



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

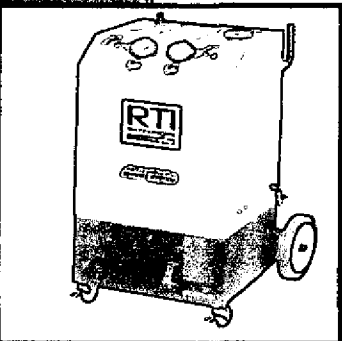
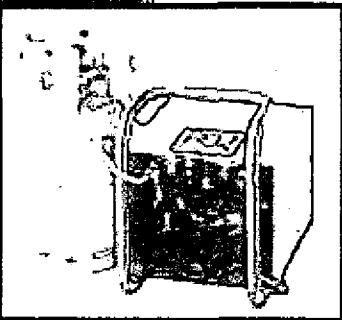
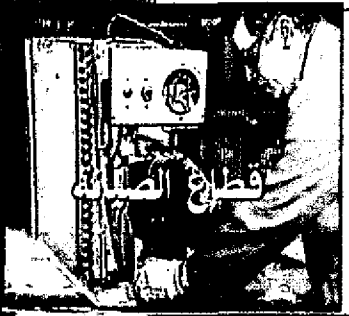
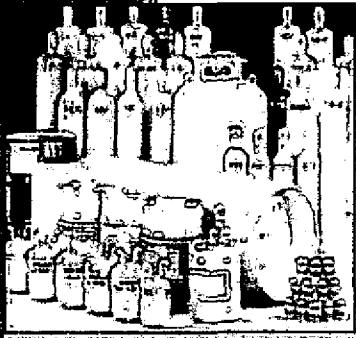
Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

23361



Final Report

UNIDO Contract NO: 16001149
Project No: MP/EGY/05/002

CFC's phase out plan In Egypt

Ministry of State for Environmental Affairs

United Nations Industrial Development Organization





Final Report on the Contract between

**The United Nations Industrial Development Organization
(UNIDO)
&
Universal Company**

**For the Provision of Services and Transfer of Technology
related to the Phase-out of CFCs' in the Refrigeration and
MAC Sector
in Egypt**

**Contract No: 16001149
UNIDO Project No.: MP/EGY/02/002**

**Submitted by: Eng. Edwar Ibrahim Fahmy
General Manager**

UNIVERSAL COMPANY

**68, MOHAMED FARID ABOU HADID ST. , NASR CITY- CAIRO-EGYPT
TEL: (202) 4012289 TEL & FAX: (202) 2604686**

CONTENTS

Introduction

- I. OBJECTIVES OF THE TRAINING PROGRAMME
- II. EGYPT SITUATION IN RELATION TO THE MONTREAL PROTOCOL
- III. EGYPTIAN STRATEGY OF THE "NATIONAL CFCs PHASE OUT PLAN" IMPLEMENTATION
- IV. UNIVERSAL CO. APPROACH TO DESIGN AND IMPLEMENTATION OF THE TRAINING PROGRAMME
- V. SELFASSESSMENT OF THE PROGRAMME AND THE "LESSONS LEARNED"
- VI. CONCLUSIONS AND RECOMMENDATIONS

Annexes :

1. List of Trainers of the Training Courses
2. list of the coordinators and Supervisors of the Training Courses
3. list of the leading and Secondary Training Centers
4. Map of geographical distribution of the secondary training Centers following the training program
5. Map of geographical distribution of trainees and technicians from all over Egypt
6. Training Schedule for Trainers (5days) (8 Training Courses).
7. Training Schedule for Trainees and technicians (2days) (52 Training Courses).
8. Technical Report of the Training Courses
9. Coordination with ICCT Company
10. Technical Report of the all Training Courses

Attachment:

- Annex 1 : ICCT Workshop Report

INTRODUCTION

T This report shows the objectives that have been achieved upon the contract signed up between Universal Company and the United Nations Industrial Development Organization (UNIDO). The contract aimed at training and rehabilitating trainers and trainees in the Ref. & A/C sectors to raise their practical and theoretical skills in using the R&R technology in the maintenance and servicing operations for the refrigeration, A/C and MAC units. The training programme was also aimed at encouraging technicians on the use of the R&R technology by practically clarifying the economical and environmental benefits of such technology through preventing ODP refrigerants from escaping into the atmosphere during the maintenance operations.

In addition to that, the Egyptian government has worked in its ongoing programmes on raising the efficiency of technicians in the different fields. This encouraged many Ministries and Associations to join our training programme and ask for more training courses on wider basis for more spread of the modern technology in the Ref. & A/C sector. This in turn, imposed an obligation on us to meet these requests in Stage II of the NPP.

The sponsorship of his Excellency Minister of Environmental Affairs and the Chief Executive Officer of the EEAA in addition to the supervision of the NOU, and the participation of 5 great Ministries and 27 different specialized associations gave the training program a great importance on the national level.

Finally, I wish to express my deep thanks and appreciation for your help to Universal Company in finalizing the job successfully. This in turn made a great contribution in raising the efficiency of technicians in the Ref. & A/C sector in Egypt, in addition to fulfilling the objectives of the National Phase-out Plan in preserving the Ozone Layer depleting.

Pls. take note of the following additional information as requested the person in UNIVERSAL

COMPANY dealing with this report is:

Eng. Edwar Ibrahim Fahmy

Phone: + (202) 4012289

Fax: + (202) 2604686

Cell: + (202) 012 214 5306

E-mail: universalco6@hotmail.com

General Manager

Eng. Edwar Ibrahim Fahmy

I. Objectives of the training programme

The project aims at sustain reduction of ODS usage in the refrigeration and air conditioning sectors by:

- Increasing participation awareness on the Ozone Layer Depletion issues
- Providing information on conservation techniques and on the new ozone friendly refrigerants
- Introduction and demonstration of procedures that eliminate the ODS refrigerant emissions during preventive or unscheduled maintenance
- Selection and guidance in use of retrofitting refrigerants
- Development of a network for information sharing throughout the sectors

The training component of project is of utmost importance. It is an important self-sustaining capacity-building tool. It will ensure continuity in training and introduction of current and new maintenance methodologies and techniques.

The training programme for good practices in refrigeration aims at training approximately 25-30 national trainers with advanced technical background in refrigeration and air conditioning drawn from vocational institutes or industry and 1300 technicians from refrigeration and MAC workshops. The trainers already must have basic theoretical and technical training related to refrigeration and air conditioning and also they have some experience from the practical maintenance business. The technicians will operate the recovering and recycling equipment to be supplied to their workshop by the project.

The trainers will act as instructors / trainers to train approximately one thousand three hundred technicians /shop floor operators of the project.

The training programme will include classroom presentations, practical demonstrations and hands on training. The curriculum of the training program will include, but not limited to:

- Background to ozone layer, depletion of ozone layer, the Vienna Convention, the Montreal Protocol and its amendments; phase out requirements and the Government's response as a party to the Protocol.

- Ozone depletion and environmental considerations
- Importance of the refrigeration and air conditioning sector
- Overview of the inter National CFC Phase Out programme
- Properties of refrigerants and lubricants
- Hazards of refrigerants
- Refrigerant – alternative refrigerants
- Handling and storage of refrigerants, safety requirements, safe refrigerant handling techniques
- Leak detection and prevention
- Good refrigerant practice
- Retro filling refrigerants
- Recovery, recycling machines – techniques and principles
- Maintenance techniques which minimize the loss of refrigerant effect to atmosphere
- Construction of simple recovery machines from recycled components
- Practice of installation, service and maintenance techniques
- Practice of recovery, recycling an retrofitting techniques
- Installation of equipment, operation and maintenance
- Discussion on developing of a national code of good practice
- Discussion on certification
- Discussion on the regulations in place and being considered by the Government,
- Including how Egypt can meet its objectives under the Montreal Protocol
- Equipment demonstration and hands on training in the proper use of equipment and recovery & recycling machines.

II. EGYPT SITUATION TO THE MONTREAL PROTOCOL:

Egypt is considered as a complete representation for the rules of the MONTREAL PROTOCOL to OZONE DEPLETING SUBSTANCES.

In addition, Egypt approved on all the special amendment of the MONTREAL PROTOCOL.

Controlled substances consumed in Egypt are given in Table below sores taken by the Government of Egypt and the industry, the consumption is being gradually declining since 1996. The present NPP covers Annex A, substances, and Annex B substances for

terminal phase-out. The status of Egypt in terms of Montreal Protocol ratification is as follows:

Vienna Convention	09 May 1988 (R)
Montreal Protocol	02 Aug 1988 (R)
London Amendment	13 Jan 1993 (R)
Copenhagen Amendment	28 Jun 1994 (R)
Montreal Amendment	20 Jul 2000 (R)
Beijing Amendment	On going

The CFC's sectors for refrigeration and A/C in Egypt consumed about 834 tons of these substances in 2005. The schedule for reduction of CFCs consumption by the country under the NPP was agreed as follows:

PROJECT DATA		2004	2005	2006	2007	2008	2009	2010	Total
	Montreal Protocol limits	1,668	834	834	250	250	250	0	n.a.
CFCs	Annual consumption limits (except MDI sector consumption)	1047	822	595	240	113	49	0	n.a.
(ODP)	Annual phase-out from ongoing projects	-	35	19	27	23	25	0	129
(tonnes)	Annual phase-out newly addressed	40	150	182	100	41	24	0	537
	Annual reduction from institutional Activities	185	42						227
	Annual unfunded phase-out (MDI)	-	0	154	0	0	0	0	154
TOTAL ODS CONSUMPTION TO BE PHASE-OUT		225	227	355	127	64	49	0	1047

III. EGYPTIAN STRATEGY FOR CFC's PHASE OUT PLAN

The MLF with the help of Egyptian Government in complete phase out Consumption CFC's substances of Ref. A/C sectors from 834 tons to 0 tons at 2010 on three phases:

Phases	Status of implementation	(From – to)
First phase	finished	8/2005-12/2006
Second phase	Not started	12/2006-1/2008
Thrid phase	Not started	1/2008-1/2010

In addition, the 1st phase targets summered in the next points

Project Element	Status of implementation
Equipment (250 sets of R-R ,40 sets for MAC, Identification units, etc)	Completed
Evaluation and follow – up international consultants Monitoring and verification	Ongoing
Project Management	Ongoing
Trianning Programmeres (RMP)	Ongoing

IV. UNIVERSAL CO. APPROACH IN DESIGN AND IMPLEMENTATION OF THE TRAINING PROGRAMME.

In the context of Egyptian membership in the Montreal Protocol to protect the Ozone Layer and in light of the implementation of the Egyptian strategy to phase-out the use of CFCs in production, maintenance & servicing sectors in the Refrigeration and A/C Sector in Egypt the Egyptian government has legislated obligatory rules for public and private companies using the Ozone Depleting Substances (CFCs) during the production or maintenance processes in the refrigeration and air-conditioning sector. These legislations will guarantee the execution of oriented training programmes for the dealers in this sector to stop releasing the ozone depleting substances into the atmosphere. In correspondence with both the international and the Egyptian efforts in saving the Ozone Layer, we have the pleasure to participate through our organization in introducing the new technology of Recycling and Recovery (R&R) to the Refrigeration and Air-conditioning sector in Egypt. This will take place through holding training programmes to train trainers, trainees and technicians in the Ref. and A/C sector in Egypt on the technology of recycling and recovering CFCs during the maintenance process instead of releasing CFCs into the atmosphere. In light of the contract between Universal Company and the United Nations

Industrial Development Organization (UNIDO) for the implementation of training programmes for trainers and trainees, these training programmes are aimed at introducing the new technology in the repair and maintenance of the Refrigeration and A/C equipment to inspire the concerned people in this field to contribute to the preservation of the Ozone Layer.

Using the CFC's and HCFC's in the Ref. & A/C units during the maintenance operations causes the Ozone Layer to deplete; thus, it became a necessity to train and qualify workers and technicians in the Refrigeration Maintenance and Servicing Sector to be able to play their due role in controlling the harmful emissions of Refrigerants. This can be achieved through training programmes to improve the qualifications of the workers and technicians in the Refrigeration Maintenance and Servicing Sector and by training them on the Modern Technology of Recovery and Recycling and the good practices in the maintenance operations to help freeze the consumption levels of the ODSs in order to comply with the Egyptian Commitments of the Montreal Protocol. Thus this training course was held under the title of "The Training Program for Good Practices in Refrigeration and MAC Maintenance".

No doubt that the training courses for the technicians is one of the most important stages of the implementation of the training programme. It is considered as the first priority to train technicians from different workshops and associations on the use of the "modern technology in the maintenance and servicing of the cooling and refrigerating units". This is in addition to training them on the use of the R&R equipment to recover the refrigerant to be reused in the same unit. This technology can be applied to the different cooling units such as refrigerators, A/Cs, commercial refrigeration units, display cooling units, water coolers, ice makers, etc.

The technicians have been also trained on the different ways of the chemical analysis for the ozone friendly refrigerants (R-134a, R-404...etc) and the ozone depleting refrigerants (R-12, R-502...etc). The training courses have also included training the technicians on the different methods of retrofitting the units from using R-12 to using R-134a and from using R-502 to using R-404.

We noticed during these training courses the great variety in the educational backgrounds and qualifications of the technicians which allowed a great exchange of experiences among them.

The total number of technicians trained during this stage reached 1040 technicians; this number is considered as a very large number out of the sector of technicians which consists of about 24 thousand technicians in Egypt whether formal or informal.

Finally, it worth to be mentioned here that after the finalization of the training courses the company has received about 8 formal invitations from different Ministries to train their technicians following the completed training programmes. This is in addition to about 2000 more technicians expressed their need to join the training courses.

The practical examination is one of the most important stages of the training courses. After the finalization of each training course, the trainees and technicians in each training course were asked to work together to assemble a Recovery & Recycling unit similar to that of RTI's under the supervision of a technical engineer and the trainer of the training course. All the materials required for assembling the R&R unit (i.e. compressor, condenser electrical parts, safety equipment...etc) were provided by Universal Company from the local market. This idea aims at encouraging technicians to assemble, operate and use this unit in maintenance and servicing in their own workshops. This will result into more preservation for the Ozone Layer and better economic benefit to the technician through assembling the unit himself rather than purchasing it.

The result was really amazing and great: approx. 90% of the trainees and technicians have already started establishing such units on their own. Technically, the assembled unit operates at 70% efficiency of the RTI unit. Economically, it only costs about L.E. 2,300 in addition to L.E. 400 as the cost of the recovery cylinder (total cost o about L.E. 2,700). Now, after the finalization of all 52 training courses we have 52 assembled recovery units to be awarded to the peculiar trainee from each training course in the closing ceremony.

The company is looking forward to complete it's training programme to the rest of the technicians in different sectors in addition to developing training courses to give them the new and modern technology to save the Ozone Layer.

This is considered the true success for us, and we can not ignore your great efforts and cooperation with the Egyptian government to implement the training courses in the Egyptian Strategy for the Ref. & A/C sector in Egypt.

TOR from UNIDO and what has been done to achieve the targets of the Training programme and evaluation of work plane to:

1. Arrangements with the OZONE Unit which is supervising on training programme to put an imagination to do the training programme in the giving spots from the TOR.
2. Arrangements with governmental and the non governmental organizations to chose the trainers and the technicians to the training programmes.

3. Talking to the specialist sides to deal with the places to do the training programmes all over the country.
4. Deal with internal specialists to do all the technical operation concerning the ref. & A/C.
5. Prepare and sesing and print all things to the training programmes.
6. Chose the training subjects, preparing the programmes and estimation of the number of training centers and servicing workshops to be invited to delegate their technicians jointly with EEAA and the NOU using the following statistic data:

Region	Number of Service workshops	Number of Skilled Technicians	Number of Semi skilled Technicians	Total Number of Workers
Great Cairo	2,648	9,000	4,600	13,600
Delta	896	3,150	1,320	4,470
East Delta	210	800	350	1,150
West Delta	324	990	430	1,420
Upper Egypt	441	1,550	660	2,210
North Coast	117	480	210	690
Sinai	94	320	140	460
Total	4,730	16,290	7,710	24,000

A typical service workshop is a small unit usually with staff of 1 to 4 technicians, generally managed by the owner, with at least one of the workers having some sort of academic background or training. In general, these shops contain minimum basic service equipment. Approximately 65% of the total workers have some form of formal skills training, either through technical education, training in vocational institutions and youth training centres or technical high schools in specialized industries. The level of skills is generally at the level of basic technical knowledge and practical and operational skills gained on the job. Bearing in mind previously approved projects and ongoing activities, the survey estimates that at least a further 16,400 technicians would benefit from appropriate training in good practices in refrigeration servicing.

In addition, there are several special technical educational institutes that works in this field as follows:

State	Training centre	Vocational Technical secondary school	Universities and high Technical institution	Total Number
Great Cairo	15	62	12	89
East Delta	3	16	3	22
West Delta	5	26	4	35
Delta	6	77	6	89
North Coast	1	8	1	10
Upper Egypt	7	67	5	79
Sinai	2	4	0	6
Total	39	260	31	330

Thus, only 20 of the 330 technical intuitions and training centres in Egypt are actively cooperating with local service and manufacturing enterprises to supply them with trained service technicians. The current curriculum of these training centres contains both theoretical and practical components as follows:

- Background information on the Montreal Protocol
- Explanation of the effects of Ozone Layer Depletion
- The consi^quencies of the Ozone Layer depletion.
- Presentation of the appropriate regulations.
- The need for Recovery & Recycling refrigerants.
- Presentation of Recovery & Recycling technologies and methodologies in different refrigeration and A/C systems.

The practical component is generally taught out-side the training centres through hands-on work at trade companies. As the service practice and equipment in the field is not always state of art it is considered to be of high priority to make it possible for these centres to conduct the practical training as well.

Moreover, it is necessary to chair all the educational, technical, and industrial companies and the services and maintenance centers to make aware on every section and put in consideration distribute the training all over the country:

- Coordination with sides to chose the training arrangements with all the private and governmental entities to choose the trainers and specialists to come to these training courses.
- Coordination with specialists and consultants in ref. & A/C section to share with accumulated expertise and to improve the quality and success of the training programmes.
- Design and print every training materials needed for the training programmes, daily operational manuals ang guide books, instructions for purchasing the row materials, spare parts and components.
- Choosing the priority training subjects and transferring them to the trainers by visual, audio and printed materials.
- Preparing and arranging participation of ICCT Company (sub-contractor of RTI to facilitate the conducting of the training activities of Universal Co.

V. SELFASSESSMENT OF THE TRAINING PROGRAMME AND THE "LESSONS LEARNED".

According to the contract conditions the programmes were concentrated mostly on training of trainers and technician for the domestic refrigeration and MAC servicing sectors.

In order to address the entire refrigeration and air conditioning sectors and to provide an integrated package of the technical assistance described in the NPP and to ensure a sustainability of the future operation of the sectors concerned the new training programmes for 2007-2008 to be design accordingly.

It was made understandable that the new TP should be designed taking into consideration the following:

- necessity to have involved in the group training, workshops, seminars and specialized meetings the participants with different functions, duties and levels of responsibilities, starting from servicing technicians through owners/managers of the service workshops, importers/ merchants /distributors of the relevant equipment, components and chemicals, custom officers and monitoring/financial and industrial controlling/ reporting officials from the respective ministries and governmental institutions concerned;

- put in practice the invitation of local and international experts and specialized companies/institutions as the lectures to share with the relevant expertise and experience.

VI. CONCLUSIONS AND RECOMMENDATIONS.

In view of the above considerations it recommended that the further training programmes and other relevant activities to be concentrated on the following priority sectors and subjects:

- commercial and transportation refrigeration servicing and retrofitting;
- chillers and industrial refrigeration servicing, retrofitting and replacement including relevant technical, financial and legal aspects;
- technical and commercial aspects and challenges of "drop in" alternative refrigerants and technologies;
- custom, trading and legislative regulations and procedures for import, distribution and usage of ODS as the substances, materials and equipment/components containing ODS and to be used for the servicing and manufacturing of ODS containing products in Egypt ;
- domestic refrigeration appliances servicing and retrofitting with the emphasis on technical and commercial aspects of the available alternative refrigerants and their compatibility with different types of compressors.

In light of the above considerations the managerial and operational personnel of Universal Company is confident that it has clear visions on the future activities to be performed in the field of technical training and other awareness activities on the country level to contribute and assist the country in achieving its tasks under the Montreal Protocol all.

Universal Company is possessing by the required experience and qualified staff to organize and successfully conduct the training programmes and other forms training activities for the above mentioned sectors of industry, commerce and administration.

LIST OF THE LEADING AND SECONDARY TRAINING CENTERS:

No.	Training Center	Governorate	Ministry/ Association	Coordinator	Tel	No Of Courses	
						Trainers	Trainees
1	Main Permanent Center	Giza	Ministry of Education	Guirges Zaki	012378899	6	6
2	Abdeen Training Center	Cairo	Ministry of Education	Samaan Mekhael Samaan	0106231527	2	6
3	Faculty Of Technology (Sahafa)	Cairo	Ministry of Higher Education	Samy Meselhy	0106234286	0	3
4	Faculty Of Technology (Matariya)	Cairo	Ministry of Higher Education	Samy Meselhy	0106234286	0	3
5	Faculty of Industrial Education (Cairo)	Cairo	Ministry of Higher Education	Samy Meselhy	0106234286	0	3
6	Faculty Of Technology (Port Said)	Port Said	Ministry of Higher Education	Samy Meselhy	0106234286	0	4
7	Faculty Of Technology (Zakaziq)	Sharkeya	Ministry of Higher Education	Samy Meselhy	0106234286	0	4
8	Armed Forces Training Center	Cairo	Armed Forces	Farouk Mostafa Aly Ahmed	0105701271	0	5
9	Sharby Training Center	Alexandria	Ministry of Education	Mohamed Refaat	0121173685	0	3
10	Ersa Training Center	Menya	CEOSS	Fahim Gaber	0101083629	0	3
11	Aswan Training Center	Aswan	Ministry of Education	Ahmed Mohamed	0127834134	0	3
12	Sharabeya Training Center	Cairo	Ministry of Manpower	Fathy Abou Sena	0123623322	0	4
13	Shoubra Metal Center	Qalibeya	Ministry of Commerce	Mahmoud Abd El Hay	0127552652	0	3
			Total			8	52

No. of trainers trained in the training course for trainers = 20 trainers

No. of trainees trained in the training course for trainees = 25 trainees.

