

**Outline of  
The Group Training Course (I)  
in Japan**

1979 (April, 1979 to March, 1980)

**Japan International Cooperation Agency (JICA)  
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 1979.

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

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## 1. DEVELOPMENT PLAN

SERIAL NUMBER 9

TREATMENT OF OFFENDERS (矯正保護〔犯罪防止〕)

1. PERIOD

April 5, 1979 to July 10, 1979 (3 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates
- 2) Persons who hold relatively senior positions in central bureaus or departments or field agencies concerned with the correctional treatment of delinquents and offenders
- 3) Occupational experience of more than 5 years
- 4) Under 50 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Appropriate treatment measures for re-intergrating offenders into community
  - Comparative study of treatment process of offenders
  - Group workshop on the topics selected by participants
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 10

LOCAL GOVERNMENT ADMINISTRATION ( 地方行政 )

1. PERIOD

April 5, 1979 to July 3, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 5 years
- 4) Between 27 and 38 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Japanese local government introduction
  - Local finance system
  - Local tax system
  - Regional development
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Local Autonomy College, Ministry of Home Affairs

6. REMARKS

SERIAL NUMBER 42

CRIMINAL INVESTIGATION (国際捜査セミナー)

1. PERIOD

June 28, 1979 to July 28, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

3. QUALIFICATIONS

- 1) Senior police officer in charge of investigations against offenses of international nature, especially who is in charge of ICPO-NCB is preferable
- 2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Fight against international crimes in participating countries
  - Promotion of international investigative cooperation
  - Use of computers in criminal investigation
  - Police communication
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

National Police Agency

6. REMARKS

SERIAL NUMBER 77

NATIONAL GOVERNMENT ADMINISTRATION ( 國家行政 )

1. PERIOD

September 6, 1979 to November 30, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 5 years in public service or semi-government service in addition to more than 2 years' in central or national civil service
- 4) Between 30 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions
  - Comparative study on the Central Government in the participating countries
  - Problems centering on modernization
  - Public administration and civil service
  - Principles, planning and techniques concerning public policies
  - Actual state of department administration and on-the-spot study through assignment to Ministry
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute of Public Administration, National Personnel Authority

6. REMARKS

SERIAL NUMBER 79

ADMINISTRATION OF CRIMINAL JUSTICE (刑事司法行政)

1. PERIOD

September 6, 1979 to December 11, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Judges, public prosecutors, or senior police officials
- 2) Occupational experience of 8 years at least or 5 years plus a university degree or its equivalent
- 3) Good working knowledge of English
- 4) Under 50 years of age

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Criminal police of Japan
  - Laws and regulations on criminal matters in Japan and participating countries
  - Identification system of Japan
  - Interpol and international mutual assistance in criminal matters
  - Promotion of international investigative cooperation
  - Police communications of Japan, etc.

5. FACILITIES AND INSTITUTIONS

United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders

6. REMARKS

SERIAL NUMBER 82

PREVENTION OF NARCOTIC OFFENCES (SEMINAR)

(麻薬犯罪取締セミナー)

1. PERIOD

September 13, 1979 to October 19, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18)

3. QUALIFICATIONS

- 1) Officers directly responsible for narcotic control
- 2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions
  - Study on investigation techniques
  - Countermeasures against addicts and public relation activities
  - Identification of narcotic drugs
  - Instruments and equipments for investigation
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

National Police Agency

6. REMARKS



SERIAL NUMBER 83

TECHNICAL MANAGEMENT OF POLLUTION CONTROL (環境技術)

1. PERIOD

September 13, 1979 to October 22, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Junior technical officials
- 2) University graduates or equivalent
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

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

5. FACILITIES AND INSTITUTIONS

Environment Agency

6. REMARKS

SERIAL NUMBER 84

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

1. PERIOD

September 13, 1979 to October 23, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

- 1) Government officials in charge of economic development policies
- 2) Under 40 years of age
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

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

5. FACILITIES AND INSTITUTIONS

- 1) Economic Planning Agency
- 2) Tokyo International Centre, JICA

6. REMARKS

SERIAL NUMBER 91

STATISTICS (GENERAL COURSE) (統計)

1. PERIOD

September 20, 1979 to March 31, 1980 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirty (30)

3. QUALIFICATIONS

- 1) University graduates or equivalent with the knowledge of economics and mathematics
- 2) Those who hold, or are capable of assuming, positions of responsibility in government statistical offices
- 3) Preferably between 25 and 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Statistical methods
  - Economic accounting statistics
  - Demographic and social statistics
  - Economic statistics
  - Agricultural statistics
- 2) Observation of field operations of statistical surveys

5. FACILITIES AND INSTITUTIONS

Statistical Institute for Asia and the Pacific, Ministry of Construction

6. REMARKS

SERIAL NUMBER 106

FIRE SERVICE ADMINISTRATION (消防行政)

1. PERIOD

October 4, 1979 to December 10, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Bachelors in law, politics, administration
- 2) Three year experience in the field of fire service
- 3) Under 40 years
- 4) 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

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

SERIAL NUMBER 109

DEVELOPMENT ECONOMICS (GENERAL)

(開発エコノミスト〔一般〕)

1. PERIOD

October 4, 1979 to March 31, 1980 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

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
  - Development planning
  - Basic theory and techniques of project planning
  - Agricultural development and its project planning
  - Industrial development and its project planning
  - Planning and evaluation of transportation projects
  - Development strategies of international organization
  - Japanese economic growth
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

International Development Centre of Japan

6. REMARKS

SERIAL NUMBER 128

DEVELOPMENT ECONOMICS (INDUSTRIAL PROJECT)

(開発エコノミスト〔工業〕)

1. PERIOD

January 10, 1980 to March 26, 1980 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Having a minimum of 2 year working experience
- 4) Age between 30 and 45 years
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Financial planning of development projects, financial and economic analysis
  - Current situation of development, study of industrial policy
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

International Development Centre of Japan

6. REMARKS

SERIAL NUMBER 133

PREVENTION OF OFFENCES (SENIOR COURSE) (犯罪防止〔上級〕)

1. PERIOD

January 31, 1980 to March 18, 1980 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Nominated by their government
- 2) Senior police officers, public prosecutors, judges and other high officials at policy making level, preferably those whose duties are closely related to the prevention and control of social and economic offenses
- 3) Have a sufficient command of spoken and written English
- 4) Under 55 years of age and likely to continue to work in this field for a minimum of 2 years

4. DESCRIPTION OF TRAINING

- 1) Individual presentations
  - a) Forms and dimensions of social and economic offenses
  - b) Measures for preventing and controlling social and economic offenses
- 2) Seminar discussions

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 141

ENVIRONMENTAL ADMINISTRATION ( 環境行政 )

1. PERIOD

March 13, 1980 to April 30, 1980 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Senior technical or administrative officials for environmental administration, either central or local, in governmental organizations
- 2) Under 45 years of age
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussion
  - 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
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

International Affairs Division, Environment Agency

6. REMARKS



## 2. AGRICULTURE

SERIAL NUMBER 13

AGRICULTURAL EXTENSION SERVICE ( 農業普及 )

1. PERIOD

April 19, 1979 to July 31, 1979 (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 3 years
- 4) Under 40 years of age
- 5) 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, management, extension and education by the local government
  - Visit to extension stations and experimental research institutions

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 34

CONTROL OF RICE DISEASES AND INSECT PESTS ( 稲病害虫防除 )

1. PERIOD

May 24, 1979 to December 19, 1979 (6.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) 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
  - Agriculture in Japan and its topics
  - Rice growing techniques in Japan
  - Administration and research organization for plant protection in Japan
  - Major diseases and insect pests in rice growing
  - Agricultural extension system in Japan
- 2) Observation tours
  - Research institute and other related organs

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 41

AGRICULTURAL MACHINERY MAINTENANCE AND REPAIR

( 農業機械整備 )

1. PERIOD

June 14, 1979 to December 26, 1979 (6.5-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 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
  - Orientation, agricultural machinery, fundamentals of mechanical engineering, subjects related to agricultural machinery, managerial aspects in agricultural machinery
  - Dis-assembly and maintenance of various types of engines and tractors
- 2) Observation tours
  - Research institutes (various types of agricultural machinery, tractors and bulldozer)
  - Agricultural experiment stations, universities
  - Agricultural co-operatives

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 44

AGRICULTURAL LAND AND WATER RESOURCES DEVELOPMENT

(農地水資源開發)

1. PERIOD

June 28, 1979 to August 27, 1979 (2-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 10 years
- 4) Under 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Outline of Japan's agriculture and improvement
  - Planning criteria
  - Land improvement project
  - Design criteria
  - Management of facilities and water management
- 2) Observation tours
  - Present situation of agricultural land utilization and water resources development in Japan

5. FACILITIES AND INSTITUTIONS

Agricultural Structure Improvement Bureau, Ministry of Agriculture, Forestry and Fisheries

6. REMARKS

SERIAL NUMBER 59

AGRICULTURAL STATISTICS (農林水産統計)

1. PERIOD

August 9, 1979 to November 3, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields (Planning Administration)
- 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
  - Agricultural situation and statistics in Japan
  - Method of statistical survey
  - Survey for the basic structure on agriculture
  - Survey on agricultural economics
  - Crop survey
  - Outline of horticulture survey and marketing information service
  - Utilization of computer

5. FACILITIES AND INSTITUTIONS

Statistics and Information Department, Economic Bureau, Ministry of  
Agriculture, Forestry and Fisheries

6. REMARKS

SERIAL NUMBER 71

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

1. PERIOD

August 30, 1979 to December 2, 1979 (3-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 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

SERIAL NUMBER 117

AGRICULTURAL CO-OPERATIVES (農業協同組合)

1. PERIOD

October 25, 1979 to December 3, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 5 years
- 4) 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 other kinds of co-operatives
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute for the Development of Agricultural Cooperation in Asia

6. REMARKS



SERIAL NUMBER 134

VEGETABLE CROPS PRODUCTION (野菜生産)

1. PERIOD

February 7, 1980 to November 30, 1980 (10-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 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
  - Applicable method of intensive cultivation of major vegetable crops
  - Matters pertaining to the rationalization of vegetable marketing and circulation
  - Breeding and seed production technology
  - Experiment in cultivation method
- 2) Observation tours
  - Visits to the institutes, agricultural high school, university and agricultural co-operative associations and other related organs

5. FACILITIES AND INSTITUTIONS

Uchihara International Agricultural Training Centre, JICA

6. REMARKS

SERIAL NUMBER 135

IRRIGATION AND DRAINAGE ( 灌 溉 排 水 )

1. PERIOD

February 7, 1980 to November 30, 1980 (10-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

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 35 years of age (Male)
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Principle of irrigation and drainage (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.

