

VI 協 力 実 績

1. 調査団の派遣

1) 事前調査団(49.11.14～12.10)

	(氏名)	(所属)
団 長	黒 子 孟 夫	国際協力事業団鉦工業開発協力部長
団 員	野 島 昭 夫	三菱重工(株)名古屋機器製作所
〃	池 原 広 伸	(株)日立製作所国際事業部
〃	三 宅 信 弘	通商産業省機械情報産業局総務課
〃	大 塚 嘉 幸	通商産業省通商政策局経済協力部技術協力課

2) 実施調査団(50.8.23～9.10)

	(氏名)	(担当)	(所属)
団 長	酒 井 正 巳	総括兼エレベータ	社団法人日本エレベータ協会
副団長	佐 野 美 則	調整・研修	国際協力事業団鉦工業開発協力部
団 員	喜 多 久 雄	冷凍・空調	社団法人日本冷凍空調工業会
〃	安 室 辰 夫	施設・行政	建設省大臣官房営繕計画課
〃	小 林 一 美	一般電子	社団法人日本電子機械工業会

3) 計画打合せチーム(54.1.31～2.18)

	(氏名)	(担当)	(所属)
団 長	竹 林 陽 一	総 括	国際協力事業団鉦工業開発協力部長
団長代理	下 道 晶 久	企画・調整	国際協力事業団鉦工業開発協力部鉦工業開発技術課
団 員	小 林 哲 郎	電気機器	通商産業省機械情報産業局産業機械課
〃	木 下 正 文	一般電子	国際協力事業団無償協力調達部機材第1課

4) エバリュエーションチーム(55.1.4～1.14)

団 長	総 括 和 田 稚 夫	国際協力事業団鉦工業開発協力部鉦工業開発技術課長
団 員	テレビ名取忠光	新日本電気(株)テレビ事業部
〃	電気機器 沖田誠治	通商産業省機械情報産業局電子機器電機課
〃	企画調整 大谷明裕	国際協力事業団鉦工業開発協力部鉦工業開発技術課

5) 機材修理(55.5.15～5.31)

団 長	総 括 石 崎 政 弘	(株)日立製作所
団 員	機材保守管理 千秋昌夫	菱電サービス(株)
〃	業務調整 小 牧 勉	国際協力事業団無償協力調達部機材第1課

6) 現地調査 (57.1.23~2.1)

団 長 総 括 中 村 信 国際協力事業団鉱工業開発協力部鉱工業開発技術
課長
団 員 現地事情調査 塩 谷 和 外務省中近東第2課課長補佐
〃 技術協力行政 入 沢 博 通商産業省通商政策局経済協力部技術協力課
〃 技術協力計画 酒 井 正 巳 国際協力事業団鉱工業開発協力部特別囑託

7) 巡回指導 (58.7.19~7.29)

団 長 久 留 義 雄 総 括 国際協力事業団理事
団 員 鶴 田 雅 文 協力企画 通商産業省通商政策局中東室
〃 末 森 満 業務調整 国際協力事業団鉱工業開発協力部鉱工業開発
技術課
〃 木 村 昭 エレベータ(交流) 三菱電サービス開発調査室長

2. 専門家の派遣

1) 第1回専門家派遣 (51.3.10~4.30)

総 括 酒 井 正 巳 ㈱日立製作所エレベータ技術本部
エレベータ 木 村 昭 三菱電サービス㈱昇降機本部
冷凍・空調機器 喜 多 久 雄 ㈱日立製作所清水工場
ラ ジ オ 近 藤 正 雄 松下電器産業㈱ラジオ事業部
テ レ ビ 沼 野 滋 東京芝浦電気㈱
電 卓 日 高 晃 鳥取三洋電機㈱無線事業部
建 築 中 村 光 男 日建設計㈱設計監理部

2) 第2回専門家派遣 (52.3.2~3.16)

総 括 酒 井 正 巳 ㈱日立製作所エレベータ技術本部
エレベータ 木 村 昭 三菱電サービス㈱昇降機本部
冷凍・空調機器 勝間田 茂 ㈱日立製作所清水工場
建 築 中 村 光 男 日建設計㈱設計管理部

3) 第3回専門家派遣 (52.11.9~11.29)

総 括 酒 井 正 巳 ㈱日本製作所エレベータ技術本部
エレベータ 木 村 昭 三菱電サービス㈱昇降機本部
冷凍・空調機器 勝間田 茂 ㈱日立製作所清水工場
ラ ジ オ 近 藤 正 雄 松下電器産業㈱ラジオ事業部
テ レ ビ 吉 川 定 義 新日本電気㈱テレビ事業部
電 卓 上 杉 智 重 鳥取三洋電機㈱無線事業部

建 築 中 村 光 男 日建設計㈱設計管理部

4) 第1回長期専門家の派遣

エレベータ 木村 昭 (53. 9.24~55.10. 2) 菱電サービス㈱昇降機本部
冷凍・空調機器 勝間田 茂 (53.11.15~…54.4.4 死去) ㈱日立製作所清水工場
総括 酒井 正 巳 (54. 4. 4~55.10.11) ㈱日立製作所エレベータ技
術本部
ラジオ 近藤 正 雄 (54. 4. 4~55.10.11) 松下電機産業㈱ラジオ事業
部
冷凍・空調機器 紀野 好 佑 (54. 7.25~55.10.11) ㈱日立製作所清水工場
テレビ 名取 忠 光 (55. 4.10~55.10.11) 新日本電気㈱テレビ事業部

5) 据付専門家の派遣

イ. エレベータコース

○地上用(54. 3.28~54. 5. 6)

千秋 昌 夫 菱電サービス㈱
石崎 政 弘 ㈱日立製作所水戸工場

○塔上用(54. 3.28~54. 7.15)

井上 健 次 ㈱日立製作所水戸工場
長田 隆 菱電エレベータ施設㈱
山崎 芳 孝 日立エレベータサービス㈱
田口 和 孝 三菱電機㈱

ロ. 冷凍・空調機器コース

松村 光 夫 太平空調機㈱ (54. 9.26~54.12.26)
椎名 和 男 宮口電機工業㈱ (54.10. 3~54.12.26)
西条 新 一 ㈱滝商工業 (")

6) 事前打ち合せ短期専門家(58. 5.27~6. 5)

総括兼エレベータ 木村 昭 菱電サービス㈱総合生産技術センター
冷凍空調 紀野 好 佑 ㈱日立製作所清水工場
技術協力計画 佐藤 幸 次 国際協力事業団鉱工業開発協力部鉱工業開発技術
課

7) 協力再開打ち合せ短期専門家

エレベータ 高橋 達 男 (58. 7.19~ 7.29) ㈱日立製作所水戸工場
冷凍空調 紀野 好 佑 (") ㈱日立製作所清水工場
テレビ 松坂 嘉 治 (58. 7.19~ 8. 1) 三洋電機㈱
ラジオ 池田 郁 夫 (") 三洋電機㈱

8) 第2回長期専門家(58.9.20~60.3.31)

総括兼エレベータ 高橋達男 ㈱日立製作所水戸工場
業務調整 平野 偉 国際協力サービスセンター
エレベータ 原田 憲一 ㈱三菱電機サービス
冷凍空調 紀野好佑 ㈱日立製作所清水工場

9) 短期専門家派遣

松坂嘉治(テレビ) ① 58.9.20~58.11.18 三洋電機㈱海外本部技術推進
② 59.7.31~59.10.31 部
③ 60.2.1~60.4.1
池田郁夫(ラジオ) ① 58.9.20~58.11.18 三洋電機㈱オーディオ製造事
② 59.9.21~59.12.10 業部
③ 60.2.15~60.3.22
今井修治(電卓) 58.11.8~12.19 鳥取三洋電機㈱電子機器事業
部
西尾裕吉(電卓) 60.2.1~60.4.1 鳥取三洋電機㈱電子機器事業
部

3. イラク人研修員の受入

1) 52年度

(i) エレベータ訓練コース……4名、(52.6.24 ~ 53.6.23)

<Teacher 2名>

Mr. Kudayer Abbas Muhamad Al-Kasab (1950年生)

University of Baghdad 卒(電気工学)

Mr. Ali Reeof Ali-Al-Zubiadi (1951年生)

University of Baghdad 卒(機械工学)

<Instructor 2名>

Mr. Subhi Farman Dura (1952年生)

Institute of Technology Baghdad 卒(電気工学)

Mr. Khalil I. Ahmad (1946年生)

Technical High School 卒(機械工学)

研修受入機関：三菱電機㈱、㈱日立製作所

(ii) 冷凍・空調機器訓練コース……3名、(52.10.28 ~ 53.10.27)

<Teacher 2名>

Mr. Adel Abbood Jasem Al-Robayi (1948年生)

University of Baghdad 卒(機械工学)

Mr. Aklam Ghadhdan Al-Roumi (1948年生)
University of Baghdad 卒(応用工学)

< Instructor 1名 >

Mr. Mahmoud Khudir Khadim (1954年生)
Petroleum Training Center 卒
研修受入機関：㈱日立製作所清水工場

2) 53年度

(i) 一般電子機器訓練コース

イ.ロ.ハ …… 53.4.13 ~ 54.4.12

ニ …… 53.7.17 ~ 53.8.7

イ. ラ ジ オ

< Teacher 1名 >

Mr. Fareed Abdul Rasool Al-Ansari (1951年生)
College of Engineering Technology 卒(電気工学)

< Instructor 1名 >

Mr. Aolnan Dakhil (1954年生)
Institute of Technology 卒(電子工学)
研修受入機関：松下電器産業㈱

ロ. テ レ ビ

< Teacher 1名 >

Mr. Laith Abduls Samad Naaman (1952年生)
University of Baghdad 卒(電子工学)

< Instructor 1名 >

Mr. Jalal Sadik Hasan (1951年生)
Institute of Technology 卒(電子工学)
研修受入機関：新日本電気㈱

ハ. 電 卓

< Teacher 1名 >

Mr. Am Abdul Sahib Mirza Mohamd (1951年生)
College of Engineering Technology 卒(電気工学)

< Instructor 1名 >

Mr. Am Mahammed Abdnl Chafoor (1950年生)

Petroleum Training Center 卒 (電気工学)

研修受入機関：鳥取三洋電機㈱

ニ. 総括

Mr. Nadhim D. Salman

3) 56年度

(i) エレベータ訓練コース 1名 (57.2.4 ~ 57.4.20)

<Teacher 1名>

Mr. Kudayer Abbas Mahamad Al-Kasab (1950年生)

University of Baghdad 卒 (電気工学) (2回目来日)

研修受入機関：三菱電機㈱、㈱日立製作所

(ii) 一般電子機器 (ラジオ) 訓練コース 1名 (57.1.28 ~ 57.5.17)

<Teacher 1名>

Mr. Assad Mohamed Kamil

University of Baghdad 卒 (電気工学)

研修受入機関：松下電気産業 (株)

4) 58年度

(i) 総括 (58.10.21 ~ 11.12)

Dr. Adnon Hagi Shihab (1932年生)

センター所長

Plekhanov Institute of National Economics (U.S.S.R) 卒

研修受入機関：日立製作所

三菱電機㈱

三洋電機㈱

(ii) 一般電子機器訓練コース 2名

イ. 電卓 (59.1.26 ~ 3.24)

<Instructor 1名>

Miss Feryal Mohamad Ali Saeed (1959年生)

Institute of Oil 卒

研修受入機関：鳥取三洋電機㈱

ロ. 電卓及びテレビ (59.1.26 ~ 6.28)

Mr. Abdu Ghulam Hussien (1956年生)

University of Sulaimania 卒 (電気工学)

研修受入機関：鳥取三洋電機㈱

三洋電機㈱

(iii) エレベーターコース 1名 (59.1.26 ~ 4.6)

Mr. Subhi Farman Dura (1952年生)

Institute of Technology Baghdad 卒(電気工学)

研修受入機関：日立製作所

三菱電機㈱

5) 59年度

(i) 冷凍・空調機器訓練コース 3名

イ. <Teacher 2名> (59.6.30 ~ 9.29)

Mr. Adel Abbood Jasem Al-Robayi (1948年生)

University of Baghdad 卒(機械工学)

Mr. Aklam Ghadhfan Al-Roumi (1948年生)

University of Baghdad 卒(応用工学)

研修受入機関：日立製作所

山武ハネウエル㈱

日本ダンフォース㈱

東京都立品川職業訓練学校

日本冷凍空調工業会

ロ. <Teacher 1名> (60.1.5 ~ 60.2.18)

Mr. Rafid J. Alyas (1961年生)

University of Baghdad 卒(電子工学)

研修受入機関：シャープ電機

日立製作所

矢崎総業

(ii) 一般電子機器訓練コース 2名

イ. ラジオ(59.6.14 ~ 9.13)

<Teacher 1名>

Mr. Assad Mohamed Kamil (1955年生)

University of Baghdad 卒(電気工学)

研修受入機関：三洋電機㈱

ロ. ラジオ(60.1.5 ~ 60.2.18)

<Instructor 1名>

Mr. Ala'a H. Salman (1961年生)

Technology Institute 卒(電気工学)

研修受入機関：三洋電機㈱

(iii) エレベーター訓練コース 2名 (59.6.14 ~ 9.29)

<Teacher 2名>

Mr. Kudayer Abbas Muhamad Al-Kasab (1950年生)

University of Baghdad 卒(電気工学)

Mr. Ali Reeof Ali-Al-Zubiadi (1951年生)

University of Baghdad 卒(機械工学)

研修受入機関: 三菱電機㈱

日立製作所

4. 機材供与

協力期間中及び協力終了時まで供与が確定している機材について、とりまとめの上、調査団訪「イ」中の1984年10月22日に訓練センターに於いて供与機材のイラク側への引き渡し式を実施した。

JICA 供与機材引渡式

日時 昭和59年10月22日(月) 11時半~13時

於 電気産業訓練センター(Zafarania)

式次第

1. 司会者開会 (Miss Nawal センター英語教師)
2. 角南エバリュエーション・チーム・リーダーあいさつ
3. Mrs. Awatif Al-Zubaid 軽工業省 General Director of Man Power Dept.
あいさつ
4. 供与機材目録署名 (Mrs. Awatif・角南リーダー)
5. 木村敬三在イラク日本大使あいさつ
6. 訓練棟引渡し機材見学

以上

出席者

日本側: 大使館 木村敬三大使

高津書記官、護書記官

エバリュエーション・チーム 角南平リーダー他5名

専門家チーム 高橋達男リーダー他5名

イラク側: 軽工業省 Mrs. Awatif

SOID 2名

センター センター長以下 職員、教師、生徒

Speech by Amhassodor Mr. Kimura

Director general, Mrs. AWATIF., president of this center Mr. Duri, and distinguished guests from Iraq and Japan.

It is my great pleasure to make a little speech at this ceremony. I'm delighted to see the fact that the relation between Iraq and Japan has been developed in various fields.

I think the program of this center has been one of the most successful examples which symbolize the friendly relationship between Iraq and Japan. I believe no country in the world can develop itself without good education, without able human resources, and without great effort. Among these three factors, good education is of prime importance. Therefore, Japanese government has tried to contribute with great pleasure to the development of human resources, and without great effort. Among these three factors, good education is of prime importance. Therefore, Japanese government has tried to contribute with great pleasure to the development of human resources by offering various educational services to many countries of the world.

By the way, every time I hear about the Elevator training course in this center, I remember the following awful story. Recently a member of our embassy used on elevator of one of the famous hotels in Baghdad. This elevator is excellent in commanding a fine view. But when he used it, it suddenly stopped near the top of the hotel and he was canned. He was so scared that he almost fainted because this poor boy has a fear of heights. He tried desperately to escape out of the box for three hours, but no one or no managers could help him out. I believe if the general manager had graduated this training center, he could have immediately repaired the elevator, saying to the embassy staff "Mr. No problem Mako Mushkera!"

When I visited this center, I was strongly impressed and moved by the sincere and dedicated attitude of students, teachers and staffs of this center. At the same time, this reminds me of great efforts of many persons who have shared in this project. In this opportunity, let me express my sincere appreciation and my thanks to all persons who have taken pains to make this program a success.

Finally I would like to express my sincere wish for future prosperity of this training center which will definitely contribute to further development of Iraqi-Japanese friendship in the future.

Thank you very much for your kind attention.

اجهزة فنية متطورة الى مركز التدريب المهني

احتفل امس باستكمال الاجهزة الفنية وتدريب الملاكات الوطنية في مركز التدريب المهني للصناعات الكهربائية والالكترونية التابع لوزارة الصناعات الخفيفة .
وجرى بالمناسبة حفل في المركز المذكور حضره عدد من المسؤولين في الوزارة والسفير الياباني في بغداد والمدير العام للمؤسسة اليابانية التي جهزت المركز بمعدات التدريب والخبرات الفنية .
ووافقت المؤسسة اليابانية على تقديم المساعدة التي يحتاجها المركز من الاجهزة الفنية وافتتاح اقسام جديدة فيه تشمل التأسيسات الكهربائية والانارة الصناعية وتشغيل وادامة الماكائن البلاستيكية ونظم السيطرة الالكترونية وصيانة وادامة الاجهزة الطبية والسلالم الكهربائية والرافعات الشوكية .