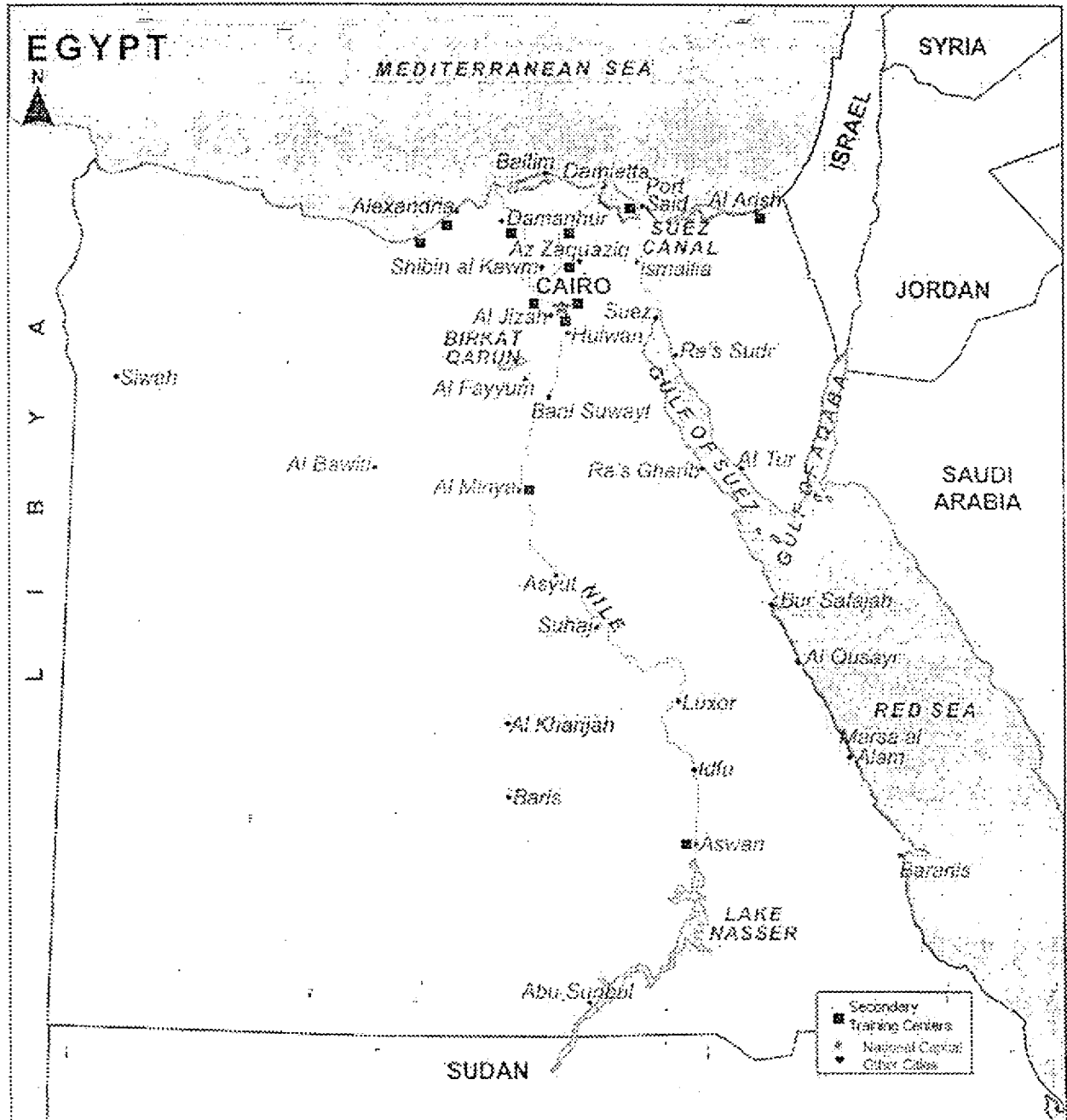
LIST OF THE COORDINATORS AND SUPERVISORS OF THE TRAINING COURSES

- Dr. Mohamed Sayed Khalil C.E.O./ EEAA
- Dr. Ezzat Lewis Director of the National Ozone Unit
- Walid El Sammak Executive Engineer of the Refrigeration Sector/ NOU
- Edwar Ibrahim Fahmy Owner of the Company
- Tarek Soliman General Manager of the Universal Company
- Mohamed Refaat Executive Manager for the Training Program (Universal Company)
- Samy Meslhy Ministry of Higher Education
- Salah Abdel Haq Federation of Egyptian Industries
- Fathy Abou Sena Ministry of Manpower and Emigration
- Mohamed Abdel Salam El Husseiny Representative of the Associations and Specialized Institutions in the Refrigeration sector
- Albert Ibrahim Meshreky Representative of the Universal Company
- Ibrahim Meshreky Manager of the NPP Project
- Guirges Zaki Ministry of Education
- Mahmoud Mohamed Aguina Center for the MAC sector
- Mahmoud Abdel Hay Ministry of Foreign Trade and Industry
- Faheem Gaber NGOs

LIST OF TRAINERS OF THE TRAINING COURSES:

Serial	Names	Associations
1	Yasser Elsayed Selim Ali	Badrasheen Industrial Secondary School
2	Salah Bayoumi AbdelRahim Hekal	Bahtim Industrial Secondary School
3	Refat Mostafa Mousa	Bahtim Industrial Secondary School
4	Saria Ahmed Abd Elrahman	Bahtim Industrial Secondary School
5	Elsayed Abdel Nabi Abdelaziz	Giza Electrical Secondary School
6	Amr Aly Farghaly Ahmed	Giza Electrical Secondary School
7	Essam Ibrahim AbdelHamid	Badrasheen Industrial Secondary School
8	Mohamed Ali Ali Mohamed	Elahram Industrial Secondary School for Boys
9	Mohamed Abdel Latif Ali	Refrigeration and A/C supervisor from Elnozha Educational Sector
10	Mohamed Mokhtar Mohamed Ahfied	Galal Fahmy Advanced Technical School
11	Selim Mohamed Selim El Sherif	Teacher in Galal Fahmy Advanced Technical School
12	El Mewafaq Ahmed Abou Elela Khalil	Teacher in Galal Fahmy Advanced Technical School
13	Mohamed Saad Abbass Mohamed	Teacher in Giza Electrical Secondary School
14	Amer Elsayed Mahmoud El Sayed	Teacher in Banha Mechanical Secondary School
15	Mohamed Fouad Abbass	Teacher in Abdin Industrial Secondary School
16	Abdel Sattar Fouad Abdel Elsattar	Teacher in Abdin Industrial Secondary School
17	Ehab Abdel Azeem Mahmoud	Teacher in Abdin Industrial Secondary School
18	Mahfouz Rahim Eskander	Teacher in Giza Electrical Secondary School
19	Mahmoud Elsayed Abdel Aziz Zayed	Technician in Agina Maintenance Center for MAC
20	Magdy Mohamed Hassan	Giza Secondary School
21	Mahmoud Ashour	Giza Electrical Secondary School
22	Khaled Osman Mohamed	Giza Electrical Secondary School
23	Atef Sedik Masoud	Giza Electrical Secondary School
24	Albert Ibrahim Meshreky	Universal Company
25	Tarek Ahmed Hassan	Universal Company
26	Sammar Abdel Gabar	Universal Company
27	Osama Abdel Tawab	Universal Company
28	Tarek Ahmed Soliman	Universal Company
29	Hany Fouad Gaballa	Universal Company
30	Nadia Abdel Samee	Universal Company

MAP OF GEOGRAPHICAL DISTRIBUTION OF THE SECONDARY TRAINING CENTERS FOLLOWING THE TRAINING PROGRAM:



MAP OF GEOGRAPHICAL DISTRIBUTION OF TRAINEES AND TECHNICIANS

FROM ALL OVER EGYPT:



Tr

Training Schedule for Trainees (2 days).

First Day		
1. Registration	8:00	8:30
2. Summary (Refrigeration Maintenance Sector and training on Modern Technology in order to freeze the consumption levels of the ODS in order to achieve compliance with the Egyptian Commitments and International Agreements (Montreal Protocol).	8:30	10:30
3. CFC's-HCFC Ozone depletion potential, GWP, HGW, the effect if you released refrigerant to atmosphere	10:30	12:00
4. Break	12:00	12:30
5. Ozone friendly Refrigerants and its oil	12:30	14:00
6. Revision of fundamental of refrigeration and air conditioning	14:00	15:00
7. ozone friendly Refrigerants (Zeotropics & Blends)	15:00	16:00
8. Recovery and Recycle unit	16:00	18:00

Second Day		
1. Experiments on the use of Recovery unit for domestic units	8:00	10:00
2. Experiments on the use of Recovery unit for A/c unit	10:00	12:00
3. Break	12:00	12:30
4. Experiments on the use of Recovery unit for MAC.	12:30	15:00
5. Analysis of Refrigerant by Automotive Refrigerant Identifier.	15:00	16:00
6. Open Discussion	16:00	18:00

Training Schedule for Trainers (5 days).

First Day		
1. Registration	9:00	9:30
2. Summary (Refrigeration Maintenance Sector and training on Modern Technology in order to freeze the consumption levels of the ODS in order to achieve compliance with the Egyptian Commitments and International Agreements (Montreal Protocol).	9:30	12:00
3. Break	12:00	12:30
4. CFC's-HCFC-Ozone depletion potential, GWP, HGWP, the effect if you release refrigerant to atmosphere (Theoretical)	12:30	14:00
5. Ozone friendly Refrigerants and its oil (Theoretical)	14:30	18:00

Second Day

1. Revision of fundamental of refrigeration and air conditioning (Theoretical)	9:00	10:00
2. ozone friendly Refrigerants (Zeotropic & Blends) (Theoretical)	10:00	11:00
3. All the groups check for leak, then recover the refrigerant charge in the unit they work on, charge with nitrogen, check for leak with soap, purge the nitrogen, then evacuate to 300 micron, and then charge by volume. (Practical)	11:00	12:00
4. Break	12:00	12:30
5. Explain PCB Boards for split air conditioning units (Theoretical)	12:30	13:30
6. Retrofit the refrigerator and deep freezer from R12 to R134a (Practical)	13:30	15:00
7. Measuring superheat and sub cool for air conditioning and refrigerator (Practical)	15:00	16:00
8. Charging deep freezer with R404a (Practical)	16:00	17:00
9. Wiring of the PCB boards (Practical)	17:00	18:00

Third Day		
1. Recovery and Recycle unit (<u>Practical</u>)	9:00	12:00
2. Break	12:00	12:30
3. Connection of the recovery unit with different types of refrigeration and air-conditioning. (<u>Practical</u>)	12:30	13:00
4. Experiments on the use of Recovery unit for domestic units (<u>Practical</u>)	13:00	18:00

Fourth Day		
1. Experiments on the use of Recovery unit for A/C unit (<u>Practical</u>)	9:00	12:00
2. Break	12:00	12:30
3. Experiments on the use of Recovery unit for MAC. (<u>Practical</u>)	12:30	18:00

Fifth Day		
1. Evaluation Exam - Solving the Exam (<u>Practical + Theoretical</u>)	9:00	10:00
2. Break	10:00	12:00
3. Analysis of Refrigerant by Automotive Refrigerant Identifier. 1. (<u>Practical + Theoretical</u>)	12:00	16:00
5. Open Discussion - Revision for all lessons (<u>Theoretical</u>)	16:00	17:00

LIST OF TRAINERS IN THE TRAINING COURSES (8 COURSES):**First Training Course**

No	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Aref Awad Ghattas	Giza	2100111	Ref. & A/C	0124044488	Teacher	1992
2	Gamal Aboud Saad Aboud	Giza	84842	Ref. & A/C	0108914468	Teacher	1998
3	Ahmed Abdel Shafy Moawad	Dakahleya	1202434	Ref. & A/C	050/6824394	Teacher	1995
4	Ehab Ibrahim Mohamed	Cairo	0404791	Ref. & A/C	002/2489633	Teacher	1991
5	Mohamed Anyar Abdel Raoff	Cairo	30403942	Ref. & A/C	0121579379	Teacher	1998
6	Nagy Aqily Beshay	Cairo	0102488	Ref. & A/C	0121021007	Teacher	1995
7	Essam Ahmed Zaky	Cairo	103352	Ref. & A/C	0106444303	Teacher	1994
8	Salem Mohamed Selim	Cairo	0102584	Ref. & A/C	0124777015	Teacher	1994
9	Mohamed Abdel Nady Abdel Magid	Cairo	0102299	Ref. & A/C	0127488443	Teacher	1994
10	Mohamed Fathy Mohamed	Cairo	2243	Ref. & A/C	0124508840	Teacher	1996
11	Fady Fawzy Ghazy Mohamed	Giza	218235	Ref. & A/C	0106746443	Teacher	1992
12	Reda Owida Hakim Owida	Giza	2102044	Ref. & A/C	0125806620	Teacher	1996
13	Magdi Mohamed Elsayed	Cairo	90204	Ref. & A/C	002/5906894	Teacher	1993
14	Hossam Mohamed Soliman	Cairo	0102777	Ref. & A/C	0106204280	Teacher	1998
15	Mamdoh Abdel Latif Abdel Aziz	Cairo	0100074	Ref. & A/C	0104322055	Teacher	1998
16	Ayman Ibrahim Fekry	Cairo	010112278	Ref. & A/C	0105463146	Teacher	1990
17	Mohamed El sayed Ahmed	Cairo	01026478	Ref. & A/C	0126603639	Teacher	1988
18	Magdi Louis Beshara	Cairo	0103875	Ref. & A/C	002/4984818	Teacher	1988
19	Akmal Yanny Salama	Fayoum	230091	Ref. & A/C	0121619574	Teacher	1997
20	Ramadan Mahmoud Elsayy	Fayoum	2301079	Ref. & A/C	084-6597093	Teacher	1997
21	Emad Naser Nashed	Cairo	0103258	Ref. & A/C	0122244765	Teacher	1994
22	Mohamed Salah Abdel Magid	Cairo	—	Ref. & A/C	0105447327	Teacher	1995
23	Ezzat Samy Amin	Fayoum	2301115	Ref. & A/C	0105817506	Teacher	1992
24	Adelsayed Ahmed	Cairo	—	Ref. & A/C	0103614688	Teacher	1987
25	Wafaa Shehata Abdel Moez	Cairo	—	Ref. & A/C	—	Teacher	1994

Second Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mohamed Ahmed Abdel Hamid	Cairo	0102718	Ref. & A/C	0124588205	Teacher	1992
2	Khaled Hassan Abdel Wahed	Giza	12104351	Ref. & A/C	0107681709	Teacher	1994
3	Hesham Elraey Mohamed	Cairo	0103172	Ref. & A/C	0125955108	Teacher	1991
4	Ebrahim Hassan Ibrahim	Kaliobeya	1400594	Ref. & A/C	002/6084718	Teacher	1997
5	Mohamed Mokhtar Mohamed	Cairo	0104235	Ref. & A/C	0104328044	Teacher	1993
6	Mohamed Hamza Ahmed	Cairo	012798	Ref. & A/C	002/4373046	Teacher	1988
7	Mohamed Roshdy Abdel Aziz	Cairo	012192	Ref. & A/C	0103807385	Teacher	2001
8	Gamal Abdel Kader Awad	Cairo	101611	Ref. & A/C	0106928867	Teacher	1996
9	Hamdy Abdel Alim Arafa	Dakahleya	1400637	Ref. & A/C	0109517283	Teacher	1992
10	Hazem Monir Ahmed Diab	Sohag	2602539	Ref. & A/C	0125652458	Teacher	1992
11	Mahfoz Ibrahim Eskandar	Beni-sweif	220978	Ref. & A/C	0123480802	Teacher	1994
12	Mohamed Saad Abas	Cairo	—	Ref. & A/C	0124034060	Teacher	1994
13	Talaat Abdel Magid Elgary	Menofeya	1703012	Ref. & A/C	0103014447	Teacher	1994
14	Mohamed aly aly hegazy	Cairo	0101938	Ref. & A/C	0122319738	Teacher	1994
15	Zakaria Goma Abdel Maksod	Cairo	101759	Ref. & A/C	0104985739	Teacher	1994
16	Mohamed Ibrahim Mohamed	Cairo	01034011	Ref. & A/C	012759723	Teacher	1995
17	Bahaa Eddin Gouda Abo Said	Cairo	0101115	Ref. & A/C	0106910046	Teacher	1993
18	Ebrahim Abdel Aziz Ahmed	Cairo	—	Ref. & A/C	0121065394	Teacher	1996
19	Nagah Abdel Karim	Cairo	—	Ref. & A/C	002/3128663	Teacher	1993
20	Mosaad Said Mohamed	Cairo	0102097	Ref. & A/C	0124651290	Teacher	1974
21	Mohamed Ragab Abdel Halim	Fayoum	2300251	Ref. & A/C	0105567129	Teacher	1997
22	Mohamed Eid Elsaid	Fayoum	2300194	Ref. & A/C	084.230584	Teacher	1992
23	Nader Zakaria Yossef	Cairo	100039	Ref. & A/C	0128715356	Teacher	1995
24	Nasser Ahmed Makhlof	Fayoum	2300176	Ref. & A/C	0104472641	Teacher	1989
25	A laa Helmy Mohamed	Fayoum	230079	Ref. & A/C	0108729018	Teacher	1992

Third Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current	
						Position	Date of Graduation
1	Attetf Elsaid Abdel Fatah	Kaliobeya	1400551	Ref. & A/C	0124985585	Teacher	1992
2	Amer Elsaid Mohamed Elsaid	Kaliobeya	1400796	Ref. & A/C	0106358822	Teacher	1997
3	Amr Ahmed Monir Mohamed	Cairo	0104319	Ref. & A/C	012269059	Teacher	1996
4	Ahmed Bayomy Mohamed	Cairo	0105394	Ref. & A/C	0124342820	Teacher	1997
5	Tarek Mohamed Hassan	Cairo	0104439	Ref. & A/C	0101401890	Teacher	1997
6	Mohamed Elsaid Ahmed	Cairo	0103894	Ref. & A/C	0127516979	Teacher	1993
7	Mamdoh Fathy Azmy	Behera	1801179	Ref. & A/C	012571380	Teacher	1995
8	Samy Shawky Louka	Giza	2100137	Ref. & A/C	002/5659673	Teacher	1988
9	Ahmed Ibrahim Elsamaloty	Giza	210578	Ref. & A/C	002/3278720	Teacher	1994
10	Ahmed Mohamed Elawady	Kaliobeya	140147	Ref. & A/C	010243489	Teacher	1992
11	Mona Abdel Satar Abdel Karim	Cairo	102062	Ref. & A/C	0122688189	Teacher	2003
12	Samch Khalaf Allah	Kaliobeya	46912	Ref. & A/C	0122867760	Teacher	1998
13	Tawfik Abdel Gabbar Tawfik	Menya	2400291	Ref. & A/C	0128999670	Teacher	1996
14	Ahmed Hosseney Said	Cairo	0101871	Ref. & A/C	0106921864	Teacher	2000
15	Nadia Abdel Rahman Saad	Cairo	103504	Ref. & A/C	01258334	Teacher	1993
16	Atta Mossa Mohamed	Kaliobeya	1402217	Ref. & A/C	013332265	Teacher	1992
17	Mohamed Shaaban Mohamed	Cairo	89934	Ref. & A/C	0123415343	Teacher	1996
18	Shaaban Fathy Abdel Kawy	Fayoum	2300735	Ref. & A/C	0103670936	Teacher	1997
19	Yaser Hussein Hemeida	Fayoum	2301011	Ref. & A/C	084/6640108	Teacher	1997
20	Said Ramadan Osman	Fayoum	2300112	Ref. & A/C	0105369835	Teacher	1997
21	Ehab Aziz Escaros	Cairo	0100054	Ref. & A/C	0105485237	Teacher	1996
22	Hosnia Aly Mohamed	Cairo	154236	Ref. & A/C	002/8264752	Teacher	1986
23	Mohamed Ahmed Kamal	Cairo	—	Ref. & A/C	0124559499	Teacher	1994
24	Mahmoud Mohamed Amin	Giza	2100851	Ref. & A/C	0125176332	Teacher	1999
25	Abdel Magid Badr Abdel Magid	Giza	2102237	Ref. & A/C	0101274282	Teacher	1993

Fourth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Yasser Mohamed Mohamed	Menofeya	1701211	Ref. & A/C	0105458806	Teacher	1992
2	Emad Mannaa Hassan	Assiut	2501514	Ref. & A/C	088/7720497	Teacher	1994
3	Reda Mohamed Ahmed	Kaliobeya	1401795	Ref. & A/C	0132493712	Teacher	2002
4	Mohamed Gamal Gad	Giza	--	Ref. & A/C	0106283750	Teacher	1994
5	Said Saleim Salam	Cairo	0101737	Ref. & A/C	0105749076	Teacher	1997
6	Hesham Mohamed Abdel Maksoud	Kaliobeya	1400415	Ref. & A/C	0125614351	Teacher	1992
7	Hany Kamal Khalil	Cairo	153373	Ref. & A/C	0122319967	Teacher	1993
8	Nagah Lashin Mohamed	Giza	2101957	Ref. & A/C	--	Teacher	1987
9	Hany Yossef Samvael	Giza	2101759	Ref. & A/C	002/3260506	Teacher	1994
10	Esmat Elsaid Shehata	Giza	2401271	Ref. & A/C	0104743533	Teacher	1998
11	Khaled Abdel Tawab Soliman	Giza	2102172	Ref. & A/C	0105586158	Teacher	1993
12	Ahmed Abo Elsoud Abdel Monsef	Giza	2100184	Ref. & A/C	0129883736	Teacher	1993
13	Hussein Mohamed Radwan	Qena	270374	Ref. & A/C	0104399156	Teacher	1977
14	Ashraf Ejid Ahmed	Giza	100334	Ref. & A/C	01048820345	Teacher	1993
15	Mohamed Abdel Wahab Mohamed	Cairo	0101291	Ref. & A/C	002/8950958	Teacher	1988
16	Soliman Makram Soliman	Giza	2101251	Ref. & A/C	0123731765	Teacher	1991
18	Zeinab Abdel Moty Ahmed	Giza	2108101	Ref. & A/C	0128180580	Teacher	2004
19	Mohamed Mohamady Mohamed	Giza	--	Ref. & A/C	--	Teacher	1994
20	Mahmoud Aly Ibrahim Badr	Cairo	0100232	Ref. & A/C	0124319938	Teacher	1997
21	Walid Abdullah Abdel Azim	Kaliobia	1401171	Ref. & A/C	0124865123	Teacher	1995
22	Wad Abbas Aly	Cairo	175846	Ref. & A/C	0109223880	Teacher	1997
23	Khaled Fathy Abdel Rassol	Cairo	0103478	Ref. & A/C	0106367093	Teacher	1997
24	Zakaria Ahmed Abdel Magid	Giza	2102212	Ref. & A/C	0126611013	Teacher	1991
25	Khaled Mohamed Saber	Giza	2103671	Ref. & A/C	0104838545	Teacher	1994

Fifth Training Course

No.	Name	Governorate	ID. No.	Major in	Id. No.	Current Position	Date of Graduation
1	Reda Abdel Fattah Hussein	Giza	2400379	Ref. & A/C	0103064203	Teacher	1999
2	Oassem Anwar Celery	Giza	2101939	Ref. & A/C	0125409834	Teacher	2003
3	Hesham Hanna Ayad	Giza	2101491	Ref. & A/C	0129268348	Teacher	1993
4	Motea Aly Abdel Aziz	Kaliobeya	1402135	Ref. & A/C	0106873299	Teacher	1998
5	Mohamed Abdel Baset	Cairo	0102113	Ref. & A/C	0126060789	Teacher	1997
6	Walid Ragab Mohamed	Cairo	104833	Ref. & A/C	0126068624	Teacher	1998
7	Mahmoud Yahia Emam	Cairo	—	Ref. & A/C	0106789152	Teacher	1995
8	Mohamed Abdel Hady Mostafa	Cairo	0101851	Ref. & A/C	0103620835	Teacher	1995
9	Romany Rafat Sharobin Karas	Cairo	2100858	Ref. & A/C	0105572258	Teacher	1996
10	Mohamed Mahmoud Mohamed	Cairo	0101078	Ref. & A/C	002/7866086	Teacher	2002
11	Sherief Ahmed Gaber	Cairo	0101334	Ref. & A/C	0128430378	Teacher	1997
12	Abdel Hakim Marzok	Cairo	2101554	Ref. & A/C	002/3108454	Teacher	1998
13	Naser Abdel Aziz Abdullah	Cairo	0101912	Ref. & A/C	0101368246	Teacher	1998
14	Mohamed Abbas Ismail	Giza	160775	Ref. & A/C	002/8736971	Teacher	1994
15	Ahmed Arify Ahmed Ahmed	Giza	2101436	Ref. & A/C	0102081607	Teacher	1994
16	Mohamed Kamel Sultan	Giza	2102692	Ref. & A/C	0109704908	Teacher	1994
17	Malak Ayoub Reyad	Assiut	2502738	Ref. & A/C	0122968655	Teacher	1994
18	Sameh Salah Elsaid	Kaliobeya	1400548	Ref. & A/C	0133238992	Teacher	1992
19	Mohamed Kamal Said	Cairo	0105335	Ref. & A/C	0103095951	Teacher	1992
20	Ibrahim Farghaly Saber	Cairo	101454	Ref. & A/C	0102455460	Teacher	1994
21	Amr Mahmoud Tawfik	Cairo	10059	Ref. & A/C	0109970563	Teacher	1992
22	Hamdy Mohamed Ahmed	Sharkia	1304294	Ref. & A/C	055/6504603	Teacher	1990
23	Ahmed Abdel Galil Ahmed	Cairo	0100751	Ref. & A/C	0106869472	Teacher	1998
24	Rabea Wahib Attallah	Giza	—	Ref. & A/C	0121386488	Teacher	1992
25	Rafat Samir Fawaz	Sohag	—	Ref. & A/C	0106143019	Teacher	1994