5. FACILITIES AND INSTITUTIONS

Uchihara International Agricultural Training Centre, JICA

6. REMARKS

SERIAL NUMBER 138

RICE PRODUCTION MECHANIZATION ( 稲作機械化 )

**1. PERIOD**

February 28, 1980 to December 21, 1980 (10-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Twelve (12)

**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 35 year of age
- 5) Good working knowledge of English

**4. DESCRIPTION OF TRAINING**

- 1) Lectures 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 works, administration of mechanization and co-operative use of farm machinery in Japan
- 2) Observation tours
  - Experimental and Research Institutes and other related organs

**5. FACILITIES AND INSTITUTIONS**

Uchihara International Agricultural Training Centre, JICA

**6. REMARKS**

SERIAL NUMBER 139

RICE CULTIVATION ( 稲 栽 培 )

1. PERIOD

February 28, 1980 to December 21, 1980 (10-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

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 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training  
-Orientation, Japanese lessons, agriculture in the world, rice culture in Japan, rice breeding and seed protection, soil & fertilizer, farm machinery, land improvement  
-Extension work, survey, administration
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Uchihara International Agricultural Training Centre, JICA

6. REMARKS

### **3. ANIMAL INDUSTRY HUSBANDRY**

SERIAL NUMBER 14

POULTRY DEVELOPMENT ( 養 鶏 )

1. PERIOD

April 26, 1979 to October 1, 1979 (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) Between 26 and 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Raising and practical training
  - Hygiene and diseases
  - Feeding and management for layers and broilers
  - Breeding and improvement of strains
  - Farm management
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 15

ARTIFICIAL INSEMINATION FOR CATTLE (家畜人工受精)

1. PERIOD

April 26, 1979 to October 21, 1979 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

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
  - General aspect of livestock industry in Japan
  - Practice in treatment of cattle
  - Theory, practice of artificial insemination
- 2) Observation tour

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

#### 4. FORESTRY



SERIAL NUMBER 18

WOOD INDUSTRIAL MACHINERY (木材工業機械)

1. PERIOD

May 3, 1979 to July 30, 1979 (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) Over 40 years of age
- 5) Good working of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Lumber cutting and its equipment
  - Plywood processing and its equipment
  - Woodworking machineries
  - Technical development and transfer of technology in relation to roles of industrial research institutions, small business guidance centres, chambers of commerce and industry, and co-operative associations
- 2) Observation tour

5. FACILITIES AND INSTITUTIONS

- 1) Industrial Research Institute, Aichi Prefecture
- 2) Nagoya International Training Centre, JICA

6. REMARKS

SERIAL NUMBER 78

REFORESTATION TECHNIQUES AND ADMINISTRATION (森林造成技術者)

1. PERIOD

September 6, 1979 to December 6, 1979 (3-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 7 years
- 4) Under 40 years of age
- 5) Good working knowledge of English
- 6) Be 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 watershed managements of Japan
- 20 Observation tours

5. FACILITIES AND INSTITUTIONS

Forestry Agency, Ministry of Agriculture, Forestry and Fisheries

6. REMARKS

## 5. FISHERIES

SERIAL NUMBER 17

MARINE FISHERIES RESEARCH ( 水 産 研 究 )

1. PERIOD

May 3, 1979 to November 3, 1979 (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 4 years
- 4) Under 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Marine resources
  - Population dynamics and statistics on diagnosis and control of fishery resources
  - Seaweeds and plantation culture
  - Utilization, processing and preservation
  - Water pollution
  - Radioactive contamination of marine environment
  - Ocean-physical analysis of mechanism of sea current changes
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Tokai Regional Fisheries Research Laboratory, Fishery Agency

6. REMARKS

SERIAL NUMBER 46

FISHERIES CO-OPERATIVES (漁業協同組合)

1. PERIOD

July 5, 1979 to December 20, 1979 (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 3 years
- 4) Under 40 years of age
- 5) Good working knowledge of English
- 6) Be healthy enough to undergo the training

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - ~Theories, principles and management of fisheries co-operatives
  - ~Fisheries legislation
  - ~Fisheries insurance system
  - ~Other related matters
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

SERIAL NUMBER 47

COASTAL FISHERIES EXTENSION I (PRACTICE)

(沿岸漁業普及 I〔实用〕)

1. PERIOD

July 5, 1979 to December 20, 1979 (5.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

3. QUALIFICATIONS

- 1) Senior high school 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) Practical training and lectures
  - Fishing gear and methods of coastal fisheries in Japan
  - Handling, repair and maintenance of small type marine diesel engines
  - Fisheries administration, economy and fisheries co-operatives
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

SERIAL NUMBER 131

COASTAL FISHERIES EXTENSION II (THEORY)

(沿岸漁業普及Ⅱ〔理論〕)

1. PERIOD

January 10, 1980 to June 9, 1980 (5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18)

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
  - Fishing gears and methods of coastal fisheries in Japan
  - Handling, repair and maintenance of small type marine diesel engines
  - Fisheries administration, economy and fisheries co-operatives
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kanagawa International Fisheries Training Centre, JICA

6. REMARKS

## **6. CONSTRUCTION AND CIVIL ENGINEERING**



SERIAL NUMBER 5

CONSTRUCTION MACHINERY (建設機械)

1. PERIOD

April 5, 1979 to July 10, 1979 (3-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) Under 40 years of age
- 5) 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) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Construction
- 2) Osaka International Training Centre, JICA

6. REMARKS

SERIAL NUMBER 23

PORT AND HARBOUR ENGINEERING ( 港 灣 工 学 )

1. PERIOD

May 3, 1979 to September 8, 1979 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective field
- 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
  - Planning of ports and harbours
  - Design of port and harbour facilities
  - Execution of port and harbour construction works
  - Container berth
  - Exercise, discussion and case study
- 2) 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

SERIAL NUMBER 24

HYDROGRAPHIC SURVEY (水路測量)

1. PERIOD

May 3, 1979 to October 3, 1979 (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) Present employment at national hydrographic office or other related organization
- 4) Under 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Control survey
  - Electronic survey
  - Sounding (Tidal observation and correction)
  - Harbour survey
  - Ocean survey
  - Data processing of ocean survey
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Hydrographic Department, Maritime Safety Agency

6. REMARKS

SERIAL NUMBER 38

SURVEYING AND MAPPING (GEODESY) (測量技術)

1. PERIOD

June 7, 1979 to December 8, 1979 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) Knowledge of mathematics, physics and chemistry of senior high school graduate level
- 2) Present of future engagement in surveying and mapping
- 3) Under 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - General introduction to surveying, mapping and printing in Japan
  - Outline of photogrammetry and cadastral survey
  - Introduction to Higher Geodesy
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Geographical Survey Institute, Ministry of construction

6. REMARKS

SERIAL NUMBER 58

RIVER ENGINEERING (河川工学)

1. PERIOD

August 2, 1979 to December 3, 1979 (4-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 35 years of age
- 5) Observation tours

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - River engineering, river planning, hydraulic structure, dam and sabo engineering
  - River improvement works, mechanics of bank and flood forecast
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

River Bureau, Ministry of Construction

6. REMARKS

SERIAL NUMBER 65

BRIDGE ENGINEERING ( 橋 梁 工 学 )

1. PERIOD

August 23, 1979 to November 6, 1979 (2.5-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 3 years
- 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

- 1) Road Bureau, Ministry of Construction
- 2) Tokyo International Centre, JICA

6. REMARKS

SERIAL NUMBER 73

SEISMOLOGY AND EARTHQUAKE ENGINEERING (地震工学)

1. PERIOD

August 30, 1979 to August 17, 1980 (11.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty-one (21)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Well versed in elementary 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 course: General seismology, basic programming of computer, etc.
  - Seismology course: Seismological application of computer, elasticity, etc.
  - Earthquake engineering course: Earthquake resistant design of building structure, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 81

CONSTRUCTION ENGINEERING ( 建設施工 )

1. PERIOD

September 6, 1979 to December 26, 1979 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University or college graduates, or equivalent
- 2) Occupational experience of more than 5 years
- 3) Good working knowledge of English
- 4) Under 40 years of age

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Construction management
  - Construction cost
  - Soil mechanics
  - Rock engineering
  - Technical inspection
  - Construction engineering
  - Construction machinery
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Construction
- 2) Faculty of Engineering, Kyoto University
- 3) Osaka International Training Centre, JICA

6. REMARKS



SERIAL NUMBER 85

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

1. PERIOD

September 13, 1979 to October 29, 1979 (1.5-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) 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 Information Centre
  - Kansai district

5. FACILITIES AND INSTITUTIONS

- 1) Road Bureau, Ministry of Construction
- 2) Public Works Research Institute

6. REMARKS

SERIAL NUMBER 94

CITY PLANNING ( 都 市 計 画 )

1. PERIOD

September 27, 1979 to December 1, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

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 discussions
  - Urban problems and regional planning in Japan
  - City planning system
  - Planning and development of transportation facilities
  - Planning and development of sewage system
  - Development of new residential cities and housing plan
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) City Bureau, Ministry of Construction
- 2) Tokyo International Centre, JICA

6. REMARKS

SERIAL NUMBER 99

TECHNOLOGY FOR DISASTER PREVENTION (EARTHQUAKE)

(防災技術セミナー)

**1. PERIOD**

October 3, 1979 to December 17, 1979 (2.5-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Ten (10)

**3. QUALIFICATIONS**

- 1) University graduates in science or technology with occupational experience of more than five 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**

National Research Centre for Disaster Prevention

**6. REMARKS**

## **7. PUBLIC UTILITY WORKS**

SERIAL NUMBER 26

THERMAL-ELECTRIC POWER ENGINEERING (火力発電)

1. PERIOD

May 10, 1979 to July 28, 1979 (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 (Electrical and/or mechanical)
- 3) Occupational experience of more than 7 years
- 4) Between 30 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Power system management
  - Operation and maintenance of thermal power station
- 2) Observation tours
  - Various types of power stations
  - Heavy electrical machinery shops

5. FACILITIES AND INSTITUTIONS

- 1) Public Utilities Dept., Agency of National Resources & Energy, Ministry of International Trade and Industry
- 2) Tokyo Electric Power Company, Inc.
- 3) Overseas Electric Industry Survey Institute Inc.

6. REMARKS

SERIAL NUMBER 27

HYDRO-ELECTRIC POWER ENGINEERING (水力発電)

1. PERIOD

May 10, 1979 to July 28, 1979 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 7 years
- 4) Between 30 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training  
-Planning, designing, construction and maintenance of dams and hydro-power stations
- 2) Observation tours  
-Various types of power stations  
-Electric Power Development Company, Ltd.

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of International Trade and Industry
- 2) Electric Power Development Co., Ltd.
- 3) Overseas Electric Industry Survey Institute Inc.

6. REMARKS

SERIAL NUMBER 33

WATER WORKS ENGINEERING (上水道施設)

1. PERIOD

May 17, 1979 to August 16, 1979 (3-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
  - Design, construction and management of water works system
  - Purification plant control, leak prevention (practical training)
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 70

GEOHERMAL ENERGY (地熱エネルギー)

1. PERIOD

August 30, 1979 to November 19, 1978 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) Young scientists or technologists who graduated from universities, majoring in geology, geophysics, chemistry, electrical engineering, mechanical engineering, mining, or similar subjects or these having scholastic ability equivalent to the above or higher than that
- 2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Geothermal geology
  - Structural geology
  - Geothermal hydrology
  - Power plant engineering, etc.
- 2) Observation tours
  - Kyushu University
  - Kyushu Electric Power Company, Inc.

