Study Tours
- 3) Practice at shipyard
 - 4 months at shipyard

5. FACILITIES AND INSTITUTIONS

6. REMARKS

SHIPBUILDING (B) (船舶技術 (B))

1. PERIOD

January 5, 1987 to December 24, 1987 (12-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

eleven (11)

3. QUALIFICATIONS

- (1) be presently engaged in the field of maritime industries or its related industries.
- (2) meet one of the following requirements:
 1. be university graduate who majored in Engineering, and have more than three (3) years of occupational experience in Shipbuilding industries. (But, he who majored in naval architecture is not required this occupational experience.)
 2. have the academic background equivalent to the above.
- (3) be male and be not more than thirty (30) years of age

4. DESCRIPTION OF TRAINING

- 1) Lectures
 - Japanese Language
 - Orientation on Shipbuilding Industries
 - Lectures on Shipbuilding Engineering
 1. Ship calculation I & Drawing and Mold loft
 2. Ship calculation II & Applies ship dynamics
 3. Hull design & Hull construction process
 4. Welding process
 5. Outfitting design & process
 6. Ship repair
 7. Marine engine & electricity
 8. Production control & Shipyard management
 9. Fishig boat, work boat
 10. Harbour & Shipping
- 2) Observation and Study Tours
- 3) Practice at shipyard
 - 4 months at shipyard

5. FACILITIES AND INSTITUTIONS

6. REMARKS

MAINTENANCE OF CONSTRUCTION MACHINERY (建設機械整備)

1. PERIOD

May 8, 1986 to August 4, 1986 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduates (mechanical engineering), or equivalent with occupational experience of more than 3 years
- 2) Presently engaged in or expected to be engaged in near future in planning and administration work in the field of construction machinery
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Development and present situation of mechanized construction work and use of construction machinery
 - Planning of mechanized construction work and use of construction machinery
 - Function, structure and performance of construction machinery
 - Maintenance, repair, inspection, troubleshooting and field construction machinery
 - Planning, layout, parts control, tool control and administration of work shop
 - Construction sites and related manufacturing firms
- 2) Practical training
 - Fundamental Practice: Engine, Clutch, Torqueconverter, Transmission, Final drive, Differential gear, Brake, Steering, Hydraulic System, Power shift transmission, Undercarriage, etc.
 - Specialized Practice: Bulldozer, Scarper, Grader, Wheel-loader, Hydraulic excavator, Crane, Compaction Machinery, Dump Trunk, etc.
- 3) Presentation of country report
- 4) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Construction
- 2) Japan Construction Mechanization Association

6. REMARKS

MAINTIEN DES MACHINES POUR LA CONSTRUCTION (建設機械整備 (仏語))

1. PERIOD

January 29, 1987 to March 29, 1987 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates (mechanical engineering), or equivalent with occupational experience of more than 3 years
- 2) Presently engaged in or expected to be engaged in near future in planning and administration work in the field of construction machinery
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
 - Development and present situation of mechanized construction work and use of construction machinery
 - *Planning of mechanized construction work and use of construction machinery*
 - Function, structure and performance of construction machinery
 - Maintenance, repair, inspection, troubleshooting and field construction machinery
 - Planning, layout, parts control, tool control and administration of work shop
 - Construction sites and related manufacturing firms
- 2) Practical training
 - Fundamental Practice: Engine, Clutch, Torqueconverter, Transmission, Final drive, Differential gear, Brake, Steering, Hydraulic System, Power shift transmission, Undercarriage, etc.
 - Specialized Practice: Bulldozer, Scarper, Grader, Wheel-loader, Hydraulic excavator, Crane, Compaction Machinery, Dump Truck, etc.
- 3) Presentation of country report
- 4) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Construction
- 2) Japan Construction Mechanization Association

6. REMARKS