Sixth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Abo Elsaad Ragab Elmetwally	Dakahlia	1202831	Ref. & A/C	0106741195	tech. Ideal comp	1988
2	Magdy Yakoub Abdel Massieh	Menya	2400534	Ref. & A/C	0124007677	agricultural eng	1996
3	Mohamed Saïd Saïd	Cairo	100101118	Ref. & A/C	0123283274	ITI Comp	2003
4	Mohamed Abdel Razik Hassan	Qena	2700417	Ref. & A/C	0127811366	Eng. bahgat group	2005
5	Wagdy William Khair Attia	Cairo	105375	Ref. & A/C	0123805532	tech. Ideal comp	1999
6	Ahmed Mohamed Hassan	Alexandria	201279	Ref. & A/C	0126824464	eng. at Mogl comp	2004
7	Osama Saïd Mohamed	Kaliohya	1402976	Ref. & A/C	0122460492	Ref. & A/C	1998
8	Tamer Ibrahim Hanafy	Cairo	103927	Ref. & A/C	0101107654	tech -of air cond	1994
9	Abdel Halim Abdel Fattah Abdel Halim	Cairo	73200078	Ref. & A/C	0121031010	B. tech comp	1995
10	Farghaly Mohamed Farghaly	Cairo	0102053	Ref. & A/C	0123951983	Engat comp	1976
11	Abdel Rahman Mohamed Morsy	Cairo	0101796	Ref. & A/C	0122577454	ref- air cond	2006
12	Ahmed ELshahat Galal	Beheira	0180397	Ref. & A/C	0121232680	engat auto cool	2002
13	Mohamed Saber Saad	Giza	2100212	Ref. & A/C	010444685	miraco - carrier	2003
14	Hassan Hassan Hassan	Menofeya	1700939	Ref. & A/C	0122792825	tiba and - eng	1978
15	Aym An Elsaïd Tawfik	Giza	2105535	Ref. & A/C	0106304617	production	2000
16	Ahmed Morad Osman	Cairo	57126	Ref. & A/C	0127464508	manager	1979
17	Ezz el-din mostafa el saïd	Cairo	0102132	Ref. & A/C	0106973481	teacher	1983
18	Mahmoud abdel hady mohamed	Beheira	0181734	Ref. & A/C	0108077738	teacher	1996
19	Wageh zarif mehany	Sohag	45591	Ref. & A/C	0129142227	teacher	1985
20	Essam Eddin Mostafa	Giza	2100198	Ref. & A/C	0107200866	teacher	1989
21	Ahmed Saïd Abdel Gawad	Giza	2101691	Ref. & A/C	0106233543	teacher	1994
22	Mahmoud Abdullah Mohamed	Sohag	2602116	Ref. & A/C	0107075402	teacher	1973
23	Ahmed Mostafa Elsaïd	Dakahlia	—	Ref. & A/C	0122538846	teacher	1994
24	ELsaïd Abdel Aziz Azazy	Sharkeya	—	Ref. & A/C	0125794244	teacher	1994
25	Mohamed Elsaïd Abu Elela	Cairo	—	Ref. & A/C	0101073443	teacher	1992

Seventh Training Course

No.	Name	Governorate	ID No.	Major in	Id. No.	Current Position	Date of Graduation
1	Amr Essam Eddin	Gharbeya	1601156	Ref. & A/C	01278722591	Ref. & A/C	1999
2	Ahmed Farhy Nabawy Mostafa	Giza	012108376	Ref. & A/C	0127814442	Ref. & A/C	2000
3	Amr Shokery Rizk	Cairo	0102639	Ref. & A/C	0124247355	electronic-tech	2002
4	Mohamed Abdel Mohssen	Sharkeya	101050	Ref. & A/C	0123320418	Ref. & A/C	1975
5	Mohamed Rabea Mohamed	Menya	2400099	Ref. & A/C	0122241463	Ref. & A/C	2005
6	Mohamed Aly Mohamed	Cairo	—	Ref. & A/C	0101660017	manager	1998
7	Ahmed Saad Mohamed	Gharbeya	1601332	Ref. & A/C	0127450683	—	1992
8	Diya Nabii Hawed Ahmed	Giza	0101379	Ref. & A/C	0103490710	production	2003
9	Ahmed Mohamed Ghoneimy	Kaliobeya	1402072	Ref. & A/C	0126554617	eng.	2000
10	Aref Ahmed Abu Elhabib	Cairo	101212	Ref. & A/C	0123306758	general electric	1988
11	Mohamed Ahmed Taha	Sharkeya	1301333	Ref. & A/C	0128473669	Ref. & A/C	1999
12	Salah Hassan Hassan	Menofeya	1701793	Ref. & A/C	01274514	manager	1970
13	Adel Nagib Michael Wahba	Cairo	0101738	Ref. & A/C	0126353155	Ref. & A/C	1977
14	Mohamed Hassan Hassan	Cairo	0103318	Ref. & A/C	0101295588	—	1986
15	Ahmed Aziz Mohamed	Kaliobeya	1400856	Ref. & A/C	002/8580791	eng	2003
16	Mohamed ragab ramadan	Beni Sow eif	2206996	Ref. & A/C	0107503921	production	1998
17	Mohamed Ibrahim Aly	Zagazig	1301516	Ref. & A/C	0123320418	production	1982
18	Rassem Mamdoh Fekry	Menya	2400938	Ref. & A/C	0106748103	eng.	1997
19	Nabil Abdel Kadder Sobaih	Cairo	0103413	Ref. & A/C	0126322389	Ref. & A/C	1990
20	Nader Aly Abdel Naser	Cairo	183573	Ref. & A/C	012804521	teacher	1996
21	Elsaid Abdel Ghafar Aly	Cairo	0103334	Ref. & A/C	0121072019	teacher	1988
22	Mohamed Kamal Farid	Giza	—	Ref. & A/C	0101522480	teacher	1999
23	Abdullah Abdel Allim Garary	Giza	—	Ref. & A/C	0125866223	teacher	1999
24	Mahrous Amin Abdel-Magid	Wahat	—	Ref. & A/C	0125268154	teacher	1999
25	Amr Aly Araghalu Ahmed	Giza	2101396	Ref. & A/C	0125446342	teacher	1993

Eighth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Khaled Maher Senosy	Giza	5023336	Ref. & A/C	0127256156	teacher	1999
2	Ahmed Mohamed Tawfik	Giza	—	Ref. & A/C	0123609620	teacher	1993
3	Samih Ahmed Aly	Dakahleya	—	Ref. & A/C	050/7308318	teacher	1997
4	Khaled Ramadan Hussein	Giza	2100538	Ref. & A/C	0103750841	teacher	1999
5	Hany Abdel Fattah	El Faiyoum	2300152	Ref. & A/C	0104565614	teacher	1997
6	Mahmoud salem Hassan	Giza	7259649	Ref. & A/C	0102874905	teacher	1997
7	Ahmed Mohamed Ibrahim	Menya	24001794	Ref. & A/C	0125656458	teacher	1999
8	Hesham Aly Hassan	Esmailia	1900373	Ref. & A/C	0121071021	teacher	1994
9	Mahmoud Abdel Aziz Kamel	El Faiyoum	2300378	Ref. & A/C	0104307901	teacher	1999
10	Aly Abbas Said Khalil	El Faiyoum	2300033	Ref. & A/C	0123901123	teacher	1997
11	Omar Mohamed El Sayed	Sharkeya	1300591	Ref. & A/C	0108067448	teacher	1998
12	Ussuna Aly Mohaimed	Sharkeya	1301375	Ref. & A/C	055-2162772	teacher	1999
13	El Husseiny Eweis Mohamed Abozeid	Giza	2100273	Ref. & A/C	02-8066036	teacher	1999
14	Essam Ahmed Raafat	Sharkeya	1303753	Ref. & A/C	0126914016	teacher	1995
15	Nabil Saliman Ahmed	North Sinai	3400055	Ref. & A/C	068-3365749	teacher	1996
16	Hany Mohamed Hassan	Cairo	102832	Ref. & A/C	064-3441007	teacher	1994
17	Nadia Abd El Rahman Saad	Cairo	103504	Ref. & A/C	0125833801	teacher	1993
18	Yasser Mohamed El Sadek Mohamed	Sharkeya	1301958	Ref. & A/C	0124776647	teacher	1990
19	Khaled Mohamed Reyad	Assuit	2500437	Ref. & A/C	0105609147	teacher	1992
20	Reda Aly Mohaimed	Giza	2101096	Ref. & A/C	0122680526	teacher	1993
21	Mohamed Soliman Dawoud	Cairo	0101131	Ref. & A/C	0125366770	teacher	1997
22	Fayez Attैया Mahmouid	Sharkeya	1300051	Ref. & A/C	02-2277622	teacher	1991
23	Mostafa Mohamed Abo El Nour	Giza	2100897	Ref. & A/C	0109630523	teacher	1999
24	Mohamed Mostafa Abbas Farned	Giza	2102015	Ref. & A/C	0123458651	teacher	1997
25	Salah Abd El Hakim	Giza	2100452	Ref. & A/C	02-8431398	teacher	1999

LIST OF TRAINEES IN THE TRAINING COURSES (52 COURSES):**First Training Course**

No.	Name	Governorate	ID No.	Majorin	Tel. No.	Current Position	Date of Graduation
1	Hatem Mohamed Zaki	Menofia	1701036	Ref. & A/C	048/3889091	Teacher	1993
2	Naser Ebrahim Ahmed	Kafer- El Shaikh	1500035	Ref. & A/C	0103867061	Teacher	1997
3	Ashraf Mohamed Abdel Saleem	Kafer- El Shaikh	29966	Ref. & A/C	047/3402336	Teacher	1995
4	Shaapan Khalil Mostafa	Behaira	1801192	Ref. & A/C	045/2704683	Teacher	1993
5	Alaa El Din Mohamed Abdel Hamed	Alex	201911	Ref. & A/C	0129218065	Teacher	1989
6	Raafat Ahmed Ebrahim	Behaira	113950	Ref. & A/C	0128498727	Teacher	2000
7	El Said Mohamed Abdel Alla	Behaira	1818431	Ref. & A/C	0103741201	Teacher	1993
8	Mohamed Kamal El Daramally	Alex	201236	Ref. & A/C	0124086894	Teacher	1998
9	Mahmoud Abdel Fattah Mohamed	Behaira	1800215	Ref. & A/C	3366346	Teacher	1991
10	Reda Ebrahim El Said	Gharbia	1600919	Ref. & A/C	040/2341318	Teacher	1995
11	Gamal Abdel Gawad Bdel Gawad	Gharbia	1601036	Ref. & A/C	0123778424	Teacher	1992
12	Faitham Said Shahin Ebrahim	Alex	200039	Ref. & A/C	0124292041	Teacher	1991
13	Mohamed El Shabat El Refea	Gharbia	1605254	Ref. & A/C	040/2456275	Teacher	1992
14	Mohamed Hussen Yossef	El- Monofia	1700059	Ref. & A/C	048/2326092	Teacher	1992
15	Maysara Mohamed Ahmed	Alex	291956	Ref. & A/C	0121378985	Teacher	1999
16	Waleed Ramadan El- Shaikh	Alex	202577	Ref. & A/C	03/2558869	Teacher	1995
17	Ebrahim Ebrahim Abdel Naby	Alex	200637	Ref. & A/C	012877831	Teacher	1992
18	Refaat Ahmed Kamal El Din	Kafr Elsheikh	1500677	Ref. & A/C	0103758737	Teacher	2001
19	Ahmed Said Mohamed	Alex	200751	Ref. & A/C	0126541301	Teacher	1988
20	Aly Hassanin Hussen	Alex	200731	Ref. & A/C	0122743162	Teacher	1992

Second Training Course

No.	Name	Governorate	ID No.	Major in	Id. No.	Current Position	Date of Graduation
1	Mahmoud Mohamed Ahmed	Alex	201918	Power	0123167956	Teacher	1993
2	Abdel Alem Ebrahim Ahmed	Kaliobia	1401411	Ref. & A/C	0127663481	Teacher	1998
3	Eman Abdel Halim Abdel Kader	Gharbia	1001704	Ref. & A/C	3811021	Teacher	1999
4	Aly Ebrahim Mohamed	Alex	202599	Ref. & A/C	5363630	Teacher	1984
5	Wageh Fawzy Farag	Menofia	1701235	Ref. & A/C	048/2736689	Teacher	1991
6	Samir Mohamed Mohamed	Behaira	—	Ref. & A/C	2986732	Teacher	1996
7	Abdel Latif Abdel Naffe	Alex	201811	Ref. & A/C	0123838866	Teacher	1992
8	Hamed Shabaan Hamed	Gharbia	1601953	Ref. & A/C	0103029039	Teacher	2000
9	Mostafa Bayomi Mohamed	Gharbia	1601378	Ref. & A/C	0402571494	Teacher	1999
10	Abdel Hamed El Said Abdel Hamed	Kafer- El Shaikh	1502291	Ref. & A/C	0107811687	Teacher	1993
11	Rabee Ahmed El Darbity	Menofia	1701234	Ref. & A/C	0109465366	Teacher	1991
12	Mohamed Abdel Hamed Ahmed	Alex	022516	Ref. & A/C	012628485	Teacher	1995
13	El- Shahat Mohamed Mohamed	Kafer- El Shaikh	1501693	Ref. & A/C	0122863650	Teacher	1995
14	Mohamed El Said Ahmed	Kafer- El Shaikh	1500438	Ref. & A/C	047/2682326	Teacher	1998
15	Ebrahim Foad Mohamed	Kafer- El Shaikh	1500591	Ref. & A/C	047/3287590	Teacher	2000
16	Mahmoud Mohamed Kamal	Sharkia	1301531	Ref. & A/C	055/684093	Teacher	1999
17	Saad Mohamed Abdel Moncem	Gharbia	1603699	Ref. & A/C	0108590032	Teacher	1995
18	Ahmed Abdel Gellil Abdel Azim	Gharbia	1601534	Ref. & A/C	0104073355	Teacher	2001
19	Abdel Nasser El Said Abdel Magid	Behaira	1803353	Ref. & A/C	0125799305	Teacher	1998
20	Mabrok Abdel Fattah Ahmed	Behaira	1801335	Ref. & A/C	679754	Teacher	1998

Third Training Course

No.	Name	Governorate	ID. No.	Major in	Id. No.	Current Position	Date of Graduation
1	Mohamed Helmy Mohamed	Behaira	1800071	Ref. & A/C	0126396854	Teacher	1991
2	Ibrahim Ahmed Hassan	Kafer-El Shaikh	61016	Ref. & A/C	0102018350	Teacher	1995
3	Fathy Shaker El Said	Menofia	1700997	Ref. & A/C	0109861784	Teacher	1991
4	Saad Ahmed Abas Ahmed	Alex	200252	Ref. & A/C	0121080935	Teacher	1991
5	Aly Mahmoud Mohamed	Alex	200053	Ref. & A/C	0120623454	Teacher	1995
6	Mohamed Marzok Gad Alla	Alex	3070201411	Ref. & A/C	0123796966	Teacher	1992
7	Rafik Hana Botros Hana	Alex	200255	Ref. & A/C	0109774014	Teacher	1995
8	Khaled Mohamed Abdel Khalik	Cairo	0102793	Ref. & A/C	02/5034806	Teacher	1995
9	Hussen Ahmed Hussen	Alex	201779	Ref. & A/C	0125385856	Teacher	1986
10	Ahmed Maawad Mohamed	Alex	200379	Ref. & A/C	0122558305	Teacher	1986
11	Ashraf Mahmoud Abdel Ghany	Behaira	3300770	Ref. & A/C	0104103443	Teacher	1991
12	Mohamed Ebrahim Emaam	Sharkia	1300692	Ref. & A/C	0108067448	Teacher	1999
13	Ayman El Said Atta Farabat	Menofia	1702193	Ref. & A/C	3623865	Teacher	1991
14	Harnada Shahat Fahmy	Kena	2701438	Ref. & A/C	0104529438	Student	—
15	Mahmoud Abdel Alla Mhmoud	Sharkia	1400551	Ref. & A/C	055/2282342	Teacher	1992
16	Abdel Alla Abdel Rahman El Desoki	Gharbia	1601031	Ref. & A/C	0109536415	Student	—
17	Mohamed El Said El Araby	Port said	300037	Ref. & A/C	06603415403	Teacher	1996
18	Mahmoud Fahmy Elbrahim	Giza	2100236	Ref. & A/C	0125640123	Teacher	1993
19	Ebrahim Abdel Wahb Said	Giza	2104139	Ref. & A/C	0182968921	Teacher	—
20	Asaad Morris Khaled Michcal	Souhag	1103069	Ref. & A/C	0101536781	Teacher	1992

Fourth Training Course

No.	Name	Governorate	ID No.	Major in	Id. No.	Current Position	Date of Graduation
1	Alaa Mohamed Noaman	Giza	2100652	Ref. & A/C	02/8627225	Teacher	1999
2	Fathy Mohamed Moamen	Giza	2101298	Ref. & A/C	0104770994	Teacher	2003
3	Abir Mohamed Yahia	Cairo	—	Ref. & A/C	0101641613	Teacher	1993
4	Mohamed Soliman Mohamed	Sharkia	85710	Ref. & A/C	0105231591	Teacher	1991
5	Mohamed El Said Fathy	Swiss	400173	Ref. & A/C	0122778138	Teacher	1995
6	Yasser Abdel Raof	Minia	2400077	Ref. & A/C	0123615370	Teacher	1995
7	Nasser Ahmed Mostafa	Assiut	2501573	Ref. & A/C	0121760179	Teacher	1993
8	El-said Helmy Abozid	Esmachia	1900056	Ref. & A/C	064/3963444	Teacher	1994
9	Yasser Mohamed Mohamed	Giza	2101631	Ref. & A/C	0126180061	Teacher	1994
10	Ussama Yassin Abdel Hamed	Cairo	100112	Ref. & A/C	02/7216836	Teacher	1988
11	Hany El Said Mohamed	Esmachia	2800819	Ref. & A/C	0102327293	Teacher	1994
12	Alaa Salah Abdel Hafiz	Assiut	2500051	Ref. & A/C	0102263998	Teacher	1993
13	Amgad Beniamen Mosaad	Assiut	2500192	Ref. & A/C	0126096262	Teacher	1993
14	Alaa Mohamed Said	Souhag	2601214	Ref. & A/C	064/3750709	Teacher	1993
15	Ussama Ahmed Hassanin	Sharkia	1301854	Ref. & A/C	0128501843	Teacher	1992
16	Emad El Din Ahmed Aly	Assiut	2500276	Ref. & A/C	088/2294646	Teacher	1985
17	Waleed Mohamed Amin	Sharkia	1302032	Ref. & A/C	—	Teacher	1991
18	Aly Taha Naser Aly	Bani- scuit	2200917	Ref. & A/C	082/2514173	Teacher	1993
19	Ayman Ezzat Aly Abdel Ghafar..	Giza	165880	Ref. & A/C	0109973217	Teacher	1996
20	Michel Magdi Abdel Shahed	Cairo	0101577	Ref. & A/C	0107988603	Teacher	—

Fifth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Bakry Mohamed Hussien	Aswan	2800312	Ref. & A/C	097/7324915	Teacher	1993
2	Magdi Mohamed Abdel Wahab	Giza	2102294	Ref. & A/C	0105760512	Teacher	1996
3	Hamada Mohamed Ebrahim	Sharkia	1300838	Ref. & A/C	055/2100695	Teacher	2001
4	Mohamed Abdel Shafy	Giza	2102958	Ref. & A/C	0109101513	Teacher	1998
5	Ahmed Yehia Mohamed	Cairo	0101812	Ref. & A/C	0105939546	Teacher	1998
6	Tarek Amer Abdel Halim	Giza	70473	Ref. & A/C	0102288353	Teacher	1993
7	Michael Shawki Azmy	Cairo	107115	Ref. & A/C	0103437907	Teacher	—
8	Aref Fekry Abdel Halim	Bani- seuif	2201656	Ref. & A/C	0108434646	Teacher	1992
9	Makram Atta Girgis Saad	Bayom	2300354	Ref. & A/C	0104917651	Teacher	1992
10	Salem El Said Abdel Hawed	Sharkia	1301475	Ref. & A/C	0106256502	Teacher	1991
11	Ussama Adel Amen Hassan	Cairo	101915	Ref. & A/C	0129902344	Teacher	1998
12	Gamal Galal Mohamed	Assiut	2500135	Ref. & A/C	0103162304	Teacher	1984
13	Ehab Loralla Nader	Assiut	2500773	Ref. & A/C	0182695316	Teacher	1993
14	Essam Aly Abdel Ghany	Cairo	100393	Ref. & A/C	0105097503	Teacher	1990
15	Mahmoud Ebrahim Mohamed	Assiut	250077	Ref. & A/C	0107128172	Teacher	1993
16	Bahgat Abdel Azim Hashem	Sharkia	1301277	Ref. & A/C	055/2286357	Teacher	1991
17	Shaimaa Zin El- Abdin Abdel Alla	Giza	105389	Ref. & A/C	02/5648253	Student	—
18	Wael El-Said Mohamed Ahmed	Sharkia	1305015	—	01264284460	Teacher	1998
19	Khalifa Saber Mohamed El- Meshanab	Souhag	—	Ref. & A/C	093/2583760	Inspector	1975
20	Talaat Yossef Yassa Aiad	Mimia	240096	Power	093/2583760	Inspector	1977

Sixth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Abdel Salam Elsaid	Sharkia	1301732	Ref. & A/C	055/3681944	Teacher	1995
2	Salah Khamis Khalil	Cairo	100191	Ref. & A/C	0123575279	Teacher	1987
3	Pathy Abdel Latif Hassanin	Esmaelia	1900199	Ref. & A/C	0126845292	Teacher	1994
4	Desoki Abd Alla Alam El Din	Assiut	2500971	Ref. & A/C	0104655402	Teacher	1993
5	Mohamed Medhat Hassan	Sharkia	1300039	Ref. & A/C	0105210553	Teacher	1992
6	Mahmoud Hassan Mahmoud	Kena	2700079	Ref. & A/C	0161302930	Teacher	1988
7	Ahmed Amir Ahmed	Kena	273758	Ref. & A/C	0102636918	Teacher	1998
8	Mohamed El Said Soliman	Cairo	100976	Ref. & A/C	02/6272528	Teacher	1996
9	Soliman El Said Soliman	Sharkia	1300616	Ref. & A/C	055/2100309	Teacher	1991
10	Mohamed Khalil Gad	Sharkia	59903	Ref. & A/C	0124061554	Teacher	1992
11	Taha Ashor Kamel Mohamed	Giza	2102075	Ref. & A/C	0128913805	Teacher	1998
12	Salah Salem Abdel Moncem	Sharkia	97603	Ref. & A/C	0100251778	Teacher	1997
13	Hamada Abdel Alla Abdel Alla	Minia	240245	Ref. & A/C	069/377541	Teacher	1995
14	Mamdoh Ebrahim Mohamed	Sohag	2600335	Ref. & A/C	0124682345	Teacher	1994
15	Mohamed Helmy Mostafa	port- said	300173	Ref. & A/C	066/3621486	Teacher	2001
16	Bayomi Mohamed Mahmoud	Assiut	2500615	Ref. & A/C	—	Teacher	1993
17	Hassan Shawki Abdel Hamed	Giza	2101711	Ref. & A/C	0126388768	Teacher	1999
18	Eslam El Said Abo Ghait	Sharkia	1300136	Ref. & A/C	0182371690	Teacher	1994
19	Montasser Mohamed Abdel Halem	Assiut	84498	Ref. & A/C	0101943022	Teacher	1993
20	Mohamed Zaki Mohamed	Esmaelia	1300897	Ref. & A/C	0123197322	Teacher	1994

Seventh Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Tamer Hassan Wahba	Giza	2103416	Ref. & A/C	0121179211	Teacher	1997
2	Ahmed Saber Abdel Nasser	El-Wady - El Gdid	320035	Ref. & A/C	092/4775161	Teacher	1995
3	Hassan Ahmed Abdel Halem	Assiut	2500459	Ref. & A/C	--	Teacher	1996
4	Waleed Edd Hassan	Cairo	104714	Ref. & A/C	0108088183	Teacher	1992
5	Ayman Mohamed Esmaeal	Cairo	0103856	Ref. & A/C	-	Teacher	1994
6	Aly Aly Ahmed Salama	Sharkia	130091	Ref. & A/C	055/3681033	Teacher	1991
7	Yasser Mohamed Wasfy	Sharkia	97668	Ref. & A/C	055/2274848	Teacher	1994
8	Ahmed Said Ahmed Mohamed	Giza	2100515	Ref. & A/C	0107815665	Teacher	2000
9	Mahmoud Abdel Karim Abdel Zaher	Giza	2100659	Ref. & A/C	0105851716	Teacher	1999
10	Mohamed Ahmed Mahmoud	Giza	2101659	Ref. & A/C	02/7753447	Teacher	1991
11	Amro Ahmed Hassan Aly	Sharkia	1300890	Ref. & A/C	055/3692901	Teacher	1991
12	Dahy Ebrahim Agazy Ebrahim	Minia	2400999	Ref. & A/C	086/3924990	Teacher	1994
13	Mohamed Abdel Ail Abdel Halem	Cairo	101532	Ref. & A/C	--	Teacher	1988
14	Wahid Abdel Tawab Mohamed	Giza	210475	Ref. & A/C	02/8413740	Teacher	1999
15	Ashraf Saber Abdel Alla	Menofia	1700131	Ref. & A/C	0127333789	Teacher	1997
16	Waleed Mohamed El Said	Cairo	0102974	Ref. & A/C	--	Teacher	1996
17	Hosseniy Mohamed El Hosseniy	Sharkia	1301916	Ref. & A/C	0109390143	Teacher	1998
18	Mohamed Samy Farid	Cairo	100214	Ref. & A/C	0128666046	Teacher	1997
19	Hossam El Din Taha Abdel Razzik	Giza	918182	Ref. & A/C	0128165945	Teacher	1997
20	Mostafa Mohamed Ebrahim	Beni - scauf	69090	Ref. & A/C	--	Teacher	1993