5. FACILITIES AND INSTITUTIONS

Kyushu University

6. REMARKS



SERIAL NUMBER 80

WATER POLLUTION CONTROL AND SEWAGE WORKS ENGINEERING

(水質汚濁下水道)

1. PERIOD

September 6, 1979 to December 14, 1979 (3-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
  - Planning, design, construction, maintenance of sewage system
  - Sewage treatment plant
  - Manufactures of sewage treatment plant
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) City Bureau, Ministry of construction
- 2) Japan Sewage Works Corporation

6. REMARKS

SERIAL NUMBER 105

ELECTRIC POWER MANAGEMENT (電気事業経営)

1. PERIOD

October 4, 1979 to December 1, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

3. QUALIFICATIONS

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

4. DESCRIPTION OF TRAINING

- 1) *Lectures and practical training*  
*—Planning and management of power system*
- 2) *Observation tours*  
*—Hydro, thermal and nuclear stations*  
*—Heavy machinery manufacturers*

5. FACILITIES AND INSTITUTIONS

- 1) *Overseas Electric Industry Survey Institute Inc.*
- 2) *Chubu Electric Power Co., Ltd.*

6. REMARKS

SERIAL NUMBER 107

ELECTRIC POWER DISTRIBUTION (配電技術)

1. PERIOD

October 4, 1979 to December 26, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) Technical college graduates or equivalent
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 7 years
- 4) Between 30 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Transmission, transformation and distribution lines
  - Design, construction and maintenance of transmission lines
  - Distribution facilities and work
  - Indoor and outdoor wiring, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Public Utilities Dept., Agency of Natural Resources and Energy, Ministry of International Trade and Industry
- 2) Overseas Electric Industry Survey Institute Inc.

6. REMARKS

## 8. MINING AND MINERALS

SERIAL NUMBER 16

OFFSHORE PROSPECTING (沿海鉱物資源)

1. PERIOD

April 26, 1979 to November 4, 1979 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

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
  - Geology
  - Geophysics
  - Applied mathematics
  - Geochemical method for petroleum and mineral deposits
- 2) Navigation and position-finding techniques
- Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Tokyo International Centre, JICA
- 2) Geological Survey of Japan

6. REMARKS

SERIAL NUMBER 48

MINING ENGINEERING ( 鉱 山 )

1. PERIOD

July 5, 1979 to September 7, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University or college graduates or equivalent
- 2) Qualified in their respective fields
- 3) Healthy enough to carry out practical training in mines
- 4) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training  
- Knowledge and techniques of mining industry in Japan  
- Mining, mineral dressing, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- |   |                                    |
|---|------------------------------------|
| 1) Japan Mining Industry Association    | 7) Mittetsu Mining Co., Ltd.       |
| 2) Dowa Mining Co., Ltd.                | 8) Sumitomo Metal Mining Co., Ltd. |
| 3) Furukawa Co., Ltd.                   | 9) Toho Zinc Co., Ltd.             |
| 4) Mitsubishi Metal Corporation         |                                    |
| 5) Mitsui Mining and Smelting Co., Ltd. |                                    |
| 6) Nippon Mining Co., Ltd.              |                                    |

6. REMARKS

SERIAL NUMBER 54

GROUNDWATER RESOURCES DEVELOPMENT (地下水開発)

1. PERIOD

July 19, 1979 to November 9, 1979 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

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

- 1) Lectures and practical training
  - Groundwater exploration
  - Aquifer selection
  - Measurement of aquifer constants
  - Groundwater utilization
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Geological Survey of Japan, Ministry of International Trade and Industry

6. REMARKS

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental setup and the procedures followed.

3. The third part of the document presents the results of the experiments and discusses the implications of the findings. It compares the observed data with theoretical predictions and highlights any discrepancies.

4. The fourth part of the document provides a comprehensive analysis of the data, including statistical tests and graphical representations. It discusses the significance of the results and their potential applications in the field.

5. The fifth part of the document concludes the study and offers suggestions for future research. It identifies the limitations of the current work and proposes ways to address them in subsequent studies.

6. The sixth part of the document contains a list of references and a bibliography. It includes citations to relevant literature and sources used in the study.

## 9. HEAVY INDUSTRY

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental setup and the procedures followed.

3. The third part of the document presents the results of the experiments and discusses the implications of the findings. It compares the observed data with theoretical predictions and highlights any discrepancies.

4. The fourth part of the document provides a comprehensive analysis of the data, including statistical tests and graphical representations. It discusses the significance of the results and their potential applications in the field.

5. The fifth part of the document concludes the study and offers suggestions for future research. It identifies the limitations of the current work and proposes ways to address them in subsequent studies.

6. The sixth part of the document contains a list of references and a bibliography. It includes citations to relevant literature and sources used in the study.



SERIAL NUMBER 2

METAL FINISHING ENGINEERING (金属表面処理技術)

1. PERIOD

April 5, 1979 to September 30, 1979 (6-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 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Electroplating of Cu, Ni, Cr and Zn on metal bases
  - Plating on plastics
  - Electro-polishing
  - Electro-forming and mechanizing
  - Plating equipment
  - Industrial pollution prevention
  - Industrial management
  - Aluminum anodizing
  - Effluent control technology and metal finishing equipment
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Government Industrial Research Institute, Nagoya
- 2) Industrial Research Institute, Aichi Prefecture
- 3) Nagoya Municipal Industrial Research Institute
- 4) Nagoya International Training Centre, JICA

6. REMARKS

SERIAL NUMBER 45

WELDING TECHNOLOGY ( 溶 接 技 術 )

1. PERIOD

June 28, 1979 to January 28, 1980 (7-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) Between 26 and 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Introduction to classified welding processes
  - Electrical 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, Japan Welding Society
- 2) The Faculty of Engineering, Nagoya University

6. REMARKS

SERIAL NUMBER 55

FOUNDRY ENGINEERING ( 鋳 造 )

1. PERIOD

July 26, 1979 to March 31, 1980 (8-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 2 years
- 4) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Foundry sand
  - Mould properties and sand mixtures
  - Moulding processes
  - Fuels
  - Melting furnaces
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Government Industrial Research Institute, Nagoya
- 2) Industrial Research Institute, Aichi Prefecture
- 3) Metal Industries Institute, Mie Prefecture
- 4) Nagoya Municipal Industrial Research Institute

6. REMARKS

SERIAL NUMBER 97

METAL WORKS AND ENGINEERING ( 金属加工 )

1. PERIOD

September 27, 1979 to August 31, 1980 (11-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 2 years
- 4) Between 27 and 38 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) Government Industrial Research Institute, Nagoya
- 2) Industrial Research Institute, Aichi Prefecture
- 3) Nagoya Municipal Industrial Research Institute

6. REMARKS

SERIAL NUMBER 110

SHIPBUILDING ( 船 舶 技 術 )

1. PERIOD

October 4, 1979 to June 9, 1981 (20-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 Practical training
  - Applied ship dynamics and ship calculation
  - Basic design, hull design and outfitting design
  - Drawing and moulding plan
  - Hull construction, welding and outfitting processes
  - Marine engine and marine electricity
  - Production management
  - Shipyard practices
  - Shipbuilding processes
  - Test and sea-trial
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ship Bureau, Ministry of Transport
- 2) Tokyo International Centre, JICA
- 3) Overseas Shipbuilding Cooperation Centre

6. REMARKS

SERIAL NUMBER 132

ELECTRICAL STEEL MAKING (電気製鋼技術)

1. PERIOD

January 24, 1980 to April 30, 1980 (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 3 years
- 4) Between 26 and 40 years of age (Under 40 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 furnace, dissolution method, material control
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Government Industrial Research Institute, Nagoya
- 2) Daido Special Steel Corporation

6. REMARKS

## 10. CHEMICAL INDUSTRY

SERIAL NUMBER 3

CERAMIC GLAZE AND DECORATION ( 釉 薬 着 彩 )

1. PERIOD

April 5, 1979 to September 30, 1979 (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) Over 26 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Overglaze color
  - Frit making
  - Low melting glaze
  - Porcelain glazes
  - Color glazes
  - Decoration technique
  - Screen printing
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre, JICA
- 2) Tajimi-city Ceramic Design Research Centre
- 3) Government Industrial Research Institute, Nagoya

6. REMARKS



SERIAL NUMBER 43

CERAMIC INDUSTRY DEVELOPMENT (SEMINAR) (窯業開発セミナー)

1. PERIOD

June 28, 1979 to July 30, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Director or high ranking official in charge of ceramic development in governmental organization
- 2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions
  - Potteries and porcelains
  - Refractories
  - Technical ceramics
  - Structural clay products
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) National Industrial Research Institute, Nagoya
- 2) Ministry of International Trade and Industry

6. REMARKS

SERIAL NUMBER 57

TILE MANUFACTURING TECHNOLOGY (タイル製造)

1. PERIOD

July 26, 1979 to March 31, 1980 (8-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) Between 26 and 45 years of age
- 5) Good working knowledge of English
- 6) Be healthy enough to undergo the training

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Applicability test of raw materials
  - Processing machines operation
  - Forming machines operation
  - Glaze preparation
  - Firing
  - Packing and inspection
  - Quality control methods
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 92

PLASTICS (プラスチック)

1. PERIOD

September 20, 1979 to March 31, 1980 (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) Occupational experience of more than 3 years
- 4) Between 25 and 35 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

- 1) Osaka Municipal Technical Research Institute
- 2) Osaka International Training Centre, JICA

6. REMARKS

SERIAL NUMBER 95

REFRACTORY MANUFACTURING TECHNOLOGY (耐火物製造)

1. PERIOD

September 27, 1979 to March 31, 1980 (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) Occupational experience of more than 3 years
- 4) Between 26 and 45 years of age

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
  - Trial manufacturing of refractory bricks
  - Testing of refractory bricks
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 96

CERAMIC ENGINEERING ( 窯 業 技 術 )

1. PERIOD

September 27, 1979 to August 31, 1980 (11-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) 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 and practical training
  - Refractories, kiln construction, chemical analysis
  - International analysis, quality control, transfer paper
  - Sanitary ware, insulator, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre, JICA
- 2) Government Industrial Research Institute, Nagoya
- 3) Seto Branch, Government Industrial Research Institute, Nagoya

6. REMARKS

## 11. LIGHT INDUSTRY

SERIAL NUMBER 7

COIN AND DECORATION MANUFACTURE,  
METAL ANALYSIS AND PRECIOUS METAL REFINING

1. PERIOD (貨幣及び勲章製造)  
April 5, 1979 to September 30, 1979 (6-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED  
Five (5)

3. QUALIFICATIONS

- 1) Technical high school graduates or equivalent
- 2) Qualified in their respective fields
- 3) Under 35 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Coin manufacturing
  - Decoration and engraving
  - Metal analysis and precious metal refining
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS  
Mint Bureau, Ministry of Finance

6. REMARKS

SERIAL NUMBER 37

METROLOGY AND MEASUREMENT STANDARDS (計量標準)

1. PERIOD

June 7, 1979 to December 6, 1979 (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) 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
  - Maintenance of measurement standards
  - Specialized practical training
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) National Research Laboratory of Metrology (NRLM)
- 2) Electrotechnical Laboratory (ETL)

6. REMARKS



SERIAL NUMBER 56

WEAVING ENGINEERING ( 織 布 技 術 )

1. PERIOD

July 26, 1979 to March 31, 1980 (8-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 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Technical problems of textile industries in Japan
  - Chemical and synthetic yarn
  - Practices on weaving machinery
  - Chemical and physical testing of fabric
  - Weaving mill management, etc.
- 2) Observation tour