The Training Center for Electrical and Electronic Industries of the Ministry of Light Industries has celebrated before yesterday the completion of its technical equipment and the training of its technical cadre.

The celebration which held in the Center was attended by officials from the Ministry, the Ambassador of Japan in Baghdad and the Director General of the Japanese firm which supplied the Center with training equipments and technical expertise,

The Japanese firm agreed to render the assistance required by the Center which includes technical equipment, opening new departments for electric installations, industrial lighting as well as operation and maintenance of plastic machineries, medical apparatus, electric lifts and cranes.

(Iraq October 23, 1984)

INVENTORY OF PROVIDED EQUIPMENT

Technical Cooperation Project

For

The Electrical and Electronic Industries Training Center

In

The Republic of Iraq

This inventory includes the lists of costs and major equipment provided by the Japan International Cooperation Agency during the technical cooperation period to the Iraq Vocational Training Center for Electrical and Electronic Industries.

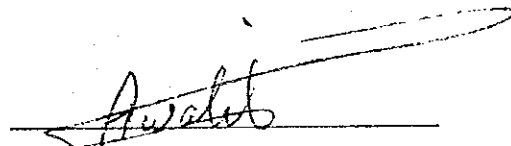
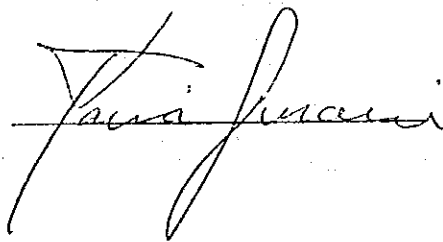
THIS INVENTORY WAS PRESENTED BY MR.SUNAMI, LEADER OF EVALUATION TEAM, JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) TO MRS.AWATIF, GENERAL DIRECTOR OF MAN POWER DEPARTMENT, MINISTRY OF LIGHT INDUSTRIES AT THE CEREMONY FOR PROVISION OF EQUIPMENT HELD ON OCTOBER 22, 1984 AT THE VOCATIONAL TRAINING CENTER FOR ELECTRICAL AND ELECTRONIC INDUSTRIES.

For the Japan International
Cooperation Agency

For the Ministry of Light
Industries

Mr. Taira SUNAMI
Leader of Evaluation Team

Mrs. AWATIF Al-Zubaidi
Director General of
Man Power Department



Costs of Provided Equipment

Unit:Y1,000

Fiscal Year of Shipping	Objective of Provision				TOTAL	Typical Equipment
	for Electronic Devices Training Course	for Elevator Training Course	for Refrigeration & Air- Conditioning Training Course	Common to All Courses		
1976	-	50,000	① 73,240	-	123,240	① Air Conditioning Training Equipment
1977	② 27,040	-	-	③ 1,500	28,540	② Radio,TV,Calculator ③ Copy Machine, etc.
1978	16,000	④ 48,760	5,000	⑤ 1,820	61,560	④ Elevator Practice Tower, etc. ⑤ Car
1979	⑥ 10,000	-	-	-	10,000	⑥ TV, Calculator
Sub Total	53,040	98,760	78,240	3,300	233,340	
1983	② * 2,000	-	-	③ 7,550	9,550	② Note 1 ③ Cars, Copy Machine
1984	29,610 * 1,300	④ 34,600	47,040	⑤ 1,400	113,950	④ Elevator Simulator ⑤ VTR, TV
1984 Not yet arrived	-	-	-	-	30,000	
Total					385,840	

- Note: 1. Figures with no mark are equipment under provision procedure and figures with * is equipment brought by experts at their arrival.
 2. Expenses for books, preparation of textbooks and VTR teaching aids are not included.
 3. Typical equipment is given in the right column. Other provided major equipment are listed in the following pages.
 4. Practical degree of use of the equipment in the education is listed in the right end column. The meanings of the symbols are as follows;

- A : Equipment used by students for practices and experiments (operation, measurement, assembly/disassembly, etc.)
 B : Equipment operated and explained by teachers & instructors in the practice classes.
 C : Equipment exhibited in the practice room all the time to satisfy students' desire for learning.

Further, numbers together with the symbols A & B indicate the used school year (e.g. A2 ... Category A in the 2nd year).

List of Major Equipment Provided
TV, Radio & Calculator Courses

I TV

I-1	TV Set (B/W, Color) (20 sets)	1977	A2,3
I-2	TV Set (B/W, Color) (30 sets)	1978	A2,3
I-3	TV Set (B/W, Color) (34 sets)	1979	A2,3
I-4	20" Color TV Set (1 set)	1983	A2,3
I-5	Measuring Instrument (Digital Meter, etc.)(11 pieces)	1983	A2,3
I-6	26", 20", 16", 14" Color TV Set (24 sets)	1984	A2,3
I-7	Measuring Instrument (Curve Tracer, Color Bar Generator, Oscilloscope, Synchroscope, etc.) (25 pieces)	1984	A2,3

II Radio

II-1	Radio Set and Kit (200 sets)	1977	A2,3
II-2	Radio Set and Kit (100 sets)	1978	A2,3
II-3	Tape Recorder Set (50 sets)	1978	A2,3
II-4	Player (15 sets)	1978	-
II-5	Electric Parts (Resistor, Transistor, IC, etc.)	1978	A2,3
II-6	Tool (Tracking Bar, Driver, etc.) (57 pieces)	1983	A2,3
II-7	PCB (Universal Board) (40 pieces)	1983	A2
II-8	Radio Set and Kit (290 sets)	1984	A2,3
II-9	Tape Recorder Set and Kit (64 sets)	1984	A3
II-10	Measuring Instrument (WOW Meter, Oscilloscope, Filter, etc.) (81 pieces)	1984	A2,3
II-11	Tool Set (40 sets)	1984	A2,3
II-12	Electric Parts (Capacitor, IFT, etc.)	1984	A2,3

III Calculator

III-1	Calculator Set (100 sets)	1977	A3
III-2	Calculator Set (100 sets)	1978	A3
III-3	Calculator Set (135 sets)	1979	A3
III-4	Calculator Set and Kit (Desktop Type 12 Fig. 10 Fig. Function, W/Watch, etc.) (342 sets)	1984	A3

List of Major Equipment Provided
Elevator Course

I Training Room No.1

I-1	Control Panels for 5D-SK, 2S-SK, ACR & DCFP Elevator (4 kinds)	1976	A3, C2
I-2	Starting Panel for DC Elevator	1976	B2, B3
I-3	Selector for Mitsubishi Elevator	1976	B2, B3
I-4	Mechanical Landing Switch	1976	B2, B3
I-5	DC Geared Elevator Simulator	1984	A3
I-6	AC Elevator-Simulator	1984	A3

II Training Room No.2

II-1	Elevator Car & Entrance Door Assemblies with M2, M3, SM-G Type Door Operator (4 kinds)	1976	B2, A3
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III Training Room No.3

III-1	Traction Machine, Geared & Gearless Type	1976	B2, A3
III-2	Oil Buffer	1976	B2
III-3	Governor	1976	B2
III-4	Safeties Device	1976	B2
III-5	Electric Welder	1976	A2, A3

IV Training Tower for Elevator

IV-1	DC Geared Elevator (SV Control System)	1978	A2, A3
IV-2	AC Elevator (ACR Type)	1978	A2, A3

V Store

V-1	Spare Parts	1976	
V-2	Measuring Instruments & Tools	1976	
V-3	Spare Parts	1984	

List of Major Equipment Provided
Refrigeration & Air-Conditioning Course

I Laboratory

I-1	Training Equipment for Psychrometric Chart	1976	A3
I-2	Training Equipment for Refrigeration Cooling Cycle	1976	A2
I-3	Training Equipment for Hydrodynamics	1976	B3
I-4	Training Panel for Refrigeration Cooling Cycle	1976	B2
I-5	Water Quality Analyzer	1984	A2
I-6	Training Panel for Solar Air-Conditioning System	1984	B3

II Operation Training Room

II-1	Split System Air Conditioner (4 sets)	1976	A3, B2
II-2	Water Chiller and Fan-Coil Unit System Air Conditioner (4 sets)	1976	A3, B2
II-3	Cold Storage and Show Case	1976	A3, B2
II-4	Room Air Conditioners (4 sets)	1976	A3, B2
II-5	Ice Machine (1 set)	1976	A3, B2
II-6	Drinking Water Cooler (1 set)	1976	A3

III Compressor Overhauling Training Room

III-1	Open Type Compressor (6 sets)	1976	A2
III-2	Semi-Hermetic Type Compressor (3 sets)	1976	A2
III-3	Hermetic Type Compressor (3 sets)	1976	A2
III-4	Cut Models of Compressors, Pumps, Controllers	1976	C
III-5	Screw Compressor (1 set)	1984	A3

IV Electric Wiring Training Room

IV-1	Training Panel for Wiring (12 sets)	1976	A3
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V Installation Training Room

V-1	Heat Pump Type Air Conditioners Outdoor Units (3 sets) & Indoor Units (9 sets)	1984	A3
V-2	Training Equipment for Refrigeration Cooling Cycle Condensing Units (4 sets), Unit Coolers (12 sets) Cold Storage (1 set)	1984	A3
V-3	Screw Water Chiller	1984	B3

VI Storage

VI-1	Spare Parts and Tools	1976 1984	
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資料 1.

面会者リスト

<イラク側>

(Ministry of Light Industries)

Mr. Osama A Razaq (Vice minister)

Mrs. Awatif Al-Zubaidi (Director General of Man power Dept.)

(SOID)

Mr. Najj Al-Jaff (President) 兵役にて不在

Mr. Nouman Tahir Al-Kaisi

Mrs. Suha Ahmad Najj

(EIC.)

Mr. Ahmad Rafi Al-Uraibi (President)

(Center)

Dr. Adnan Hakki Shehab (Former Director)

Mr. Hikmat Khudeir Haider

Mr. Faisal Al-Sadoon

Mr. Nadhim Abdul Muhsin

Mr. Yehia Kasim

(General Electronic Dept.)

Mr. Abdu Ghulan Hussien (Head)

Mr. Assad Mohamed Kamil

(Elevator Dept.)

Mr. Ali Reeof Ali Al-Zubiadi (Head)

Mr. Khodher Abass Mouhamed Al-Zaedi

(Air-Conditioning & Refrigeration Dept.)

Mr. Adel Abood Al-Robayi (Head)

Mr. Akram Ghadhban Al-Roumi

<現地日本人関係者>

(Embassy of Japan)

Mr. Keizo Kimura (Ambassador)

木村敬三 大使

Mr. Hiroshi Fukada (Secretary)

深田 博 書記官

Mr. Toshiji Takatsu (Secretary)

高津俊司 書記官

Mr. Masayuki Mori (Secretary)

護 雅行 書記官

(JICA Expert Team)

Mr. Tatsuo Takahashi (Leader)

Mr. Isamu Hirano (Coordinator)

Mr. Yoshishuki Kino (Airconditioning)

Mr. Kenichi Harada (Elevator)

Mr. Yoshiharu Matsusaka (Television)

Mr. Ikuo Ideda (Radio)

参考資料 2

1. 1983年7月26日付 R/D
2. 1983年7月26日付 TSI
3. 1982年1月28日付 R/D
4. 1982年1月28日付 TSI
5. 1980年1月 7日付 R/D
6. 1975年9月 7日付 R/D

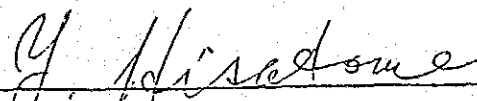
THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE
TECHNICAL CONSULTATION TEAM AND THE AUTHORITIES
CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF
IRAQ ON THE JAPANESE TECHNICAL COOPERATION FOR
THE ELECTRICAL AND ELECTRONIC INDUSTRIES TRAIN-
ING CENTER PROJECT

The Japanese Technical Consultation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Yoshio Hisatome, visited the Republic of Iraq on July 1983 for the purpose of reviewing the result of the implementation of technical cooperation program of the above-captioned project on the basis of the Record of Discussions signed on January 7, 1980 and January 28, 1982.

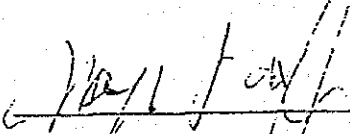
During its stay in the Republic of Iraq, the Team exchanged views and had a series of discussions with the Iraqi authorities concerned, and as a result of the discussions, both parties agreed to recommend to their respective Governments as follows:

The duration of technical cooperation between the two Governments, as stipulated in the Attached Documents and its Annexes of the above-mentioned original Record of Discussions, will be extended until the end of March, 1985, notwithstanding the provision of paragraph IX of the said Attached Document.

Baghdad, July 26, 1983



Yoshio Hisatome
Leader
Japan Technical Consultation Team
Japan International Cooperation Agency
Japan



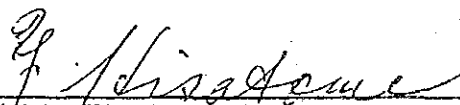
Naji M-Jaff
President
State Organization for Industrial
Development
The Republic of Iraq

TENTATIVE SCHEDULE OF IMPLEMENTATION ON THE JAPANESE
TECHNICAL COOPERATION PROJECT FOR THE ELECTRICAL AND
ELECTRONIC INDUSTRIES TRAINING CENTER IN THE REPUBLIC
OF IRAQ

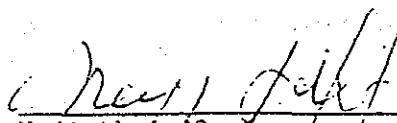
The Japanese Technical Consultation Team and the State Organi-
zation for Industrial Development have jointly formulated the Tentative
Schedule of Implementation as annexed hereto.

These have been formulated in connection with the Record of Dis-
cussions signed between the Japanese Technical Consultation Team and
the State Organization for Industrial Development concerning the Electri-
cal and Electronic Industries Training Center Project on the conditions
that necessary budget will be allocated for the implementation of the
Project by both sides, and that the schedule is subject to change within
the framework of Record of Discussions when necessity arises in the
course of the implementation of the Project.

Baghdad, July 26 , 1983



Yashio Hisatome
Leader
Japanese Technical Consultation
Team
Japan International Cooperation
Agency
Japan



Naji Al-Jaff
President of
State Organization for Industrial
Development
The Republic of Iraq

TENTATIVE SCHEDULE OF IMPLEMENTATION

FY Month	1983												1984											
	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Item																								
Training Schedule of Students in Center																								
Term of Technical Cooperation																								
I. Mission																								
II. Dispatch of Japanese Experts																								
1. Long-term experts																								
(1) Team-Leader(Electric Lift (OC))																								
(2) Coordinator																								
(3) Electric Lift (AC)																								
(4) Refrigerator & Air-Con																								
2. Short-term experts																								
(1) T.V.																								
(2) Radio																								
(3) Calculator																								
III. Training of Iraqi Counterparts in Japan																								
(1) Life																								
(2) Ref. & Air-Con																								
(3) T.V.																								
(4) Radio																								
(5) Calculator																								
IV. Provision of Equipment																								
	Supplementary training in Japan will be provided in the form of accepting at least two Iraqi counterparts for each 1983 and 1984 FY.																							
	Supplementary equipment and machinery necessary for the project will be provided within the yearly budgetary allocation for 1983 and 1984 FY.																							
	Three experts will be dispatched if necessary, for the smooth implementation of the project.																							

Note; 1. This is subject to conditions that necessary budget will be acquired for the implementation of the project.
 2. The contents of technical cooperation is subject to change within the scope of the provisions given in the "Record of Discussions".

Accepted by
[Signature]

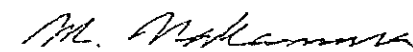
THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE
TECHNICAL CONSULTATION TEAM AND THE AUTHORITIES
CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF
IRAQ ON THE JAPANESE TECHNICAL COOPERATION FOR
THE ELECTRICAL AND ELECTRONIC INDUSTRIES TRAINING
CENTER PROJECT

The Japanese Technical Consultation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Makoto Nakamura, Head of Technical Cooperation Division, Mining and Industrial Development Cooperation Department of JICA, visited the Republic of Iraq from January 24 to January 31, 1982 for the purpose of reviewing the result of the implementation of technical cooperation program of the above-captioned project on the basis of the Record of Discussions signed on January 7, 1980.

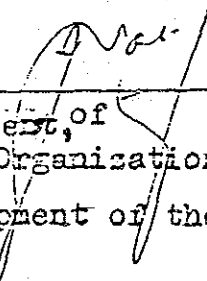
During its stay in the Republic of Iraq, the Team exchanged views and had series of discussions with the Iraqi authorities concerned, and as a result of the discussions, the Team and the Iraqi authorities concerned agreed to recommend to their respective Governments as follows;

The duration of technical cooperation between the two Governments, as stipulated in the Attached Documents and its Annexes of the above-mentioned original Record of Discussions, will be extended until the end of July, 1983, notwithstanding the provision of paragraph IX of the said Attached Document.