Ninth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Karam Diab Khalaf Diab	Sohag	2600453	Electricity	093/2235082	Tech - Trainer	1980
2	Aly Abdel - Moneem Mehanny	Meja	2402313	Electricity	0122637301	Manger - tech	1976
3	Mahmoud Ahmed El - Said	Sohag	2600438	Elect-Equipment	0127182101	Tech - Trainer	1981
4	Sobchy Takawy Mosaad Gad	Assiut	2501235	Elec-Equipment	—	Tech - Trainer	1978
5	Mohyi Abdel Mohaimen Hassan	Menofia	—	Trainer	0107708234	Ref. & A/C	1983
6	Anwar Abdel Hakem Abdel Mottele	Menofia	1700533	automotive	048/3421343	Ref. & A/C	1983
7	Said Ebrahim Mohamed Soliman	Sharkia	11730	automotive	055/2289759	Manger of automotive	1981
8	Redda Saber el - Said Ahmed	Sharkia	1301239	automotive	055/2400648	Tech - Trainer	2001
9	Mohamed Hashem Mohamed	Sohag	2600296	Maintenance Equipment	0108106649	Trainer	1981
10	Said El-Said Abdel Haddy	Cairo	1700171	—	02/7573026	Trainer Automotive	1984
11	Abdel Hakem Zaky Jachob	North - Sinai	3400111	—	0106398165	Tech - Trainer	1982
12	Hamed Farahat Ebrahim	Giza	51564	Ref. & A/C	0128930582	Teacher	1993
13	Gamal Abdo Ahmed	Assiut	2500136	Ref. & A/C	0103081444	Teacher	1978
14	Saad Kotb Saad Kotb	Alex	200431	Ref. & A/C	0124728561	Teacher	1992
15	Amro Khalil Mohamed Khalil	Kafer el - shaikh	1500072	Ref. & A/C	0121024939	Teacher	1999
16	Khaled Fakhry Abdel- Rahman	El- Behaira	1803251	Ref. & A/C	0128836670	Teacher	1996
17	Atta Mohamed Mahmoud Farghaly	Souhage	2600392	Ref. & A/C	—	Teacher	1979
18	Ahmed Hamed Hashem	Alex	202473	Ref. & A/C	—	Teacher	1995
19	Ahmed Abdel - moneem Edd	Alex	201194	Ref. & A/C	0124028541	Teacher	1988
20	Mostafa Ahmed Ebrahim abdel Latrif	Cairo	0101239	Ref. & A/C	0129825398	Teacher	2000

Tenth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mohamed Soliman Ahmed	Menofia	1700914	Ref. & A/C	3894882	Teacher	1993
2	Mamdouh Salem El-Said Soliman	Cairo	101493	Ref. & A/C	0109224561	Teacher	1991
3	Mahmoud Abdel Halem Abdel Aziz	Menofia	1700837	Ref. & A/C	048/3882185	Teacher	1991
4	Mohamed Farouk El-Said El-Saadany	Gharbia	1418	Ref. & A/C	040/2160022	Teacher	1992
5	Nabile Mahmoud Mohamed Mossa	Behaira	1801414	Ref. & A/C	0123288946	Teacher	1991
6	Artfa Foad Atia Hendy	Behaira	1803417	Ref. & A/C	0127827572	Teacher	1991
7	Hassan El-Said El-Maraey	Gharbia	1600174	Ref. & A/C	0128992417	Teacher	1995
8	Mohamed Ebrahim El-Sabahy	Alex	201798	Ref. & A/C	0102364342	Teacher	1998
9	Foad Ahmed Foad El-Saedi	Kafer el - shaikh	1500979	Ref. & A/C	0104878121	Teacher	1999
10	Mohmoud Mahmoud Abdel - Hamed	Behaira	1802154	Ref. & A/C	0101282010	Teacher	1991
11	Bassiony Fathy Mohamed	Kafer el - shaikh	58248	Ref. & A/C	047/3486798	Teacher	1995
12	Redda Abou El-Fetoh Mohamed	Kafer el - shaikh	1500431	Ref. & A/C	0102060866	Teacher	1997
13	Said Maher Said Beshai	Alex	201311	Ref. & A/C	5508639	Teacher	1985
14	Ussama Ebrahim Yossef Aly	Alex	02595	Ref. & A/C	0104921589	Teacher	1989
15	Mahmoud Ahmed Hamed Mohamed	Alex	2000575	Ref. & A/C	0123847924	Teacher	1993
16	Hany Aly Mohamed Hussien	Alex	201256	Ref. & A/C	03/3609476	Teacher	1999
17	Alaa Abdel Wahab Abbas	Alex	202093	Ref. & A/C	03/4435730	Teacher	1992
18	Marwa Abbas Helmy El-Said	Alex	200461	Ref. & A/C	0107474413	Teacher	1999
19	Garnal Abdel Naby Aly Ahmed	Alex	2001818	Ref. & A/C	0127549948	Teacher	1999
20	Sherif Abdel Aziz Mohamed	Giza	2102013	Ref. & A/C	0105281398	Teacher	1998

Eleventh Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Abdel Alim Salah El- Din	Beni- Scuif	2200197	Ref. & A/C	082/2171071	Teacher	1993
2	Wael Hamdy Mohamed El- Said	Giza	2102295	Ref. & A/C	0101910767	Teacher	1993
3	Hesham Said Afify Khamis	Giza	2100079	Ref. & A/C	0101109774	Teacher	1992
4	Abdel Waheb Abdel Magid	Giza	2100091	Ref. & A/C	0109772606	Teacher	1994
5	Mohamed Hassan Gaber Hassan	Scutz	400032	Ref. & A/C	0127986310	Teacher	1995
6	Famza Mostafa Abdel Mohsen Ahmed	Faoum	201999	Ref. & A/C	0128669217	Teacher	1999
7	Mona Ahmed Salah Aly	Sina	—	Ref. & A/C	0126613387	Teacher	1987
8	Akram Ahmed Mahmoud Abdel Magid	Giza	8800177	Ref. & A/C	0128547101	Teacher	2000
9	Hosny Rashed Abdel Magid	Sharkia	1301236	Ref. & A/C	0103885914	Teacher	1991
10	Samy Fauzy Mahmoud Shimbarly	Sharkia	1201016	Ref. & A/C	055/2100908	Teacher	1991
11	Aly Mokhtar Aly Bdel Fattah	Giza	2100517	Ref. & A/C	0124776107	Teacher	1999
12	Tarrek Abdel El-Naby Hassan	Sharkia	1302415	Ref. & A/C	055/2306113	Teacher	1990
13	Mohamed Kamel Mohamed	Cairo	101636	Ref. & A/C	0122361103	Teacher	1994
14	Mohamed Mahmoud Mohamed	Minia	2402436	Ref. & A/C	012642122	Teacher	1998
15	Ahmed Mohamed Mahmoud	Sharkia	1300677	Ref. & A/C	—	Teacher	1997
16	Hazem Mohamed Abdel Baky	Beni- Scuif	2201096	Ref. & A/C	0105641102	Teacher	1993
17	Mostafa Ahmed Said Mohamed	Beni- Scuif	2201316	Ref. & A/C	0109024255	Teacher	1993
18	Ussama Abdel Hamed Said Zidan	Beni- Scuif	2201551	Ref. & A/C	2172880	Teacher	1993
19	Reda Talaat Fahmy Abdel Bar	Sharkia	91450	Ref. & A/C	055/2325805	Teacher	1991
20	El-Said Khairy El-Said Ebrahim	Sharkia	1300072	Ref. & A/C	055/2377004	Teacher	1997

Twelfth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Karim Slud Mohamed Ahmed	Cairo	2102815	Production Worker	0129891761	Glasses	2000
2	Mohamed Roshdy Abdel Rahman	Cairo	0101657	Ref. & A/C	—	Teacher	—
3	Raafat Moatamed Tawfik Mohamed	Cairo	01012596	Ref. & A/C	0122674195	Teacher	1993
4	Mohamed Foad Mohamed Abdel Gawad	Giza	2102416	Quality Observation	0126484930	Quality Observer	2001
5	Ehab Beshara Aizac Loka	Cairo	101472	Ref. & A/C	0124988803	Teacher	1992
6	Abdel Aziz Mohamed Abdel Aziz	Cairo	104875	Ref. & A/C	0103154642	Teacher	2000
7	Samir Hamed Abdel Wahab Mohamed	Menofia	1701331	Ref. & A/C	0124621945	Teacher	1999
8	Mohamed Mhassen Mohamed Hussien	Cairo	105014	Ref. & A/C	0107398153	Teacher	1992
9	Yehia Mohamed Yossef Mekawy	Sharkia	1300914	Power	0128507574	Eng	1988
10	Ahmed Mohamed Reda Metwally	Sharkia	1301491	Mechanical	0107830191	Teacher	2004
11	Hossam Fawzy Hassan El-Said	Aswan	2800553	Ref. & A/C	0103753617	Teacher	1993
12	Mohamed Aly Wahba Armin	Beni-Seuif	2200977	Ref. & A/C	082/4452757	Teacher	1992
13	Kamal Mohamed El-Said Mohamed	Sharkia	1300131	Ref. & A/C	055/2280893	Teacher	2000
14	Ahmed helmy mohamed	El-monofia	1700651	Ref. & A/C	0483481910	teacher	1994
15	mohamed abdel mohssen el said	Gharbia	1601338	Ref. & A/C	—	teacher	1999
16	Ahmed ebrahim ahmed	Alex	201070	Ref. & A/C	0182645598	teacher	1989
17	Ahmed haris mohamed	Alex	200312	Ref. & A/C	0120686208	teacher	1991
18	Anter sajjah abdel hamid	Behaira	1800696	Ref. & A/C	0101397791	teacher	1999
19	Sherhan Abdel Rahim Mohamed	Kena	2701968	Ref. & A/C	0104515779	Student	—
20	Shihab El-Din Hassan Saad	Alex	203278	Ref. & A/C	0123445925	Student	—

Thirteenth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mohamed Fathy Mohamed	Sharkia	1011086	Ref. & A/C	0124946596	Teacher	2003
2	Edd Abdel Galil Abdel Galil	Bene- Seuf	2200833	Production	0104969169	Eng. Egypt. Comp	2004
3	Ahmed Abo El- Feroth Mohamed	Menofia	1701738	Ref. & A/C	0102708592	Teacher. Of maintenance	2000
4	Aly Hawdy Hassan Soliman	Cairo	100411	Arldo - Advertising	0127178312	Super Faizer	1971
5	Salah Mohamed Ahmed	Cairo	0101872	Ref. & A/C	0104409861	Teacher	1982
6	Mohamed El- Said Maarof	Menofia	1700838	MaintenanceOf Elect	8313491	Teacher	1990
7	Hanafy Mohamed El- Said	Cairo	0102935	Ref. & A/C	0101596432	Teacher Maintenance	1983
8	Waleed Gaber Aly Saleh	Cairo	100636	Ref. & A/C	3179220	Teacher	1999
9	Mohamed Mohamed Shaaban	Giza	12118111	Ref. & A/C	02/1218111	Teacher	1992
10	Khaled Abdel Nasser Badawy	Giza	2103578	Ref. & A/C	0102328115	Teacher	2001
11	El- Gohary Yossef El- Gohary	Gharbia	1603131	Ref. & A/C	0109197801	Teacher	—
12	Mohamed Ussama Fekry Abdel Kader	Sharkia	1306496	Electricity	055/3651888	Teacher	2004
13	Ussama Ebrahim Abdel Hamid	Giza	—	—	02/3557526	Teacher	—
14	Ehab Mohamed El- Habashi Abdel Hakim	Giza	2101697	Power	0104425125	Ref. & A/C	1990
15	Medhat Ahmed Aly Mohamed	Menofia	1701279	Ref. & A/C	0109481274	Teacher	1991
16	Mostafa Raian Mohamed Salem	Assiut	1500557	Electrical Equipment	0128653826	Quality Abserver	1992
17	Hamdy Ramadan Abdel Ghafar	Beni- Seuf	2201214	Machanic Automotive	010498717	Teacher	1988
18	Romany Samir Ebrahim Soliman	Kaliobia	1401775	Ref. & A/C	0125127086	Teacher	1998
19	Ashraf Beshara Meshriky Shenada	Cairo	100496	Ref. & A/C	—	Teacher	—
20	Mohamed Maher Abas El- Said	Cairo	1900335	Ref. & A/C	02/6428737	Superfaizerof Ideal	1976

Fourteenth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Hesham Mohamed Abou Hashem	Cairo	0101891	Power	0161676078	Eng	2004
2	Salwa Adel Azab Salama	Dakhhlia	1200661	Mechanical	0124904720	Eng At Egypt	2004
3	Adel Ahmed Esmael Ahmed	Giza	2100078	Elect	02/5733757	Tech. Elect	1982
4	Amro Ebrahim Mohamed Aly	Cairo	0104034	Power	0103450518	Eng. Of & A/C	2003
5	Ahmed Fathy Abdel Fatah El Akhras	Giza	2102013	Ref. & A/C	0106405034	Tech. & A/C	1989
6	Ebrahim Gomaa Ahmed Ebrahim	Kalobbia	1400551	Ref. & A/C	0106854481	Tech. & A/C	1998
7	Abdel Hamed Hameda Bakry	Cairo	1015457	Tech Ref. & A/C	0109242217	Tech. & A/C	1992
8	Mahrous Hamdy El- Said Ahmed	Cairo	0101933	Fine Instrument	0126242513	Tech. & A/C	1983
9	Ashraf Ahmed Mohamed Soliman	Cairo	103098	Ref. & A/C	0127375503	Tech. & A/C	1984
10	Marzouk Kamel Marzouk Haggag	Cairo	0104139	Ref. & A/C	0108830878	Tech. & A/C	1995
11	Ahmed Mostafa El- Said Mohamed	Giza	2102053	Ref. & A/C	0100831931	Tech. & A/C	2002
12	Faragalla Ahmed Abdel Moncem	Cairo	0103632	Mechanical	0106406510	Tech. & A/C	1999
13	Mohamed Foad Mohamed Abdou	Dakhhlia	1202332	Ref. & A/C	0124006045	Tech. & A/C	1996
14	Ashraf Mohamed Wahbec Abdel Khalil	Cairo	101311	Ref. & A/C	02/7182706	Tech. & A/C	1991
15	Mostafa El Saghir Abdel Rahem Aly	Souhag	2601631	Mechanical	093/253100	Inspector	1976
16	Raafat Mohamed Abdel Haddy Hussien	Souhag	2600112	Ref. & A/C	0127013737	Inspector	1973
17	Nasser Mohamed Salem Mohamed	Cairo	86419	Ref. & A/C	02/7311479	Inspector	—
18	Magdi Awad Alla el biltagy Awad	Cairo	100611	Ref. & A/C	0106362360	Inspector	1985
19	Abdel Raof Abdel Ghafar El- Dawce	Kenna	2700073	Ref. & A/C	095/2467070	Inspector	1985
20	Ebrahim Farag Ebrahim Abou El- Khair	Menofia	—	Ind - Educ	0125682079	Inspector	1991

Fifteenth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mostafa Abdel Hamid Hassan	Kaliobia	1403573	Ref. & A/C	0124573851	Teacher	1992
2	Mostafa Gaber Abdel Rahman	Cairo	104857	Metal Industries	6016281	Teacher	1984
3	Mahmoud Hassan Mahmoud	Cairo	0102191	Power	0123121249	General	1979
4	Waleed Farouk Negm Yassin	Cairo	102154	Ref. & A/C	0123243269	Teacher	1997
5	Amir Ebrahim Abdel Magid	Gharbia	1626172	Power	0102334911	Eng. Omega Comp	2003
6	Ahmed Serag El- Din Ahmed	Kaliobia	100993	Elect- Equipment	0107819545	Teacher	—
7	Ebrahim Abdel Salam Ebrahim	Giza	2100517	Power	0105469995	Eng. Air Cond	2002
8	Rafaat Abdel Latif Mohamed	Cairo	0101516	Ref. & A/C	0102310750	Teacher	1996
9	Yasser Edd Mohamed Mostafa	Cairo	8800432	Calculators	5260653	Teacher	2003
10	Ahmed Mohamed Morsi Hassan	Giza	2101859	Power	0104314516	Eng. Omega Comp	2004
11	Khaled Sobhy Hamza Aly	Cairo	103171	Automotive	0101615266	Maintenance Manager	1988
12	Mohamed Abdel Patah Mohamed	Giza	2101672	Ref. & A/C	0124450709	Teacher	2000
13	Ebrahim Mohamed Abdel Ghany	Kaliobia	1400851	Ref. & A/C	0103674474	Teacher	1996
14	Said Mohamed El Said El Sabry	Cairo	100636	Ref. & A/C	0105024802	Manager Of Quality	1980
15	Ebrahim Goda Ebrahim Mohamed	Dakhalia	1201634	Power	0123997607	production Manager	1994
16	Mostafa Mohamed Kabari	Cairo	104233	Electricity	0125153302	Teacher	1990
17	Said Mohamed Aly Dawod	Menofia	1700297	Ref. & A/C	0106649519	Teacher	2000
18	Zaki Ebrahim Zaki Osman	Kaliobia	1400632	Ref. & A/C	0125975019	Teacher	1997
19	Gomblat Mohamed El- Hady	Sharkia	1303154	Ref. & A/C	2963871	Super Faizer	1984
20	Marwa Wahid Mohamed Taha	Cairo	245281	Power	4544661	Eng. Omega Comp	2006

Sixteenth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Taalat Gornaa Abdel Magid Mostafa	Beni-Souf	2201533	Ref. & A/C	0105147317	Tech- Goldi	1994
2	Nabil Mohamed Mohamed Mossi	Alex	43677	—	0127539791	Tech- Delta Comp	1987
3	Raafat Said Abdel Ghany	Sharkia	105435	Ref. & A/C	0122711571	Tech-Ref- Air cond	1988
4	Ahmed Hamada Mohamed Abdel Kawi	Cairo	0105172	Ref. & A/C	02/2955813	Tiba- Eng school	2000
5	Esmael Morsi Ragab Morsi	Minia	2403278	General Gloss	0104726027	tech- Zanuissi	2000
6	Abdel Gawad El- Morsi El- Haj	Gharbia	1600178	Mechanical	0125381884	Tech- Zanuissi	1991
7	Hassan Ahmed Ebrahim Mohamed	Cairo	103116	Ref. & A/C	0128689086	Tech	1991
8	Walid Mohamed Morsi Khalifa	Cairo	100539	Power	02/5050336	Tech	1991
9	Mostafa Abdel Raof Mostafa	Sharkia	1301959	—	0122580537	Tech- Air cond	1987
10	Ahmed Mohamed Karam Abdel Aziz	Cairo	677801	Electricity	0125828285	Tech- Miraco Comp	1972
11	Mohamed Mohamed Shaaban	Giza	2118111	—	0126169653	Tech - Ref	—
12	Abo Bakr Mohamed Mahmoud	Cairo	103091	Tech- Ref& A/C	0127828774	Tech- Ref& A/C Glid Comp	1982
13	Ayman Mitwally Kotb Hussen	Cairo	100719	—	0101615176	Manager Of Maintenance	1983
14	Adel El- Said Mohamed Mohamed	Sharkia	1302617	Electricity	0109634096	Tech- Of Air Cond	1985
15	Hany Mahmoud Khilil El Said	Cairo	0103975	—	0126881731	—	—
16	Wael Yossef Raggab Mohamed	El- Basatin	104137	Ref. & A/C	0122346893	Ref. & A/C	1998
17	AbdAlla Mohamed Aly El- Said	Cairo	100591	Ref. & A/C	0101222461	Tech- Shoubra Comp	1981
18	Jeosif Aizac Sultan Saweris	Cairo	104292	Ref. & A/C	0121288815	Eng - At Kirriazi Comp	1999
19	Mohamed Saad El- Din El- Said	Kaliohia	1401076	Ref. & A/C	0124051645	Teacher	1996
20	Mahmoud Maged Lattfy Sedik	Cairo	102672	—	0109390847	Teacher	2004

Seventeenth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Artef Abdel Sattar Naser	Giza	2102437	—	0128280030	Tech- Zanussi Comp	1995
2	Mohamed Hanafy Abd Alla	Cairo	0104358	Power	0122993734	Eng- At Mog. Comp	2003
3	Hossam Salah Abdel Moneem Ebrahim	—	8800394	Power	0107818760	Eng- At Auto Cool	2006
4	Abdel Mawla Abdel Lattif Mohamed	Cairo	0101851	Ref. & A/C	0124409922	Ref. & A/C Tech	1993
5	Tarek Korany Mohamed Mohamed	Giza	2100434	Power	01235569553	Manager Of Research At Goli Group	1992
6	Mohamed Said Mohamd Eissa	Giza	2100252	Ref. & A/C	0107375628	Super Paizer	1984
7	Ashraf Sabry Aziz Girges	Kalifornia	1400591	Power	0128865695	Eng. At Gorika	2003
8	Nabile Mohamed Lotfy Said	Giza	2100099	Power	0127446605	Tech- Ar'liba Comp	1986
9	Tarek Fahmy Mahmoud Gamal	Menofia	1700331	Ref. & A/C	0122593535	Tech - At Goldi Group	1993
10	Abdel Farah Aly Mohamed El- Zaher	Sharkia	1301799	Power	0123319099	Tech - Eng	1976
11	Saida El- Hosainy Mahmoud Abdel Daim	Cairo	100629	Chimistry	0107242552	Chimistry At Shoubra	2005
12	Osama Fathy Mohamed El- Said	Menofia	1709979	Power	0106935914	Tech- At Goldi	1997
13	Soliman El- Said Mabrouk Solima	Giza	2100997	Ref. & A/C	0122822628	Tech- At B. Comp	1993
14	Waled Mohamed Taha Mahmoud	Alex	210200975	Ref. & A/C	0123832785	Tech- At Ideal Comp	2002
15	Alaa Anter Mohamed Ahmed	Cairo	101832	Power	0105466540	Eng- Union Air	2002
16	Samir Mohamed Abdel Halim	Cairo	157	Power	0123331236	—	2002
17	Hatem Mohamed Abdel Razik	Dakalia	120335	Ref. & A/C	012296439	Tiba Ind. Eng. Comp	2006
18	Mohamed Ahmed El-Said Abdel Alla	Sharkia	1307235	Electrical Sectim	0121067168	Electrical Tech	1998
19	Ramdan Mohamed Said Mohamed	Giza	2102179	Ref. & A/C	02/7316592	Teacher	1990
20	Hesham Mohamed Ebrahim	Cairo	102612	Ref. & A/C	0106991049	Ref. & A/C	2000

Eighteenth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Hany Kamel Abo Kalam	Cairo	102434	Ref. & A/C	0105150759	Tech. Ref. & A/C	1990
2	Ahmed Mohamed Ahmd Said	Giza	2103192	Ref. & A/C	0101924688	Tech. In. Egat Comp	—
3	Ahmed Gharib El Said Hassan	Sharkia	1302255	Ref. & A/C	0100498932	Tech - Goldi Comp	1990
4	Wael Abdel Rehem Khalifa	Souhag	2600131	Ref. & A/C	093/6850653	Tech	1992
5	Waleed Adel Ebrahim Mohamed	Gharbia	152521	—	0128363956	Tech- Ideal Comp	1996
6	Moataz Yossef Zaky Saber	Cairo	104717	Ref. & A/C	0124156325	Tech. In Kerrirazi Comp	1992
7	Mostafa Kamal Abdel Monce	Cairo	107779	Ref. & A/C	0124137624	Tech - Citlal Comp	1997
8	Mahmoud Fathy Mohamed Abdel Alla	Assiut	2500356	Micatroic	0101999276	Eng. Of Miraco Carrier	2006
9	Ahmed Mamdoh Ebrahim Shehata	Giza	2100216	Ref. & A/C	02/8326815	Tech. Ref. & A/C	1991
10	Hamada Mohamed Abdel Kavy	Giza	5954	Electricity	02/2955813	—	1974
11	Amro Fahmy Abdel Alla	Cairo	—	Ref. & A/C	0106699357	—	1987
12	Mohamed Msbah Said Mohamed	Cairo	0102671	Production	0101647198	Production	2004
13	Mohamed Hashem Mohamed Hashem	Cairo	01011793	Power	0101458278	Eng. Auro cool Comp	2004
14	Essam Shafik Henes	Giza	2103395	Ref. & A/C	0127452108	Tech. Of Ref. & A/C	1994
15	Amro Mohamed Ebrahim Aly	Sharkia	010213117	—	—	—	—
16	Mohamed Abdel Mohsen El- Balasy	Sharkia	14252	Ref. & A/C	0123620076	Tech. Of Ref. & A/C	1975
17	Hossen Said Hossen KHali	Cairo	93692	Production	02/6034664	Eng. At Delta Ind Comp	1990
18	Mohamed Mohamed Mahmoud Rehim	Cairo	—	Ref. & A/C	02/4904443	Tech. Of Ref. & A/C	1988
19	Khald Abdel Monceem Abdel Alim	Cairo	101414	Power	0101518005	Maintenance manger	1988
20	Waleed Ahmed Abas Mashady	Cairo	103031	Production	0106508678	Power	2002