5. FACILITIES AND INSTITUTIONS

- 1) Mikawa Textile Technical Centre
- 2) Owari Textile Technical Centre
- 3) Nagoya International Training Centre, JICA

6. REMARKS

SERIAL NUMBER 64

INDUSTRIAL STANDARDIZATION AND QUALITY CONTROL

(工業標準化)

1. PERIOD

August 16, 1979 to November 10, 1979 (3-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 3 years
- 4) Under 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussions and seminars
  - Fundamentals in industrial standardization
  - Administration of national standardization
  - Standardization at international level
  - Legal metrology & measurement standards
  - Export inspection system
  - Reference of standards
  - JIS Marking system
  - Presentation of product standards
  - Quality control & statistical methods
  - Reliability and quality assurance
  - Company standardization
  - Value engineering and standardization
  - Standardization in physical distribution
  - Permeation and implementation of standards

5. FACILITIES AND INSTITUTIONS

Agency of Industrial Science and Technology, Japanese Standards Association

6. REMARKS

SERIAL NUMBER 74

INDUSTRIAL DESIGN ( デザイン )

1. PERIOD

September 6, 1979 to October 24, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

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

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Tendency of industrial design in Japan
  - Motive and process of design
  - Role of industrial design
  - Design methods, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Japan Industrial Design Promotion Organization
- 2) Japan Export General Merchandise Centre

6. REMARKS

**1. PERIOD**

January 10, 1980 to March 31, 1980 (3-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Ten (10)

**3. QUALIFICATIONS**

- 1) University or college graduates or equivalent
- 2) Occupational experience of more than 3 years
- 3) Age between 25 and 35 years
- 4) Good working knowledge of English

**4. DESCRIPTION OF TRAINING**

- 1) Lectures and practical training
  - Fundamental properties of glass
  - Sheet glass
  - Container glass
  - Machinery and materials
- 2) Observation tours

**5. FACILITIES AND INSTITUTIONS**

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

**6. REMARKS**

## 12. TRANSPORTATION AND TRAFFIC

SERIAL NUMBER 30

TOURISM A (SEMINAR) (観光セミナー〔A〕)

1. PERIOD

May 10, 1979 to July 10, 1979 (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) 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
  - Tourism administration
  - Tourism promotion activities
  - Tourism development method
  - Tourist industry business
  - Tourist service
  - Presentation and discussion of country report
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Tourism Department, Ministry of Transport
- 2) Japan National Tourist Organization

6. REMARKS

SERIAL NUMBER 39

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

**1. PERIOD**

June 14, 1979 to September 13, 1979 (3-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Eight (8)

**3. QUALIFICATIONS**

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Present or future engagement in planning and administration of construction works
- 4) Under 35 years of age
- 5) Good working knowledge of English

**4. DESCRIPTION OF TRAINING**

- 1) Lectures and practical training
  - Construction of railways in Japan
  - Maintenance of tracks and structures:  
Modern method and techniques of track maintenance for higher speed and low cost, reinforcement of track 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 Corporation
- 4) Osaka International Training Centre, JICA

**6. REMARKS**

SERIAL NUMBER 52

RAILWAY ROLLING STOCK ENGINEERING ( 鉄 道 車 輜 )

1. PERIOD

July 5, 1979 to October 14, 1979 (3.5-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 7 years
- 4) Under 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Railway and rolling stock in Japan
  - Planning and administration of rolling stock
  - Design and specification of rolling stock
  - Rolling stock manufacturing engineering
  - Procurement and inspection of rolling stock
  - Management of materials for rolling stock
  - Other related matters
- 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



SERIAL NUMBER 69

NAVIGATION AIDS ( 航路標識 )

1. PERIOD

August 30, 1979 to November 4, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) High school graduates or equivalent
- 2) Administrators in the field of navigation aids service
- 3) Under 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Theory and treatment of navigation aids (lighted beacon, buoys, radio beacon, etc.)
  - Treatment of wave activated generators, air wet batteries, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Tokyo International Centre, JICA  
Maritime Safety Agency

6. REMARKS

SERIAL NUMBER 75

SHIPPING BUSINESS (海運経営実務)

1. PERIOD

September 6, 1979 to November 5, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

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 40 years of age
- 5) Good working knowledges of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - International shipping and Japanese shipping
  - Future and innovation of maritime transportation
  - Containerization, other unitarizations and related conventions
  - Present situation of Japanese shipbuilding industry
  - Shipping conference and management of liner operation
  - Education, training and management for seamen
  - Bill of lading, charter party, marine insurance, etc.
  - In-service training at shipping company
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Shipping Bureau, Ministry of Transport

6. REMARKS

SERIAL NUMBER 86

SUBWAY ENGINEERING (地下鉄道工学)

1. PERIOD

September 13, 1979 to November 11, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- 1) Technical college 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
  - Construction planning of subway
  - Design of subway structure
  - Construction method of subway
  - Management of construction work
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) *Ministry of Transport*
- 2) *Teito Rapid Transit Authority*
- 3) *Traffic Bureau, Osaka City*
- 4) *Tokyo International Centre, JICA*

6. REMARKS

SERIAL NUMBER 89

PORTS AND HARBOURS (SENIOR COURSE) ( 港 灣 上 級 )

1. PERIOD

September 16, 1979 to October 20, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) Persons who have ever participated in Seminar in Ports & Harbours or Port & Harbour Engineering Course in Japan before 1974
- 2) Nominated by their government
- 3) Civil engineers presently engaged in harbour engineering works
- 4) Above 35 and under 50 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Planning of ports and harbours container terminal
  - Caisson design
  - PHRI (Port and Harbour Research Inst.)  
"Wave" or "Soil".
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Bureau of Ports and Harbours, Ministry of Transport

6. REMARKS

SERIAL NUMBER 108

METEOROLOGY ( 気 象 学 )

1. PERIOD

October 4, 1979 to February 3, 1980 (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) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Mechanism of rainfall
  - Recent typhoon theory
  - Introduction to numerical weather prediction
  - Forecasting of rainfall
  - Global telecommunication system and ADESS facilities
  - Radar observation and utilization of radar data
  - Tidal theory and observation
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Japan Meteorological Agency
- 2) Meteorological Research Institute of JMA
- 3) Meteorological College of JMA

6. REMARKS

SERIAL NUMBER 111

AERODROME (SEMINAR) (空港セミナー)

1. PERIOD

October 11, 1979 to November 19, 1979 (1-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) 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) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Civil Aviation Bureau, Ministry of Transport
- 2) Tokyo International Centre, JICA
- 3) Japan Airport Consultants Co., Inc.

6. REMARKS

SERIAL NUMBER 112

RAILWAY ELECTRIFICATION AND HIGH-SPEED OPERATION

(鉄道電化高速運転)

1. PERIOD

October 11, 1979 to December 15, 1979 (2-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
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Transport
- 2) Japanese National Railway (JNR)
- 3) Railway Electrification Association

6. REMARKS

SERIAL NUMBER 114

TOURISM B (SEMINAR) (観光セミナー〔B〕)

1. PERIOD

October 11, 1979 to December 17, 1979 (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
- 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
  - Tourism administration
  - Tourism promotion activities
  - International congress and convention business
  - Tourism development method
  - Tourism industry business
  - Tourism service
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Tourism Department, Ministry of Transport
- 2) Japan National Tourism Organization

6. REMARKS



SERIAL NUMBER 116

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

1. PERIOD

October 18, 1979 to November 28, 1979 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University
- 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 practical training
  - Seamen's education and training
  - Qualification for ships officer
  - Labor standards of seamen
  - Seamen's welfare
  - Employment exchange system for seamen
  - Mariners' insurance system
  - Tendency of ships technical innovation
  - Present situation and the future of shipping
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Tokyo International Centre (JICA)  
Seafarers Bureau, Ministry of Transport

6. REMARKS

SERIAL NUMBER 121

PORTS AND HARBOURS (SEMINAR) (港湾セミナー)

1. PERIOD

October 26, 1979 to December 21, 1980 (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 50 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Administration on ports and harbours
  - Technical aspects of port development
  - Port planning in general
  - Port management and operation
  - Cargo handling operation
  - \*\* Discussion on the present situation of ports and harbours in the participating countries
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Bureau of Ports and Harbours, Ministry of Transport
- 2) Tokyo International Centre, JICA

6. REMARKS

SERIAL NUMBER 123

PHYSICAL OCEANOGRAPHIC SURVEY (海洋物理調査)

1. PERIOD

November 1, 1979 to March 12, 1980 (4.5-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
  - Self-study on specific items
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Hydrographic Department, Maritime Safety Agency

6. REMARKS

SERIAL NUMBER 136

RAILWAY SIGNAL ENGINEERING ( 鉄道信号 )

1. PERIOD

February 14, 1980 to June 20, 1980 (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

### **13. POSTAL SERVICE, COMMUNICATION AND BROADCASTING**

SERIAL NUMBER 4

TELEPHONE SWITCHING ENGINEERING (I) (電話交換 [ I ])

1. PERIOD

April 5, 1979 to July 15, 1979 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduate or equivalent
- 2) Working for telecommunication administrations or common carrier organizations
- 3) Sufficient practical experience on their own switching systems
- 4) Under 40 years old
- 5) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Basic and theoretical technology for switching system
  - Crossbar switching system
  - Electronic switching system (ESS)
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Public Corporation (NTT)

6. REMARKS

SERIAL NUMBER 11

ELECTRONICS ( 電子工学 )

1. PERIOD

April 12, 1979 to October 31, 1979 (6.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

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

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Analysis techniques of materials by X-ray diffraction
  - Applications of laser light
  - Logical designs of digital equipment
  - Discharge deterioration test of plastic film materials and measurement of discharge amount
  - Thin film technology
  - Applications of ultrasonic power
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 19

INTERNATIONAL TELEGRAPH AND TELEPHONE  
SERVICES (TRAFFIC AND COMMERCIAL) (國際電信電話業務)

1. PERIOD

May 3, 1979 to July 16, 1979 (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
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Introduction (International Telecommunication system in Japan, Recent Trend of International Telecommunication Technique)
  - Other services (leased channel, AUTOMEX, DATEL, etc.)
  - Telephone and telex traffic management
  - Traffic demand forecast
  - Circuit planning
  - Accounting procedures
  - ITU and INTELSAT
  - Telecommunication statistics
  - Personnel administration and wages
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS



SERIAL NUMBER 20

SATELLITE COMMUNICATION ENGINEERING (REGULAR) (衛星通信〔レギュラー〕)

1. PERIOD

May 3, 1979 to August 4, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Introduction
  - Transmission system
  - Facilities
  - Operation and maintenance
  - INTELSAT
  - Planning of earth station construction
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

SERIAL NUMBER 21

CARRIER TELEPHONY ENGINEERING (搬送電話)

1. PERIOD

May 3, 1979 to August 12, 1979 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University graduate 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
  - Frequency division multiplex systems
  - Pulse code modulation systems
  - Application technique
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Public Corporation (NTT)

6. REMARKS

'TELEVISION BROADCASTING MANAGEMENT' (テレビ放送管理)

1. PERIOD

May 10, 1979 to June 21, 1979 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Staffs higher than division-chiefs engaged in administrative and 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

Ministry of Posts and Telecommunications

6. REMARKS

In view of the fact that a wide range of knowledge on running television broadcasting is indispensable to managing staffs, the study programme involves major subjects on television broadcasting management such as its system, engineering, finance and programme planning.