Baghdad, Jan . 28 1982



Leader
Japanese Technical Consultation Team
Japan International Cooperation Agency




President of
State Organization for Industrial
Development of the Republic of
Iraq.

TENTATIVE SCHEDULE OF IMPLEMENTATION ON THE JAPANESE
TECHNICAL COOPERATION PROJECT FOR THE ELECTRICAL AND
ELECTRONIC INDUSTRIES TRAINING CENTER IN THE REPUBLIC
OF IRAQ

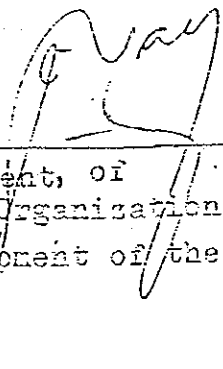
The Japanese Technical Consultation Team and the State Organi-
zation for Industrial Development have jointly formulated the Tentative
Schedule of Implementation as annexed hereto.

These have been formulated in connection with the Record of Dis-
cussions signed between the Japanese Technical Consultation Team and
the State Organization for Industrial Development concerning the Electri-
cal and Electronic Industries Training Center Project on the conditions
that necessary budget will be allocated for the implementation of the
Project by both sides, and that the schedule is subject to change within
the framework of Record of Discussions when necessity arises in the
course of the implementation of the Project.

Baghdad, Jan. 23 1982



Leader
Japanese Technical Consultation
Team
Japan International Cooperation
Agency



President, of
State Organization for Industrial
Development of the Republic of
Iraq

TENTATIVE SCHEDULE OF IMPLEMENTATION

Japanese Fiscal Year Item	1975	1976	1977	1978	1979	1980	1981	1982	1983
	9	h	h	h	h 1 1	h 7 10 1	h 7 10 1	h 7 10 1	h 7 10 1
Technical Cooperation Stage									
Dispatch of Survey Teams									
Dispatch of Japanese Experts									
Equipment and Machineries (1) Japanese Side (Shipment)									
(2) Iraqi Side									
Staffing of Iraqi Personnel									
Training of Iraqi Counterparts in Japan									

Foot Note: (1) This Program is subject to conditions that necessary budget will be acquired for the implementation of the Project.
 (2) The Contents of technical cooperation is subject to change within the scope of the provisions given in the "Record of Discussions".
 (3) Dispatch of Japanese experts is subject to the possibility of recruitment of necessary personnel in Japan.

THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE PROGRAM
CONSULTATION TEAM AND THE AUTHORITIES CONCERNED OF THE
GOVERNMENT OF THE REPUBLIC OF IRAQ ON THE JAPANESE
TECHNICAL COOPERATION FOR THE ELECTRICAL AND ELECTRONIC
INDUSTRIES TRAINING CENTER PROJECT

The Japanese Program Consultation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Masao Wada, Director of Technical Cooperation Division, Mining and Industrial Development Cooperation Department of JICA, visited the Republic of Iraq from January 5 to 13, 1980 for the purpose of working out the details of the technical cooperation program for the operation stage concerning the Electronic and Electrical Industries Training Center Project in the Republic of Iraq following the preceding Record of Discussions signed on September 7, 1975 which covered the technical cooperation program for the construction stage of the Project.

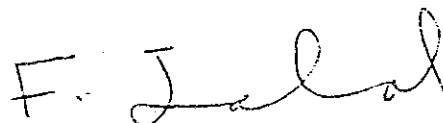
During its stay in the Republic of Iraq, the Team exchanged views and had a series of discussions with the Iraqi authorities concerned, inter alia the State Organization for Industrial Development, in respect of the desirable measures to be taken by both Governments for the successful implementation of the above-mentioned Project.

As a result of the discussions, the Team and the Iraqi authorities concerned agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Baghdad, January 7th, 1980.



Leader
Japanese Program Consultation Team
Japan International Cooperation
Agency



President of the State Organization
for Industrial Development of the
Republic of Iraq

THE ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Republic of Iraq will cooperate with each other in implementing the Electrical and Electronic Industries Training Center Project (hereinafter referred to as "the Project") for the purpose of providing the theoretical and practical training for students who will contribute to promotion and development of electrical and electronic industries in the Republic of Iraq.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expenses services of the Japanese experts as listed in Annex II through the normal procedures under the Technical Cooperation Scheme of Japan.
2. In accordance with laws and regulations in force in the Republic of Iraq, the Japanese experts referred to in 1 above and their families will be granted in the Republic of Iraq the privileges, exemptions and benefits as listed in Annex III and no less favourable than those granted to experts of third countries or international organizations performing similar missions.

F. J.

M. W.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expenses supplementary machinery, equipment and other materials necessary for the implementation of the Project through the normal procedures under the Technical Cooperation Scheme of Japan.
2. The articles referred to in 1 above will become the property of the Government of the Republic of Iraq upon being delivered c.i.f. to the Iraqi authorities concerned at the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

IV. TRAINING OF IRAQI COUNTERPART PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expenses the Iraqi personnel connected with the Project for technical training in Japan through the normal procedures under the Technical Cooperation Scheme of Japan, when necessity arises.

F. J.

M. W.

2. The Government of the Republic of Iraq will take necessary measures to ensure that the knowledge and experience acquired by the Iraqi personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF IRAQ

1. In accordance with the laws and regulations in force in the Republic of Iraq, the Government of the Republic of Iraq will take necessary measures to provide at its own expenses:
 - (1) Services of the Iraqi counterpart personnel and administrative personnel as listed in Annex IV;
 - (2) Land, buildings and facilities as listed in Annex V;
 - (3) Supply or replacement of machinery, equipment, instrument, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
 - (4) Transportation facilities and travel allowances for the Japanese experts for the official travel within the Republic of Iraq;
 - (5) Suitably furnished accommodations for the Japanese experts and their families taking into consideration the local conditions, as well as laws and regulations in force in the Republic of Iraq.

F. J.
M. W.

2. In accordance with the laws and regulations in force in the Republic of Iraq, the Government of the Republic of Iraq will take necessary measures to meet:

- (1) Expenses necessary for the transportation within the Republic of Iraq of the articles referred to in III above as well as for the installation, operation and maintenance thereof;
- (2) Customs duties, internal taxes and any other charges, imposed in the Republic of Iraq on the articles referred to in III above;
- (3) All running expenses necessary for the implementation of the Project.

VI. ADMINISTRATION OF THE PROJECT

1. President of the State Organization for Industrial Development (hereinafter referred to as "SOID"), the Ministry of Industry and Minerals, will bear the overall responsibility for the implementation of the Project.
2. The Director of the Electrical and Electronic Industries Training Center (hereinafter referred to as "the Center"), under the supervision and direction of the President of SOID, will be responsible for the administration of the implementation of the Project.
3. Japanese Chief Adviser will take appropriate care on technical matters and will give necessary technical and managerial advice to the Director of the Center in close coordination with the President of SOID and the Director General of Manpower and Vocational Training in the Ministry of Industry and Minerals.

F. J.
M. W.

4. Japanese experts will give instruction and advice to the Iraqi counterpart personnel on the technical matters concerning the implementation of the Project.
5. For the effective and successful implementation of the Project, a Joint Committee (hereinafter referred to as "the Committee") will be established with the members as listed in Annex VI. The Committee will have the functions to prepare the detailed Work Plan and to consult any other related matters arising from the implementation of the Project, and will be held when necessity arises.

VII. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Iraq undertakes to bear claims, if any arises, against the Japanese experts engaged in the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Iraq except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VIII. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with this Attached Document.

F. J.
M. W.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be terminated on the end of July, 1981.

F. J.

M. W.

ANNEX I MASTER PLAN

1. Under the Project the following three courses will be conducted in the Center;

Training Course	Number of Trainees
a) Electric Lift Course	24
b) Air-Conditioning and Refrigeration Equipment Course	24
c) Radio, T.V. and Electronic Calculating Machines Course	40

2. The duration of each training course will be thirty six (36) months consisting of eighteen (18) months of basic training and another eighteen (18) months of advanced training.
3. The trainees to be admitted into the Center must have nine (9) years' schooling.

F. J.
M. W.

ANNEX II JAPANESE EXPERTS

- (1) Chief Adviser.
- (2) Experts in the fields of
 - a) Electric Lift
 - b) Air-Conditioning and Refrigeration Equipments
 - c) Radio, T.V. and Electronic Calculating Machines

Note: Short-term experts other than those described above will
be sent when necessity arises.

F. J.
M. W.

ANNEX III PRIVILEGES, EXEMPTIONS AND BENEFITS

1. Exemptions from income tax and charges of any kind imposed on, or in connection with the living allowances remitted from abroad.
2. Exemptions from import and export duties and any other charges in respect of personal and household effects, including one motor vehicle per family, which may be brought into the Republic of Iraq from abroad in accordance with laws and regulations in force in the Republic of Iraq.
3. Free medical services and facilities to the Japanese experts and their families in the Iraqi Government Public Hospitals and Health Centers.
4. Issuance of identification cards to the Japanese experts and their families, in order to secure the cooperation of the authorities concerned of the Government of the Republic of Iraq in the performance of the duties of the Japanese experts.

F. J.
M. W.

ANNEX IV LIST OF IRAQI STAFF

- (1) The Director of the Center
- (2) Technical Staff
 - a) Teachers
 - b) Instructors
 - c) Technologists
 - d) Skilled Workers
- (3) Administrative Staff
 - a) Administrative Officers
 - b) Clerical Staff
 - c) Utility Staff

F. J.

M. W.

ANNEX V LIST OF LAND, BUILDING AND FACILITIES

- (1) Office Rooms for the Japanese Experts
- (2) Lift Tower Building
- (3) Library
- (4) Conference and Lecture Rooms
- (5) Other necessary ~~rooms~~ for operating the Project
facilities

F. J.
M. W.

ANNEX VI MEMBERS OF THE JOINT COMMITTEE .

1. Chairman: President of the SCID
Vice-Chairman: Director of Studies and Research of
the SCID.

2. Members :

(1) Japanese side

(i) Chief Adviser

(ii) The other experts and personnel concerned
to be dispatched by JICA, if necessary.

(2) Iraqi side

(i) The Director of the Center

(ii) The other personnel concerned.

Foot Note: Staff of the Embassy of Japan will be able
to attend the Joint Committee meeting as
observer.

F. J.
M. W.

1975年9月7日 (★10)

ON THE RECORD OF DISCUSSIONS BETWEEN THE JAPANESE IMPLEMENTATION
SURVEY TEAM AND THE MINISTRY OF INDUSTRY AND MINERALS
STATE ORGANIZATION OF INDUSTRIAL DEVELOPMENT
OF THE GOVERNMENT OF THE REPUBLIC OF
IRAQ

The Japanese Implementation Survey Team (hereinafter referred to as 'the Team') organized by the Japan International Cooperation Agency, headed by Mr. Masami Sakai, the Japan Elevators Association, visited the Republic of Iraq from August 24th, 1975 to September 8th, 1975 for the purpose of working out details of the Project for the establishment of the Iraq Training Center for Electrical and Electronic Industries (hereinafter referred to as 'the Project').

On the basis of the results of the preliminary survey in November and December 1974, the Team conducted a survey and exchanged views with the Ministry of Industry and Minerals of the Government of the Republic of Iraq.

The Record of Discussions includes construction stage which is a 3-year period ^{or} until the end of construction, to be followed by a subsequent operation stage for which the Japanese Government will take the necessary measures to prepare the required experts in order to operate the Center efficiently and immediately after inauguration, as part of the software plan. (Technical assistance in the form of sending Japanese experts to Iraq and accepting Iraqi trainees in Japan at the expense of the Japanese Government)

F.J. The Japanese Team agreed to recommend to its own Government the matters referred to in the Record of Discussions attached herewith, The Iraqi Delegation, on the other hand, will prepare a report indicating the cost and other details concerning the Center to the Iraqi Authorities concerned for approval and financial allocations.

Therefore, this Record of Discussions will be in force from the date of the letter of approval submitted by the Iraqi Authorities concerned to the Government of Japan.

Written in duplicate in English at Baghdad, on September 7, 1975.

For the Japan International
Cooperation Agency.

Masami Sakai, Leader of ^{the} Team.

西井正巳

For the Ministry of Industry &
Minerals, State Organization of
Industrial Development.

Dr. Ferhang Jalal, President.

F. Jalal

RECORD OF DISCUSSIONS

1. Desiring to assist the self-sustaining development of manpower in the Republic of Iraq and the industrial development of the country the Government of Japan will cooperate with the Government of the Republic of Iraq in the field of electrical and electronic industries at the center to be located in Zafarania.

2. The outline of the project:

(1) The Project will be carried out in the three courses as listed in Annex I. These courses comprise respectively two (2) stages : the first is the basic course and the second is the advanced course:

(2) The duration of each training course will be thirty six (36) months including the period of eighteen (18) months to the basic course and that of eighteen (18) months to the advanced course, respectively.

(3) The trainees to be admitted to the Center must have nine years' schooling. The number of trainees is listed in Annex I.

(4) The Center will be inaugurated at the earliest possible date in 1978.

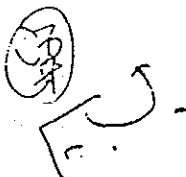
3. The measures to be taken by the Government of Japan:

(1) In accordance with laws and regulations in force in Japan, the Government of Japan will take necessary measures to provide at its own expense the requisite services of Japanese experts for the purpose of advancing the objectives of the Center and further promoting cooperation in preparation for establishing the Center as listed in Annex II.

(2) The Japanese experts will carry out the duties as listed in Annex III.

(3)a. In accordance with laws and regulations in force in Japan, the Government of Japan will take necessary measures to provide at its own expense equipment, machinery, instruments and other materials required for the establishment of the Center.

b. The goods referred to above will become the property of the Government of the Republic of Iraq upon being delivered C.I.F. at the Port of disembarkation to the Authorities concerned of the Republic of Iraq.



c. The goods referred to above will be utilized exclusively for the implementation of the Project upon the advice of the Japanese Chief Advisor.

d. The goods referred to above will be subject to close consultation between Japanese and Iraqi sides for the purpose of successful transportation to and installation at the Center.

(4) In accordance with laws and regulation in force in Japan, The Government of Japan will take necessary measures to receive at its own expense the Iraqi counterpart personnel associated with the Project for technical training in Japan up to the necessary number required for the Center.

4. The measures to be taken by the Government of the Republic of Iraq:

(1) In accordance with laws and regulations in force in the Republic of Iraq, the Government of the Republic of Iraq will take necessary measures to provide at its own expense:

a. The services of the Iraqi counterpart personnel for the preparation of inauguration of the Center as listed in Annex IV.

b. Requisite land and all the necessary buildings for the Center.

c. Equipment, machinery, instruments, and other materials necessary for the establishment of the Center except for those provided by the Government of Japan at its own expense including those listed in Annex V.

d. A fully furnished comfortable accommodation for each Japanese expert and his family.

(2) In accordance with laws and regulations in force in the Republic of Iraq, the Government of the Republic of Iraq will take necessary measures to meet:

a. Expense necessary for construction works of the Center.

b. Expense necessary for the transportation of the goods provided by the Government of Japan as well as for their installation, operation and maintenance.

c. Customs duties and any other charges, if any, as may be imposed upon the goods provided by the Government of Japan to the Republic of Iraq.

d. Expense for the internal travel in Iraq of the Japanese experts on duty.

e. Expense for vehicle with driver for the Japanese experts during working hours including transportation from and to house.

(10)

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5. The Japanese experts ~~and their families~~ will be granted in the Republic of Iraq, the privileges, exemptions and benefits as listed in Annex VI no less favorable than those granted to the experts of any third country under similar circumstances.

6. The Government of the Republic of Iraq undertakes to bear claims, if any arises, against the Japanese experts resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Iraq, except for those claims arising from the willful misconduct or gross negligence of the Japanese experts.

7. The Government of the Republic of Iraq will take necessary measures to ensure that the knowledge and experiences acquire through the Iraqi counterpart personnel will be utilized effectively for the implementation of the Project.

8. (1) President of the State Organization of Industrial Development, the Government of the Republic of Iraq will have the overall responsibility for the implementation of the Project.

(2) The Director of the Center will be responsible for the construction and operation of the Center, while the Japanese Chief Advisor will be responsible primarily for technical matters and give advice to the Director of the Center on other matters whenever so requested by the latter.

9. There will be mutual consultation between the two Governments on any matter arising from the implementation of the Project.