Nineteenth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mohamed Yahia Hamed El- Rashidy	Cairo	—	Electricity	0123549920	—	1997
2	Mohamed Fathy Abbas Mohamed	Giza	2101851	General Proctation	0126252835	Armed Forces	2001
3	Salah El-Din Mohamed Hassan	Cairo	—	Power	—	—	—
4	Samch Abdel Fattah Yossef Saad	Cairo	0102079	—	0103099605	—	1988
5	Amro Artia Saad El- Din Artia	Cairo	0100534	Power	0101430131	Eng	2002
6	Hussam El- Din El- Said Awad Alla	Alex	—	Power	0124436275	—	1997
7	Mohamed Abdel Aziz Abou- Enin	Kaliobia	—	Mechanical	0122842615	—	1996
8	Girgis Zaky Girges	Minia	2400456	Ref. & A/C	0107314802	Trainer	1986
9	Esmel Razik Esmel Rizek	Cairo	119078	Electricity	0127318933	—	2001
10	Magdi Botros Aziz	Gharbia	—	—	—	—	—
11	Mohamed Salah El- Din Farag	Dakhalia	91149	Electricity	0182412161	Tec - Armed Forces	1990
12	Sherif Rafaat Salama Mohamed	Cairo	—	Electricity	—	—	—
13	Magdi Fathy Abdel Gawad	Cairo	123421	Ref. & A/C	—	—	—
14	Ebrahim El-Said Abdel Kader Mfaady	Cairo	69144	Food - Manufacture	0123438858	—	1996
15	Mohamed Kamal Tohamic Aly	Cairo	—	Ref. & A/C	0105431758	—	1992
16	Waleed Tohamy Aly Farghally	Kaliobia	32633	—	0100676416	—	1988
17	Mohamed Ahmed Abdel Razik	Giza	2100911	Power	0122381425	—	1990
18	Essam El- Din Abdel Malek	Sharabia	—	Ref. & A/C	0101448113	Manager Of Ref. & A/C	1977
19	Ahmed Mohamed Mahmoud Bayomi	Cairo	100392	Electricity	0123619845	Eng	1992
20	Ahmed Mohamed Aly Taalab	Giza	2101975	Power	0104001872	Eng	1997

Twentieth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Ahmed Hamdy Abdel Latif Mahmoud	Kaliobia	1401693	Ref. & A/C	0120192191	Inspector	1992
2	Mostafa Aly El- Gohary	Gharbia	1600772	Ref. & A/C	0104954223	Inspector	1985
3	Mahmoud Mostafa Taha Mostafa	Beni - Seuf	—	Ref. & A/C	0123554351	Inspector	1988
4	Mahmoud Aly Omar Hassan	Kafer El- Shaikh	113012	Ref. & A/C	0109084653	Inspector	1985
5	Salah Abdel Alem Ahmed Farrag	Kaliobia	1401893	Ref. & A/C	0161531703	Inspector	1985
6	Mohamed Abdel Halim El- Said	Alex	202052	Ref. & A/C	0122855625	Inspector Of & A/C	1984
7	Mohamed Abdel Latif Aly	Cairo	100971	Ref. & A/C	02/4783741	Inspector Of & A/C	1992
8	Aly Ahmed Ahmed Abou Raya	Dakelhalla	100109	Ref. & A/C	0127650542	Inspector	1985
9	Samih Taha Saber	Assiout	2500036	Ref. & A/C	—	Inspector	1973
10	Essam Esmel Mohamed Abdel All	Esmellia	19000235	Ref. & A/C	0125255813	Inspector Of & A/C	1990
11	Abdel All Ally Mostafa Abdel All	Port - Saed	01100131	Electricity	0121417071	Inspector	1991
12	Mohamed Ahmed Abdel Razik Hamad	Giza	2100911	Ref. & A/C	047/3486278	Inspector	1991
13	Abdel Aziz Bassiony Ahmed	Kafer El- Shaikh	1500795	Power	047/3400292	Inspector	1985
14	Hassan Awad Said Khalil	El- Wady El- Gadid	3200057	Ref. & A/C	0161835288	Inspector Of & A/C	1980
15	Khaled Mahrous Mohamed Salem	Cairo	3378	Ref. & A/C	02/4909331	Inspector	1984
16	Hamdy Abdel Sattar Ramadan	Kafer El- Shaikh	1500354	Maintenance Of Elect	047/3231586	Inspector Of & A/C	1981
17	Said Monir Foad Said	Cairo	101875	Ref. & A/C	0123063327	Teacher	1995
18	Ahmed Mohamed Ahmed Mohamed	Cairo	101311	Ref. & A/C	0125883303	Teacher	1992
19	Mohamed Abdel Razzik Abdel Kader	Cairo	1300217	Ref. & A/C	0161321109	Teacher	1993
20	Shaimaa Mohamed Mohamed	Giza	2103262	Ref. & A/C	0128475839	Teacher	—

Twenty First Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Said Hussen Mohamed Aly	Cairo	102079	—	02/4781611	Training Center	1977
2	Gamal Ahmed Abdel Barry Said	Dakkehalla	1201277	Ref. & A/C	0103446773	Tech. At Ghamr	1982
3	Mohamed Anwar Mohamed Hassan	Assiut	2500054	Ref. & A/C	088/2406566	Tech At Man Power	1983
4	Ezzat Helmy Zaky Bedwany	Souhag	2600634	Electricity	093/4762755	Tech. Trainer	1981
5	Nadder Nazary Bassally Abid	Souhag	2600137	—	0124838392	Tech. Trainer	1977
6	Mohamed Hamed Abd alla Ahmed	Giza	2101556	Ref. & A/C	068/3356307	Tech. Trainer	1985
7	Mohamed Saad Hefny Telleb	Giza	2101314	Wilding Metal	02/3257320	Training Center	1982
8	Affi Mohamed Ahmed	—	—	—	4456788	Mechanical	—
9	Mohamed El-Said Ahmed Mostafa	Menofia	—	Automotive	0129965048	Trainer Of Automotive	1982
10	Mahmoud Mohamed Abdel Naddy	Minia	43073	Elect. Equipment	0121384517	Training Center	1976
11	Mohamed Lotfy Ahmed El-Henawy	Alex	1400293	Ref. & A/C	—	Trainer Of Ref. & A/C	1981
12	Mohamed Mosbah Abdel Moarty	Dakkehalla	1203214	Ref. & A/C	—	Trainer Of Ref. & A/C	1983
13	Ebrahim Monir Habib Morgan	Minia	2400295	Electricity	0124785394	Trainer Of Ref. & A/C	1982
14	Magdi Mohamed Mohamed Said	Beni - Seouf	2200031	Tech	0121589709	Tech. ref. & A/C	1987
15	Ayman Mohamed Soliman Ghannam	North - Sina	3300152	Automotive	0161623675	Tech. Trainer	1987
16	Abbas Farouk Abbas Farhat	Cairo	14213	Wilding Metal	02/3196728	Trainer Of Wilding Tech	1984
17	Ahmed Aly Zin El-abdin Mohamed	Kafer El-Shaikh	1501415	Ref. & A/C	0128707136	Training Center	1984
18	Mohamed Mosaad Mohamed	Damietta	171000434	Ref. & A/C	0123263119	Tech. ref. & A/C	1985
19	Adel Ebrahim El-Desoki Ebrahim	Dakkehalla	1200579	Ref. & A/C	050/6011541	Inspector	1992
20	Khamis Mohamed Said Said	Cairo	—	Ref. & A/C	0122823366	Inspector	1984

Twenty Second Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Tamer Hassan Mohamed Hassan	Sharkia	43819	Armed Forces	—	Armed Forces	1994
2	Aly Abdel Galil Abdel Latif	Kaliobia	470124108	Ref. & A/C	0132713916	Armed Forces	1992
3	Bahy Mohamed Mostafa Awad	Alex	—	Electricity	0120623325	Armed Forces	1996
4	Aly El- Said Aly El- Shorbagy	Dakhalia	14607	Electricity	0125414549	Armed Forces	1990
5	Kamal Khalaf Embaby Khalaf Alla	Cairo	14781	Ref. & A/C	02/4744304	Armed Forces	1996
6	Mohamed El- Shahat El- Tahher	Sharkia	1304575	Ref. & A/C	—	Armed Forces	1991
7	Ekramy Fahmy Mohamed Gadalla	Gharbia	9101011	Electricity	040/2883109	Armed Forces	1990
8	Mohamed Abdel Atty Abdel Kadder	Gharbia	1603391	Armed Forces	040/5750726	Armed Forces	1992
9	Mohamed Hamdy Mohamed Abdel Latif	Dakhalia	102679	Armed Forces	0107912582	Armed Forces	1989
10	El-Said Abbas El- Said	Kaliobia	71302	Ref. & A/C	0132521575	Armed Forces	1984
11	Emad Hamdy Lotfy Zidan	Behaira	471163418	—	03/4999745	Armed Forces	1990
12	Ayman Abdel Hamed Ahmed	Gharbia	1604451	Steam Heater Services	—	Armed Forces	1989
13	Fathy Aly Bader Hassan	Sharkia	1302495	—	—	—	1984
14	Mahmoud Mohamed Mahmoud	Sharkia	79317	Armed Forces	0129124215	Armed Forces	1985
15	Amro Sultan Abdel Nabby Elbrahim	Giza	106354	Ref. & A/C	—	Armed Forces	1990
16	Waleed Abdel Monceem Sobhy Hasham	Cairo	0102193	Elect - Equipment	0126437347	Armed Forces	1993
17	Aymen Fares Aly Diab	Cairo	0101538	Tech - At Armed Forces	02/2808781	Tech . Ref. & A/ C	1992
18	Abdel Hamed El- Said Abdel Rehim	Souhag	2602412	Electricity	093/3270880	armed Forces Officer	1972
19	Ashraf Gaafar Aly Abbas	Giza	50614	Armed Forces	0122358261	—	1985
20	Wasfy Shawky Kellada Machrious	Kenna	2701416	Ref. & A/C	096/5328452	Inspector	—

Twenty Third Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Abdalla Ahmed Ebrahim Gabbr	Menofia	49009716	—	048/771966	Armed Forces	1987
2	El- Mahdy Ahmed Salah El- Din	Gharbia	83951	Power	0128784614	Armed Forces	1988
3	Farid Henny Farid El- Gazzar	Cairo	146387	Electricity	—	Armed Forces	1988
4	Essam Salah El- Din Aly	Cairo	6115090	Ref. & A/C	—	Tech. Ref. & A/ C	1991
5	Mohamed Mostafa Hassan Yousscf	Alex	69582814	Power	0124525301	Armed Forces	2004
6	Mohamed Mohamed Abdel Maksod	Alex	828991122	Ref. & A/C	0122909366	Armed Forces	2001
7	Adel Abdel Rahman Kamel	Giza	115469	—	010787756	—	1979
8	Hany Atref Maamon Khedr	Kafer El- Shaikh	57414	Power	0107429916	—	2001
9	Hany Fawzy Ahmed Amer	Cairo	—	Ref. & A/C	0106134331	Armed Forces	1991
10	Salah Hashem Abdel Hamed	Sharkia	1301359	Ref. & A/C	0106994174	Armed Forces	1999
11	Mohamed Fattch Radwan Sultan	Menofia	3002612	Electricity	0108306589	Armed Forces	1987
12	Mohamed Hassan Abdel Moatty	Behaira	100479	—	03/5004769	Armed Forces	2003
13	Mohamed Mohamed Saad Abou - Zid	Menofia	1701938	Elect - Equipment	03/4428379	Armed Forces	1984
14	Mohamed Nabile Abdel Kaddier	Alex	38304340	Power	0102005594	Armed Forces	2005
15	Waleed Ahmed Abdel Gawad	Cairo	1063	Mechanices	0101252348	Armed Forces	1998
16	Ahmed Samy Mossa Mohamed	Sharkia	909615	—	0109239281	Armed Forces	—
17	Fathy Abdel Alem Abdel Rahman	Menofia	827828	—	3889757	Armed Forces	1997
18	Ahmed Mohamed Samir Taher	Cairo	105081	Power	0101920096	Armed Forces	1995
19	Mohamed Baazak Said Ahmed	Faioum	2300858	—	0129414360	Armed Forces	1991
20	Said Ermam Mohamed Ahmed	Cairo	223730	Ref. & A/C	0101093764	Teacher	1995

Twenty Fourth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mohamed Metwally Ahmed Morad	Dakhalia	1202039	Ref. & A/C	0127028211	Armed Forces	1990
2	Kamal Mohamed Mahmoud	Alex	72992	Ref. & A/C	0129382234	Armed Forces	1969
3	Aymen Abdel Aziz El- Said	Behaira	1803831	Ref. & A/C	0106470461	Armed Forces	1992
4	Magdy Abdel Monem Ghonam Mohamed	Kaliohia	147058	Ref. & A/C	0106438284	Armed Forces	1987
5	Yasser Hemdan Hussen Mahfouz	Assut	2500331	Power	0126082614	Eng	1995
6	Mahmoud Mohamed Abd Alla	Gharbia	1600815	Ref. & A/C	0126728589	Armed Forces	2006
7	Mohamed Zaki Aly Seddik	Cairo	0100438	Electricity	02/6039210	Armed Forces	—
8	Emad Sabry Taha Mohamed	Cairo	250718	Automotive	0122620357	Armed Forces	—
9	Ebrahim Ahmed Said Abdel Hafiz	Cairo	0102454	Electricity	0106165496	Armed Forces	1991
10	Aymen Abdel Magid Soliman	Cairo	103692	—	0124469034	Armed Forces	1998
11	Ebrahim Esmeal Ebrahim Hashish	Menofia	1700871	Ref. & A/C	0107384236	Armed Forces	1985
12	Mohamed Abdel Ghafar Rasslan	Behaira	1801372	Electricity	0108349159	Armed Forces	1991
13	Badawy Zaghlor Ahmed Newishy	Giza	—	Ref. & A/C	0104342331	Armed Forces	1990
14	Sameh Mostafa Amen Ahmed	Cairo	0104477	Power	0102606885	Armed Forces	1994
15	Khaled Mohamed Said Ahmed	Cairo	116110	Electricity	0109984917	Armed Forces	1984
16	Mohamed Gamal El Din Aly	Faioum	2300191	Power	0101539413	Armed Forces	1998
17	Mohamed Asaad Husseny Mahmoud	Cairo	—	Power	0101504788	Armed Forces	1996
18	Nasser Mohamed El- Askary Aliwa	Kaliohia	82252	Computer	0101570702	Armed Forces	1998
19	Ahmed Gamal Ahmed Lotfy	Kaliohia	82386	Computer	0106719677	Armed Forces	1988
20	Hammed Ahmed Goda Ahmed	Beni - Souif	2200617	Ref. & A/C	0127539531	Inspector	1993

Twenty Fifth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Medhat El- Said Ahmed Abdel Rehim	Cairo	94095	Leathal Wippons	0122855120	Armed Forces	1992
2	Shaaban Dib Tawfik Abdel Magid	Beni - Seuf	2200117	—	082/6905849	Armed Forces	1992
3	Hany Adib Ebrahim Hanna	Gharbia	1600238	Ref. & A/C	0123850666	Armed Forces	1991
4	Ahmed Abbas Hassan Mohamed	Cairo	101051	Ref. & A/C	0129475676	Armed Forces	1991
5	Mohamed Nabil Tawfik	Cairo	169088	Welding	4647554	Armed Forces	1985
6	Barrakat Esmael Taha Ogela	Menofia	90366	Power	048/2770330	Armed Forces	1989
7	Safwat El- Said Mohamed Rezk	Menofia	467250	Electricity	—	Armed Forces	—
8	Omer Mohamed Soubhy Abde Alla	Cairo	0101034	Mechanical	0126603696	Armed Forces	1990
9	Mohamed Seady Mahmoud Attia	Giza	473369	Tech	010292373	Armed Forces	1992
10	Shawky Esmeal Attia	Gharbia	4790329	Armed Forces	0101996103	Armed Forces	2005
11	Wael Abdel Halim Ebrahim	Menofia	97438	Ref. & A/C	0127162292	Armed Forces	1988
12	Redda Abdel Sattar Aly	Sharkia	1301311	—	0104141084	Armed Forces	2000
13	Mohamed Zaki Ebrahim	Menofia	88831	—	0108156252	Armed Forces	1972
14	Magdi Karnal Abdel Kadder	Cairo	64570	Armed Forces	—	Armed Forces	1986
15	Saad Ebrahim Abdel Moatty	Kafer El-Shaikh	1800631	Electricity	047/2555768	Armed Forces	1997
16	Waleed Aly Mostafa	Cairo	46511	Mechanical	0182910213	Armed Forces	1990
17	Gaber Farhat Omar Shahat	Menofia	1700151	Ref. & A/C	048/2281410	Inspector	1975
18	Ahmed Mohamed Mahmoud El-gendi	Menofia	1700192	Ref. & A/C	0104385333	Inspector	1976
19	Zarif Aly Ebrahim Mikawy	Sharkia	1302871	Ref. & A/C	0103343303	Teacher	1981
20	Nagy Mahmoud Abdel Aziz	Sharkia	1300252	Mechanical	055/2286598	Teacher	1984

Twenty Sixth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Zarif Aly Ebrahim Mikawy	Sharkia	1302871	Ref. & A/C	010 3343303	Teacher	1981
2	Abdel Wahhab Mahmoud Abdel - Wahhab	Sharkia	1300594	Automotive	055/2351873	Teacher	1971
3	Ahmed Elewa Mohamed Elewa	Sharkia	1301151	Power	055/3978286	Teacher	1970
4	Mahmoud Fathy Mahmoud Youssef	Sharkia	1301059	Mechanical	0101804604	Teacher	1985
5	Nader Gendi Abdel - Malak Rizik Alla	Sharkia	1302895	—	0106202268	Teacher	1988
6	Ahmed El- Din Mohamed Youssef	Sharkia	1300114	Automotive	0122246981	Teacher	1978
7	Hamed El- Shabar Mohamed Mahmoud	Sharkia	1301097	Automotive	0127280792	Teacher	1989
8	Terriza Labib Shehatta Mansour	Sharkia	1301361	Power	0124942890	Teacher	1980
9	Samy Shafik Ebrahim Yossef	Dakelhilia	1201531	Automotive	6843168	Teacher	1973
10	Ahmed Mohamed Ahmed Osman	Sharkia	1300894	Automotive	0127433158	Eng	—
11	Mohamed Mohamed Hussany	Sharkia	1300907	Power	0121612480	Teacher	1987
12	Mohamed Mohamed Mahedy	Sharkia	1300214	Ref. & A/C	0129910808	Teacher	—
13	Khaled Abdel Aziz Mohamed Mohamed	Sharkia	1301191	Ref. & A/C	0107251250	Teacher	1982
14	Hamed Abdel Hamed Mohamed Mohsen	Sharkia	1300479	Automotive	255/2356872	Teacher	1977
15	Farida Zaky Mostafa El- Nager	—	1302149	Ref. & A/C	0121208423	Teacher	1979
16	William Ramsis Saif	Sharkia	1300071	Automotive	0120546996	—	1981
17	Samir Ghabrial Sharobim Farag	Scuz	400274	Transmission	0125389449	Teacher	1992
18	Gamal Salem El- Alemy Mostafa	Cairo	0102779	Ref. & A/C	0104191658	Teacher	1983
19	Aid Michael Abdel Malak	Sharkia	2315	Power	055/4554497	Teacher	1980
20	Hany Shaker Mahmoud Youssef	Kalshobia	14040658	Power	0103719486	Teacher	2002

Twenty Seventh Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Hazzem Shaker Ahmede Shaker	Cairo	100057	Power (Ref. A/C)	012 3353534	Engineer	2005
2	Nabil Desoky Mostafa Desoky	Giza	2101993	Metals (Ref. A/C)	010 0427038	Technician	2001
3	Mohamed Said Mohamed Abou-Serce	Cairo	101054	Electricity (Ref. A/C)	010 3365736	Technician	1998
4	Mohamed Foad Abass Hassan	Cairo	101036	Ref. & A/C	010 3972928	Technician	1995
5	Mostafa Kamel Ahmed	Cairo	102792	Ref. & A/C	012 3149562	Technician	1982
6	Hanna Fawzy Ephram Abou-Saif	Cairo	2404239	Ref. & A/C	012 3733461	Technician	1997
7	Abdel- Fattah Mohamed Abdel Fattah	Cairo	105497	Ref. & A/C	012 4766497	Technician	2003
8	Mahmoud Ahmed Mahmoud Karrayy	Cairo	-	Ref. & A/C	015 3559069	Technician at Ideal Co.	1988
9	Abdel Khalek El-Said Abdel- Khalek Aly	Cairo	263816	-	012 4512769	Technician	1985
10	Ernad Abdel Samad Abdallah Hassan	Cairo	101693	Ref. & A/C	012 1173985	Manger of Ref. section at port- said metal co.	1983
11	Mohamed Safvat Ahmed Artia	Cairo	104598	Ref. & A/C	012 3597138	Technician	1996
12	Ozoris Roshdy Selwanis Aziac	Cairo	100738	Ref. & A/C	02/ 2570850	Technician	1980
13	Mohamed Fathy Meawad Aly	Giza	1308829	Automotive	012 4124540	Project Manager at Still Master Company	1986
14	Mohamed Said Aly Ebrahim	Giza	2102394	-	02/8119602	Production Super Visor	1996
15	Adham Abdel -Barry Aly Mostafa	Kenna	2700159	Ref. & A/C	010 0516341	Technician	1995
16	Zarif Naseem Israel Barnaba	Cairo	100932	Ref. & A/C	012 1829040	Technician	1991
17	Abdel -Rahman Abdallah Mostafa	Sharkia	1300314	Ref. & A/C	012 3583613	Inspector	1985
18	Mohamed Ahmed Mahmoud	Sharkia	1300373	Ref. & A/C	010 3137825	Inspector	1989
19	Ramadan Esmael El-Said Kassab	Sharkia	1301739	Ref. & A/C	010-1546388	Inspector	1984
20	Wael Ahmed Ebrahim El- Shoura	Gharbia	1600854	Ref. & A/C	012 7222737	Trainer	1991

Twenty Eighth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Ahmed Aly el- Said	Behira	18023095	Chemistry	010 3926817	Enviromental Inspector	2002
2	Mohamed Hamdy El- Babelly	Cairo	103453	-	-	Enviromental Inspector	1998
3	Mohamed Abdel - Mbdy Mahmoud Soliman	Giza	-	Physics (Ref. A/C)	010 3817246	Enviromental Inspector	2002
4	Mahmoud Mohamed Mohamed Ebrahim	Seuz	400031508	Chemistry (Ref. A/C)	010 6179157	Enviromental Inspector	2001
5	Ahmed Fathy Abdel Baky El Adll	Alexandria	-	Chemistry (Ref. A/C)	012 4001361	Enviromental Inspector	2000
6	Adel Awad Ebrahim Mohamed Awad	Giza	2101958	Ref. & A/C	012 3587317	Teacher	1993
7	Yasser Mansour Ahmed Awad	Giza	2101875	Ref. & A/C	012 0297292	Teacher	1999
8	Hesham Shazelly Yossef Abdel- Krcm	Cairo	102319	Ref. & A/C	010 8272781	Trainer	1992
9	El- Banawy Harned Mohamed El-Banawy	Giza	2101693	Ref. & A/C	012 3784423	Trainer	1976
10	Alaa Farghally Kossan Attia	Cairo	101398	Ref. & A/C	02/ 35556294	Trainer	1997
11	Mohamed Kotb Mohamed Hussien	Cairo	102794	Ref. & A/C	-	Trainer	2002
12	Helal Saad helal hassanin	Sharkia	1300599	Ref. & A/C	055/ 2420554	Trainer	1995
13	Khaled Ahmed Mohamed Gaballah	Sharkia	1300375	Ref. & A/C	055/2421357	Trainer	1992
14	Hesham Talaat Mohamed Aly	Cairo	103935	Ref. & A/C	-	Trainer	1991
15	Mohamed Mohamed Mohamed Afaan	Gharbia	1600852	Power (Ref.& A/C)	012 7707176	Trainer	1969
16	Hamed Helmy El- mahedy Arna	Dakehallia	1203334	Ref. & A/C	050 9140126	Trainer	1985
17	Nabile Kamal Fahmy Sedarous	Alexandria	201432	Ref. & A/C	012 3709340	Trainer	1988
18	Medhat Abdel - Rahman El-Said	Cairo	101134	Ref. & A/C	010 1738664	Trainer	1989
19	Wafaa Maheedy Aly Mostafa	Cairo	100427	Ref. & A/C	010 2969260	Teacher	1996
20	Mohamed Sherif El- Senosy	Kalliobia	1400915	Ref. & A/C	010 6914065	Trainer	1992