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

It is desirable that those who intend to study production method of television programme or television engineering should apply for "Educational Television Programme Course" or the "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).

SERIAL NUMBER 36

TELEPHONE OUTSIDE PLANT ENGINEERING ( 電 話 線 路 )

**1. PERIOD**

June 7, 1979 to September 16, 1979 (3.5-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Fifteen (15)

**3. QUALIFICATIONS**

- 1) University or 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
  - Demand forecast, fundamental telephone network plan, transmission system and engineering economy
  - Outside plant construction and maintenance
- 2) Observation tours

**5. FACILITIES AND INSTITUTIONS**

Nippon Telegraph and Telephone Public Corporation (NTT)

**6. REMARKS**

SERIAL NUMBER 49

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

**1. PERIOD**

July 5, 1979 to September 17, 1979 (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*
  - Basic Theory
  - FM transmitter
  - Transmitting System in general
  - Radio frequency circuit
  - Tube circuit
  - Medium wave transmitter
  - Radio propagation
  - Practical training with radio transmitter
- 2) Observation tours

**5. FACILITIES AND INSTITUTIONS**

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

**6. REMARKS**

SERIAL NUMBER 50

COLOR TELEVISION ENGINEERING (テレビ放送技術)

1. PERIOD

July 5, 1979 to October 8, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Engineers serving in a broadcasting organization with a few years of practical experience in TV engineering
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training  
- Electron tubes, color theory, telecine, VTR transmitter, studio work, outside broadcasting, new broadcasting techniques, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS

SERIAL NUMBER 51

MICROWAVE COMMUNICATION ENGINEERING (I) (マイクロウェーブ〔I〕)

1. PERIOD

July 5, 1979 to October 15, 1979 (3.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) University or college graduates
- 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
  - Microwave circuit
  - Microwave propagation
  - FM Microwave TV transmission theory
  - FM multiple telephone transmission theory
  - Antenna and feeder for microwave communications
  - Diversity reception
  - Power plant for microwave communication
  - Others
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Public Corporation (NTT)

6. REMARKS

SERIAL NUMBER 53

EDUCATIONAL TELEVISION PROGRAMME (教育テレビ番組)

1. PERIOD

July 19, 1979 to October 8, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

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

4. DESCRIPTION OF TRAINING

- 1) Lectures, discussions and practical training
  - Planning and composition of educational TV programme
  - Educational TV programme production
  - Special effects for educational TV programme production, TV arts, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

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

6. REMARKS



SERIAL NUMBER 61

INTERNATIONAL TELEX COMMUNICATION ENGINEERING

(国際テレックス通信)

1. PERIOD

August 16, 1979 to November 5, 1979 (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) Currently engaged in, or have basic knowledge of international telex communication engineering work
- 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
  - Telegraph transmission system
  - Basic planning of telex system
  - Electronic telex exchange
  - Telegraphy equipment
  - Maintenance management
  - Maintenance and testing of telex network
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

SERIAL NUMBER 62

RADIO FREQUENCY MONITORING ( 電波監視 )

1. PERIOD

August 16, 1979 to October 4, 1979 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) College graduates or equivalent
- 2) Qualified in their respective fields
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
- 2)
  - Purpose of radio frequency monitoring in Japan and international cooperation
  - Substance of radio frequency monitoring service in Japan
  - Arrangement and use of results of radio frequency monitoring
  - Outline of radio frequency monitoring facilities in Japan
  - Licensing and supervising of radio stations
- 3) Observation tours

5. FACILITIES AND INSTITUTIONS

Ministry of Posts and Telecommunications

6. REMARKS

SERIAL NUMBER 63

SATELLITE COMMUNICATION ENGINEERING (ADVANCED)

(衛星通信 [ アドバンス ])

1. PERIOD

August 16, 1979 to October 26, 1979 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates specializing in telecommunications or electrical engineering or equivalent
- 2) Must have experience of not less than three years in INTELSAT satellite communication service
- 3) Be currently engaged or expected to engage in satellite communication service
- 4) Under 40 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Transmission system
  - Facilities
  - Operation and maintenance
  - INTELSAT
  - Planning of earth station construction
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

SERIAL NUMBER 66

TELEPHONE SWITCHING ENGINEERING (II) (電話交換〔II〕)

1. PERIOD

August 23, 1979 to November 25, 1979 (3-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 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Basic and theoretical engineering for switching system
  - Crossbar switching system
  - Electronic switching system
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Public Corporation (NTT)

6. REMARKS

SERIAL NUMBER 88

MICROWAVE COMMUNICATION ENGINEERING (II) (マイクロウェーブ〔II〕)

1. PERIOD

September 13, 1979 to December 23, 1979 (3-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 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Microwave circuit
  - Microwave propagation
  - FM microwave TV transmission theory
  - FM multiple telephone transmission theory
  - Antenna and feeder for microwave communications
  - Diversity reception
  - Power plant for microwave communication
  - Others
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Public Corporation (NTT)

6. REMARKS

SERIAL NUMBER 100

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

1. PERIOD

October 4, 1979 to October 18, 1979 (0.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) 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

SERIAL NUMBER 122

TELEPHONE NETWORK PLANNING AND DESIGNING (電話網計画設計)

1. PERIOD

November 1, 1979 to February 18, 1980 (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) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Fundamental telephone network design
  - Outline of various systems
  - Toll telephone network planning
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nippon Telegraph and Telephone Public Corporation (NTT)

6. REMARKS

SERIAL NUMBER 124

BROADCASTING ADMINISTRATION (SEMINAR) (放送幹部セミナー)

1. PERIOD

November 11, 1979 to November 24, 1979 (0.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Directors general or high ranking officials responsible for management or administration of broadcasting in government or public broadcasting organizations
- 2) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Problems in medium frequency radio broadcasting
  - Technical criteria for frequency allocation
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Radio Regulatory Bureau, Ministry of Posts and Telecommunications

6. REMARKS



SERIAL NUMBER 127

INTERNATIONAL TELEPHONE SWITCHING ENGINEERING ( 國際電話交換 )

1. PERIOD

January 10, 1980 to March 22, 1980 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. DUALIFICATIONS

- 1) University graduates or equivalent
- 2) Under 45 years or age
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - System design
  - Traffic engineering
  - Development of international telephone transit exchange
  - Subscriber dialling system
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kokusai Denshin Denwa Co., Ltd. (KDD)

6. REMARKS

SERIAL NUMBER 137

TELECOMMUNICATION DEVELOPMENT (SEMINAR) (電気通信開発セミナー)

1. PERIOD

February 22, 1980 to March 7, 1980 (0.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Directors general or high ranking officials responsible for management or administration of telecommunications in governmental or operational organizations
- 3) Good working knowledge of English a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - The up-to-date situation and topics in the field of telecommunication in Japan
  - Present situation and prospects of telecommunication development, domestic and abroad
  - Problems of telecommunication development, home and abroad, particularly in participating countries
- 2) Observation tours
  - To various related institutions and manufacturing plants

5. FACILITIES AND INSTITUTIONS

Ministry of Posts and Telecommunications

6. REMARKS

SERIAL NUMBER 140

POSTAL EXECUTIVES (SEMINAR) (郵政幹部セミナー)

1. PERIOD

March 3, 1980 to March 16, 1980 (0.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

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

## **14. MEDICAL TREATMENT AND WELFARE**

SERIAL NUMBER 8

MICROBIAL DISEASES STUDY (微生物病研究)

1. PERIOD

April 5, 1979 to March 25, 1980 (11.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Researchers or teachers in microbiology or public health with a prospect of promotion to leading staffs after completion of this course
- 3) Under 40 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and discussion
  - Microbiology
  - Virology
  - Parastiology
  - Other related subjects
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Research Institute for Microbial Diseases, Osaka University

6. REMARKS

SERIAL NUMBER 12

**FAMILY PLANNING ADMINISTRATION FOR  
SENIOR OFFICERS (SEMINAR)** (家族計画指導者セミナー)

**1. PERIOD**

April 12, 1979 to April 28, 1979 (0.5-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Ten (10)

**3. QUALIFICATIONS**

- 1) Nominated by their government
- 2) Senior officers or executive members who are responsible for family planning programmes of the government or voluntary organizations at a central level
- 3) Have a sufficient command of spoken and written English
- 4) Be in good health

**4. DESCRIPTION OF TRAINING**

- 1) Country Reports
  - a) Oral presentation of constraints on family planning administration
  - b) Paper presentation of general situation of national family planning programmes described with geographic, demographic and administrative and organizational informations
- 2) Topic discussion
  - Planning and budget
  - Recruitment and training of personnel
  - Information, education and communication

**5. FACILITIES AND INSTITUTIONS**

Japan Organization for International Cooperation in Family Planning, Inc. (JOICFP)

**6. REMARKS**

SERIAL NUMBER 25

TUBERCULOSIS CONTROL (ADVANCED) (結核対策上級)

1. PERIOD

May 7, 1979 to June 11, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Medical officers who are or are planned to be, in charge of tuberculosis control programme of a certain administrative level
- 2) a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Lectures, seminars, group discussion and workshops:
  - Recent advances in TB control
  - Progress and problems in the participants' TB programmes
  - Simulation of TB epidemiology
  - Evaluation of TB programme
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) The Research Institute of Tuberculosis  
Japan Anti-tuberculosis Association

6. REMARKS

SERIAL NUMBER 32

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

1. PERIOD

May 10, 1979 to July 16, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Three 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) Tokyo International Centre, JICA
- 2) Planning division, Water Supply and Environment Department, Environmental Health Bureau.
- 3) Department of Sanitary Engineering, The Institute of Public Health
- 4) Japan Environmental Sanitation Centre

6. REMARKS



SERIAL NUMBER 35

**INFORMATION, EDUCATION AND COMMUNICATION  
IN FAMILY PLANNING (SEMINAR)**

(家族計画広報教育セミナー)

**1. PERIOD**

June 7, 1979 to June 26, 1979 (0.5-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Fifteen (15)

**3. QUALIFICATIONS**

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Be officers who are directly involved and responsible for family planning IE & C programme of government or voluntary organizations at central or provincial level
- 4) Good working knowledge of English

**4. DESCRIPTION OF TRAINING**

- 1) Lectures and practical training
  - IE & C and rural community participation into family planning programme
  - IE & C and rural health development programme
  - Decentralization of IE & C and family planning and medical services

**5. FACILITIES AND INSTITUTIONS**

Japanese Organization for International Cooperation in Family Planning, Inc. (JOICFP)

**6. REMARKS**

SERIAL NUMBER 40

TUBERCULOSIS CONTROL ( 結 核 対 策 )

1. PERIOD

June 14, 1979 to October 22, 1979 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

3. QUALIFICATIONS

- 1) Physicians who are engaged in national tuberculosis control programme, preferably having or to have a leading role in the programme, excluding those who are engaged in pure clinical work
- 2) A sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Lectures, discussions, workshops, field visits, etc.
  - Statistics
  - Epidemiology
  - Tuberculosis control programme
  - WHO and its role in the tuberculosis control and research
  - General concept of tuberculosis
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association

6. REMARKS

SERIAL NUMBER 60

**MEDICAL AND HEALTH ASPECTS  
IN FAMILY PLANNING (SEMINAR)** (家族計画医学保健セミナー)

**1. PERIOD**

August 15, 1979 to September 4, 1979 (0.5-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Fifteen (15)