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ANNEX I
THE COURSES AND THE NUMBER OF TRAINEES

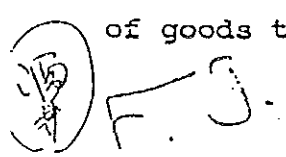
Training Course	Number of Trainees
a) Electric lift course	18
b) Air-conditioning and refrigeration equipment course	18
c) Radio, T.V. and electronic calculating machines course	30

ANNEX II
JAPANESE EXPERTS

- (1) Chief advisor
- (2) Expert on :
 - a) Electric lift
 - b) Air-conditioning and refrigeration equipments
 - c) Radio, T.V. and electronic calculating machines
 - d) Building.

ANNEX III
DUTIES OF THE JAPANESE EXPERTS

- (1) Duties of the Japanese Chief Advisor
 - a) Overall advice on the preparation of a basic plan for the establishment of the Center.
 - b) Overall advice on training programme and training activities in each training course.
 - c) Overall advice on the preparation of the curricula including, if required, dispatch of Japanese experts for this purpose as well as on technical training in Japan of officials of the Republic of Iraq associated with the activities of the Center.
 - d) Overall advice on the preparation of the list of equipment and machinery necessary for the operation of the Center.
 - e) Overall advice and cooperation pertaining to preparatory stage of the establishment of the Center including transportation, installation, test run and maintenance of goods to be provided by the Government of Japan.



- f) Overall advice and cooperation pertaining to the construction of the Center.
- g) Overall advice and cooperation concerning the selection and training of the Iraqi counterparts.
- h) Other instruction activities.

(2) Duties of the Japanese Experts:

- a) Advice on the preparation of a basic plan for the establishment of the Center.
- b) Planning of training programme and conducting training activities in each training course.
- c) Advice on the preparation of the list of equipment and machinery necessary for the operation of the Center.
- d) Advice and cooperation to the technical matters including curricula, pertaining to each training course.
- e) Advice and cooperation to the technical matters on transportation, installation, test run and maintenance of goods and machinery to be provided by the Government of Japan.
- f) Other duties directed by the Japanese Chief Advisor.

ANNEX IV
IRAQI STAFF

- (1) Director of the Center
- (2) Administrative Staff
Employees including typists, clerks and drivers.

ANNEX V

1. Electric Lift Course

- (1) Traction Machine Assembly
- (2) Governor Sets
- (3) Car, Platform sets
- (4) Safety assembly
- (5) Selector assembly
- (6) Door engine assembly
- (7) Consumptive parts or devices

2. Air-conditioning and Refrigeration Course

- (1) Training Unit
- (2) Refrigeration system pannel board
- (3) Psychrometric test instrument
- (4) Open type. compressor

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- (5) Semi hermatic compressor
- (6) Hermatic compressor
- (7) HMC compressor
- (8) Assorted cutway model
- (9) Assorted jigs and tools for compressor
- (10) Packaged air-conditioner
- (11) Water chiller
- (12) Fan coil unit
- (13) Room air-conditioner
- (14) Condensing unit
- (15) Cooling unit
- (16) Display case
- (17) Cooling tower
- (18) Ice machine
- (19) Water cooler
- (20) Walk in Storage Room

3. GENERAL ELECTRONIC APPARATUS COURSE

- (1) Color Television
- (2) Parts kit of color Television
- (3) Black & White Television
- (4) Parts kit of Black & White Television
- (5) Signal Injector
- (6) Shield room
- (7) Radio
- (8) Radio kit part
- (9) Electronic calculators
- (10) Electronic calculator for engineering

ANNEX VI

PRIVILEGES, EXEMPTIONS AND BENEFITS

- (1) Exemption from Income Tax
- (2) Automobile import privileges will be granted to the Japanese experts during their stay in Iraq for works connected with the Center in accordance with laws, rules, regulations and their amendments of the Iraqi Government.
- (3) Free medical services and facilities.

Handwritten signature and initials, possibly 'F. J.' and a circular mark.

資料 2.

合同評価会議議事録

Joint Evaluation Meeting

Date : October 22, 1984

Place : Center, Baghdad, Iraq

Attendents:

Iraq Side Mrs. Awotf (Ministry of Light Industry)
 Mrs. Suha (SOID)
 Mr. Nouman (SOID)
 Mr. Uraibi (EIC)
 Dr. Hakki (Center)
 Mr. Al-Douli (Center)
 Mr. Hikmat (Center)
 Mr. Abdu (Center)
 Mr. Ali (Center)
 Mr. Adel (Center)

Press — Baghdad Observer

Japan Side Team : Mr. Sunami
 Mr. Hamada
 Mr. Suemori
 Mr. Kimura
 Mr. Hirakawa
 Mr. Tamura

Expert: Mr. Takahashi
 Mr. Hirano

Embassy of Japan : Mr. Takatsu

Joint Evaluation Meeting

Date : Oct. 22, 1984 (Monday)

Place : Training School, Dr. Hakki's Room

10:30 Am. (delayed of 1 hour)

Awatif : Opening - apology for the delay would like to proceed according to the order in the Report - request for comments

Report in nicely prepared. Would appreciate comments putting emphasis on Iraqi teachers.

First Comments from Iraqi side:

I. Introduction - no comments

Uraibi : (in Arabic)

Awatif : Page. 7 Paragraph 2 and 3 in not necessary. It should only discuss the background of the Project. Not necessary to put economic history of Iraq. Make it simple. (Uraibi's opinion)

Sunami : OK. Will leave this paragraph to you. Please submit the "Background" by tomorrow morning.

- Everybody agreed. -

Awatif : Next II Methodology of Evaluation

Ali : Page 21 (i) What do you mean by "Scattered and lost"? Such (thing) has never happened. Also, it says, "some course". -Then, which course? and "text book" - is this the maintenance manual?

Takahashi: Many textbooks, we can not find.

Takatsu: Before the war, some counterpart brought away personal catalogue, etc. which they brought back from Japan. They are not here anymore. In this sense, it says "scattered and lost".

Adel : This is the first time we hear this matter. Which course do you mean?

Kaski : Mr. Takahashi, have you ever asked about this and didn't we answer to your question?

Takahashi: (Repeat: the explanation of the counterpart who are not staying in the Center anymore.)

Hikmat : Not only (i) but we have comments both on (i) and (ii)

Adel : Nothing is lost! Please give us the list of huge lost. Air-Conditioning course has every textbook.

Ali : "Textbook", do you mean by student's textbook or teacher's textbook? If it's a student's textbook, that is something that we prepare, not Japan side. And if it's teacher's textbook, we have textbook, but for practice, elevator is using the manual supplied by the makers and we do not have complete textbook.

Takahashi: Yes, it's a textbook of practice, So on (i) we delete the word "lost" and (ii) make it "textbook for practice (elevator)", how about that?

Ali : (ii) "Translation into Arabic", is this about student's textbook? Is nothing to do with Japan side.

Hirano : That's right. It's the problem of wording, (ii) is our suggestion.

Awatif : Both (i) & (ii) do not need to be mentioned in this Report. Why don't we delete?

Takahashi: No, it is very important.

Hakki : Up to now, no reference has been supplied from Japan to prepare textbook for students - only general guidance and maker's manuals for teacher's textbook.

Takahashi: I'm talking about textbook for practice of students are necessary.

Ali : Not for students - It is not suitable to use materials from Japan to use directly to student's class. Not useful and not appropriate!

Awatif : Let's delete both. It doesn't make difference.

Japan side (Discussion)

Kimura : Remain (i) and cancel (ii) is as far as we can admit.

C/P : It's not even scattered!

Suemori: It is true that textbook for students are not prepared and it is important to improve in the future. So (ii) should remain and change the wording.

Adel : Air-conditioning course has finished translation 6 years ago we have student's textbook.

Suemori: JICA will supply more textbook for improvement.

Awatif : Ali suggests (ii) should be "Any material arrived from Japan will be translated immediately into Arabic". How's that?

- everybody agrees -

Adel : Page 26 (vi), Does these mean, teaching materials will arrive in the future?

Suemori: Yes, by the end of March 31, 1985. Some of them have already arrived in the airport.

Swatif: Up to now, Japanese experts are from the makers and remain transfer of technology. Next time we would like to have people who can teach of course technology but at the same time, teach "To be the teacher of the Vocational Training Center"
"How to be" and "what is" to be a teacher of VTC.

Everybody: Next time?

Awatif : Yes, this is just to remind you an future needs.

Hikmat : (vii) Training material for who?

Suemori: Training material there is only written material - only textbook and manuals for teachers.

(Mr. Takahashi goes out to get the sample of newly arrived textbook)

Awatif : Let's proceed to the "Conclusion and Recommendation" - The most important.

Japan : Please delete "and Recommendation"

Awatif : Why? Recommendation is vary important to continue cooperation for the next 5 years. You don't mear you don't want to cooperate with us any more? Don't take recommendation!

Hamada : The future plan, we hove to discuss with our Government after we go back. We can not say anything about the future project.

Uraibi : Yes, so we just put our wish in the last of the Conclusion. It is our wish to have cooperation continued and expand by adding new specializations. It is not a new project - extention of this Project.

Hamada : We will convey your message to our Government but we can not put that in this Report. This Report is for the evaluation of "until March, 1985"

Awatif : For reminding our wish, we would like to put our wish, if you don't like it as Recommendation, there just as our Comment. You don't have objections in maintaining good relations with us?

Suemori: No, but we can not put that in this Report. We only discuss about Phase I.

Awatif : Report without Recommendation is useless.

Uraihi : And this Report has no binding to Japan, one, to Iraq. It is not fair.

Hamada : Anyway, your wish will be transfered to Japan, and in this paper, we only include the matters evaluating the post achievements and up to March 31, 1985.

Awatif : Then, put it as a note or Comment. Let's work out the extention by March, We are not talking about a New Project. We are talking about this Project.

Takatsu: Well, we don't have time now to discuss about the future plan, so why don't we discuss tomorrow morning at EIC.

- Everybody agreed -

12:00 Over

資料 3

エバリュエーションレポート

JOINT EVALUATION REPORT

BY

THE EVALUATION TEAM OF

THE JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

AND

THE STATE ORGANIZATION FOR INDUSTRIAL DEVELOPMENT (SOID)

MINISTRY OF LIGHT INDUSTRY OF IRAQ

ON

THE TECHNICAL COOPERATION PROJECT FOR THE

ELECTRICAL AND ELECTRONIC INDUSTRIES

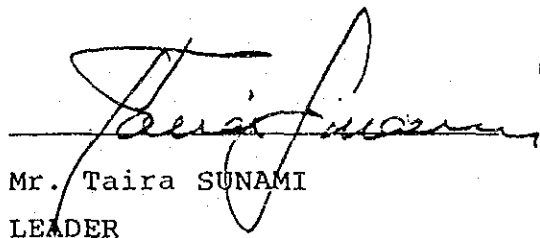
TRAINING CENTER OF IRAQ

OCTOBER, 1984

BAGHDAD, IRAQ

MUTUALLY ATTESTED AND SUBMITTED
TO ALL CONCERNED

OCTOBER 24, 1984



Mr. Taira SUNAMI
LEADER
EVALUATION TEAM
JAPAN INTERNATIONAL
COOPERATION AGENCY
JAPAN



Mrs. AWATIF Al-Zubaidi
DIRECTOR GENERAL
MANPOWER TRAINING AND MINING
DEVELOPMENT DEPARTMENT
MINISTRY OF LIGHT INDUSTRY
THE REPUBLIC OF IRAQ

Discussion paper between the Evaluation Team for the Japan International Cooperation Agency (JICA) and the State Organization for Industrial Development (SOID) of Ministry of Light Industry of IRAQ, on the evaluation of the Technical Cooperation for the Electrical and Electronic Industries Training Center Project which will terminate on March 31, 1985.

Date : October, 1984

Place : Baghdad, Iraq

Attendance :

* Iraqi side*

Ministry of Light Industry

Mrs. Awatif Al-Zubaidi (Director General of Manpower Training and Mining Development Dept.)

State Organization for Industrial Development

Mrs. Soha Ahmad Naji (Director of Foreign Relation Dept.)

Mr. Nouman Tahir Al Kaisi

EIC

Mr. Ahmad Rafi Al Auraibi (Manager)

The Center

Mr. Mohamed Hatam Saltan Al-Douli (Director)

Dr. Adnan Haqi Shihab (Former Director)

Mr. Hikmat Khudier Haider (Vice Director)

Mr. Abdu Ghulan Hussien (Head of Electronic Dept.)

Mr. Ali Reeof Ali Al-Zubiadi (Head of Elevator Dept.)

Mr. Adel Abood Al-Robayi (Head of Refrigeration and Air-conditioning Dept.)

Japanese side

Japanese Evaluation Team

Mr. Taira Sunami (Team Leader)

Mr. Yuji Hamada (Technical Cooperation)

Mr. Mitsuru Suemori (Coordinator)
Mr. Akira Kimura (Electric Lift)
Mr. Takahito Tamura (Air-conditioning & Refrigeration)
Mr. Itsuo Hirakawa (General Electric Apparatus)

Japanese Experts

Mr. Tatsuo Takahashi (Chief Advisor)
Mr. Isamu Hirano (Coordinator)
Mr. Yoshisuke Kino (Air-conditioning & Refrigeration)
Mr. Kenichi Harada (Electric Lift)
Mr. Yoshiharu Matsusaka (Television)
Mr. Ikuo Ikeda (Radio)

Japanese Embassy

Mr. Toshiji Takatsu (Secretary)

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~~Asold~~

Contents of Joint Evaluation Report:

I. Introduction	1
1. Objective	1
2. Background of the Project	.....	2
3. Summary of the Project	.....	5
(1) Chronological Review of the Project	.....	5
(2) Outline of the Center	.....	7
(3) Japanese Technical Cooperation	.....	7
II. Methodology of Evaluation	.....	11
III. Result of Evaluation	.....	12
1. Building and Facilities	.....	12
2. Staffing	.....	13
3. Management and Administration	.....	14
4. Budget	.....	15
5. Training Courses	.....	16
6. Japanese Experts	.....	18
7. Technical Training of Iraqi Counterpart in Japan...	.....	19
8. Equipment (including Training Materials)	.....	20
VI. Conclusion	.....	22

- ANNEX A LAYOUT AND FACILITIES
- B LIST OF TEACHERS AND INSTRUCTORS
- C ORGANIZATION CHART OF THE CENTER
- D SUBJECTS AND YEARLY SCHOOL HOURS
- E DATA OF STUDENT'S IN-AND-OUT
- F LIST OF DISPATCHED JAPANESE EXPERTS
- G LIST OF DISPATCHED JAPANESE SURVEY TEAM
- H TRAINING OF IRAQI COUNTERPART IN JAPAN
- I LIST OF MAJOR EQUIPMENT PROVIDED

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JOINT EVALUATION REPORT

I. Introduction

1. Objective

The Japanese Evaluation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (JICA) headed by Mr. Taira Sunami, visited the Republic of Iraq from October 17 to October 25, 1984 for the purpose of identifying past achievements and future prospects of the Japan-Iraqi Technical Cooperation Project on the Electrical and Electronic Industries Training Center (hereinafter referred to as "the Center") which has been conducted ten(10) years on the basis of the Record of Discussions (R/D) signed on September 7, 1970 (amended on January 7, 1980, on January 28, 1982, and on July 26, 1983) between the Japanese teams and the authorities concerned of the Government of the Republic of Iraq (hereinafter referred to as "the Iraqi Authorities Concerned").

The Team discussed and studied with the Iraqi Authorities Concerned, and the Japanese Experts, a number of aspects regarding the performance of commitments, achievements of the function of the Center, constraints which hampered past activities and possible causes which may restrain future prospect as well.

After careful studies and discussions, the Team and the Iraqi Authorities Concerned summarized its findings and observations, as described in the following chapters.

(1)

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2. Background of the Project

1) After 1973, the Government of Iraq began to rapidly expand economic development on the basis of its oil income. The increasing oil income has made it possible to overcome various key development obstructions, however, the Government of Iraq has recognized that the number of qualified technicians and skilled workers did not fully meet the domestic demand to grasp the tempo of industrialization. Therefore, Iraq has made positive efforts to resolve this problem. Following measures have been taken to resolve this problem:

- (i) Securing skilled workers and qualified technicians on a long-term basis by expanding and strengthening technical high schools and higher technical schools under the Ministry of Education.
- (ii) Training skilled workers in various fields by establishing technical courses in technical training centers (same level as technical high schools) under the Ministry of Industry and Minerals (later on, reorganized as the Ministry of Light Industry).

The present cooperation project on the establishment of the Electrical and Electronic Industry Training Center comes under the above (ii).

2) The "Japan-Iraq Economic and Technical Cooperation Agreement" was concluded between the governments of the two countries in August, 1974. With response to the request of the government of Iraq for the training of skilled workers in the electrical and electronic industry sector, the Government of Japan

decided to cooperate in a project for the establishment of the Electrical and Electronic Industries Training Center in the fields of electronics, elevator, refrigeration and air-conditioning. JICA was commissioned to carry out the project.

In November, 1974, JICA sent the preliminary survey team to consult with officials of the State Organization for Industrial Development (SOID) of the Ministry of Industry and Minerals of Iraq. The team confirmed the feasibility of the project by conducting a survey of existing vocational schools, training centers and state-run enterprises. It also prepared an outline of the training center plan.