Twenty Ninth Training Course

No	Name	Governorate	ID No	Major in	Tel. No.	Current Position	Date of Graduation
1	Maged Attia Mohamed Hassan	Palastin	-	Automotive	012 2183671	Technician	-
2	Ahmed Essam El-Din Mohamed	Zeitoun	-	Ref. & A/C	010 1303631	Technician	1993
3	Ahmed Mostafa Kamel Ahmed	Kalliobia	1401938	Ref. & A/C	012 3812708	Technician	1994
4	Tarrek Shawky Abdel-Khalik	Cairo	4732	Ref. & A/C	012 3306748	Group Manager	1987
5	Mohamed Aboulfath Mahmoud	Menofia	1702133	Ref. & A/C	048/ 3960740	Technician	1998
6	Wael Abdel-Shafy Diab Ebrahim	Kalliobia	140451	Ref. & A/C	010 8015164	Observer Quality	1990
7	Nageh Abdel-Hafiz Abdallah	Sharkia	1301532	(Ref. & A/C)	015 3717461	Technician	1993
8	Tallal Essam Hussien Saleh	Giza	104331	-	012 5507955	Technician	-
9	Khaled Mohamed Nady	Cairo	104751	Ref. & A/C	010 1945214	Technician	1990
10	Ahmed Mohamed Ahmed Mostafa	Cairo	101698	(Ref. & A/C)	012 2544175	Engineer	2002
11	Kamel Kamel Mohamed Abou-Hamama	Gharbia	1603055	Production (Ref. & A/C)	010 6195802	Technician	1985
12	Usama Ahmed Mohamed	Cairo	4879	Ref. & A/C	012 2783186	Technician	1987
13	Gamal Hassan Mohamed Aly	Cairo	100539	power (Ref. & A/C)	010 8243192	Technician	2004
14	Alaa Esmail Mohamed Ahmed	Cairo	9020100	power (Ref. & A/C)	02/ 4847359	Technician	1992
15	Ahmed Mohamed Mahgoub Salem	Alexandria	200971	Power (Ref. A/C)	03/ 4510216	Engineer Production	2004
16	Helmy Goma Hashem Abdel-Naby	Beni-Saif	2201091	Ref. & A/C	010 5323855	Technician	1991
17	Ahmed Ragab Abdel-Aziz	Giza	2745252	Ref. & A/C	010 5749668	Technician	1992
18	Amr El-Khoudary Mohamed	Kalliobia	1400696	Power (Ref. A/C)	010 1615177	Maintenance Manager	2000
19	Josif Ryad Ebrahim Mansour	Sharkia	1300037	Ref. & A/C	012 23631665	Maintenance Manager	1988
20	Mahmoud Hassan Sabet Attia	Giza	2100415	Ref. & A/C	010 4056933	Trainer	1988

Thirtieth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Ussama Abdel Wadod Abdel Rassol	Kalliohia	1400756	Power	0133428745	Eng. At Banha Tech	1992
2	Mohamed Abdel Hamed Taha	Dakelhia	—	—	—	Section Manger	1975
3	Abdel Hamed Zaky Abdel All Saad	Menofia	1701231	Power	0100580232	Eng	1974
4	Shokry Ahmed Hassan El- Seaddi	Menofia	1700693	Power	0103103149	Eng	1977
5	Kamal Abdel Moatty Mohamed	Menofia	1702291	Teacher	3705206	Tech	1985
6	Mahmoud Abdel Alla Mahmoud	Menofia	1700534	Teacher	0106758293	teacher Eng. Educ	1983
7	Sabah Kamel Ghanem Seror	Cairo	110994	Power	02/6390035	Maintenance	1989
8	Neamat Alla Faris Nakhla	Cairo	67146	Power	0122379300	Teacher	1990
9	Ghada Kassem Abdel Rahman	Cairo	0100286	Power	0104320583	Teacher	1990
10	Hannan Ahmed Artia Foda	Cairo	0101249	Power	02/4529497	Teacher	1987
11	Edd Ebrahim Mohamed Ahmed	Cairo	144438	Power	02/5270029	Teacher	1990
12	Saber Mohamed Abdel Atry Mattrer	Kalliohia	1400716	Automotive	0105416603	Teacher	1983
13	Khaled Abdel Fattah El- Saïd	Cairo	105218	Power	0108762318	Teacher	1982
14	Magdi Muhssen Rushdy	Cairo	0102793	Power	0123340717	Teacher	1994
15	Ahmed Lamee Aly Ahmed	Cairo	0103695	Power	0123325480	Teacher	1990
16	Saber Saad Abdel Fattah	Kalliohia	1401692	Ref. & A/C	02/2830886	Teacher	1973
17	Mohssen Mohamed Mohamed	Demiat	1100158	Automotive	4187531	Teacher	1975
18	Adel Morcouc Lottfy Shally	Cairo	82956	Automotive	0121858329	Teacher	1982
19	Mahmoud Shawky Meselhy	Sharkia	1301457	Ref. & A/C	055/3680562	Teacher	1982
20	Mohamed Abdel Fattah Mohamed	Kalliohia	1400932	Ref. & A/C	0120751975	Teacher	2001

Thirty First Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No	Current Position	Date of Graduation
1	Mohamed Said Abdel Motaal	Esmailia	1900056	Power	0105608516	Teacher	1985
2	Said Said Mohamed El- Haddy Emam	Kalliobia	1400791	Ref. & A/C	0129132909	Teacher	2002
3	Ebrahim Abdrabou Abdel Samee	Kalliobia	1403958	Ref. & A/C	0108047436	Teacher	2002
4	Said Ahmed Mohamed Rashid	Cairo	101012	Automotive	02/2541950	Teacher	1990
5	Gamal Philib Yassa	Cairo	0103976	Refrigeration	0124596310	Teacher	2006
6	Mohamed Said Aly Ebrahim	Giza	2102394	—	02/8119602	Production Supper Paizer	1996
7	Mohamed Fathy Meawad Aly	Giza	138829	Automotive	0124124540	MangerProject Steel Master Co	1986
8	Ozoris Rbshedy Selwanes Eshak	Cairo	0100738	Ref. & A/C	0127974515	Tech. Ref. & A/C	1980
9	Mohamed Safvat Ahmed Atria	Cairo	104598	Ref. & A/C	0123597138	Tech. Ref. & A/C	1996
10	Emad Abdel Samad Abdalla	Cairo	0101693	Ref. & A/C	0121173985	Manger Of Ref. Section At Mlog	1983
11	Abdel Khalek El- Said Abdel Khalek	Cairo	263816	Survive Of Maintenance	0124512679	Tech. At Bahgat Co	1985
12	Mahmoud Ahmed Mahmoud	Cairo	—	Ref. & A/C	0123556069	Tech. At Ideal Co	1988
13	Abdel F'atrah Mohamed Abdel Fattah	Cairo	105497	Ref. & A/C	0124766497	Tech. Ref. & A/C	2003
14	Hanaa Fawzy Ebrahim Abou Saif	Cairo	2404239	Ref. & A/C	0123733461	Tech. Ref. & A/C	1997
15	Mostafa Kamel Ahmed	Cairo	102792	Ref. & A/C	0123149562	Tech	1982
16	Mohamed Foad Abbas Hassan	Cairo	101036	Ref. & A/C	0103972928	Tech. Ref. & A/C	1995
17	Mohamed Said Mohamed Abou Serec	Cairo	101054	Elect- Machines	0103365736	Tech	1998
18	Nabil Desoky Mostafa Desoky	Giza	2101993	Metals	0100427038	Production Technation	2001
19	Hazem Shaker Ahmed Shaker	Cairo	1000057	Power	0123353534	Eng. At Miraco Carrier	2005
20	Zarif Nessim Israel Barnaba	Cairo	100932	Ref. & A/C	0121829040	Tech. Ref. & A/C	1991

Thirty Second Training Course

No.	Name	Governorate	ID. No	Majorin	Tel. No.	Current Position	Date of Graduation
1	Mostafa Mohamed Yossef Mohamed	Minia	2400576	Power	0124262946	Teacher	1975
2	Mohamed Ahmed Mohamed	Cairo	0102117	Tech - Ref & A/C	0121430813	Tech - Ref & A/C	—
3	Halla Abdel Halem Mostafa	Port - Said	300064	Power	0124464195	Teacher	1982
4	Mohamed Hassan Hassan Rawy	Port - Said	300052	Automotive	066/3417337	Teacher	1987
5	Tafida Aly About El-Nour Ebrahim	Port - Said	300104	Power	0123269393	Teacher	1980
6	Haisam Saad Aly Rahem	Soudi - Arabia	880036	Power	3227276	Teacher	1983
7	Ahmed Helmy Aly Abdel Hafiz	Souhag	2600454	Ref. & A/C	0109814112	Teacher	1993
8	Said Mansour Habib	Aswan	2800774	Ref. & A/C	0125039485	Teacher	2000
9	Waleed Khalifa Abdel Rahman	Souhag	2603275	Ref. & A/C	093/2501263	Teacher	1994
10	Artef Fathy Mohamed Soliman	Souhag	2601614	Ref. & A/C	0124219975	Teacher	1994
11	Salch Fawzy El- Sawy El- Said	Sharkia	1302598	Ref. & A/C	255/3762823	Teacher	2001
12	Rehan Meawad Aly Ebrahim	Dakelhalla	1203198	Ref. & A/C	0108660616	Teacher	1996
13	Abou El- hassan Shazly Said	Red - Sea	3100072	Ref. & A/C	065/3547405	Teacher	1993
14	Mahmoud Ahmed Abdel Fattah	Cairo	0104777	Ref& AC	012 5865432	Technician	2004
15	Ahmed Mohamed Agany	Cairo	-	Ref. & A/C	010 3732080	Technician	2005
16	Mohamed Abd El Dayem Mohamed	Sharkeya	140711	Ref.&A/c	055 3951742	Technician	1990
17	Saria Ahmed Abd El Rahman	Tebin	45020	Ref. & A/C	010 2812572	Technician	1996
18	Abd Allah Mohamed Aly El Shafec	Cairo	0100591	Ref. & A/C	010 1222461	Technician	1981
19	Ehab Sayed Mosuad Abdo	Cairo	0102531	Ref. & A/C	010 6337838	Technician	2005
20	Mohamed Ahmed Youssef	Cairo	0103919	Ref. & A/C	010 3598212	Technician	2003

Thirty Third Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Adham Abdel Bary Aly Mostafa	Kenna	2700159	Ref. & A/C	0100516341	Technical Research	1995
2	Mahmoud Emam Ebrahim Mohamed	Cairo	—	Ref. & A/C	02/4930654	Manager Of Ref. & A/C	1982
3	Mohamed Abdalla Mostafa Elbrahim	Cairo	0103857	Ref. & A/C	02/3219106	Tech. Of Ref & A/C	1996
4	Alaa Ahmed Mohamed Ahmed	Minia	2400954	Power	010684246	Teacher	1989
5	Sarby Abdel Fatah Badawy El- Said	Gharbia	1602399	Ref. & A/C	0104548501	Teacher	1984
6	Said Aly/Mersal Hussien	Aswan	2800357	Ref. & A/C	0124638736	Teacher	1973
7	Mostafa El- Said Hussien Yossef	Kenna	2701377	Ref. & A/C	0123113257	Teacher	1984
8	Mohamed Ahmed Abdel Naem	Kenna	—	Ref. & A/C	5216179	Teacher	1984
9	Sameh Aly El- Sawy Mohamed	Esmailia	1900298	Ref. & A/C	0123713780	Tech. Of & A/C	1997
10	Mohamed Abdou El- Desoky	Gharbia	68902	Power	0105235262	Teacher	1989
11	Essam Abdel Halem Abdel Daim	Menofia	1701034	Power	0123107665	Teacher	1988
12	Mahmoud Mesalhy Soliman	Alex	200697	Ref. & A/C	0122628287	Teacher	2001
13	Abdou Said Abdou Maarof	Gharbia	1600151	Power	0123788657	Teacher	1988
14	Adel Labib Kirolos	Souhag	—	Ref. & A/C	0128320886	Teacher	1973
15	Aly Mohamed Ahmed Soliman	Souhag	57716	Power	0102528299	Teacher	1994
16	Abdel Hamed Mohamed Yossef	Kenna	2701616	—	097/2269646	Teacher	1974
17	Yasser Amen Ahmed Torkia	Menofia	1701754	Ref. & A/C	0109898198	Teacher	1996
18	Morad Girgis Demian Beshay	Gharbia	1601295	Power	0124511610	Teacher	2002
19	Razek Abdalla Saleh Singer	Gharbia	103418	Electricity	0108012639	Teacher	1984
20	Mohamed Sabet Alem El- Din	Cairo	—	Power	0122913385	Teacher	1975

Thirty Fourth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mohamed Ahmed hassan Ahmed	Kenna	2701715	Ref. & A/C	010 4916628	Teacher	1974
2	Said Mohamed Hassan Mohamed	kenna	2551	Ref. & A/C	012 8815478	Teacher	1995
3	Attralla Farrag Abou-el-Hassan Abaddy	Kenna	2705518	Ref. & A/C	096 6821441	Teacher	1995
4	Mahmoud Ahmed Abou - strait	Aswan	280051	Ref. & A/C	-	Teacher	1992
5	Abdel-Redda El- far 'Fawfik	-	-	Ref. & A/C	-	Teacher	-
6	Mohamed Kassem Mohamed Ahmed Anany	Souhag	2600115	Ref. & A/C	012 8022918	Teacher	1993
7	Salem Manae Diab Abdel- Salan	Aswan	2800432	Ref. & A/C	097 4718937	Teacher	1992
8	Mansour Khoudary hassan abdalla	Aswan	2800358	Ref. & A/C	010 0276786	Teacher	1992
9	Aly abdel- rahman aly rahman aly	Assuit	2500815	Ref. & A/C	010 4733721	Teacher	1992
10	Rabeey hassan mahmoud osman	Aswan	2800271	Ref. & A/C	012 5461632	Teacher	1992
11	Ashraf Nour-El-Din Abdel- Aziz	Aswan	280053	Ref. & A/C	012 7140622	Teacher	1992
12	Sultan Bassry Mahmoud hassanin	Aswan	2800616	Ref. & A/C	012 2818434	Teacher	1992
13	Gihan Bahr Mohamed nour nasser	Aswan		Ref. & A/C	097 2310027	Teacher	1997
14	Abdel Nasser Abdel - Sattar Ahmed	Souhag	2603773	Ref. & A/C	012 7062792	Teacher	1993
15	Ahmed Rabeec Mahmoud Metwally	Kenna	2700134	Ref. & A/C	010 2632408	Teacher	1993
16	Flemdan Ahmed Yossef Gomaa	Kenna	2700299	Ref. & A/C	095 815271	Teacher	1977
17	Ashraf Kamel Reiad abdel-messeh	Souhag	2600233	Ref. & A/C	093 2798281	Teacher	1994
18	Hany Mohamed El-rashidy hassan Khaliil	Kenna	27017930	Ref. & A/C	012 8028687	Teacher	1998
19	Medhat Shabban Mahmoud Kamal El-Din	Souhag	2602555	Ref. & A/C	010 9452990	Teacher	1994
20	Waleed Khalifa Abdel - Rahman Abdel-kerim	Souhag	2603275	Ref. & A/C	093 2501263	Teacher	1994

Thirty Fifth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Hussen Mohyee El-Din hassan Mohamed	Aswan	2800219	Ref. & A/C	097 3590851	Teacher	1998
2	Mohmoud Abdel- Nabby Gadalla	Alexandria	201093	Ref. & A/C	03 4500299	Teacher	1992
3	Ayman Mohamed el-said soliman	Aswan	2800279	Ref. & A/C	097 4501549	Teacher	1992
4	Ahmed Abdel Mottelb Sadek	Aswan	2800615	Ref. & A/C	097 4500273	Teacher	1992
5	Attef Labib Yossef Bekheet	Souhag	2600057	Ref. & A/C	010 1071062	Teacher	1992
6	Ashraf Assil Nour el- Din Ebrahim	Souhag	2601158	Ref. & A/C	012 9080243	Teacher	1992
7	Mamdouh Ahmed Hassan Awis	Souhag	26021704	Ref. & A/C	093 2321753	Teacher	1992
8	Ahmed Mostafa Mohamed Ahmed	Souhag	2600235	Ref. & A/C	012 8074367	Teacher	1994
9	Zaky Mohamed Rashidy Ahmed	Kenna	2800757	Ref. & A/C	095 2254642	Teacher	1992
10	Mansour Mohamed Ahmed Soliman	Kenna	2700218	Ref. & A/C	012 9086889	Teacher	1995
11	Ashraf Abdel - Kerrim Khoudary Metwally	Aswan	2800195	Ref. & A/C	010 2292990	Teacher	1995
12	Ashraf Fahkry Abdel-Metaal Mohamed	Aswan	2800918	Ref. & A/C	012 4544899	Teacher	1992
13	Rashwan Ahmed Rashwan Mossa	Kenna	2700513	Ref. & A/C	010 3054745	Teacher	1981
14	Mostafa Mohamed Mahmoud El- Tawil	Kenna	2700835	Ref. & A/C	010 7645990	Teacher	1993
15	Hussen Ahmed El-Said Meawad	Kenna	2701792	Ref. & A/C	010 8724392	Teacher	1980
16	Abdel - Basset Selem Abdel- Ghafar Selem	Kenna	-	Ref. & A/C	-	Teacher	1978
17	Khaled Abdel - Wahab Mohamed Ahmed	Aswan	2800291	Ref. & A/C	010 0652559	Teacher	1992
18	Mohamed Farthy Mohamed Aly	Aswan	270500	Ref. & A/C	097 3135180	Teacher	1992
19	Ahmed Said Mamdouh Ebrahim	Cairo	103873	Ref. & A/C	018 2686432	Teacher	1993
20	Mohamed Shokry Hussen Kassam	Souhag	2601111	Ref. & A/C	093 2535771	Teacher	1992

Thirty Sixth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Fifi Nabile Mohamed Abdel - Atty	Kafer El Sheikh	1500608	Ref. & A/C	012 7169410	Teacher	2002
2	Ebrahim Lotfy Mohamed Ahmed	Cairo	-	Ref. & A/C	010 5869957	Teacher	2002
3	Mohamed Salama Abdel - Haddy Mohamed	Alexandria	170200691	Ref. & A/C	010 9283643	Teacher	2005
4	Ahmed Ahmed Meawad	Giza	2103732	Ref. & A/C	0100562245	Teacher	1996
5	Noha Abdel- Atty Abdel - Wahab	Cairo	100036	Ref. & A/C	010 6073189	Teacher	1984
6	Aymen Mohamed Mohamed Ebrahim	Cairo	106775	Ref. & A/C	012 7088332	Teacher	1990
7	Redda Aly Mohamed Yossef	Kalliobia	1401091	Ref. & A/C	013 3361393	Teacher	1978
8	Mohamed Said Abdel - Ghany Yossef	Cairo	101213	Ref. & A/C	012 8728731	Teacher	1984
9	Aly Mahmoud Abou-Zeis Hissan	Cairo	101175	Ref. & A/C	02 4274896	Teacher	1993
10	Amal Aly Dahab El- Gendi	Alexandria	49278	Ref. & A/C	-	Teacher	1988
11	Hassan Fawzy Mohamed El Strar	Cairo	102796	Ref. & A/C	010 5141393	Teacher	2006
12	Hamada Mohamed Abdel- Rahman Awis	Beni-Sewif	2201011	Ref. & A/C	012 9688916	Teacher	2000
13	Saber Shaaban Emam Said	Beni-Sewif	82201099	Ref. & A/C	082 9200619	Teacher	2004
14	Ahmed Lotfy El-Said Arwa	Cairo	100293	Ref. & A/C	02 3068681	Teacher	1988
15	Sabry Ramadan Ahmed	Gharbia	1601759	Ref. & A/C	010 4194979	Teacher	2004
16	Medhat Mohamed Ahmed Abdel - Rahman	Cairo	100951	Ref. & A/C	012 4595824	Teacher	1990
17	Hanaa Aly Abdel - Rahman	Cairo	101249	Ref. & A/C	012 8787556	Teacher	1986
18	Mohamed Reface Abou El-Hassan Yassen	Aswan	374043	Ref. & A/C	09730 74043	Teacher	1995
19	El-Amir Alfy Saleb Abou - Saif	Aswan	2800693	Ref. & A/C	012 3887435	Teacher	1992
20	Mohessen Aly Esmael Mohamed	Aswan	2800293	Ref. & A/C	018 2632278	Teacher	1992

Thirty Seventh Training Course

No.	Name	Government	ID. No.	Major in	Id. No.	Current Position	Date of Graduation
1	Saffaa Aly Soliman Aly	Port -Said	30268	Ref. & A/C	066 3909709	Teacher	1990
2	Yossef Mohamed Yossef Terra	Port -Said	300211	Ref. & A/C	066 3728683	Teacher	1980
3	Tarrek Mohamed Mahmoud Mohamed	Port -Said	3000310	Ref. & A/C	010 5011419	Teacher	1995
4	Nassera El- Said Hassan	Port -Said	300127	Ref. & A/C	066 3720207	Teacher	1980
5	Yossef Yossef Mohamed	Port -Said	300136	Ref. & A/C	010 2759428	Teacher	1978
6	Fawzy Abdel-Ghamy Wahed Abdalla	Dakehallia	1202115	Ref. & A/C	0503225645	Teacher	1976
7	Mamdoh El- Said Attia El -Said	Kenna	40274	Ref. & A/C	010 1840143	Teacher	1978
8	Gamal Ahmed El-Desoky	Port-Said	300111	Ref. & A/C	012 479899	Teacher	1978
9	Mohmed Mohamed Mahmoud Osman	Port- Said	300278	Ref. & A/C	012 334574	Teacher	1978
10	Wahba El -Said El Refaey El- Lailly	Port- Said	45192	Ref. & A/C	012 790857	Teacher	1978
11	Zaghloul Abdel- Sadek Abdel- Hamed	Port -Said	1701232	Ref. & A/C	012 2831967	Teacher	1978
12	Ebrahimb El- Said Mohamed El-Gizy	Port -Said	300274	Ref. & A/C	012 3486594	Teacher	1978
13	Mohssen Mohamed Fatthy Ebrahim	Port- Said	300253	Ref. & A/C	010 5632546	Teacher	1990
14	Mohamed Hanafy Biomy Abdalla	Port- Said	52412	Ref. & A/C	010 1820279	Teacher	1990
15	Atref Mohamed Awad Shaaban	Port-Said	47470	Ref. & A/C	010 7663554	Teacher	1978
16	Aly Abdel- Fattah Ahmed El- Araby	Port-Said	8800034	Ref. & A/C	010 7332433	Teacher	1983
17	Nadia Ahmed Talaat El-Said	Port -Said	300065	Ref. & A/C	066 3603917	Teacher	1989
18	Hassan Mohamed Ahmed El Daba	Port-Said	300312	Ref. & A/C	010 9506557	Teacher	1974
19	Taghrid Ebrahim Asffor	Port-Said	300305	Ref. & A/C	010 5266044	Teacher	1987
20	Karim Ebrahmi Mohamed El Tarrably	Port-Said	300148	Ref. & A/C	012 2356669	Teacher	1990

Thirty Eighth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Ehab Mahmoud Hassanin Nassar	Souhag	2601556	Ref. & A/C	012 3821682	Teacher	1992
2	Yeha Mahmoud Ahmed Alian	Aswan	2800096	Ref. & A/C	097 4501834	Teacher	1992
3	Abdel Naem Hassan Mohamed Adam	Aswan	2800116	Ref. & A/C	010 9688572	Teacher	1992
4	Mohamed Yossef Aly Mohamed	Aswan	2800251	Ref. & A/C	010 27004528	Teacher	1992
5	Ramadan Ragab Hamed Hassan	Aswan	2800091	Ref. & A/C	012 4215119	Teacher	1992
6	Abdel - Moneem Abdilly Soliman	Kenna	2700572	Ref. & A/C	010 0331601	Teacher	1995
7	Abdel Mehana Badran Yonnis	Kenna	27001111	Ref. & A/C	096 5410116	Teacher	1992
8	Mohamed Okasha Mohamed Hussen	Kenna	2700495	Ref. & A/C	018 2246832	Teacher	1993
9	Ashraf Abdel- Raddy Hussen Kennawy	Kenna	2701593	Ref. & A/C	012 4163232	Teacher	1992
10	Kamal Mohamed Nassary Abdel - Rahman	Kenna	2701719	Ref. & A/C.	010 6345771	Teacher	1993
11	Ahmed Said Hassan Hussen	Kenna	2702858	Ref. & A/C	010 7716339	Teacher	1998
12	Hussecny hassan Soliman Aly	Souhag	2601355	Ref. & A/C	093 2621927	Teacher	1994
13	Fayz Sarwat Fekry Said	Souhag	2601392	Ref. & A/C	010 3670442	Teacher	1992
14	Mareey Anwar Marec Zidan	Souhag	2601731	Ref. & A/C	093 32551003	Teacher	1994
15	Ahmed Aly Hussen Ahmed	Kenna	2700131	Ref. & A/C	010 7006853	Teacher	1978
16	Hussam Helal Naser Abdel- Shafy	Sharkia	1302357	Ref. & A/C	012 6544273	Teacher	1999
17	Yossef Abdel- Salam Esmael Mohamed	Sharkia	1300552	Ref. & A/C	012 3513253	Teacher	1993
18	Khalaf Ebrahim Desoky El-Said	Souhag	2601778	Ref. & A/C	012 2928284	Teacher	-
19	Mohamed Said Aly Hamdalla	Kenna	3615	Ref. & A/C	010 7271517	Teacher	1995
20	Nabile El- Abd Ashaia Gurgis	Kenna	2700175	Ref. & A/C	010 6191283	Teacher	1980