**3. QUALIFICATIONS**

- 1) Medical, paramedical or related professionals in charge of health and biological aspects in family planning of governments or voluntary organizations at central or provincial level
- 2) With sufficient command of spoken and written English

**4. DESCRIPTION OF TRAINING**

- 1) Lectures and discussions
  - Family planning in Japan
  - Maternal and child health and family planning in Japan
  - Main theme:
    - Family planning and hospital
    - Family planning and health centre
    - Family planning and maternal and child health centre
    - Medical aspects
      - condom and other traditional methods
      - oral pill
      - IUDs, etc.
- 2) Observation tours

**5. FACILITIES AND INSTITUTIONS**

Japanese Organization for International Cooperation in Family Planning, Inc. (JOICFP)

**6. REMARKS**

SERIAL NUMBER 72

MEDICAL SCIENCE AND TECHNOLOGY (医科学技術)

1. PERIOD

August 30, 1979 to May 31, 1980 (9-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Present engagement in the field of medicine or public health
- 3) Under 40 years of age
- 4) Good working knowledge of English
- 5) Be healthy enough to accomplish the 11 months' training

4. DESCRIPTION OF TRAINING

- 1) Lectures, seminars and laboratory works
  - General epidemiology
  - Specific epidemiology
  - General virology
  - Tropical virology and infectious diseases
  - Pathology
  - Biostatistics
  - Acclimatization
  - Selected topics of interest
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Kobe University School of Medicine, Kobe University

6. REMARKS

SERIAL NUMBER 115

COMMUNITY BASED FAMILY PLANNING PROGRAMME (SEMINAR)

(家族計画組織活動セミナー)

1. PERIOD

October 18, 1979 to November 6, 1979 (0.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Responsible officers for the logistics in family planning programmes of respective governments or voluntary organizations at a central level
- 2) With sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) *Presentation and discussions*
  - Family planning in Japan
  - Family planning programmes in relation to the logistics of each participating country
  - Main theme:
    - How to supply contraceptive effectively to the population
    - Distribution channel of contraceptives
    - Equipment and personnel
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Japanese Organization for International Cooperation in Family Planning, Inc.  
(JOICFP)

6. REMARKS

SERIAL NUMBER 118

**EARLY GASTRIC CANCER DETECTION  
AND OTHER GASTROINTESTINAL TRACT DISEASES**

( 早期胃ガン診断 )

**1. PERIOD**

October 25, 1979 to December 22, 1979 (2-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Fifteen (15)

**3. QUALIFICATIONS**

- 1) Graduates of a medical college or the medical department of a university
- 2) Practically experienced for more than 7 years, majoring in the diagnosis cancer, gastritis, ulcer or polyp of stomach and its adjacent region in the field of X-ray, endoscopy, pathology or surgery
- 3) Under 45 years of age
- 4) Good working knowledge of English

**4. DESCRIPTION OF TRAINING**

- 1) Lectures and practical training  
- Various subjects involved in this field
- 2) Observation tours

**5. FACILITIES AND INSTITUTIONS**

Medical Association for Early Gastric Cancer Detection

**6. REMARKS**

SERIAL NUMBER 119

LABORATORY WORKS FOR TUBERCULOSIS CONTROL

(精核対策細菌技術指導者)

1. PERIOD

October 25, 1979 to February 25, 1980 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

3. QUALIFICATIONS

- 1) Either one of the following three items
  - a) Qualified technicians experienced over two years of laboratory works in bacteriology
  - b) Doctors with over one year of experience in laboratory works in bacteriology
  - c) Senior technicians with over five years of experience in laboratory works in tuberculosis bacteriology
- 2) Engaged in the training of health personnel in laboratory works for tuberculosis control
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Tuberculosis control programmes
  - Role of laboratory work in tuberculosis control programmes
  - Laboratory techniques and methods for tuberculosis control
  - Accuracy control of laboratory examinations
  - Laboratory data control
  - Management of laboratory works, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association

6. REMARKS

SERIAL NUMBER 120

CLINICAL ONCOLOGY (ガン対策)

1. PERIOD

October 25, 1979 to March 6, 1980 (4.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Licensed physicians with occupational experience of more than 2 years in diagnosis and treatment of cancer
- 2) Under 35 years of age
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Outline of cancer control in Japan
  - Hospital cancer registry
  - Epidemiology
  - Anatomical and clinical pathology
  - X-ray diagnosis of cancer
  - Endoscopic diagnosis
  - Radiotherapy
  - Chemotherapy
  - Surgical operation and anesthesia
  - Radioisotope
- 2) Observation tour

5. FACILITIES AND INSTITUTIONS

*National Cancer Centre*

6. REMARKS



SERIAL NUMBER 125

NATIONAL HEALTH ADMINISTRATION ( 衛生行政 )

1. PERIOD

November 21, 1979 to December 20, 1979 (1-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Medically qualified administrators of the national government taking charge of health administration
- 3) In a position to participate in planning and deciding national health administration policy

4. DESCRIPTION OF TRAINING

- 1) Lectures
  - Maternal and child health
  - Health manpower development
  - Communicable disease control
  - Health administration in Japan
  - Mental health
  - School health
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre
- 2) Ministry of Health and Welfare
- 3) International Medical Foundation of Japan

6. REMARKS

SERIAL NUMBER 126

MEDICAL RADIOGRAPHY (医療放射線技術)

1. PERIOD

November 22, 1979 to June 30, 1980 (7-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

3. QUALIFICATIONS

- 1) Senior high school 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
  - X-ray physics and X-ray engineering
  - Photographic chemistry
  - Radiation measurement
  - Radiation protection
  - Computer
  - Radiography, its theory and apparatus
  - Radiographic techniques, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) College of Biomedical Technology, Osaka University
- 2) Hospital attached to the Medical Faculty of Osaka University

6. REMARKS

## 15. MANAGEMENT TECHNOLOGY

SERIAL NUMBER 1

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

1. PERIOD

April 5, 1979 to June 30, 1979 (3-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) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Regional development
  - Industrial estate development planning
  - Financing and managerial guidance
  - Smaller industries and export trade promotion
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Nagoya International Training Centre, JICA

6. REMARKS

SERIAL NUMBER 68

BUSINESS FEASIBILITY STUDY AND MANAGEMENT PRACTICE (工業開発計画実務)

1. PERIOD

August 23, 1979 to March 31, 1980 (7-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (14)

3. QUALIFICATIONS

- 1) University graduates or equivalent with occupational experience in their own specialized fields for more than three 3 years
- 2) Being currently engaged in or designated to the profession in the field of industrial development, planning and execution in governmental organization
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and case practices
  - Organization and system, finance and accounting, production, marketing, and business diagnosis
  - Case study
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Nagoya International Training Centre, JICA
- 2) Central Japan Industrial Association (CJIA)

6. REMARKS

SERIAL NUMBER 129

MEASURES FOR SMALLER INDUSTRY (中小企業対策)

1. PERIOD

January 10, 1979 to March 31, 1980 (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 practical training
  - General perspectives of Japan's smaller enterprises
  - Its development and management methods in connection with governmental policies, taxation systems, financing and banking provisions, etc.
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Osaka Prefectural Government
- 2) The Osaka Prefectural Institute for Industrial Management
- 3) Osaka International Training Centre, JICA

6. REMARKS

## **16. ECONOMY, FINANCE AND MONEY**

SERIAL NUMBER . 28

TRADE PROMOTION A (SEMINAR) (貿易振興セミナー (A) )

1. PERIOD

May 10, 1979 to July 9, 1979 (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) 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
  - Trade promotion
  - Japanese economy and trade
  - World trade (Japan) and Asia, Near and Middle East and Africa
  - Trade business practice
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) World Trade Centre of Japan
- 2) Tokyo International Centre, JICA

6. REMARKS



SERIAL NUMBER 67

FOREIGN TRADE PRACTICE FOR LEADERS (貿易実践指導者)

1. PERIOD

August 23, 1979 to December 19, 1979 (4-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

- 1) University graduates or equivalent with occupational experience of more than 3 years
- 2) Under 35 years of age
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Theory, policy and structure of trade
  - Management of trade
  - Business practice of trade transaction
  - Function and system of customs
  - Export insurance and inspection of export and import goods
  - Foreign exchange and foreign trade finance
  - Marine insurance
  - Transportation
  - Dispute and settlement
  - Communication

5. FACILITIES AND INSTITUTIONS

- 1) The Kobe Chamber of Commerce and Industries
- 2) Kobe University

6. REMARKS

SERIAL NUMBER 76

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

1. PERIOD

September 6, 1979 to November 20, 1979 (2.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fourteen (30)

3. QUALIFICATIONS

- 1) University graduates
- 2) Qualified in their respective fields and have excellent performance record
- 3) Occupational experience of more than 5 years (preferably in indirect taxation)
- 4) Under 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Orientation
- 2) Lectures and Discussions
  - Tax policy analysis
  - Tax administration
  - Special lectures on tax related matters
- 3) Theses and Round Table Discussions

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Finance
- 2) National Tax Administration
- 3) Hachioji International Training Centre, JICA

6. REMARKS

SERIAL NUMBER 93

CUSTOMS TECHNIQUES (SEMINAR) (税関行政セミナー)

1. PERIOD

September 27, 1979 to November 13, 1979 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

3. QUALIFICATIONS

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

4. DESCRIPTION OF TRAINING

- 1) Lectures and Discussion  
--The organizations and functions of customs administration
- 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

SERIAL NUMBER 98

TRADE PROMOTION B ( SEMINAR ) (貿易振興セミナー (B) )

1. PERIOD

September 28, 1979 to November 27, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective field
- 3) Under 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Trade promotion
  - Japanese economy and trade
  - International economy
  - Trade business practice
  - Current topics
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

World Trade Centre of Japan (WTC)

6. REMARKS

SERIAL NUMBER 101

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

1. PERIOD

October 4, 1979 to October 21, 1979 (0.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) presently engaged in tax planning or administration
- 2) ranked senior class officials
- 3) have a sufficient command of spoken and written English

4. DESCRIPTION OF TRAINING

- 1) Comparative study on tax system and administration through round-table discussions
- 2) Field trips to tax officers and various industry plants

5. FACILITIES AND INSTITUTIONS

National Tax Administration

6. REMARKS

## 17. LABOUR

SERIAL NUMBER 6

HIGH SKILLED MACHINIST (上級技能者訓練)

1. PERIOD

April 5, 1979 to March 25, 1980 (11.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Technical or trade school 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
  - Mechanical engineering
  - Mechanical processing
  - Production engineering
  - Measurement
  - Drawing
  - Supervisory training
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Higashi-Yodogawa Advanced Vocational Training Centre, Osaka Prefectural Government

6. REMARKS

SERIAL NUMBER 22-1

VOCATIONAL TRAINING INSTRUCTORS  
(MACHINERY TRADE) (職業訓練指導員養成〔機械〕)

1. PERIOD

May 10, 1979 to March 30, 1980 (10.5-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) Between 25 and 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Mechanics and mechanism
  - Strength of materials
  - Metals and metal technology
  - Machine tools
  - Mechanical processing
  - Measuring and testing
  - Hand finishing
  - Machine tool operation
  - Mechanical experiment
- 2) *Observation tours*