The next step was the dispatch of the implementation survey team to consult with SOID on concrete plan and methods for establishment and management of the Center. Based on the result of discussions, seven short-term Japanese experts were dispatched in March, 1976 to begin technical cooperation in the project.

The construction of the Center building was carried out by the Iraqi side. But there was a six-month delay from the scheduled completion date as the center was finished in December, 1979 and the opening ceremony was held in January, 1980. During the preparatory stage which continued for four years and four months, JICA sent Japanese experts to give advice on the basic plan to build the Center and to make the plan of various training courses. The Japanese side also provided and installed training equipment and accepted Iraqi counterpart for technical training in Japan.

In January, 1980, JICA sent the evaluation team to Iraq to study and evaluate the cooperative effects of the preparatory stage as well as make arrangements for the substance of technical cooperation after the completion

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of the center. It was decided to continue the co-operation until the end of July, 1981.

However, the outbreak of the War in September, 1980 led to a temporary suspension of the cooperation for the project.

With the strong request of Government of Iraq for re-opening the Japanese technical cooperation, JICA sent the technical guidance team in July, 1983. It was decided that cooperation between the two countries would be resumed. The cooperation period was extended to the end of March, 1985 in order to accomplish the target in the Record of Discussions (R/D).

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3. Summary of the Project

1) Chronological Review of the Project

The summarized record of implementation of the technical cooperation programme is as listed below:

<u>Fiscal Year</u>	<u>Items</u>
1974	<ol style="list-style-type: none">1. Conclusion of "Japan-Iraq Economic and Technical Cooperation Agreement"2. Despatch of JICA Preliminary Survey Team
1975	<ol style="list-style-type: none">1. Despatch of JICA Implementation Survey Team2. R/D was signed (Technical Cooperation Term: Four and half years until the end of January, 1980)3. Despatch of seven(7) short-term experts
1976	<ol style="list-style-type: none">1. Despatch of four(4) short-term experts2. Provision of Equipment
1977	<ol style="list-style-type: none">1. Technical training of seven(7) counterpart personnel in Japan2. Despatch of seven(7) short-term experts3. Provision of Equipment
1978	<ol style="list-style-type: none">1. Technical training of seven(7) counterpart personnel in Japan2. Provision of Equipment3. Despatch of two(2) long-term experts4. Despatch of JICA Mutual Consultation Team5. Despatch of six(6) short-term experts for installation of equipment provided by JICA6. Enrollment of the first trainees to the Center

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- 1979
1. Despatch of three(3) long-term experts
 2. Despatch of three(3) short-term experts for installation of equipment provided by JICA
 3. Completion of the Center building
 4. Despatch of JICA Evaluation survey team (Extention of cooperation term up to the end of July, 1981)
 5. Opening Ceremony of the Center
- 1980
1. Suspension of technical cooperation due to the outbreak of Iraq-Iran War
- 1981
1. Despatch of JICA Technical Guidance team (Extention of cooperation term up to the end of July, 1983)
 2. Technical training of two(2) counterpart personnel in Japan
- 1983
1. Despatch of six(6) short-term experts
 2. Despatch of JICA Technical Guidance team (Extention of technical cooperation term up to the end of March, 1985)
 3. Despatch of four(4) long-term experts
 4. Technical training of four(4) counterpart personnel in Japan
 5. Provision of equipment
- 1984
1. Technical training of five(5) counterpart personnel in Japan
 2. Despatch of two(2) short-term experts
 3. Provision of Equipment (including training materials)

2) Outline of the Center

(1) The Center Building

The Center is located at Zaafaranya district in Baghdad (20km south of Baghdad's center). It consists of administrative buildings, workshops and dormitory facilities. The training center except dormitory was completed in December, 1979 following a delay of about six months.

(2) Goals of Training Center Activities

With the advance of Iraq's industrialization, increasing demands are expected for construction of buildings, houses, etc., and construction of various factories as well as consumer demand. It also became urgent to develop skilled workers in order to promote development of the electrical and electronic industry.

At the Center, there are courses to develop skilled workers who carry out the necessary maintenance and repair work in the electrical and electronic industry.

3) Japanese Technical Cooperation

(1) Cooperation Period and Stages

(i) The preparatory Stage (up to the completion of the Center building)

Cooperation at the preparatory stage of this project was covered a four years and four months period from September, 1975 to December, 1979. During this period, Japanese experts despatched by JICA conducted to plan the training programmes and management methods of the Center. Iraqi counter-

(2)

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part in various courses trained in Japan and the necessary training equipment had provided and installed in the Center by JICA.

(ii) The Implementation Stage

Cooperation at the implementation stage of the project lasted for one and half years from January, 1980 to late July, 1981 when the first term trainees were graduated. Due to the Iraq-Iran War which started in September, 1980, cooperation activities were suspended. As a result, the cooperation period has been extended two times so far, in an attempt to achieve the target of cooperation objectives. At present, the cooperation period will be terminated at the end of March, 1985.

(2) Cooperation Scheme

This is a kind of project-type technical cooperation and consists of despatch of Japanese experts, technical training of counterpart in Japan and provision of training equipment (including training materials).

(i) Despatch of Japanese Experts

At the preparatory stage (September, 1975 to December, 1979) of the project, JICA had despatched about 20 experts since March, 1976 in an effort to execute designing of the Center building and related facilities, studying and preparing specifications of training equipment and planning of training programs (formulation of curriculum and selection of training materials). In addition, nine experts

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were sent in FY 1979 so as to install training equipment provided by JICA.

At the implementation stage of the project (January, 1980 to date), long-term Japanese experts in each of training courses were despatched in order to make plan of training curriculum and selection of training materials and to train Iraqi counterpart who are teachers and instructors in three training courses.

As a result of the outbreak of the Iraq-Iran War in September, 1980, Japanese technical cooperation was forced to suspend without cooperating to the third-year training course. Therefore, the most difficult third-year training had to be carried out by the Iraqi side without technical advice and guidance from Japanese experts and it was revealed that they had not acquired full technical command of training equipment including adjustment and measurement equipment, trouble analyser and other highly-graded study items.

Therefore, it has been scheduled to accomplish the initial target by dispatching experts (consisting of Hitachi, Ltd., Ryoden Service Co., Ltd., Sanyo Electric Co., Ltd. and International Cooperation Service Center) for each course, starting the late of September in 1983.

(ii) Provision of Training Equipment

Until the completion of the Center buildings almost all training equipment and

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materials as well as tools necessary for installation has been provided and nine experts despatched and installed the equipment to the Center up to the late of December, 1979.

The Japanese experts prepared specifications on such measurements, tools and expendables as necessary for training courses to be supplied by the Iraqi side.

(iii) Technical Training of Iraqi Counterpart in Japan

All training courses are conducted for all term by Iraqi teachers and instructors (counterpart of Japanese experts), directly in Arabic. Under this conditions, training of Iraqi counterpart in Japan was considered essential.

Prior to the start of operations of the Center, 13 Iraqi counterpart (four in elevator, three in refrigeration and air-conditioning and six in general electronic apparatus course) underwent a one-year technical training course in Japan. Since the commencement of cooperation, number of Iraqi counterpart has reached to twenty-five (25).

II. Methodology of Evaluation

1. Materials Used As Reference

In order to evaluate the past achievement quantitatively as well as qualitatively, the following materials are adopted as references :-

- (i) The R/D and the Tentative Schedule of Implementation (TSI) signed on September 7, 1975, on January 7, 1980, on January 28, 1982, and on July 26, 1983;
- (ii) The official request made by the Government of the Republic of Iraq with respect to expert services, training of counterpart in Japan and provision of machinery, equipment and other materials by means of form A-1, A-2, 3 and A-4 respectively;
- (iii) Japanese Expert's reports;
- (iv) Iraqi counterpart's training reports.

The R/D and the TSI are the fundamental reference materials and accordingly, these are used for the basis of evaluation to as far an extent possible. However, descriptions in the R/D with respect to various subject of evaluation are mostly too general or indicative only. It is, therefore, very difficult in many cases to evaluate the performance and achievements of any activity quantitatively and/or qualitatively based on the R/D alone. In such cases, other reference materials, which are understood to be within the framework and guidelines of the R/D are used.

- 2. The Team also conducted inspections on buildings, facilities, and utilities with the cooperation of the Iraqi staff and the Japanese experts. Discussions with the Iraqi counterpart were also held.

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III. Result of Evaluation

1. Building and Facilities of the Center

Plan and Performance

- (i) Building of the Center and facilities construction were completed by Iraqi side by December, 1979. It cost ID 2,590 thousands.
- (ii) Building and facilities were constructed in accordance to original plan;
- (iii) The completion of the Center's building were 6 months behind the original schedule;
- (iv) Dormitory facilities within the Center compound have just completed in 1984 following a delay of about 5 years;
- (v) Refer to Annex A.

Comments

- (i) The delay of the construction of the Center building and facilities did not depend on the budgetary problem but the lack of construction materials which affected the completion of building facilities (electricity and water service). However, after the completion of the Center building following a delay of 6 months, the cooperation of the implementation stage had been smoothly promoted except during the suspension of cooperation due to the outbreak of war;
- (ii) The completion of dormitory facilities will be affective for the effective and fruitful training of trainees.

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2. Staffing

Plan and Performance

- (i) As of October 1, 1984, the number of personnel that make up the staff of the Center are referred to ANNEX B.

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3. Management and Administration

Plan and Performance

- (i) The Center is established as one of the technical training center under State Organization for Industrial Development. Management and administration structure is shown in ANNEX C:
- (ii) Joint Committee which consists of Iraqi staff and Japanese side hold for the smooth and effective implementation of the Project.

Comments

- (i) In general, the Center is well organized and managed by the Iraqi personnel;
- (ii) During the period of temporary suspension of cooperation due to the outbreak of war, the Center was well operated and managed by only Iraqi side without any cooperation from Japanese side.

4. Budget

Plan and Performance

- (i) The Government of Iraq has provided sufficient funds for the Project.

Comments

- (i) Operation cost should be sufficiently budgetted for the successful operation of the Center from now on, expecially after the termination of the cooperation.



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5. Training Courses

Plan and Performance

(i) At present, the following three courses are conducted:

- (i) Electric Lift Course
- (ii) Refrigeration and Air Conditioning Course
- (iii) General Electronic Apparatus (television, radio and electronic calculator) Course

These courses are aimed at acquiring skills in maintenance and repair techniques of each field;

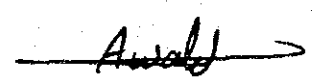
- (ii) The term of training is a 10-month period from October to July.
- (iii) The qualification of trainees for entering the Center is a graduate of middle school in Iraq (completion of nine years of education).
- (iv) The training period of the above courses is three years. The trainees receive the basic course for one year and the specialized course for two years period. In the first year of the basic courses, the trainees take such basic training as English, mathematics, physics, etc. which is a common training in all courses.

The first half of the second year is devoted to basic engineering. Training is conducted and administered by Iraqi teachers and instructors. From the latter half of the second year, the trainees receive technical training in the various courses by Iraqi teachers and instructors with technical guidance and advice from Japanese experts. The trainees take specialized courses under a curriculum which calls for lectures and practical training.

- (v) The training hours were planned at 1,800 hours/Year at the beginning. At present, it is 1,280 hours/year;
- (vi) Training subjects and yearly school hours for all courses are referred to ANNEX D:
- (vii) The enrollment of the Center is referred to ANNEX E.

Comments

- (i) In accordance with training curricula, Iraqi side will improve and translate into Arabic students' textbook based on the training materials provided by JICA and other materials.



6. Japanese Experts

Plan and Performance

- (i) JICA has despatched ten(10) long-term experts and fourty-four(44) short-term experts as shown in ANNEX F;
- (ii) In addition, seven(7) teams were also despatched in connection with the Project as shown in ANNEX G:
- (iii) Privileges, exemptions and benefits in accordance with the laws and regulations of the government of the Republic of Iraq were granted.

Comments

- (i) In general, the experts worked very closely with Iraqi counterpart in all lines of activities;
- (ii) There was initial difficulty in communication but they were overcome by mutual trust, cooperation and endeavour;
- (iii) It has been noted that all assigned experts showed genuine interest and exerted all efforts for the eventual self-reliant operation of the Center.

7. Technical Training of Iraqi Counterpart in Japan

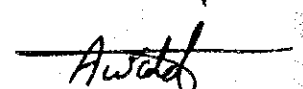
Plan and Performance

- (i) Since 1975, twenty-five(25) personnel have been sent to Japan;
These consisted of two(2) for observation studies and consultation, twenty-three(23) for counterpart training;
- (ii) Despite language difficulties, Iraq counterpart have acquired invaluable experience and knowledge during their training in Japan;
- (iii) Refer to ANNEX H.

Comments

- (i) The individual training courses at Hitachi, Ltd., Mitsubishi Electric Corp., Sanyo Electric Co., Ltd. and in some research institutions and private companies in Japan have been conducted satisfactorily with the efficient coordination of JICA and the cooperation of the said agencies;
- (ii) Due to the lack of teachers and instructors, however, some of counterpart trained in Japan were reassigned to the basic course and in 1980 a number of teachers and instructors walked out of their posts, thus the Center lost some of the teachers and instructors trained in Japan. These had seriously affected the training program.

At present, only half of teachers and instructors trained in Japan remain in the Center and request to increase center staff and to fix teachers and instructors to the Center have been made to the Iraqi side so as to promote the effective and successful implementation.



8. Equipment (including Training Materials)

Plan and Performance

- (i) From 1975 to 1984, Japanese provision of equipment and spare parts worth about 385 million yen (approx. ID510 thousand including shipping cost had been received by SOID;
- (ii) Almost all of the Japanese equipment have been delivered as scheduled;
- (iii) From 1975 to 1984, purchase of certain portion of equipment and spare parts were done by Iraqi side;
- (iv) All the equipment had been installed at the workshop and equipped with operation manuals by Japanese experts;
- (v) Japanese short-term experts were despatched to service the machines that were not in proper working conditions;
- (vi) Training materials in Arabic or in English have been prepared and provided by JICA with the cooperation of such supporting organization such as Hitachi, Ltd., Mitsubishi Electric Corp., Sanyo Electric Co., Ltd. and others.
- (vii) Refer to ANNEX I.

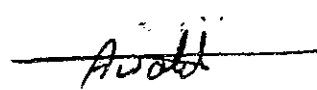
Comments

- (i) The equipment provided by JICA are sufficient to facilitate the Center as a technical training center;
- (ii) The installation of the equipment were behind schedule due to a delay of the building constructions;

- (iii) Iraqi counterpart are capable to operate all the equipment;
- (iv) Proper control and maintenance system are still open to further improvement;
- (v) The experts for installation, repair and maintenance who were sent to the Center were highly appreciated;
- (vi) All list of equipment's spareparts and expendable must be prepared in order to purchase some of them in the future ;
- (vii) Training materials for teachers and instructors provided by JICA are useful and valuable as references of each training course;
- (viii) It is considered that storage and preservation of equipment and materials provided are generally being managed well.