Thirty Ninth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Mohamed abd El fattah	Gharbeya	—	Ref& A/C	012/3953425	Technician	1982
2	Ahmed Mohamed Hassan Soliman	Alexandria	201279	Ref& A/C	012/6824464	Technician	2004
3	Maha Ayad Markos	Cairo	264020	Ref& A/C	010/1905711	Technician	1986
4	Hamada Mohamed Abd El Kawy	Giza	3954	Ref& A/C	02/2955813	Technician	1974
5	Alaa Mohamed Antar	Cairo	101832	Ref& A/C	02/5437049	Technician	2002
6	Gomblat Abd El Hady Mahmoud	Sharkeya	1303154	Ref& A/C	2963871	Technician	1984
7	Mohamed Farouk Mohamed	Gharbeya	1601273	Ref& A/C	040/5360662	Technician	2002
8	Mohamed Aly Mohamed Zin El Din	Cairo	0100971	Ref& A/C	010/1660017	Technician	1998
9	Hazem Shaker Ahmed Shaker	Cairo	0100057	Ref& A/C	012/3353534	Technician	2005
10	Hosney El Sayed Abd El Megid	Sohag	2641124	Ref& A/C	012/3256512	Technician	1992
11	Sayed Mahmoud Sayed Mahmoud	Cairo	0101035	Ref& A/C	012/7102420	Technician	2004
12	Mohamed Sherif El Senousy	Kaliobeya	1400915	Ref& A/C	010/6914065	Technician	1993
13	Sayed Abd El Moneim Refacy	Sharkeya	1301193	Ref& A/C	055/2821106	Technician	1986
14	Zaki Ahmed Soliman	Dakahlia	74398	Ref& A/C	3640335	Technician	1982
15	Hussein El Sayed Hussain	Kaliobeya	1403319	Ref& A/C	010/3795803	Technician	1993
16	Mohamed Ahmed Fouad	Giza	2200099	Ref& A/C	010/5327999	Technician	—
17	Seham Naguib Tawfik	Cairo	0101861	Ref& A/C	02/5566462	Technician	2000
18	Magdi Abd El Salam	Cairo	103896	Ref& A/C	02/2316223	Technician	1985
19	Yasser Amr Hanafi	Cairo	0101551	Ref& A/C	02/4107962	Technician	1984
20	Mamdouh Aly Aly Osman	Assuit	2500714	Ref& A/C	010/5743193	Technician	1989

Fortieth Training Course

No.	Name	Governorate	ID No.	Major in	Tel. no.	Current Position	Date Of Graduation
1	Mohamed Mostafa Abdo	Cairo	58608	Ref. &A/C	02/ 5691213	Technician	1971
2	Abd El Ghafour Gamal El Din	Cairo	1402091	Ref. &A/C	02/ 2270161	Technician	2002
3	Alaa El Din Mokhtar	Cairo	0100298	Ref. &A/C	012 4328813	-	1994
4	Soliman Abd El Hamid Salman	Cairo	0103876	Ref. &A/C	010 1952783	Technician	2000
5	Atef Fayez Ahmed	Giza	96951	Ref. &A/C	012 2947458	-	-
6	Mohamed Fayez Ahmed	Giza	2100111	-	012 3878012	-	-
7	Hany Hassan Zaki	Menoufeya	106160	Ref. &A/C	010 1363813	Technician	1998
8	Walid Mohamed Mohamed Shams	Cairo	101571	Ref. &A/C	02/ 2391151	Technician	1991
9	Ahmed Galess Ibrahim	Cairo	0102296	Ref. &A/C	010 9920999	-	2001
10	Sherif Mostafa Ahmed El Daqshan	Dakahlia	1217712	Ref. &A/C	059/ 4481729	Technician	1994
11	El Sayed Shaaban Ahmed El Tanrawy	Dakahlia	1202377	Ref. &A/C	012 8069402	Technician	-
12	Ahmed Mohamed Hasanein	El Kaliobeya	1404334	Ref. &A/C	013 2729959	Technician	2005
13	Ahmed Youssef El Sayed	El Kaliobeya	1401995	Ref. &A/C	02/ 4671693	Technician	1996
14	Zaki Abd El Moneim Zaki Mahmoud	Cairo	112692	Ref. &A/C	012 4063355	Technician	2002
15	Mohamed Gamal Ahmed	El Menya	1240076	Ref. &A/C	010 8781394	Technician	2004
16	Adel Ahmed Radi Ahmed	El Menya	79682	Ref. &A/C	010 7926569	Technician	1990
17	Ahmed Raafat Abd El Gaber	El Menya	2401959	Ref. &A/C	012 4848848	Technician	2002
18	Meichel Adel malak	El Menya	2400032	Ref. &A/C	012 4070750	Technician	2006
19	Zarif Tobia	El Menya	2402476	Ref. &A/C	086/ 7711548	Technician	1972
20	Mena Adel Malak	El Menya	2400191	Ref. &A/C	010 7971743	Technician	-

Forty First Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. no.	Current Position	Date Of Graduation
1	Mohamed Abd El Dayem	El Menya	2403236	Ref. & A/C	08/ 67718153	Technician	2002
2	Ragab Morsy Ahmed Darwesh	Beny Sweif	2201299	Ref. & A/C	082/ 7541746	Technician	1988
3	Sayed Farouk Ahmed Osman	El Menya	2401632	Ref. & A/C	086/ 7661741	Technician	2001
4	Lewis Latif Habib	El Menya	22400885	Ref. & A/C	086/ 7820013	Technician	1980
5	Isak Latif Habib Boktor	Assuit	3500134	Ref. & A/C	088/ 7824977	Technician	1981
6	Nabil Barzik Boshra	Samalout	49928	Business Adm.(Ref. & A/C)	086/ 7724398	Technician	1985
7	Mohamed Shehata El Sawy	El Menya	2401375	Ref. & A/C	086/ 7721533	Technician	1998
8	Rabee Khalaf Abd El Fodel	El Menya	2401251	Ref. & A/C	086/ 7640768	-	1989
9	Mohamed Saad Abd El Hamid	El Menya	2403373	Ref. & A/C	010 8140133	Technician	1998
10	Ahmed Sayed Mohamed	El Gharbeya	1601332	Mechanical Power (Ref. & A/C)	012 7450683	Technical Manager	1992
11	Mohamed Aly Mohamed Aly	Dakahleya	1202175	Ref. & A/C	012 6826308	Technician	2000
12	Hussein Mohamed Hussein Eid	Dakahleya	1200034	Mechanics (Ref. & A/C)	010 9552828	Technician	1964
13	Refaat Abd El Latif Mohamed	Cairo	0101516	Ref. & A/C	010 1231075	Ref. Technician	1996
14	Hossam Fawzy Hassan	Aswan	280553	Ref. & A/C	010 3753617	Technician	1993
15	Mahmoud Khairy Maghraby Mansour	Qualiobeya	-	Ref. & A/C	010 3904752	Technician	-
16	Mohamed Soliman Mohamed	Menofeya	170539	Ref. & A/C	012 9057092	Technician	1997
17	Walid Mohamed Ramadan	Sharkeya	27300	Maintenance(Ref.&A/C)	012 3307548	Maintenance Ref. & A/C	1994
18	Mohamed Mohamed Abdelzaher	Cairo	110737	Power (Ref. & A/C)	012 3062929	Quality Eng.	2004
19	Fadia Hassan Kotb Ragab	Menofeya	1701441	Chemistry (Ref. & A/C)	010 1985450	Enviromental Inspector	1997
20	Adel Abd El Hay Abd El Hamid	Cairo	101751	Ref. & A/C	012 3168863	Maintenance Tech	1987

Forty Second Training Course

No.	Name	Governorate	ID No.	Major in	Tel. no.	Current Position	Date Of Graduation
1	Abd El Fattah Abd El Hamid Abd El Fattah	Sharkeya	1301236	.	010 8860355	Recovery Tec.	1987
2	Ahmed, Abd El Tawab Mohamed Osman	El Fayoum	2301016	Ref. & A/C	012 7811866	Technician	1986
3	Ahmed Samy Abd El Moneim Mohamed	Cairo	0105477	Ref. & A/C	010 8252714	Engineer	-
4	Osama Ahmed Mohamed Abou El Ghaz	Cairo	4879	Ref. & A/C	012 2783186	Technician	1987
5	Ahmed Mostafa kamel Ahmed	Qualiobeya	1401938	Ref. & A/C	012 3812708	Technician	1995
6	Mohamed Mohamed Shaaban Mohamed	Giza	211831	Ref. & A/C	012 6169653	Technician	-
7	Mohamed Farallah Abd El Gawad	Menofeya	1701736	Ref. & A/C	012 5667972	Technician	2000
8	Khaled Ahmed Selim Mostafa	Sharkeya	1302555	Ref. & A/C	012 3151597	-	2002
9	Akram Abd El Moneim Abd El Rahman	Menofeya	86603	Power(Ref.&A/C)	010 8391957	-	1994
10	Ahmed Ghareeb El Sayed Hassan	Sharkeya	1302255	Ref. & A/C	055/5681498	Technician	1990
11	Sherif Hussein Abd El Hamid	Cairo	801275	Ref. & A/C	010 1574808	Maint. Tec.	1993
12	Walid Aly Ibrahim Abd Allah	Sharkeya	2337	Ref. & A/C	012 6963644	Technician	2001
13	Mahmoud Abd El Rafce Sanad Taleh	Sharkeya	-	Power(Ref.&A/C)	012 3076443	Ref. & A/C Training Eng.	1987
14	Khaleed Abd El Naser Badawy Mohamed	Giza	2103578	Ref. & A/C	010 2328115	Technician	1992
15	Mohamed Saad Ahmed Ibrahim	Cairo	30102857	Equipments (Ref. & A/C)	012 2780112	Technician	1975
16	Emad Saber Abou Seif Botross	Kena	2701411	Power(Ref.&A/c)	012 2191274	Quality Eng.	1998
17	Mohamed, Ashour Mostafa	Cairo	104151	Ref. & A/C	012 3857930	Teacher&Trainer	1994
18	Khaled Ramadan Hussein El Sayed	Giza	2100538	Ref. & A/C	010 3750841	Teacher	1999
19	Hazem Monir Ahmed Zeyad	Souhag	2602593	Ref. & A/C	012 5652458	Teacher	1992
20	Khaled Mohamed Osman Mostafa	Giza	2101778	Ref. & A/C	012 3821509	Technical Ref. & A/C Teacher	1994

Forty Third Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. no.	Current Position	Date Of Graduation
1	Mahfouz Ibrahim Eskandar	Beny Sweif	2200978	Ref. &A/C	082/7200426	-	1994
2	Mohamed Saad Abas	Cairo	165251	Ref. &A/C	012 4034060	Technician	1994
3	Amr Aly Farghaly Ahmed	Giza	2101396	Ref. &A/C	012 5446342	Ref. &A/C Teacher	1992
4	Hussein Mohamed Radwan	Kena	2700371	Ref. &A/C	010 4399156	Ref. &A/C Teacher	1988
5	Adel Awad Ibrahim	Giza	2101958	Ref. &A/C	012 3587317	Ref. &A/C Teacher	1993
6	Ahmed Mohamed El Awady	Qualiobeya	1401178	Ref. &A/C	010 234589	Technical Teacher	1992
7	Mostafa Mohamed Ahmed	Qualiobeya	36005	Ref. &A/C	012 2756721	Technician	1992
8	Ayman Abd El Azeem	Cairo	0104412	Ref. &A/C	02/ 4383414	Ref. &A/C Teacher	1989
9	Taha youssef Mohamed	Cairo	101878	Ref. &A/C	012 4656879	Ref. &A/C Teacher	1991
10	Youssef Said Mohamed	Qualiobeya	1401539	Ref. &A/C	012 3662427	Ref. &A/C Teacher	1992
11	Aspraf Mohamed Hussein Aly	Cairo	100811	Ref. &A/C	010 7916510	Teacher Ref.& A/C	1991
12	El Sayed Abd El Naby	Sharkeya	-	Ref. &A/C	012 5794244	Ref. & A/C Teacher	1994
13	Bassem Mostafa Said	Cairo	101974	Ref. &A/C	010 5812270	Technician	1988
14	El Gohary Youness	El Gharbeya	1603131	Ref. &A/C	010 9197801	Technician	-
15	Mostafa Ramadan Mostafa	Cairo	102013	Ref. &A/C	012 5776233	Technician	1983
16	Amr Fahmy Abd Elaal	Cairo	-	-	010 6699357	Technician	1987
17	Wael Kamal Rezk Saweres	Giza	211166	Ref. &A/C	012 7335084	Technician	2003
18	Mahmoud Mohamed	Cairo	103736	Ref. &A/C	012 5494207	Technician	1989
19	Mohamed El Syed Abdallah	Qualiobeya	1400958	Ref. &A/C	012 3497289	-	2001
20	Mohamed Ragab Ramadan	Beny Sweif	200996	Ref. &A/C	010 7303921	Technician	1998

Forty Fourth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. no.	Current Position	Date Of Graduation
1	Ahmed Mamdouh Ibrahim	Giza	22100216	Ref. & A/C	012 4940704	Technician	1991
2	Mohamed Ahmed Elsayed	Cairo	101019	(Ref. & A/C)	0101632572	Engineer (I.E.P) Co.	2001
3	Mohsen Hosny Selim	Sharkeya	1304176	Ref. & A/C	055/6991847	Technician	1995
4	Salah Mohamed Ahmed	Cairo	101872	Ref. & A/C	0104409861	Technician Ref. & A/C	1983
5	El Sayed Aly Abd El Gawad	Menofeya	-	Ref. & A/C	0103708227	Technician	1979
6	Wael Youssef Ragab	Cairo	0104137	Ref. & A/C	01020346893	Technician	1998
7	Mostafa Gaber Abdelrahman	Cairo	0104857	Ref. & A/C	02/6061281	Ref. & A/C Technician	1984
8	Zakher Guigus Zakher	Cairo	0104439	Ref. & A/C	0126323118	Engineer - Alaska Co.	2004
9	Samah Ibrahim Afifi Hatab	Qualiobeya	71423	(Ref. & A/C)	0124343931	Mechanical Engineer	2003
10	Abd El Fattah Aly	Sharkeya	01301799	Ref. & A/C	0123319099	Maintenance Engineer	-
11	Mohamed Sayed Mohamed	Giza	2100252	Ref. & A/C	010 7375628	A/C Production Quality Controller	1984
12	Osama Hassen Morsy	Sharkeya	120	(Ref. & A/C)	0123934140	Director R& D Dept.	1991
13	Mohamed Safwat Ahmed	Cairo	4598	Ref. & A/C	0123597138	Technician	1996
14	Mahmoud Einam Ibrahim	Cairo	-	Ref. & A/C	02/4930654	Practical Teacher	1982
15	Hassan Mahmoud Mostafa	Sharkeya	1301136	Ref. & A/C	055/3765157	Practical Teacher	1979
16	Yasser Amin Ahmed	Menofeya	170200	Ref. & A/C	0109787198	Practical Teacher	1996
17	Mohamed Ahmed Abdelmonem	Kena	2700438	Ref. & A/C	096/5216179	Practical Teacher	1984
18	Samy Abd El Fattah Badawy	Gharbeya	-	Ref. & A/C	0104548501	Practical Teacher	1984
19	Ibrahim El Sayed Mohamed	Port Said	300274	Ref. & A/C	0123486524	Practical Teacher	1978
20	Rezk AbdAllah Saleh	Gharbeya	103418	(Ref. & A/C)	0108012639	Technical Teacher	1984

Forty Sixth Training Course

No.	Name	Governorate	ID No.	Major in	Id. No.	Current Position	Date of Graduation
1	Sameh Ebrahim Maghazy	Kalliohia	1400714	Ref. & A/C	012 5465219	Teacher	1992
2	Mohamed Abdel-Alem Mohamed	Cairo	100374	Ref. & A/C	012 5093471	Teacher	1987
3	Ehab Yossef Attia Yossef	Cairo	-	Ref. & A/C	010 5486482	Teacher	1996
4	Rafaat Mostafa Mossa	Kalliohia	1401291	Ref. & A/C	010 1420512	Teacher	1992
5	Ayman Ahmed Aly Mohamed	Cairo	104431	Ref. & A/C	010 8234793	Teacher	1991
6	Ebrahim Faraghally Sabra Osman	Cairo	101454	Ref. & A/C	010 2455460	Teacher	1994
7	Ragab Abdel - Tawab Said	Giza	2102171	Ref. & A/C	012 3179140	Inspector	1987
8	Khaled Mohamed Abdelmobydy	Cairo	108778	Ref. & A/C	012 3886102	Teacher	1991
9	Khamis Mohamed Said Said	Cairo	-	Ref. & A/C	012 2823366	Inspector	1984
10	Magdi Awadallah El- Beltagy	Cairo	100610	Ref. & A/C	010 6362360	Inspector	1985
11	El-Said Abdel-Naby Abdel-Aziz	Sharkia	1301432	Ref. & A/C	012 5794244	Teacher	1994
12	Mahmoud Mohamed Mosrafa	Sharkia	1300872	Ref. & A/C	012 6099263	Owner SalamCo.	2001
13	Ahmed Mohamed Ahmed	Menofia	1301303	Ref. & A/C	012 6169191	Technician	2006
14	Ahmed El-Said Abdel- All Raddy	Dakchallia	1221977	Ref. & A/C	010 8856680	Env. Inspector	2002
15	Tamer Yassen El- Said Yassen	Dakchallia	1200315	Ref. & A/C	010 1184255	Env. Inspector	2001
16	Abdin Hefny Khalil Selcm	Kenna	2704451	Ref. & A/C	010 5214007	Enviromental Inspector	2001
17	Eslam Aly Aly Dawoud	Demiati	1100316	Ref. & A/C	010 4645453	Env. Inspector	2002
18	Sabry Abdel- Mohssen Mohamed	Behaira	1800297	Ref. & A/C	012 2638206	Env. Inspector	2002
19	Makram Abou-El-Fetouh	Giza	-	Ref. & A/C	010 3479417	Teacher	1991
20	Ahmed Mossa Mohamed Madany	Aswan	2800332	Ref. & A/C	012 4296666	Teacher	1990

Forty Fifth Training Course

No	Name	Governorate	ID. No.	Major in	Tel. no.	Current Position	Date Of Graduation
1	Mohamed Mohamed Elmahdy	Sharkeya	1300214	Ref. & A/C	012 9910808	Practical Teacher	1983
2	Mohamed Sayed Saadawy	Cairo	-	Ref. & A/C	012 7945247	Trainer	-
3	Adel Labib Kirolos	Souhag	-	Ref. & A/C	0128320886	Practical Teacher	1973
4	Mohamed Ahmed Mohamed	Cairo	102817	Ref. & A/C	0121430813	Technician	-
5	Youssef Mohamed Youssef	Kena	2701291	Ref. & A/C	097/2251080	Practical Teacher	1970
6	Sayed Aly Mersal Hussein	Aswan	2800357	Ref. & A/C	0124638736	Practical Teacher	1973
7	Adel Mohamed Ragab	Cairo	0100356	MAC	-	Practical Teacher	1975
8	Aly Mohamed Ahmed	Souhag	57716	Ref. & A/C	0102528629	Engineering Teacher	1994
9	Samir Saad Zaghlol Saleh	Dameira	-	Ref. & A/C	0101447940	Vice Dean - Tech. Faculty	1975
10	Tarek Mohamed Sedik	Cairo	-	MAC	0104408067	Industrial Inst. Dep.	2006
11	Sayed Ahmed Mahmoud	Cairo	101012	MAC	02/2541950	Practical Teacher	1992
12	Mohamed Mansour Ahmed	Qualiobeya	1400179	Ref. & A/C	0133410145	Teacher	1977
13	Goniaa Abd El Wahed	Cairo	102435	Ref. & A/C	0105486559	Matareya Tec. Inst.	1980
14	Gamal Salem El Alimy	Cairo	0102779	Ref. & A/C	0104191658	Teacher	1983
15	Tarek Ahmed Soliman	Cairo	0104277	Ref. & A/C	0125713455	Teacher	1993
16	Adel Abd El Aziz El Emam	Menofeya	1700432	Ref. & A/C	0123544843	Ref. & A/C Section -	1981
17	Hany Fouad Gaballah	Cairo	-	Ref. & A/C	02/4576136	Teacher	1993
18	Mohsen Mohamed Fathy Ibrahim	Port Said	300253	Ref. & A/C	0105632546	Practical Teacher	1978
19	Mostafa El Sayed Hussein	Kena	2701377	Ref. & A/C	0123113257	Practical Teacher	1984
20	Mohamed Emam Ibrahim	Cairo	-	Ref. & MAC	02/4930654	Technician	1982

Forty Seventh Training Course

No.	Name	Governorite	ID No.	Major in	Ed. No.	Current Position	Date of Graduation
1	Mahmoud Ashour Mahmoud Saleh	Giza	2102691	-	010 5201585	Technician	2004
2	Said Abdel Fattah Bahady Hassan	Cairo	103155	Ref. & A/C	012 5062249	Technician	1982
3	Ayman Ahmed Mohamed Ahmed	Cairo	102133	Ref. & A/C	012 6486138	Teacher	1994
4	Emad Hussien Ahmed Ahmed Hussien	Cairo	103037	-	012 7177435	Technician	-
5	Mohamed Ebrahim Ahmed Mohamed	Demiat	1100131	Ref. & A/C	012 2412650	Teacher	1985
6	Aly El-Din Fares Aly Hawash	Cairo	104294	Ref. & A/C	010 3708989	Teacher	1995
7	Ashraf Saad Ramadan Gomaa	Cairo	2855	-	012 5491522	Technician	1996
8	Aly Mohamed Omer Kassem	Kalliohia	1402476	Ref. & A/C	010 6960626	Teacher	1997
9	Mahmoud Mostafa Taha Mostafa	Beni- Sewif	2200832	(Ref. & A/C)	012 3554351	Inspector	1988
10	Abdallah Farouk Abdallah Mohamed Shenif	Cairo	102371	Ref. & A/C	02/ 2060872	Teacher	1987
11	Amro Ahmed Mohamed Ahmed	Cairo	100437	Ref. & A/C	012 2343455	Technician	2002
12	Mostafa Mohamed Hamed Shehata	Cairo	101611	(Ref. A/C)	010 6951075	Engineer -	1977
13	Amir Adel Ragab Mohamed Ebrahim	Cairo	106511	Ref. & A/C	-	Technician -	1993
14	Hanafy Rabec Ebrahim Hussien	Minia	2400238	Ref. & A/C	010 1312322	Teacher	1987
15	Mohamed Esmael Mohamed Aly	Beni- Sewif	2201156	Ref. & A/C	-	Teacher	1992
16	Ahmed Ezz Ahmed Salah	Cairo	127952	-	010 1288688	Goldi Comp.	-
17	Ramy Nabile Mehany Michael	Cairo	102576	Ref. & A/C	02/ 2564819	Student	-
18	Sameh Magdi Atia Abdel- Messch	Kalliohia	1415592	Ref. & A/C	012 1615424	Student	2004
19	Mohamed Abdel- Ghanny Hassan El- Wardany	Menofia	1700831	-	012 4420891	Manger	1963
20	Hafny Abdel -Aziz Aly Hassan	Giza	2101411	Ref. & A/C	012 4272437	Teacher	1998