5. FACILITIES AND INSTITUTIONS

Institute of Vocational Training

6. REMARKS



SERIAL NUMBER 22-2

VOCATIONAL TRAINING INSTRUCTORS  
(ELECTRIC TRADE) (職業訓練指導員養成〔電氣〕)

1. PERIOD

May 10, 1979 to March 30, 1980 (10.5-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 3 years
- 4) Between 25 and 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Automatic control
  - Electric machinery
  - Power electronics
  - Illumination
  - Design of house wiring
  - Electrical wiring construction and power generation, etc.
  - House wiring
  - Practice of sequence control circuit
  - Assembling and testing of transformer and motor
  - Electrical measurement
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute of Vocational Training

6. REMARKS

SERIAL NUMBER 22-3

VOCATIONAL TRAINING INSTRUCTORS  
(WOOD WORKING TRADE) (職業訓練指導員養成〔木材加工〕)

1. PERIOD

May 10, 1979 to March 30, 1980 (10.5-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 3 years
- 4) Between 25 and 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Planning and design
  - Materials
  - Wood processing (Operations of woodworking machines, cutting process, glue connections and plywood process, and paint and painting)
  - Hand processing (Adjustment of hand tools, gluing process, sanding and finishing)
  - Mechanical processing
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute of Vocational Training

6. REMARKS

SERIAL NUMBER 22-4

VOCATIONAL TRAINING INSTRUCTORS  
(AUTOMOTIVE TRADE) (職業訓練指導員養成〔運輸装置〕)

1. PERIOD

May 10, 1979 to March 30, 1980 (10.5-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 3 years
- 4) Between 25 and 35 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Mechanics and mechanism
  - Traffic engineering
  - Internal combustion engines
  - Automobile engineering
  - Repair of motor vehicles
  - Engine performance test
  - Automobile performance test
  - Mechanical experiment
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Institute of Vocational Training

6. REMARKS

SERIAL NUMBER 22-5

**VOCATIONAL TRAINING INSTRUCTORS**  
**(ELECTRONICS TRADE) (職業訓練指導員養成〔電子〕)**

**1. PERIOD**

May 10, 1979 to March 30, 1980 (10.5-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) Between 25 and 35 years of age
- 5) Good working knowledge of English

**4. DESCRIPTION OF TRAINING**

- 1) Lectures and practical training
  - Electronic components
  - Electronic circuits
  - High frequency measurements
  - Radio wave propagation and antenna engineering
  - Computer
  - TV engineering
  - Electrical communication engineering
  - Computer
  - TV engineering
  - Electrical communication engineering
  - Electronic circuits experiment
  - Transistor radio experiment
  - TV receiver experiment
  - Computer experiment
- 2) Observation tours

**5. FACILITIES AND INSTITUTIONS**

Institute of Vocational Training

**6. REMARKS**

SERIAL NUMBER 31

SUPERVISORY TRAINING (SEMINAR) (監督者訓練セミナー)

1. PERIOD

May 10, 1979 to July 9, 1979 (2-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in their respective fields
- 3) Between 30 and 50 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Present situation and problems of vocational training
  - Japanese labor economy
  - Policy for manpower development
  - Supervisor and human relations
  - Supervisory training
  - Responsibility and qualification of supervisory
  - Foreman training
  - Vocational training centre
  - Supervisor and productivity
  - Audio-visual aid
  - Foreman training within industry
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Vocational Training Bureau, Ministry of Labour
- 2) Tokyo International Centre, JICA

6. REMARKS

SERIAL NUMBER 87

OFFSET PRINTING (オフセット印刷)

1. PERIOD

September 13, 1979 to December 6, 1979 (3-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

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Introduction to photography
  - Introduction to lithography
  - Introduction to tone reproduction
  - Color reproduction and screening
  - Electronic color scanning
  - Stripping and correction
  - Offset lithographic plate making
  - Direct screening color separation
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Japan Printing Association

6. REMARKS

SERIAL NUMBER 102

INDUSTRIAL RELATIONS (SEMINAR) (勞使關係行政セミナー)

1. PERIOD

October 4, 1979 to November 21, 1979 (1.5-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

3. QUALIFICATIONS

- 1) Presently engaged in administration of industrial relations in the governmental bodies
- 2) Over 30 years of age
- 3) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures
  - Introduction to labor administration
  - Function of labor organizations
  - Labor laws
  - History and present state of industrial relations
  - Labor economy
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Labor Policy Bureau, Ministry of Labour
- 2) Japan Institute of Labour

6. REMARKS

SERIAL NUMBER 103

**PUBLIC ADMINISTRATION OFFICERS  
ON WOMEN'S PROBLEMS (SEMINAR)** (婦人関係行政セミナー)

**1. PERIOD**

October 4, 1979 to November 11, 1979 (1-month)

**2. NUMBER OF PARTICIPANTS TO BE RECEIVED**

Ten (10)

**3. QUALIFICATIONS**

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

**4. DESCRIPTION OF TRAINING**

- 1) Lecture  
- Public administration on women's problems in Japan
- 2) Observation tours

**5. FACILITIES AND INSTITUTIONS**

- 1) Women's and Young Workers' Bureau, Ministry of Labour
- 2) Tokyo International Centre, JICA

**6. REMARKS**



SERIAL NUMBER 104

INDUSTRIAL SAFETY AND HEALTH (SEMINAR) (労働安全衛生行政セミナー)

1. PERIOD

October 4, 1979 to November 16, 1979 (1-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 3 years
- 4) Between 25 and 45 years of age
- 5) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Role of governmental and non-governmental organizations in industrial safety and health
  - Methods of accident investigation and procedures of cause analysis and cost calculation
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

- 1) Ministry of Labour
- 2) Tokyo International Centre, JICA

6. REMARKS

SERIAL NUMBER 113

VOCATIONAL TRAINING (SEMINAR) (職業訓練セミナー)

1. PERIOD

October 11, 1979 to December 18, 1979 (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) Between 30 and 45 years of age
- 4) Good working knowledge of English

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Vocational education in Japan
  - Employer-employee relationship and wages
  - Development of human abilities and employment policy
  - Public employment security
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

Vocational Training Bureau, Ministry of Labour

6. REMARKS

**18. INFORMATION SCIENCE**

SERIAL NUMBER 90

COMPUTER TECHNOLOGY (コンピューター技術)

1. PERIOD

September 20, 1979 to December 20, 1979 (3-month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

3. QUALIFICATIONS

- 1) Must have fundamental knowledge of FORTRAN programming
- 2) Must be intent on learning fundamental COBOL programming and advanced FORTRAN programming including practice
- 3) Under 40 years of age

4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - COBOL
  - FORTRAN
  - Application to Statistics, especially Population Census
- 2) Observation tours

5. FACILITIES AND INSTITUTIONS

The Asian Electronics Union, Tokyo

6. REMARKS

GROUP TRAINING COURSES AND SEMINARS FOR 1979 BY THE GOVERNMENT OF JAPAN

JAPAN INTERNATIONAL COOPERATION AGENCY

No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates													Facilities and Institutions		
			4	5	6	7	8	9	10	11	12	1	2	3				
1	Smaller Enterprise Development (Seminar)	3	5		30													Nagoya International Training Centre, JICA
2	Metal Finishing Engineering	6	5						30									Government Industrial Research Institute, Nagoya, Ministry of International Trade and Industry
3	Ceramic Glaze and Decoration	6	5						30									Ditto
4	Telephone Switching Engineering (I)	3, 5	5			15												NTT (Nippon Telegraph and Telephone Public Corporation)
5	Construction Machinery	3	5			10												Ministry of Construction
6	High Skilled Machinist	11.5	5														25	Higashi-Yodogawa Advanced Vocational Training Centre, Osaka Prefectural Government
7	Coin and Decoration Manufacture, Metal Analysis and Precious Metal Refining	6	5						30									Mint Bureau, Ministry of Finance
8	Microbial Diseases Study	11.5	5														25	Research Institute for Microbial Diseases, Osaka University
9	Treatment of Offenders	3	5			10												United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders
10	Local Government Administration	3	5			3												Local Autonomy College, Ministry of Home Affairs
11	Electronics	6.5	12														31	Osaka Prefectural Industrial Research Institute
12	Family Planning Administration for Senior Officers (Seminar)	0.5	12	28														Japanese Organization for International Cooperation in Family Planning Inc. (JOICFP)
13	Agricultural Extension Service	3.5	19			31												Japan Agricultural Extension Association
14	Poultry Development	5	26														1	Okazaki National Poultry Breeding Station, Ministry of Agriculture, Forestry and Fisheries
15	Artificial Insemination for Cattle	6	26														21	Fukushima National Livestock Breeding Station, Ministry of Agriculture, Forestry and Fisheries
16	Offshore Prospecting	6	26														4	Geological Survey of Japan, Ministry of International Trade and Industry
17	Marine Fisheries Research	6		3													3	Tokai Regional Fisheries Research Laboratory, Fishery Agency
18	Wood Industrial Machinery	3		3					30									Industrial Research Institute, Aichi Prefecture etc.

No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates												Facilities and Institutions		
			4	5	6	7	8	9	10	11	12	1	2	3			
19	International Telegraph and Telephone Services (Traffic and Commercial)	2.5		3		16											KDD (Kokusai Denshin Denwa Co., Ltd.)
20	Satellite Communication Engineering (Regular)	3		3			4										Ditto
21	Carrier Telephony Engineering	3.5		3			12										NTT (Nippon Telegraph and Telephone Public Corporation)
22	Vocational Training Instructors (Machinery, Electric, Electronics, Wood Working and Automotive)	10.5		10											30		Institute of Vocational Training
23	Port and Harbour Engineering	4		3				8									Bureau of Ports and Harbours, Ministry of Transport
24	Hydrographic Survey	5		3						3							Hydrographic Department, Maritime Safety Agency
25	Tuberculosis Control (Advanced)	1		7		11											The Research Institute of Tuberculosis
26	Thermal-Electric Power Engineering	2.5		10			28										Overseas Electric Industry Survey Institute Inc.
27	Hydro-Electric Power Engineering	2.5		10			28										Ditto
28	Trade Promotion A (Seminar)	2		10			9										World Trade Centre of Japan
29	Television Broadcasting Management	1.5		10		21											International Cooperation Division, Ministry of Posts and Telecommunications
30	Tourism A (Seminar)	2		10			10										Tourism Department, Ministry of Transport
31	Supervisory Training (Seminar)	2		10			9										Vocational Training Bureau, Ministry of Labour
32	Solid Waste Management and Night Soil Treatment	2		10			16										Japan Environmental Sanitation Center
33	Water Works Engineering	3		17			16										Japan Water Works Association
34	Control of Rice Diseases and Insect Pests	6.5		24											19		Hyogo Prefectural Agricultural Research Centre and Kobe University
35	Information, Education and Communication in Family Planning (Seminar)	0.5		7		26											Japanese Organization for International Cooperation in Family Planning Inc. (JOICFP)
36	Telephone Outside Plant Engineering	3.5		7			16										NTT (Nippon Telegraph and Telephone Public Corporation)
37	Metrology and Measurement Standards	6		7											6		National Research Laboratory of Metrology (NRLM)
38	Surveying and Mapping (Geodesy)	6		7											8		Geographical Surveying Institute, Ministry of Construction