IV. Conclusion

- (i) Most activities programmed in the R/D and other pertinent papers have been and will be achieved as targeted until the end of March, 1985. These are greatly due to the efforts of Iraqi counterpart with the cooperation of Japanese experts;
- (ii) During the period of technical cooperation, commitments made by Japanese side had been accomplished in the cases of despatch of Japanese experts, technical training of Iraqi counterpart in Japan, and provision of machinery and equipment;
- (iii) Both Iraqi and Japanese sides accomplished their respective roles;
- (iv) Both parties are confident that the Center will be able to take over the self-reliance phase;
- (v) Despite the suspension of cooperation due to the outbreak of War, cooperation had been continued for total ten years by the joint efforts of Iraq and Japan for the achievement of the original target. During this period, both parties did not remain the Project only the transfer of electrical and electronic technology, but also deepened understanding on management and control of organization, working efficiency and sense of value. It is no doubt that the Project played and will play an important role of promoting good relation between two countries;
- (vi) As a result of the Project, the facilities of the Center became the first-class in Iraq, and it had got on the right track of the programme of developing the skilled workers which is set at the highest priority in Iraq. Thus, it is not an overstatement that the Center with its training facilities has become the model in the



country that indicates the target and direction of the domestic vocational training centers;

- (vii) As a conclusion, appreciation is accorded to both sides for the performance of the technical cooperation for the Center which has contributed considerably towards the development of the skilled workers in electrical and electronic industries in Iraq;

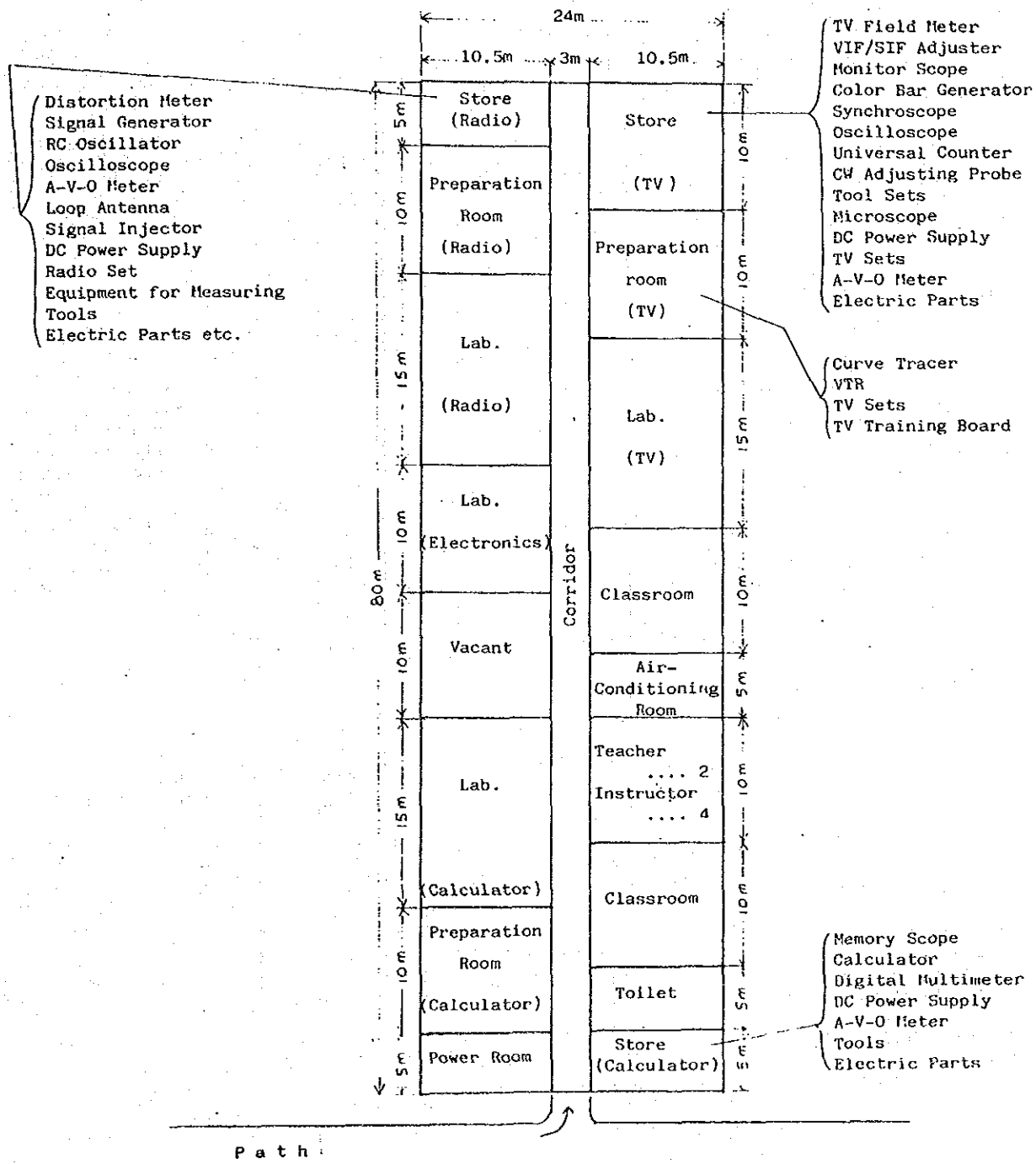
Since both parties shared the same view that the Project has been successfully implemented as scheduled in R/D, the cooperation will be terminated at the end of March, 1985.

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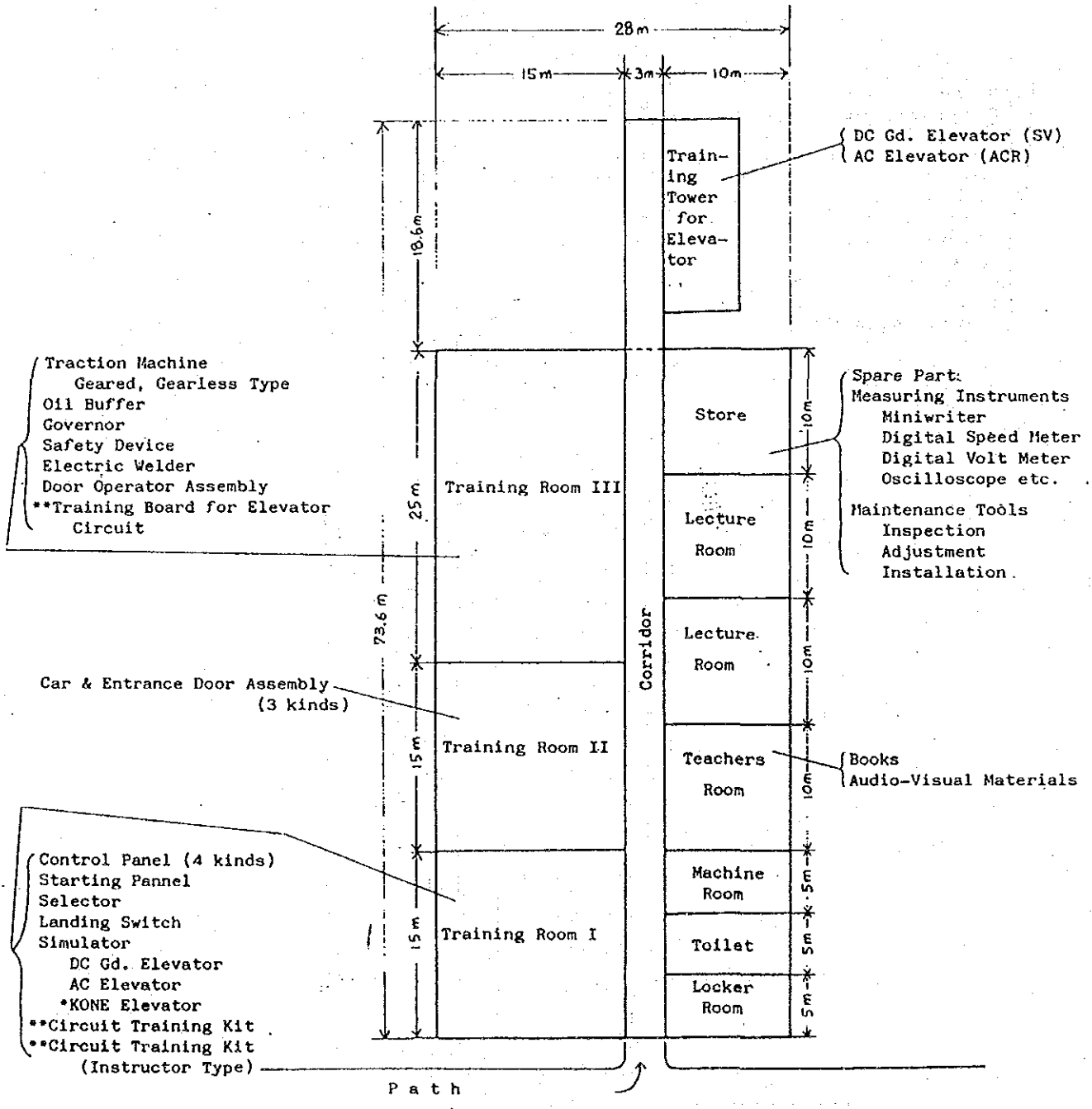
ANNEX A-1

LAYOUT AND FACILITIES
ELECTRONICS COURSE BUILDING



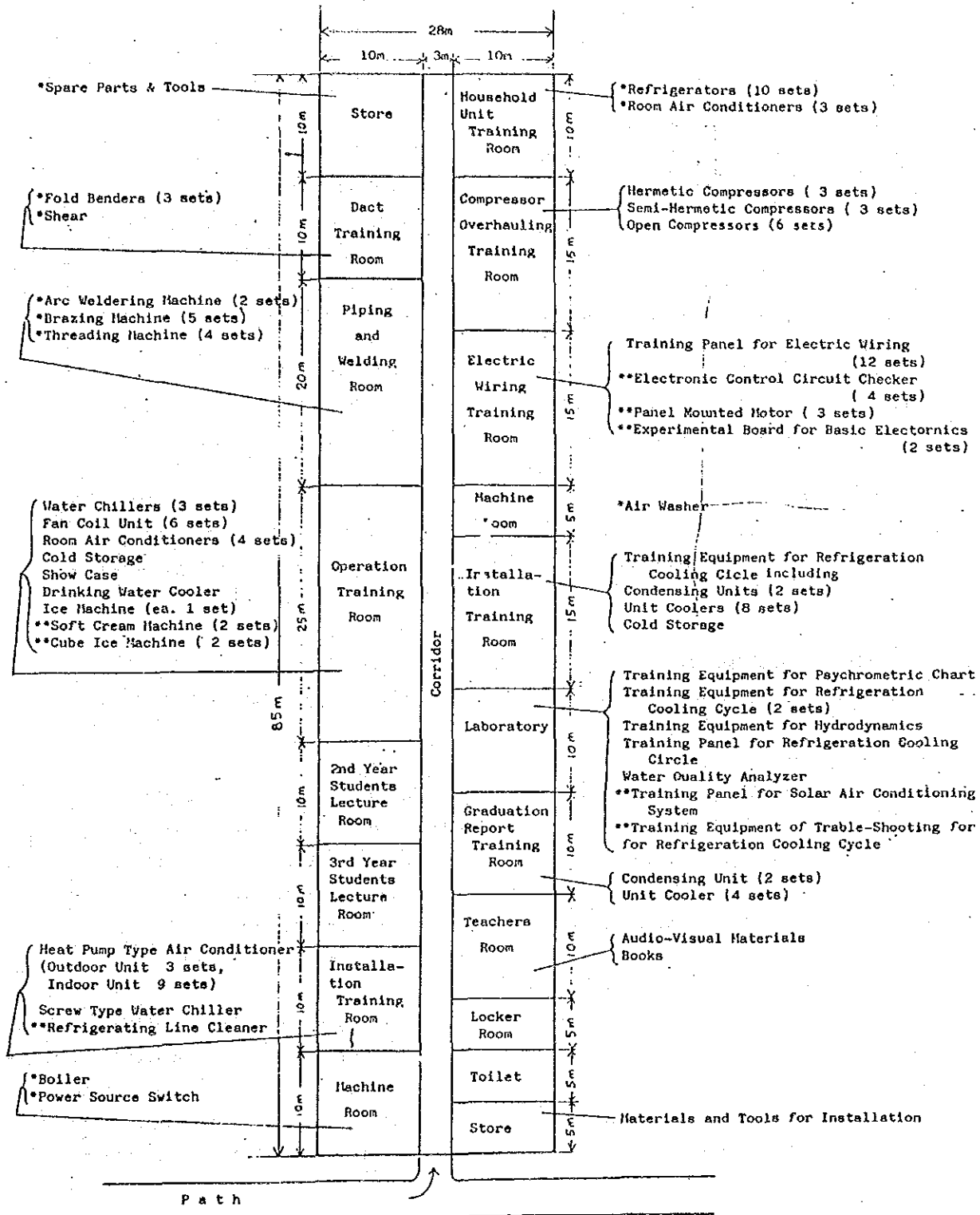
ANNEX A-2

LAYOUT AND FACILITIES
ELEVATOR COURSE BUILDING



Note: * Equipment bought by the Center
 ** Equipment to be provided by JICA
 no mark Equipment provided by JICA

ANNEX A-3
LAYOUT AND FACILITIES
REFRIGERATION & AIR-CONDITIONING COURSE BUILDING



NOTE: * Equipment: bought by the Center
 ** Equipment: to be provided by JICA
 no mark Equipment provided by JICA

ANNEX B

List of Teachers & Instructors of the CenterA Common Subject

<u>Position</u>	<u>Name</u>	<u>Subject</u>
Teacher	Dr. Adnan Haqi Shihab	National Education
Teacher	Mr. Hikmat Khudeir Haider	Physics
Teacher	Mr. Nadhim Abdul Muhsin	English
Teacher	Miss Manal Subih Mohamad	English
Teacher	Mr. Imam Muhamad Ahmad	Mathematics
Teacher	Miss Khawla Liabi Shamkhi	Mathematics
Instructor	Miss Loma Hanna Seleem	Electrical Drawing & Industrial Drawing
Instructor	Miss Niran Kamal Hassan	Industrial Management
Instructor	Mrs. Intesar Alwan Al-Saadi	Electrical Technology
Instructor	Miss Iman Hassan Ziara	Electrical Technology

B Electronic Devices Training Course

Teacher	Mr. Abdu Ghulan Hussien	TV & Electronic Calculator
Teacher	Mr. Assad Mohamed Kamil	Radio & Electrical Engineering
Teacher	Mr. Abdul Monem Soliman	Radio Practice
Instructor	Mr. Alah Hussein Salman	Radio Practice
Instructor	Miss Maha Abdul Satar Abdul Karim	TV Practice
Instructor	Miss Feryal Mohammad Ali Saeed	Electronic Calculator Practice

C Elevator Trainig Course

Teacher	Mr. Ali Reeof Ali Al-Zubiadi	Elevator Mechanical Engineering
Teacher	Mr. Khodher Abass Mouhamed Al-Zaedi	Elevator Electrical Engineering
Instructor	Mr. Subhi Farman Dura	Elevator Electrical Practice
Instructor	Miss Nawal Hasson Muoll Mohamad	Elevator Practice
Instructor	Miss Adra Jobahr Mohamad	Elevator Practice

D Refrigeration and Air-Conditioning Course

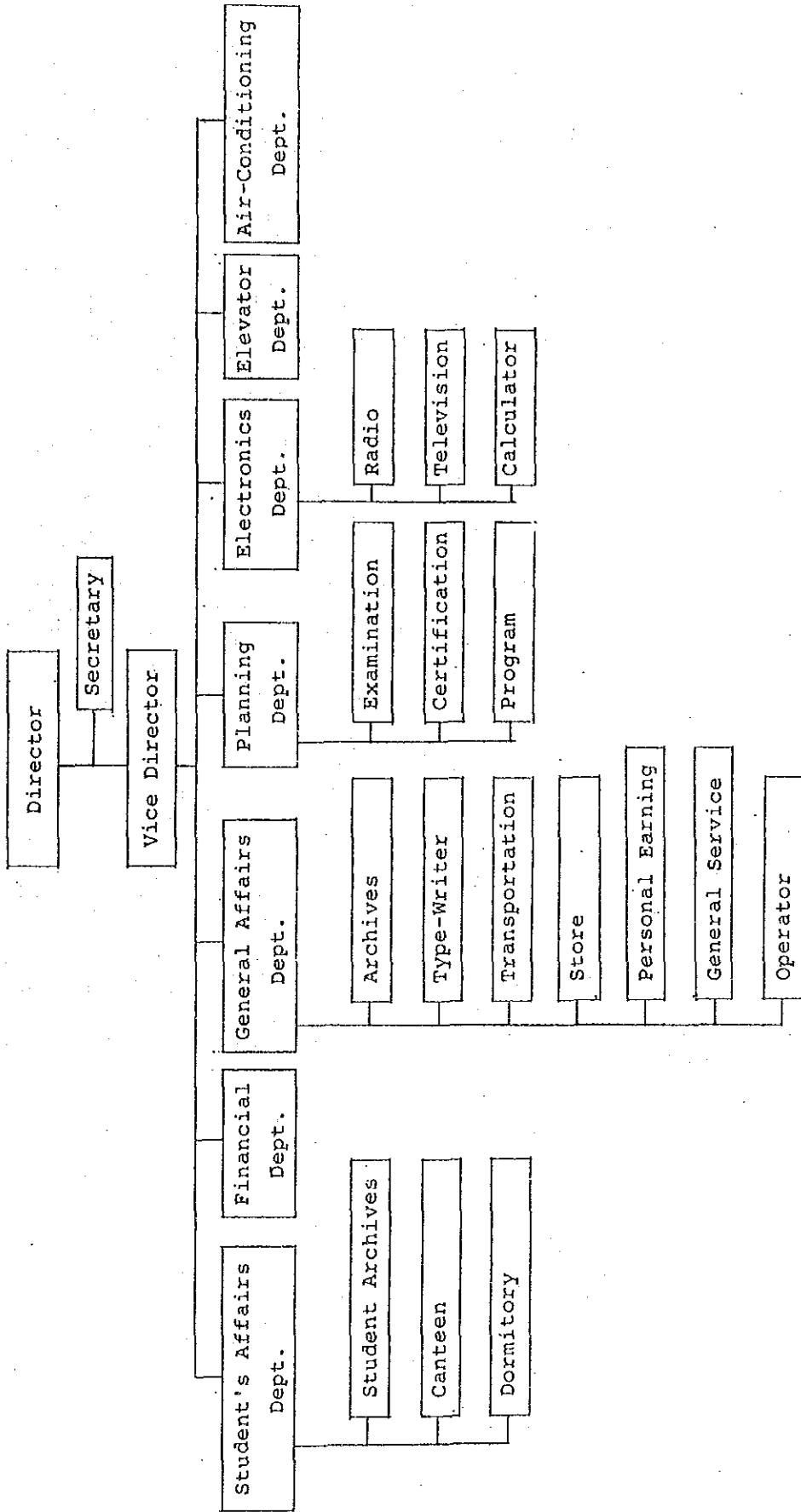
Teacher	Mr. Adel Abood Al-Robayi	Refrigeration & Air-Conditioning Eng.
Teacher	Mr. Akram Ghadhban Al-Roumi	Refrigeration & Air-Conditioning Eng.
Teacher	Mr. Rafid Jargees Alyas	Refrigeration & Air-Conditioning Eng.
Teacher	Mr. Hassan Ali Hamead	Refrigeration & Air-Conditioning Eng.
Instructor	Mr. Kotaiba Ahamud Khaled	Refrigeration & Air-Conditioning Practice

* As of October 1, 1984, the Director of the Center has changed to Mr. Mohamed Hatam Saltan Al-Douli

O R G A N I Z A T I O N C H A R T

VOCATIONAL TRAINING CENTER FOR ELECTRICAL AND ELECTRONIC INDUSTRIES

OCTOBER, 1984



ANNEX D-1

SUBJECTS AND YEARLY SCHOOL HOURS

T I M E T A B L E

1.	Holiday	Friday		
	Week Days	Saturday to Wednesday	6 S.Hr./Day	34 S.Hr./Week
		Thursday	4 S.Hr./Day	

1. Yearly 32 weeks school hours allocated to all three grades.

2. 4 weeks summer training are executed in the local site.

2.	Period	From	To	Break Time (min.)
	1	8:15	~ 9:00	5
	2	9:05	~ 9:50	15
	3	10:05	~ 10:50	5
	4	10:55	~ 11:40	15
	5	11:55	~ 12:40	5
	6	12:45	~ 13:20	

1. One school hour in this Center is practically 45 minutes.

2. Hours/Year indicated in the following lists will mean the yearly school hours.

ANNEX D-2

SUBJECTS AND YEARLY SCHOOL HOURS

(Common Course -- 1st Year Class)

	Subject	Contents	Hours /Year	Textbooks
1 s t Y e a r G e n e r a l C u l t u r a l S u b j e c t	English		64	English for Industrial Schools
	Mathematics	Singler Plural Equation of 1st & 2nd Degree, Triangle Geometry, Trigonometric Function	128	Mathematics
	Physics	Nature of Matter Heat Light Atomic Structure	96	Physics
	Electric Technology	Ohm's Law, Kirch-hoff's Law, Power & Energy, Capacitance, Electromagnetism	256	Electric Theory
	Technical Drawing	Industrial Drawing: Projection, Isometric, Section Engineering Drawing: Refined Shape, Geometric Drawing	192	Engineering & Industrial Drawing
	Industrial Management	General Industries in Iraq, Man Power in Factory, Production, Capacity, Management, Development of Industrial Management	32	Loose-leaf Text Contributed by Dr. Haqi
	National Culture	Political Education	64	(same as above)
P r a c t i c e	Physical Experiment	(There is no facility at present, only theories are taught.)	64	* All school books are completed by the State.
	Electric Experiment	(same as above)	64	
	Machinery Practice	(There is no machineries at present, so the class is not conducted.)	128	
	Physical	Sports (Football, Volleyball)	64	
			Sub Total		1088
	Summer Training	Site Training: 4 Weeks, AM6:00-PM3:00 8 Hours/Day x 6 Day/Week x 4 Weeks	192	
		Total	1280	

ANNEX D-3

SUBJECTS AND YEARLY SCHOOL HOURS

(Electronics Course 1)

		Subject	Contents	Hours /Year	Text Books
2nd Year	Common Subject	English		64	English for Industrial Schools
		Mathematics	Power Solution Principle of Power Power Involution Logarithm	64	Secondary Algebra
	Lecture	Electrical Drawing	Symbol, Simple Circuit, Lighting, Switch, Magnet Switch, Remote Control, Transformer, etc. Electric Circuit Drawing	64	Addel Shamass Toma: Electrical Drawing Hussein Hotal: Electronics
		Electrical Engineering	Basic of Electrical Engineering (Theory) Basic of Electronics	256	Longman: Basic Electrical Engineering Science Prentice-hall: Principles of Electrical Engineering Reston: Solid State Devices Analysis Application SANYO: Radio Receiver
		TV	Fundamental of B/W TV Explanation of All the Stage of B/W TV	64	Basic Television Fundamentals of TV Eng. TV Arting (Arabic) NEC: Text Book of TV SANYO: Principle of Color TV
		Radio	Basic Radio Receiver (Electric Wave, Power Circuit, Audio Circuit, Intermediate Frequency Circuit, Oscillator Circuit, Antenna Circuit, etc.	128	MIR Publishers Moscow: Radio Receivers SANYO: Radio Receivers
	Practice	Electrical Engineering	Experiment of Electric Parts	128	Reston: Solid State Devices
		TV	Measurement of Voltage and Wave-form at all the Points Trouble Shooting Repairing	128	NEC/SANYO: Service Manual and The Contents of Theory

ANNEX D-4

(Electronics Course 2)

		Subject	Contents	Hours /Year	Text Books
2nd Year	Practicice	Radio	Assembly	192	MATSUSHITA/SANYO: Schematic Diagram-Assembly Instruction Manual SANYO: Alignment Instruction Manual SANYO: Measurement Instruction Manual SANYO/MATSUSHITA: Radio Receiver Basic Radio: Theory and Servicing
			Alignment		
			Measurement		
Trouble-Shooting					
			Experiemtn on Circuits		
			Sub Total	1088	
		Field Practice		192	
			Total	1280	
3rd Year	Common Subjects	English		64	English for Industrial Schools
		Mathematics	Vector Analitical Geometry (Equation of 1st Dgree) (Circle) Group and Operation Defferential Calculus of Integral Expression	64	Engineering Analysis
3rd Year	Lecture	TV	Fundamental of Color Color Circuit with All the Stages of Color TV Trouble Shooting	96	SANYO: Principle of Color TV NEC: (same as the 2nd year)
		Radio	Radio Receiver (Power, Audio, Intermediate Frequency, Oscillator, Antenna Circuit of Radio) Tape Recorder (Playback, Recording Circuit, Head, Tape, ALC Circuit, etc.)	32	Fundamentals of Radio Servicing SANYO: Radio Receiver SANYO: Tape Recorder (1985)

ANNEX D-6

SUBJECTS AND SCHOOL HOURS

(Elevator Course 1)

		Subject	Contents	Hours / Year	Text Books	
2nd Year	Common Subject	English	P	64	English for Industrial Schools.	
		Mathematics	Power Solution Principle of Power Power Involution Logarithm	64	Secondary Algebra	
	Lecture	Electrical Drawing	Symbol, Simple Circuit, Lighting Switch, Magnet Switch, Remote Control, Transformer, etc.	64	Adjustment Manual for EGL-Type Elevator	
		Elevator Electrical Engineering	Basic Theory of Electricity & Electronics Three-Phase Induction Motor. D.C. Generator, D.C. Motor Speed Control System of Elevator Basic of Elevator Sequential Control ACR Elevator Sequence	224	HITACHI DC Elevator Adjustment Manual HITACHI Maintenance Manual HITACHI Installation Manual HITACHI Oversea Course Training Text Book HITACHI Theory & Practice for SV Elevator HITACHI Explanation Book of SV-GD Circuit Diagram	
		Elevator Mechanical Engineering	Structure of Elevator Mechanical Safety Device	144	JIS Inspection Manual (Arabic) Operation & Maintenance Manual of MITSUBISHI Elevator	
	Practice	Elevator Electrical Practice	Basic Experiments on Electricity & Electronics Construction of Relay Experiment of Three-Phase Induction Motor	272	MITSUBISHI Maintenance Manual MITSUBISHI Diaglidle Elevator Manual for Elevator (MITSUBISHI)	
		Elevator Mechanical Practice	Welding Construction of Traction Machine GOV Test	256	Text of Elevators (Elevator World Co.) Elevators & Escalators (OTIS Elevator Co.) Practical Electrical Witing (International Student Edition) Electrical Technology (B.L. Theraja)	
				Sub Total	1088	*All the textbooks above are used by teachers & instructors to teach both 2nd and 3rd year students.
		Field Practice	Field Practice on Elevator Maintenance		192	
					Total		1280

ANNEX D-5

(Electronics Course 3)

		Subject	Contents	Hours /Year	Text Books
S e r v i c e s	L e c t u r e	Calculator	Number System Karnugh Map Designs Loolean Algebra Logic Circuits	160	Louis Nashelsky: Intro- duction to Digital Computer Technology Digital Computer Science
	P r a c t i c e	TV	Measurement, Trouble Shooting, Repairing, Adjustment	224	SANYO/NEC: Color Television Training Manual
		Radio	Assembly, Alignment, Measure- ment and Trouble Shooting of Radio & Tape Recorder Experiment on Circuits of Tape Recorder	128	SANYO/MATSUSHITA: Radio Receiver SANYO: Tape Recorder (1985)
		Calculator	Assembly of Calculators Measurement Trouble Shooting Design	320	Service Manuals, etc.
				Sub Total	1088
		Field Practice		192	
			Total	1280	

ANNEX D-7

(Elevator Course 2)

		Subjects	Contents	Hours /Year	Text Books
3rd Year	Common Subject	English		64	English for Industrial Schools
		Mathematics	Vector Analytical Geometry (Equation of 1st Degree) (Circle) Group & Operation Defferential Calculus of Integral Expression	64	Engineering Analysis
	Lecture	Elevator Electrical Engineering	ACR Elevator Sequence Control SVGD Elevator Sequence Control	208	
		Elevator Mechanical Engineering	Structure of Elevator Electrical Adjustment of Elevator	64	
	Practice	Elevator Electrical Practice	Insulation Test Door Speed Leveling Trouble Shooting, Back Wiring	192	
		Elevator Mechanical Practice	Practice of Elevator Inspection Mechanical Adjustment of Elevator (door, brake, GOV, rail guide)	491	
				Sub Total	1088
	Field Practice	Maintenance of Elevators, etc.	192		
			Total	1280	

ANNEX D-8

SUBJECTS AND YEARLY SCHOOL HOURS

(Refrigeration & Air-Conditioning Course 1)

	Subject	Contents	Hours /Year	Text Book
Common Subject	English		64	English for Industrial Schools <u>Student Text</u>
	Mathematics	Power Solution Principle of Power Power Involution Logarithm	64	Secondary Algebra <u>Student Text</u>
2 n d Y e a r L e c t u r e	Electrical Drawing	Symbol, Simple Circuit, Lighting, Switch, Magnetic Switch, Remote Control, Transformer	64	Addel Shamas: Electric Drawing (Arabic) <u>Student Text</u> Hussein Hotar: Electric & Circuit Drawing (Arabic) <u>Student Text</u>
	Thermodynamics	Mass and Weight, State of Matter, Change of State, Energy, Heat Transfer, Laws of Thermodynamics	64	R.J. Dossat: Principles of Refrigeration (Arabic) <u>Student Text</u> ... (A) ARI Suggested Secondary School Course Guide: Air-Conditioning, Heating & Refrigeration <u>Curriculum Guide</u> ... (B) ARI: Refrigeration and Air-Conditioning <u>Book for Teacher</u> ... (C)
	Measurement	Mechanical Measurement (Vernier, Micrometer, Thickness Guage) Electrical Measurement (Tester, Meger, Clamp Type Tester) Thermodynamical Measurement (Thermometer, Pressure Guage, Anemometer)	96	(B) & (C)
	Basic Refrigeration	Refrigeration Cooling Cycle, Pressure-Enthalpy Diagram, Compressor, Refrigerant, Oil, Piping, Control Valve	192	(A), (B), (C) & Alhouse Modern Refrigeration and Air-Conditioning <u>Book for Teacher</u> ... (D)

(Refrigeration & Air-Conditioning Course 2)

		Subject	Contents	Hours /Year	Text Books
2nd Year	Practical	Refrigeration Cooling Cycle	Changing Stage of Refrigerant at Various Conditions	128	
		Compressor Overhauling	Mechanism of Typical Compressors, Overhauling technics	136	
		Welding	Copper Tube Brazing, Electric Welding, Gas Welding	140	
		Piping	Steel Pipe Work	140	
				Sub Total	1088
		Field Practice	Maintenance of Refrigerator & Air-Conditioning	192	
			Total	1280	
3rd Year	Lecture	English		64	English for Industrial Schools
		Mathematics	Vector Analytical Geometry (Equation of 1st Dgree) (Circle) Group & Operation Defferential Calculus of Integral Expression	64	Engineering Analysis
3rd Year	Lecture	Air-Conditioning & Refrigeration	Outline of Refrigeration, Cold Storage Design, Outline of Air-Conditioning, Psychrometrics, Heat Load Calculation, Air Distribution	256	(B), (C) & (D)
		Controls	Motor, Thermostat, Pressure-Control, Humidity Control, Control Valves, Electrical Control Circuit	64	(B) & (C)

ANNEX D-10

(Refrigeration & Air-Conditioning Course 3)

		Subject	Contents	Hours /Year	Text Books
3 r d	P r a c t i c e	Operation, Trouble Shooting & Repairing	Domestic Refrigerator, Room A/C, Packaged A/C, Water Chiller, Fan Coil Unit, Cold Storage	480	
		Experiment of Air-Conditioning	Heating, Humidifying & Cooling	60	
		Graduation Report	Design, Installation, Operation, Testing & Reporting on Practical Cold Storage	100	
			Sub Total	1088	
		Field Practice	Maintenance of Refrigerator & Air-Conditioner	192	
			Total	1280	

ANNEX E

DATA OF STUDENT'S IN-AND-OUT

Current Year	Period	1st Year Class		Course	2nd Year Class		3rd Year Class		Graduated Institute	Entered Institute		
		Entered	Remained		Sub Total	Total	Sub Total	Total				
1978	78/10 - 79/9	85		Air Conditioning								
				Lifc								
				Electronics								
			85	Total								
1979	79/10 - 80/9			A.	24	0	24					
				L.	24	0	24					
				E.	33	0	33					
			74	Total	81	0	81					
1980	80/10 - 81/9			A.	17	3	20	21	0	21	18	1
				L.	16	5	21	17	0	17	17	1
				E.	32	1	33	32	0	32	28	0
			84	Total	65	9	74	70	0	70	63	2
1981	81/10 - 82/9			A.	19	3	22	15	3	18	14	3
				L.	10	7	17	16	0	16	11	3
				E.	30	4	34	29	4	33	26	4
			70	Total	59	14	73	60	7	67	51	10*
1982	82/10 - 83/9			A.	23	1	24	21	4	25	14	3
				L.	19	3	22	13	5	18	11	3
				E.	36	3	39	31	7	38	21	4
			97	Total	78	7	85	65	16	81	46	10
1983	83/10 - 84/9			A.	21	9	30	14	11	25	22	6**
				L.	25	8	33	14	7	21	15	3
				E.	33	21	54	18	17	35	31	4***
			78	Total	79	38	117	46	35	81	68	13
1984	84/10 - 85/9			A.	25	0	25	30	3	33		
				L.	15	7	22	25	4	29		
				E.	34	6	40	47	4	51		
			60	Total	74	13	87	102	11	113		

* including 3 graduates who had gone to the University of Technology (higher education)

** gone to the Institute of Petrochemical in Basra

*** including 2 female students to EIC

List of Dispatched Japanese Experts

Duty	Name	Position	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	Remarks
Elevator installation	Masami Sakai	Hitachi	3/10 4/30	3/2 3/15 11/8 11/29	9/21	4/4	10/11 10/2		5/27 5/5				
	Akira Kimura	Ryoden	"	"		3/25 5/5							
	Masao Chiaki	Ryoden	"	"		"							
	Masahiro Ishizaki	Hitachi	"	"		"							
	Kenji Inoshita	Hitachi	"	"		"							
	Takashi Negata	Ryoden	"	"		"							
	Yoshitaka Yamazaki	Hitachi	"	"		"							
	Kazuo Taguchi	Mitsubishi	"	"		"							
	Tatsuo Takahashi	Hitachi	"	"		"							
	Kenichi Harada	Ryoden	"	"		"							
Refrigeration & Air-Conditioning	Hisao Yoshida	Hitachi	3/10 4/30	3/2 3/15 11/8 11/29	11/15	4/4	10/11			5/27 7/5 7/19 7/29	9/20	2/31	
	Shigeru Katsumata Yoshisuke Kino Mitsuo Matsumura Kazuo Shiina Shinichi Saijo	Hitachi Hitachi Hitachi Taihei Miyaguchi Takisho											
Radio	Masao Kondo	Matsushita	3/10 4/30	11/9 11/29		4/4	10/11			7/19 8/1 9/20 11/19	9/21 11/16		
	Ikuo Ikeda	Sanyo											
TV	Shigeru Numano	Toshiba	3/10 4/30	11/9 11/29									
	Sadayoshi Yoshikawa	NEC					4/10 10/11						
	Tadamitsu Natori	NEC											
	Yoshiharu Matsuzaka	Sanyo											
Calculator	Akira Hidaka	Tottori	3/10 4/30	11/9 11/29									
	Tomeshige Usugi	Sanyo		11/9 11/29									
	Shuji Imai	Tottori											
Architecture	Mitsuo Nakamura	Sanyo	3/10 4/30	11/9 11/29									
	Yukiiji Sato	Nikken		11/9 11/29									
Technical Cooperation Planning Coordination	Yukiiji Sato	JICA											
	Isamu Hirano	JICA								5/29 6/5	9/20	3/31	