No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates												Facilities and Institutions		
			4	5	6	7	8	9	10	11	12	1	2	3			
39	Maintenance and Improvement Engineering of Permanent Ways	3			14			13									Japanese National Railways
40	Tuberculosis Control	4			14					24							The Research Institute of Tuberculosis
41	Agricultural Machinery Maintenance and Repair	6.5			14								26				Osaka International Training Centre, JICA and Member Plants of Japan Agricultural Machinery Manufacturers Association
42	Criminal Investigation	1			28	28											National Police Agency
43	Ceramic Industry Development (Seminar)	1			28	30											National Industrial Research Institute, Nagoya
44	Agricultural Land and Water Resources Development	2			28		27										Agricultural Structure Improvement Bureau, Ministry of Agriculture, Forestry and Fisheries
45	Welding Technology	7			28									28			Japan Welding Society, Tokai Branch and Nagoya University
46	Fisheries Co-operatives	5.5			5								20				Kanagawa International Fisheries Training Centre, JICA
47	Coastal Fisheries Extension I (Practice)	5.5			5								20				Ditto
48	Mining Engineering	2			5		7										Japan Mining Industry Association
49	Radio Broadcasting Engineering (Radio Transmitting)	2.5			5		17										NHK (Nippon Hoso Kyokai, Japan Broadcasting Corporation), Central Training Institute
50	Color Television Engineering	3			5					8							Ditto
51	Microwave Communication Engineering (I)	3.5			5					15							NTT (Nippon Telegraph and Telephone Public Corporation)
52	Railway Rolling Stock Engineering	3.5			5					14							Japanese National Railways
53	Educational Television Programme	3			19					8							NHK (Nippon Hoso Kyokai, Japan Broadcasting Corporation) Central Training Institute
54	Groundwater Resources Development	3.5			19					9							Geological Survey of Japan, Ministry of International Trade and Industry
55	Foundry Engineering	8			26											31	Government Industrial Research Institute (GIRI), Nagoya, Ministry of International Trade and Industry
56	Weaving Engineering	8			26											31	Mikawa and Owari Textile Technical Centre, Aichi Prefecture, etc.
57	Tile Manufacturing Technology	8			26											31	Ina Seito Co., Ltd.
58	River Engineering	4					2						3				River Bureau, Ministry of Construction

No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates													Facilities and Institutions		
			4	5	6	7	8	9	10	11	12	1	2	3				
59	Agricultural Statistics	3					9				3							Statistics and Information Department, Ministry of Agriculture, Forestry and Fisheries
60	Medical and Health Aspects in Family Planning (Seminar)	0.5					15	4										Japanese Organization for International Cooperation in Family Planning Inc. (JOICFP)
61	International Telex Communication Engineering	3					16				5							KDD (Kokusai Denshin Denwa Co., Ltd.)
62	Radio Frequency Monitoring	1.5					16			4								International Cooperation Division, Ministry of Posts and Telecommunications
63	Satellite Communication Engineering (Advanced)	2.5					16			26								KDD (Kokusai Denshin Denwa Co., Ltd.)
64	Industrial Standardization and Quality Control	3					16				10							Agency of Industrial Science and Technology, Japanese Standard Association
65	Bridge Engineering	2.5					23				6							Road Bureau, Ministry of Construction
66	Telephone Switching Engineering (II)	3					23				25							NTT (Nippon Telegraph and Telephone Public Corporation)
67	Foreign Trade Practice for Leaders	4					23					19						The Kobe Chamber of Commerce and Industries and Kobe University
68	Business Feasibility Study and Management Practice	7					23									31		Central Japan Industries Association
69	Navigation Aids	2					30				4							Maritime Safety Agency
70	Geothermal Energy	3					30					19						Kyūshū University
71	Post-Harvest Rice Processing	3					30					2						Japan Rice Millers Association
72	Medical Science and Technology	9					30									80 5/31		Kobe University
73	Seismology and Earthquake Engineering	11.5					30									80 8/17		Building Research Institute, Ministry of Construction
74	Industrial Design	2					6			24								Japan Industrial Design Promotion Organization
75	Shipping Business	2					6				5							Shipping Bureau, Ministry of Transport
76	General Tax Programme (Seminar)	2.5					6				20							National Tax Administration
77	National Government Administration	3					6					30						Institute of Public Administration, National Personnel Authority
78	Reforestation Techniques and Administration	3					6					6						Forestry Agency



No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates												Facilities and Institutions		
			4	5	6	7	8	9	10	11	12	1	2	3			
79	Administration of Criminal Justice	3						6					11				United Nations and Far East Institute for the Prevention of Crime and the Treatment of Offenders
80	Water Pollution Control and Sewage Works Engineering	3						6					14				City Bureau, Ministry of Construction
81	Construction Engineering	4						6					26				Ministry of Construction
82	Prevention of Narcotic Offences (Seminar)	1						13		19							National Police Agency
83	Technical Management of Pollution Control	1						13		22							Environment Agency
84	Economic Development (Seminar)	1						13		23							Economic Planning Agency
85	Highway Construction (Seminar)	1.5						13		29							Road Bureau, Ministry of Construction
86	Subway Engineering	2						13				11					Teito Rapid Transit Authority
87	Offset Printing	3						13					6				Japan Printing Association
88	Microwave Communication Engineering (II)	3						13					23				NTT (Nippon Telegraph and Telephone Public Corporation)
89	Ports and Harbours Engineering (Senior Course)	1						16		20							Bureau of Ports and Harbours, Ministry of Transport
90	Computer Technology	3						20					20				The Asia Electronics Union
91	Statistics (General Course)	6						20								31	Statistical Institute for Asia and the Pacific Ministry of Construction
92	Plastics	6						20								31	Osaka Municipal Technical Research Institute
93	Customs Techniques (Seminar)	1.5						27				13					Customs and Tariff Bureau, Ministry of Finance
94	City Planning	2						27					1				City Bureau, Ministry of Construction
95	Refractory Manufacturing Technology	6						27								31	Technical Research Laboratory of Mino Yogyo Co., Ltd.
96	Ceramic Engineering	11						27								80 8/31	Government Industrial Research Institute, Nagoya, Ministry of International Trade and Industry
97	Metal Works and Engineering	11						27								80 8/31	Ditto
98	Trade Promotion B (Seminar)	2						28				27					World Trade Centre of Japan

No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates												Facilities and Institutions		
			4	5	6	7	8	9	10	11	12	1	2	3			
99	Technology for Disaster Prevention (Earthquake)	2.5								3			17				National Research Centre for Disaster Prevention
100	Telecommunication Management (Seminar)	0.5								4	10						International Cooperation, Ministry of Ports and Telecommunications
101	Senior Tax Programme (Seminar)	0.5								4	21						National Tax Administration
102	Industrial Relations	1.5								4		21					Labour Policy Bureau, Ministry of Labour and Japan Institute of Labour
103	Public Administration Officers on Women's Problems (Seminar)	1								4		11					Women's and Young Worker's Bureau, Ministry of Labour
104	Industrial Safety and Health (Seminar)	1								4		16					Labour Standards Bureau, Ministry of Labour
105	Electric Power Management	2								4			1				Overseas Electric Industry Survey Institute Inc.
106	Fire Service Administration	2								4			10				Fire defence Agency
107	Electric Power Distribution	3								4				26			Ministry of International Trade and Industry and Overseas Electric Industry Survey Institute Inc.
108	Meteorology	4								4					3		Japan Meteorological Agency
109	Development Economics (General)	6								4						31	International Development Centre of Japan
110	Shipbuilding	20								4						80 6/9	Ship Bureau, Ministry of Transport (Overseas Shipbuilding Cooperation Centre)
111	Aerodrome (Seminar)	1								11			19				Civil Aviation Bureau, Ministry of Transport
112	Railway Electrification and High-speed Operation	2								11				15			JNR (Japan National Railways)
113	Vocational Training (Seminar)	2								11				18			Vocational Training Bureau, Ministry of Labour
114	Tourism B (Seminar)	2.5								11				17			Tourism Department, Ministry of Transport
115	Community Based Family Planning Programme (Seminar)	0.5								10			6				Japanese Organization for International Cooperation in Family Planning Inc. (JOICFP)
116	Administration for Seamen's Education	1.5								10				28			Seafares Bureau, Ministry of Transport
117	Agricultural Co-operatives	1								25				3			Institute for the Development of Agricultural Cooperation in Asia
118	Early Gastric Cancer Detection and other Gastrointestinal Tract Diseases	2								25				22			Medical Association for Early Gastric Cancer Detection

No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates												Facilities and Institutions
			4	5	6	7	8	9	10	11	12	1	2	3	
119	Laboratory Works for Tuberculosis Control	4								25				25	The Research Institute of Tuberculosis :
120	Clinical Oncology	4.5								25				6	National Cancer Centre of Tuberculosis
121	Ports and Harbours (Seminar)	2								26		21			Bureau of Ports and Harbours, Ministry of Transport
122	Telephone Network Planning and Designing	3.5								1				18	NTT (Nippon Telegraph and Telephone Public Corporation)
123	Physical Oceanographic Survey	4.5								1				12	Hydrographic Department, Maritime Safety Agency
124	Broadcasting Management (Seminar)	0.5								11	24				International Cooperation Division, Ministry of Posts and Telecommunications
125	National Health Administration	1								21		20			International Medical Foundation of Japan
126	Medical Radiography	7								22				80 5/30	College of Biomedical Technology, Osaka University
127	International Telephone Switching Engineering	2.5										10		22	KDD (Kokusai Denshin Denwa Co., Ltd.)
128	Development Economics (Industrial Project)	2.5										10		26	International Development Centre of Japan
129	Measures for Smaller Industry	3										10		31	Osaka Prefectural Government, The Osaka Prefectural Institute for Industrial Management
130	Glass Technology	3										10		31	Government Industry Research Institute, Osaka, Ministry of International Trade and Industry
131	Coastal Fisheries Extension II (Theory)	5										10		80 6/9	Kanagawa International Fisheries Training Centre, JICA
132	Electrical Steel Making	3										24		80 4/30	Government Industrial Research Institute, Nagoya Ministry of International Trade and Industry and Daido Special Steel Cooperation
133	Prevention of Offencers (Senior Course)	1.5										31		18	United Nations Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders (UNAFEI)
134	Vegitable Crops Production	10										7		80 11/30	Uchihara International Agricultural Training Centre JICA
135	Irrigation and Drainage	10										7		80 11/30	Japanese National Railways and Japan Association of Signal Industries
136	Railway Signal Engineering	4										14		80 5/20	JNR (Japanese National Railways)
137	Telecommunication Development (Seminar)	0.5										22		7	International Cooperation Division, Ministry of Posts and Telecommunications

No.	Subjects of Courses	Duration (Month)	Starting and Terminating Dates												Facilities and Institutions			
			4	5	6	7	8	9	10	11	12	1	2	3				
138	Rice Production Mechanization	10													28	<sup>80</sup> 12/21	Uchihara International Agricultural Training Centre, JICA	
139	Rice Cultivation	10													28	<sup>80</sup> 12/21	Ditto	
140	Postal Executives (Seminar)	0.5														3	16	Postal Bureau, Ministry of Posts and Telecommunications
141	Environmental Administration	1.5														13	<sup>80</sup> 4/30	International Affairs Division, Environment Agency

JICA