ANNEX G-1

List of Dispatched Japanese Survey Team

1) Preliminary Survey Team (1974.11.14~12.10)

	<u>Name</u>	<u>Position</u>
Leader	Takeshi Kuroko	Mining & Industrial Development Cooperation Dept. Japan International Cooperation Agency
Member	Akio Nojima	Mitsubishi Heavy Industries, Ltd.
"	Hironaka Ikehara	Hitachi Ltd.
"	Nobuhiro Miyake	Machinery & Information Industries Bureau Ministry of International Trade and Industry
"	Yoshiyuki Ohtsuka	International Trade Policy Bureau Ministry of International Trade and Industry

2) Implementation Survey Team (1975.8.23~9.10)

	<u>Name</u>	<u>Duty</u>	<u>Position</u>
Leader	Masami Sakai	Chief Advisor & Elevator	Japan Elevator Association
Sub- Leader	Yoshinori Sano	Coordination & Training	Japan International Cooperation Agency
Member	Hisao Kita	Refrigeration & Air- Conditioning	Japan Refrigeration and Air- Conditioning Industrial Assoc.
"	Tatsuo Yasumuro	Facility & Administration	Government Building Planning Div. Ministry of Construction
"	Kazumi Kobayashi	Electronics	Electronic Industries Association of Japan

3) Planning & Consultation Team (1979.1.31~2.18)

	<u>Name</u>	<u>Duty</u>	<u>Position</u>
Leader	Yoichi Takebayashi	Chief Advisor	Mining & Industrial Development Cooperation Dept., Japan Inter- national Cooperation Agency
Sub- Leader	Akihisa Shimomichi	Planning & Coordination	" " "
Member	Tetsuo Kobayashi	Electrical Equipment	Ministry of International Trade and Industry
"	Masafumi Kinoshita	Electronics	Japan International Cooperation Agency

4) Evaluation Team (1980.1.4~1.14)

	<u>Name</u>	<u>Duty</u>	<u>Position</u>
Leader	Masao Wada	Chief Advisor	Japan International Cooperation Agency
Member	Tadamitsu Natori	TV	Shin Nippon Denki Co., Ltd.
"	Seiji Okita	Electrical Equipment	Ministry of International Trade and Industry
"	Akihiro Ohtani	Planning & Coordination	Japan International Cooperation Agency

ANNEX G-2

5) Maintenance and Repair of Equipment (1980.5.15-5.31)

	<u>Name</u>	<u>Duty</u>	<u>Position</u>
Leader	Masahiro Ishizaki	Chief Advisor	Hitachi Ltd.
Member	Masao Chiaki	Maintenance & Control	Ryoden Service Co., Ltd.
"	Tsutomu Komaki	Coordination	Japan International Cooperation Agency

6) Local Situation Survey Team (1982.1.23-2.1)

	<u>Name</u>	<u>Duty</u>	<u>Position</u>
Leader	Makoto Nakamura	Chief Advisor	Japan International Cooperation Agency
Member	Kazu Shioya	Local Condition Survey	Ministry of Foreign Affairs
"	Hiroshi Irisawa	Technical Cooperation Administration	Ministry of International Trade and Industry
"	Masami Sakai	Technical Cooperation Planning	Japan International Cooperation Agency

(7) Technical Consultation Team (1983.7.19-7.29)

	<u>Name</u>	<u>Duty</u>	<u>Position</u>
Leader	Yoshio Hisatome	Chief Advisor	Japan International Cooperation Agency
Member	Masafumi Tsuruta	Technical Cooperation	Ministry of Foreign Affairs
"	Mitsuru Suemori	Coordinator	Japan International Cooperation Agency
"	Akira Kimura	Elevator	Ryoden Service Co., Ltd.

Training of Iraqi Counterparts in Japan

No.	FY	VICEI		Name of Participant	Date of Birth	Academic Career		Acceptance of Training in Japan	
		Course	Duty			Alma Mater	Subject of Study	Period of Stay	Training Organ
1			Teacher	Kudayer Abass Muhamad Al-Kasab	1950	University of Baghdad	Electrical Engineering	1977.6.24	Mitsubishi Electric Corp.
2		Elevator		Ali Reoof Ali Al-Zubiadi	1951	Institute of Technology	Mechanical Engineering	1978.6.22	Hitachi Ltd.
3			Instructor	Subhi Farman Dura	1952	Technical High School	Mechanical Engineering		
4	1977			Khalil I Ahmad	1946	University of Baghdad	Mechanical Engineering		
5			Teacher	Adel Abood Al-Robayi	1948	University of Technology	Mechanical Engineering	1977.10.28	Hitachi Ltd.
6		Air-Conditioning		Akram Chadban Al-Roumi	1948	Petroleum Training Center	Mechanical Engineering	1978.10.27	Shimizu Works
7			Instructor	Mahmoud Khudir Khadim	1954	College of Eng. Technology	Electrical Engineering		
8		Radio	Teacher	Farced Abdul Rasool Al-Ansari	1951	Institute of Technology	Electrical Engineering		
9			Instructor	Aolman Dakhi	1954	University of Baghdad	Electrical Engineering		
10		Electronics	Teacher	Laith Abdulsamad Nassman	1952	Institute of Technology	Electrical Engineering		
11	1978	TV	Instructor	Jalal Sedik Hasan	1951	College of Eng. Technology	Electrical Engineering		
12		Electronic Calculator	Teacher	Abdul Sahib Mirza Mohamad	1951	Petroleum Training Center	Electrical Engineering	1979.4.12	Tottori Sanyo Electric Co.
13			Instructor	Mahammed Abdul chafoor	1950	University of California -- Berkeley	Electrical Engineering		
14		Director of the Center Sector in SOID		Nadhim D. Salman	1927	University of Technology	Electrical Engineering	1978.7.17 ~ 1978.9.7	JICA
15	1981	Elevator	Teacher	Khodher Abbas Mouhamed Al-Zaedi	1955	University of Technology	Economics & Mathematics	1982.2.4 ~ 1982.4.20	Mitsubishi Electric Corp.
16		Radio	Teacher	Assad Mohamed Kamil	1955	University of Baghdad	Electrical Engineering	1982.1.28 ~ 1982.5.17	Hitachi Ltd.
17		Director of the Center		Adnan Haqi Shihab	1932	University of Baghdad	Electrical Engineering	1983.10.23 ~ 1983.11.12	Matsushita Electric Trading Co.
18	1983	TV & E. Calculator	Teacher	Abdu Ghulan Hussien	1956	Plekhanov Institute of National Economic	Ph. D. in Management	1984.1.26 ~ 1984.6.30	JICA & Others
19		E. Calculator	Instructor	Feryal Mohammed Ali Saeed (Miss)	1959	University of Sulaimania	Electrical Engineering	1984.1.26 ~ 1984.3.31	Sanyo Electric Co.
20		Elevator	Instructor	Subhi Farman Dura	1952	Institute of Oil, Baghdad	Control & Measurements	1984.1.26 ~ 1984.3.31	Tottori Sanyo Electric Co.
21		Radio	Teacher	Assad Mohamed Kamil	1955	Institute of Technology	Electrical Engineering	1984.1.26 ~ 1984.4.10	Mitsubishi Electric Corp.
22		Elevator	Teacher	Ali Reoof Ali Al-Zubiadi	1951	University of Baghdad	Electrical Engineering	1984.6.14 ~ 1984.9.13	Hitachi Ltd.
23	1984			Khodher Abass Mouhamed Al-Zaedi	1955	University of Technology	Mechanical Engineering	1984.6.14 ~ 1984.10.13	Sanyo Electric Co.
24		Air-Conditioning	Teacher	Adel Abood Al-Robayi	1948	University of Baghdad	Electrical Engineering	1984.6.14 ~ 1984.10.13	Mitsubishi Electric Corp.
25				Akram Chadban Al-Roumi	1948	University of Technology	Mechanical Engineering	1984.6.30 ~ 1984.9.29	Hitachi Ltd.

ANNEX I-1

Costs of Provided Equipment

Unit: ¥1,000

Fiscal Year of Shipping	Objective of Provision				TOTAL	Typical Equipment
	for Electronic Devices Training Course	for Elevator Training Course	for Refrigeration & Air- Conditioning Training Course	Common to All Courses		
1976	-	50,000	① 73,240	-	123,240	① Air Conditioning Training Equipment
1977	② 27,040	-	-	③ 1,500	28,540	② Radio, TV, Calculator ③ Copy Machine, etc.
1978	16,000	④ 48,760	5,000	⑤ 1,820	61,560	④ Elevator Practice Tower, etc.
1979	⑥ 10,000	-	-	-	10,000	⑤ Car ⑥ TV, Calculator
Sub Total	53,040	98,760	78,240	3,300	233,340	
1983	① * 2,000	-	-	⑧ 7,550	9,550	⑦ Note 1 ⑧ Cars, Copy Machine
1984	29,610 * 1,300	⑨ 34,600	47,040	⑩ 1,400	113,950	⑨ Elevator Simulator ⑩ VTR, TV
1984 Not yet arrived	-	-	-	-	30,000	
Total					385,840	

- Note: 1. Figures with no mark are equipment under provision procedure and figures with * is equipment brought by experts at their arrival.
2. Expenses for books, preparation of textbooks and VTR teaching aids are not included.
3. Typical equipment is given in the right column. Other provided major equipment are listed in the following pages.
4. Practical degree of use of the equipment in the education is listed in the right end column. The meanings of the symbols are as follows;
- A : Equipment used by students for practices and experiments (operation, measurement, assembly/disassembly, etc.)
- B : Equipment operated and explained by teachers & instructors in the practice classes.
- C : Equipment exhibited in the practice room all the time to satisfy students' desire for learning.

Further, numbers together with the symbols A & B indicate the used school year (e.g. A2 ... Category A in the 2nd year).

ANNEX I-2

List of Major Equipment Provided
Electronics Course

		1984* : pending
I	TV	
I-1	TV Set (B/W, Color) (20 sets)	1977 A2,3
I-2	TV Set (B/W, Color) (30 sets)	1978 A2,3
I-3	TV Set (B/W, Color) (34 sets)	1979 A2,3
I-4	20" Color TV Set (1 set)	1983 A2,3
I-5	Measuring Instrument (Digital Meter, etc.) (11 pieces)	1983 A2,3
I-6	26", 20", 16", 14" Color TV Set (24 sets)	1984 A2,3
I-7	Measuring Instrument (Curve Tracer, Color Bar Generator, Oscilloscope, Synchroscope, etc.) (25 pieces)	1984 A2,3
I-8	20" color, 20" B/W TV Set (8 sets)	1984* A2,3
I-9	Measuring Instrument (Synchroscope, etc.) (9 pieces)	1984* A2,3
II	Radio	
II-1	Radio Set and Kit (200 sets)	1977 A2,3
II-2	Radio Set and Kit (100 sets)	1978 A2,3
II-3	Tape Recorder Set (50 sets)	1978 A2,3
II-4	Player (15 sets)	1978 -
II-5	Electric Parts (Resistor, Transistor, IC, etc.)	1978 A2,3
II-6	Tool (Tracking Bar, Driver, etc.) (57 pieces)	1983 A2,3
II-7	PCB (Universal Board) (40 pieces)	1983 A2
II-8	Radio Set and Kit (290 sets)	1984 A2,3
II-9	Tape Recorder Set and Kit (64 sets)	1984 A3
II-10	Measuring Instrument (Wow Meter, Oscilloscope, Filter, etc.) (81 pieces)	1984 A2,3
II-11	Tool Set (40 sets)	1984 A2,3
II-12	Electric Parts (Capacitor, IFT, etc.)	1984 A2,3
II-13	Measuring Instrument (Sweep Oscillator, Torque Meter, etc.) (42 pieces)	1984* A2,3
III	Calculator	
III-1	Calculator Set (100 sets)	1977 A3
III-2	Calculator Set (100 sets)	1978 A3
III-3	Calculator Set (135 sets)	1979 A3
III-4	Calculator Set and Kit (Desktop Type 12 Fig. 10 Fig. Function, W/Watch, etc.) (342 sets)	1984 A3

ANNEX I-3

List of Major Equipment Provided
Elevator Course

		1984* : pending
I	Training Room No.1	
I-1	Control Panels for SD-SK, 2S-SK, ACR & DCFP Elevator (4 kinds)	1976 A3, C2
I-2	Starting Panel for DC Elevator	1976 B2, B3
I-3	Selector for Mitsubishi Elevator	1976 B2, B3
I-4	Mechanical Landing Switch	1976 B2, B3
I-5	DC Geared Elevator Simulator	1984 A3
I-6	AC Elevator Simulator	1984 A3
I-7	Electric & Electronic Circuit Training Kit	1984* A2
I-8	Electric & Electronic Circuit Training Kit (Instruction Type)	1984* A2
II	Training Room No.2	
II-1	Elevator Car & Entrance Door Assemblies with M2, M3, SM-G Type Door Operator (4 kinds)	1976 B2, A3
III	Training Room No.3	
III-1	Traction Machine, Geared & Gearless Type	1976 B2, A3
III-2	Oil Buffer	1976 B2
III-3	Governor	1976 B2
III-4	Safeties Device	1976 B2
III-5	Electric Welder	1976 A2, A3
III-6	Door Operator Assembly	1984* B2, A3
III-7	Training Board for Elevator Circuit	1984* A3
IV	Training Tower for Elevator	
IV-1	DC Geared Elevator (SV Control System)	1978 A2, A3
IV-2	AC Elevator (ACR Type)	1978 A2, A3
V	Store	
V-1	Spare Parts	1976
V-2	Measuring Instruments & Tools	1976
V-3	Spare Parts	1984
V-4	Measuring Instruments & Tools	1984*

ANNEX I-4

List of Major Equipment Provided
Refrigeration & Air-Conditioning Course

1984* : pending

I Laboratory

I-1	Training Equipment for Psychrometric Chart	1976	A3
I-2	Training Equipment for Refrigeration Cooling Cycle	1976	A2
I-3	Training Equipment for Hydrodynamics	1976	B3
I-4	Training Panel for Refrigeration Cooling Cycle	1976	B2
I-5	Water Quality Analyzer	1984	A2
I-6	Training Panel for Solar Air-Conditioning System	1984*	B3
I-7	Training Equipment of Trouble-Shooting for Refrigeration Cooling Cycle	1984*	A3

II Operation Training Room

II-1	Split System Air Conditioner (4 sets)	1976	A3, B2
II-2	Water Chiller and Fan-Coil Unit System Air Conditioner (4 sets)	1976	A3, B2
II-3	Cold Storage and Show Case	1976	A3, B2
II-4	Room Air Conditioners (4 sets)	1976	A3, B2
II-5	Ice Machine (1 set)	1976	A3, B2
II-6	Drinking Water Cooler (1 set)	1976	A3
II-7	Soft Cream Machine (2 sets)	1984*	A3
II-8	Cube Ice Machine (2 sets)	1984*	A3

III Compressor Overhauling Training Room

III-1	Open Type Compressor (6 sets)	1976	A2
III-2	Semi-Hermetic Type Compressor (3 sets)	1976	A2
III-3	Hermetic Type Compressor (3 sets)	1976	A2
III-4	Cut Models of Compressors, Pumps, Controllers	1976	C
III-5	Screw Compressor (1 set)	1984	A3

IV Electric Wiring Training Room

IV-1	Training Panel for Wiring (12 sets)	1976	A3
IV-2	Electronic Control Circuit Checker (4 sets)	1984*	A3
IV-3	Panel Mounted Motors (3 sets)	1984*	B2
IV-4	Experimental Board for Basic Electronics (2 sets)	1984*	A2

ANNEX I-5

V Installation Training Room

V-1	Heat Pump Type Air Conditioners Outdoor Units (3 sets) & Indoor Units (9 sets)	1984	A3
V-2	Training Equipment for Refrigeration Cooling Cycle Condensing Units (4 sets), Unit Coolers (12 sets) Cold Storage (1 set)	1984	A3
V-3	Screw Water Chiller	1984	B3
V-4	Refrigerating Line Cleaner	1984*	B3

VI Storage

VI-1	Spare Parts and Tools	1976 | 1984	
VI-2	Spare Parts and Tools	1984*	