Forty Eighth Training Course

No.	Name	Governorate	ID No.	Major in	Id. No.	Current Position	Date of Graduation
1	Said Taher Badawy	Cairo	101913	Ref. & A/C	010 5241633	Technician	1984
2	Bolis Melad Masoud Dawoud	Giza	2103974	Ref. & A/C	010 3014768	-	-
3	Hamedy Salama Ahmed Salama	Cairo	103657	Ref. & A/C	012 0381298	Student	-
4	Hameda Shafik Aly Shafik	Kfer El- Sheikh	1500851	Ref. & A/C	012 2764659	-	-
5	Eslam Mahmoud Mostafa Mahmoud	Sharkia	1301353	Ref. & A/C	055/ 3693196	Technician	-
6	Ebrahim El- said El- Araby El-Said	Giza	2101897	Ref. & A/C	02/ 3260057	Student	-
7	Hussam abdrabou El-Said Shalaby	Cairo	8800119	Ref. & A/C	010 6429185	Technician	1995
8	Khaled Zakaria Abdel- Sadek	Cairo	101274	Ref. & A/C	012 6212025	Technician	1991
9	Ashraf El- Said Abdel El-Shenairy	Dakhalia	12003172	Ref. & A/C	012 3554351	Technician	1989
10	Mahmoud Farghally Abou-Zaid	Giza	2100494	Ref. & A/C	012 9141821	Technician	1990
11	Abdallah Edd Abdallah Mossa	Giza	2750721	Building Substances	012 4554916	-	1995
12	Tarrek Ahmed Mostafa	Giza	101993	Computer	010 6602544	Mohandis Co.	2001
13	Ahmed Mohamed Aly Aly	Giza	2101755	Ref. & A/C	010 7378296	Technician	1996
14	Wael Fathy Mahmoud Said Ahmed	Sharkia	-	Ref. & A/C	055/ 3700116	Technician	1998
15	Saber Mohamed Omer Eissa	Giza	2711014	Ref. & A/C	02/ 7105437	Technician	1994
16	Ahmed Mahmoud Abdel-Megid	Giza	102613	Ref. & A/C	010 5154104	Technician	1998
17	Ayman El-Amen Hamed Ramadan	Alexandria	-	Ref. & A/C	010 5644896	Technician	1998
18	Mohamed Helmy Shehab	Cairo	103895	Ref. & A/C	012 3913602	Technician	2001
19	Ahmed Sabry Ahmed Mahmoud	Aswan	2800391	Ref. & A/C	012 2183669	Technician	1988
20	Mohamed Kamal Tohamy Yossef	Cairo	100498	Ref. & A/C	010 6797754	Technician	1997

Forty Ninth Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Badery Noshy Fawzy Said	Giza	2104013	Ref& A/C	012/8640990	Technician	-
2	Ayman Aziz Eskandar Rizk	Kalibeya	1701872	Ref& A/C	010/9366128	Technician	-
3	Khairy Gouda Abdel -Mottaleb	Sharkia	1301457	Ref& A/C	012/6108355	Technician	1993
4	Mohamed Abdalla Ahmed Abdalla	Giza	1475	Ref& A/C	010/2233201	Technician	1992
5	Khaled Mohamed Barbary	Luxor	1113	Ref& A/C	012/4817527	Technician	1993
6	Emad Mahmoud Zaki Ebrahim	Cairo	103931	Ref& A/C	012/5464786	Technician	1992
7	Waleed Soliman Mohamed Soliman	Sharkia	1301655	Ref& A/C	055/2062809	Technician	2001
8	Said Mohamed Abd El All Sultán	Giza	2101572	Ref& A/C	010/7352420	Teacher	1994
9	Mohamed Mohamed Elwan	Sharkia	1300751	Ref& A/C	012/1049202	Supervisor	1994
10	Mohamed Ebrahim Omer Aly	Beni Sweif	2500531	Ref& A/C	012/1256173	Teacher	1990
11	Tamer Abd El Tawab Abdel Wahed	Kafr El Sheikh	1501394	Ref& A/C	010/1397624	Eng.	2004
12	Abdel Hatem Ahmed Mohamed	Gharbeya	21600175	Ref& A/C	012/4219884	Manager of Zamussi Comp	1984
13	Mohamed Mahmoud Awad Abdou	Cairo	0101232	Ref& A/C	010/4168593	Technician	1988
14	Ahmed Esmael Farag Ahmed	Giza	2102133	Ref& A/C	012/3340733	Teacher	1993
15	Maher Mahmoud Awad Aly	Cairo	101815	Ref& A/C	010/1980852	Technician	1974
16	Waleed Ahmed Hassan Aly	Cairo	102815	Ref& A/C	012/9853316	Technician	1992
17	George Micheal Tawfic	Kalibeya	1400774	Ref& A/C	012/3284159	Teacher	1996
18	Sobehy Abdel Hakim Amen	Menofeya	17001352	Ref& A/C	010/6682749	quality Manager	1977
19	Mohamed Mabrouk	Cairo	103915	Ref& A/C	012/5299603	Teacher	1986
20	Mohamed Mohsen Ahmed Yossef	Sharkia	1300759	Ref& A/C	055/3381667	Technician	1983

Fiftieth Training Course

No.	Name	Governorate	ID No.	Majorin	Tel. No.	Current Position	Date of Graduation
1	Fathy Hassan Osman Hassan	Cairo	102078	Ref. & A/C	0101883327	Privat Section	1960
2	Ebrahim Ebrahim Naeem Saad	Behaira	85538	Ref. & A/C	045/3338173	Impector	1984
3	Mohamed Said Ahmed Ahmed Said	Dakhhilia	1201876	Ref. & A/C	0122643817	Impector	1987
4	El-Said Aly Abdel Gawad Yornia	Behaira	1801174	Ref. & A/C	0121885266	Impector	1978
5	El-Said Mohamed Abou Hashem	Sharkia	1302135	Elect	0122291067	Impector	1987
6	Hanaa William Hanna Aizac	Menofia	1801737	Ref. & A/C	0106590806	Impector	1972
7	Mohamed Ahmed Mahmoud Fasila	Faioum	2300076	Mech	084/6340394	Impector	1979
8	Yassen Abdel Gawad Awis Mansour	Beni - Seuif	2201894	Power	0120045149	Impector	1975
9	Hamdy Aly Abdel Hamed Abou Hussien	Menofia	1701673	Ref. & A/C	0128750144	inspector	1973
10	Sherief Mohamed Gamal El- Din	Menofia	1701932	Ref. & A/C	048/2312982	Impector	1984
11	Manal El Said Hassan El Said	Cairo	—	—	0125760678	Teacher	1999
12	Naval Said Ebrahim Abdel Megid	Giza	2101861	—	0126440849	Impector	1992
13	Moheb El Said El-Sherbiny El-Habiby	Gharbia	1601259	Power	0121045798	Impector	1977
14	Said Abdel Fattah Fathalla Abou Ghadta	Gharbia	18051	Elect	045/2211206	Impector	1975
15	Hamed Mohamed Abdrabou Abdel Gawad	Kaliobia	1403231	Ref. & A/C	0132561944	Impector	1992
16	Mohamed Hamdy Abdel Makaod Negm	Sharkia	1300292	Elect	0126672051	inspector	1983
17	Said Mohamed Mohamed Abdeallah	Gharbia	1600711	Ref. & A/C	0122430139	inspector	1972
18	Samir El-Said Mohamed Hassan	Dakhhilia	1200592	Power	050/2253533	inspector	1975
19	Abdel Wahhab Mahmoud Abdel Wahhab	Behaira	1800657	Ref. & A/C	0121385814	inspector	1989
20	Ragab Aly Abdel Hallem Said	Giza	2101056	Ref. & A/C	02/5892260	inspector	1975

No.	Name	Governorate	ID. No.	Major in	Fcl. No.	Current Position	Date of Graduation
1	Mahmoud Adel Ahmed Mohamed	Cairo	101737	Ref. & A/C	02/4275428	Tech	1994
2	Emad El- Din Abdrabou Mahmoud	Cairo	102353	Mech	0124553917	Manger Of Zanussi Co.	1986
3	Mohamed Mamdouh Said Nagy	Giza	2100179	Mech	0126060661	Tech	1996
4	Hussen Abdel Waheb Abulfortoh	Sharkia	1301519	Ref. & A/C	0123919804	Super Faizer	1992
5	Mohamed El- Said Mohamed El- Said	Cairo	0102432	Mech	0126380439	Tech	2003
6	Ussama Abass Emam Mahmoud	Kalliobia	—	Ref. & A/C	0122849218	Tech	1989
7	Shaaban Farouk Said Mohamed	Aswan	2800215	Maintenance	0105438576	Tech	1987
8	Ashraf Mohamed Saleh Attia Ahmed	Sharkia	1301572	Mech	0161407716	Eng	1992
9	Salah Ebrahim Amer Mohamed	Giza	2100815	—	0120086361	Tech	—
10	Mostafa Abdel Mawlia Mostafa	Menofia	1702093	Ref. & A/C	0105606882	Tech	1988
11	Hassan Fathy Nour El- Din Shehara	Kalliobia	1401951	Quality Inspector	0104774895	Tech	1999
12	Said Abdel Moneem Rfaey Ebrahim	Sharkia	1301193	Ref. & A/C	0107986204	Tech	1985
13	Mohamed Said Mohamed Said	Cairo	105795	Ref. & A/C	0107074504	Tech	1998
14	Mohamed Ahmed Ahmed Mohamed	Dakchilia	1201534	Ref. & A/C	0104205689	Tech	1998
15	Wael Hassan Ebrahim Hussien	Cairo	122716	Ref. & A/C	0105404784	Tech	1994
16	Mostafa Mohamed Barbary Gadallah	Giza	—	Ref. & A/C	0120307760	Steel Master Comp	1995
17	Mostafa Aly Ravy Mohamed	Cairo	2702511	Ref. & A/C	0106604802	Tech	1998
18	Abdel Gawad Mohamed Awad	Kalliobia	1401832	Ref. & A/C	0101610193	Tech	1992
19	Wael Abdel Hak Abdel Azeem	Cairo	0100771	Computer	02/4630900	Tech	2002
20	Ahmed Hamed Ahmed Bendiary	Sharkia	1300035	Ref. & A/C	0128438137	General Inspector	1990

Fifty Second Training Course

No.	Name	Governorate	ID. No.	Major in	Tel. No.	Current Position	Date of Graduation
1	Amr Fayez	Cairo	—	MAC Sector	0103996357	Workshop Owner	—
2	Amal El- Gamel	Cairo	—	MAC Sector	02/6326707	Workshop Owner	—
3	Esamel El- Sahar	Cairo	—	MAC Sector	0122338474	Workshop Owner	—
4	Fawzy El- Koumy	Cairo	—	MAC Sector	0123109425	Workshop Owner	—
5	Araby Saad	Alex	—	MAC Sector	0127303700	Workshop Owner	—
6	Khaled El- Alfy	Cairo	—	MAC Sector	0123104675	Workshop Owner	—
7	Aymen Abdel Gawad	Cairo	—	MAC Sector	0122153823	Workshop Owner	—
8	Tarek Weshahy	Cairo	—	MAC Sector	0105233332	Workshop Owner	—
9	Mr. Bakr	Cairo	—	MAC Sector	02/6324368	Workshop Owner	—
10	Samir Abdel Ghany	Cairo	—	MAC Sector	0122113921	Workshop Owner	—
11	Zydan El- Seedy	Cairo	—	MAC Sector	0101260070	Workshop Owner	—
12	Mohamed Modany	Cairo	—	MAC Sector	02/5896352	Workshop Owner	—
13	Mohamed El- Marakby	Cairo	—	MAC Sector	0101112215	Workshop Owner	—
14	Fathy	Cairo	—	MAC Sector	0121111970	Workshop Owner	—
15	Abdel Hay Mostafa	Cairo	—	MAC Sector	0101154815	Workshop Owner	—
16	Sayed Zahi	Cairo	—	MAC & Ref	02/4877323	Workshop Owner	—
17	Hamdy El Sayed	Giza	—	MAC & Ref	0123127835	Workshop Owner	—
18	Aly Eso	Cairo	—	MAC & Ref	0103675947	Workshop Owner	—
19	Ramy Hasib	Cairo	—	MAC & Ref	0122154498	Workshop Owner	—
20	Mohamed Gaber	Cairo	—	MAC Sector	0123424864	Workshop Owner	—

COORDINATION WITH ICCT COMPANY :

A contract has been signed up between the RTI Company- the supplier of the equipments- and the ICCT Company for consultations.

This contract aims at introducing ICCT Company experience in operating the modern R&R equipments to the trainers who will be responsible for the training courses during the training program.

In addition to this and in coordination with the ICCT Company, a delegation of their experts visited Cairo, and held a training program for trainers on the use of the new equipment during the period 22-26/11/2006.

The trainers have been trained during this training course on all types of RTI equipment that have been supplied.

It has been agreed with ICCT experts' delegation upon another visit to Cairo to evaluate and assess the performance of the trainers and to introduce the new technologies of retrofitting refrigeration units.

And , Icct Company has made its second visit to us during the period 20-26/12/2006. The RTI delegation has continued its role in introducing the modern technology in the maintenance and servicing of the Ref. & A/C units.

I would like to seize this opportunity to express my deep thanks for UNIDO for choosing RTI Company as we really have great benefits and experiences from it were not available for us before.

Concerning this second training, it dealt with many themes of which the most important were:

A. Retrofit:

- Retrofitting a unit from using R-12 to using R-134a.
- Retrofitting a unit from using R-22 to using R-407c.

B. Welding:

- Different safe methods of welding.
- How to test welding.

Finally, I would like also to thank the UNIDO team in my name and on behalf of all the trainees on the successful choice of the ICCT Company which has also transferred to us its great experiences in the field of maintenance and servicing, Find in attach a report on ICCT Company Experts Visit .

TECHNICAL REPORT OF THE TRAINING COURSES:**C. Course Location:**

- The training courses were held in 13 different training centers distributed among 8 governorates from all over Egypt:

Serial	Governorates	Training Centers
1	Giza	Leading Training Center (Giza School)
2	Cairo	Abdeen Training Center
		Faculty of Technology (Sahafa)
		Faculty of Industrial Education (Cairo)
		Faculty of Technology (Mataria)
		Armed Forces Training Center
		Sharabeya Training Center
3	Port Said	Faculty of Technology (Port Said)
4	Sharquia	Faculty of Technology (Zagazig)
5	Alexandria	Shatby Training Center
6	Menya	Etsa Training Center
7	Aswan	Aswan Training Center
8	Qaliobeya	Shoubra Metal Center
TOTAL	8 Governorates	13 Training Center

- The courses started at 9:00 am till 6:00pm (during practical sessions & due to the number of trainees and technicians, training sessions sometimes ended at 9:00pm)
- Coffee break usually lasted for half an hour after the first lecture; lunch break was for half an hour according to the time schedule for each day.

D. Training Materials Used:

- The book "The introduction of new technology for servicing and maintenance of refrigeration and A/C units".
- Handouts (Refer to Appendix 5 in the First Interim Report).
- Video film and CD.
- Presentation shown using data show.
- Transparencies, overhead projector.

E. Theoretical Course:***Refrigeration Fundamentals: Refrigeration Fundamentals:***

- Explain temperature in degree Fahrenheit and degree Celsius
- Explain heat & BTU
- Describe latent and sensible heat
- Define pressure
- Define saturation point
- Explain superheat & sub-cooling
- Understand pressure & boiling points
- Read the compound gauge and high pressure gauge
- Explain perfect vacuum
- Explain refrigeration cycle
- Identify different types of evaporators
- Understand temperature difference for air conditioning evaporators
- Understand condensers
- Accessories for refrigerant circuits

Refrigerants:

- Recognize refillable, non refillable and recovery cylinders
- Explain cylinder capacity and cylinder color
- Know the difference between pure, isotropic, and zeotropic blends
- Using nitrogen
- Describe leak detection methods
- Explain use of vacuum pumps and evacuation procedures
- Explain the charging procedures
- Understand zeotropic blends and lubricants
- Work with bubble point and dew point
- Use saturation tables for zeotropic blends
- Use proper lubricants for refrigerant blends

Refrigerant Controls:

- Capillary tubes
- Flow control valve
- Explain TXV

Some of the trainers from each group had information about saturation, temperatures and how to use the tables to calculate superheat and sub-cool. Same about micron gauge during vacuum or how to recover the refrigerant during maintenance and re-using it in the same circuit.

They were also introduced to charge by volume and by weight. Many of them had idea about thermostatic expansion valve, how to adjust it and how to charge from R12 to R134a. They lack the knowledge of the 400 refrigerant families, ODP & HGWP. We were asked to explain the PCB for air-conditioners.

I. The Practical Course:

All available equipment was used. Equipment was of good quality and thus, facilitated the smoothness of the sessions.

Equipment Available At the Lab:

- 36 refrigerators R12 -R134a.
- 64 split air conditioner using R22
- 53 window air conditioners using R22.
- 21 condensing unit using R404a & R407c.
- 22 cooling unit using R502 and R12 available.
- 31 water coolers using R12.
- 14 Ice machines using R404a.
- 125 A/C units
- 70 Refrigeration units
- 50 Chillers
- 101 Commercial Ref. units
- Measuring & Security equipments

Trainers were divided into 4 groups. In the beginning they measured the superheat and sub cool (if possible) and current. They used tables, pressure gauge, temperature sensors, and clamp ammeter. They also checked leak in the circuits by electronic leak detectors.

After they became familiar with the equipment, we explained how to recover the refrigerant charge then they started to recover the refrigerant in 12 units (refrigerators and air conditioners) using the recovery unit and MAC unit for cars.

They used nitrogen and checked again for leak by using soap this time. After that they purged the nitrogen to air, they started to evacuate the systems from air up to 300 micron, using the

electronic micron gauge. They evacuate the graduated charging cylinder and filled it with the required amount of refrigerant.

They charged the system on three or four steps measuring after each step temperature, superheat, current, etc.

After charging the system with the right quantity of refrigerant, they measured the performance of the system, then they were asked to add more charge and check what the result is. They discovered many mistakes during their previous way to charge capillary tube system.

During charging air conditioners, they discovered that storage of 30gm can be critical and can reduce the efficiency of the air conditioning unit.

Also they retrofit R12 refrigerator by R134a. They adjusted the super heat for TXV.

They measured the micro farad for capacitors. They worked with PCB's for different types of air conditioners.

Each group worked as a team, they divided the work between them.

- Explain temperature in degree Fahrenheit and degree Celsius
- Explain heat & BTU
- Define pressure
- Explain superheat & sub-cooling
- Explain perfect vacuum
- Explain refrigeration cycle
- Accessories for refrigerant circuits

Refrigerants:

- Recognize refillable, non refillable and recovery cylinders
- Know the difference between pure, isotropic, and zeotropic blends
- Using nitrogen
- Understand zeotropic blends and lubricants
- Use saturation tables for zeotropic blends
- Use proper lubricants for refrigerant blends

Refrigerant Controls:

- Capillary tubes
- Flow control valve
- Explain TXV

- Demonstrate how to adjust superheat setting

Recovery, Recycle, Reclaim (RTI Equipment):

- Refrigerant specifications
- Refillable refrigerant cylinders
- Refrigerant recovery methods
- Basic refrigerant recovery
- Recovering/ recycling systems
- RTI model refrigerant recovery unit
- Recycling machine maintenance
- Reclaim procedures

Trade Tools & Test Equipment:

- Charging stations
- Electronic vacuum gauge
- Programmable charging scale

Retrofits:

- Converting R12 and R502 systems to one of the replacement refrigerant, R12 to R134a
- Converting R22 systems to one of the replacement refrigerant, R22 to R407 in A/C Air conditioning

J. Level of Trainers:

Approx estimat 55% of them have practical experience in the field refrigeration and air-conditioning. The remaining 45% have theoretical knowledge only.

In the first lecture, trainers were given a one-hour exam (half an hour for practical examination and half an hour for theoretical examination) to evaluate their knowledge of the subject.

K. Attendance Rate:

The attendance of the trainers was 100% during the course

L. The feed-back of the Trainers:

Little number of the trainees and technicians from each group had information about saturation, temperatures and how to use the tables to calculate superheat and sub-cool. Same about micron gauge during vacuum or how to recover the refrigerant during maintenance and re-using it in the same circuit.

They were introduced to how to charge by volume and by weight. Many of them had idea about thermostatic expansion valve, how to adjust it and how to charge from R-12 to R-134a. They lack the knowledge of the 400 refrigerant families and their alternatives, ODP & HGWP.

We were asked to explain the PCB for air-conditioners.

M. The Practical Course:

All available equipment was used. Equipment was of good quality and thus, facilitated the smoothness of the sessions.

Total Quantities of Equipment Available in the Laboratories for all the Training Centers:



Workshop Report

Train the Trainer workshop of Recovery, Recycling and Charging Equipment Giza, Egypt

23rd to 25th November 2006
and
20th to 23rd December 2006

Equipment Supplier:

RTI Technologies
P.O. Box 3099
10 Innovation Drive
York, Pa. 17402, USA

National Training Institution

UNIVERSAL Company
For Consultation and Training
68, Mohamed Farid Abou Hadid Street
Nasr City, Cairo, Egypt

Location of seminars:

Giza Electrical School

Workshop was organized by:

UNIDO, Universal Co. and the NOU – Cabinet of Ministers
Egyptian Environmental Affairs Agency

RTI project manager:

Mr. Ole Reinholdt Nielsen from RTI Technologies.

Author:

Rolf Hühren, Senior Consultant, ICCT Germany
for RTI Technologies, USA



Train the Trainer Workshop in Giza, Egypt (November / December 2006)



Table of contents:

Map of Egypt	4
List of acronyms and abbreviations:	5
Executive summary	6
Objectives	7
Background	8
Content of the workshops (seminars)	10
Participants	11
Agenda for the first R&R workshop session in November 06	12
Agenda for the second R&R workshop session in December 06	15
Results of the third day Brazing assessment	18
Basis of evaluation	18
Workshop Overall Results	18
Follow-up	19
Annex A: Workshop Pictures	20
Annex B: List of Trainers Participants	23

Map of Egypt





List of acronyms and abbreviations:

WS	Workshop (service company)
R&R	Recovery and Recycling
MAC	Mobile Air- Conditioning
RAC	Refrigeration and Air- Conditioning
NOU	National Ozone Unit
CFC	Chlorofluorocarbon Refrigerant like R12
ODS	Ozone Depleting Substances
CP/NPP	Country Program/National Phase Out Plan
RRC 770	Refrigerant Management Center, Manufacturer RTI, USA
TX 200	Multi Refrigerant Recovery Unit, Manufacturer RTI, USA
RMP	Refrigerant Management Plan
A/C	Air-Conditioner



Executive summary

The goal of this training of trainers workshop on professional R&R equipment handling is to reduce ODS (Ozone Depleting Substances) usage in the refrigeration & air-conditioning service sector in Egypt and to assist the country to comply with the phase-out schedule for CFC's under the Montreal Protocol.

The train-the-trainers workshop on professional R&R equipment handling and generic issues, such as best practices in commercial refrigeration and the sectors of MAC and AC is part of a comprehensive approach to reduce the ODS consumption in the refrigeration servicing sector in Egypt. Such approach is defined in the Refrigerant Management Plan (RMP) of Egypt, which has been approved by the Executive Committee of the Multilateral Fund to be implemented by UNIDO.

UNIDO is responsible for the implementation of the training programme on good practices in refrigeration and the implementation of the training programme on control and monitoring of ODS imports and exports for customs officers.

The completed train-the-trainers workshop on professional R&R equipment handling and other related generic issues in best refrigeration practices in Egypt was the initial workshop of this kind in the region as part of a National Refrigerant Management Plan.

The programme consists of two phases, the train-the-trainers phase and the train-the-technicians phase. The trained trainers are expected to train more than 1400 remaining service technicians in the fields of refrigeration and air-conditioning.

The long term expected result of the training programme is to enhance professional R&R equipment handling and operation on one hand, and on the other hand best service and technical practices in the refrigeration, MAC and AC sector.

This activities must assist the before mentioned sectors to switch over to non-CFC equipment in a smooth way without causing an unnecessary burden to the consumers, clients and end-user.

During the train-the-trainers workshop, 23 professionals (teachers and trainers) from several industrial and technical schools from the area of Cairo and Giza were trained on the professional R&R equipment handling and other generic issues of best practices in refrigeration and air-conditioning.



The workshop included lectures on the harmful effects of ozone layer depletion and the resulting increase of UV-A and UV-B radiation, the Montreal Protocol and its Amendments as well as lectures on CFC, HCFC, HFC and Non Fluorocarbon refrigerants, recovery, recycling equipment and preventive maintenance practices. Lectures on retrofitting and future technological developments in the refrigeration sector were also included.

Hands-on demonstrations with recovery and recycling equipment, using actual refrigeration units as well as stationary and mobile air-conditioning systems in need of recharge and maintenance were conducted as part of the training workshop.

The theoretical and practical trainer training for handling and operation of the supplied recovery, recycling, evacuation and charging equipment will bring immediate awareness amongst the technicians, both in conservation of ODS refrigerants and additional about new ozone friendly refrigerants.

All workshop sessions were conducted by photocopying of documents and copying of database of training materials and operation manuals, to be provided to the trainer.

Objectives

The main objective of the R&R programme is to reduce CFC consumption in the refrigeration and air-conditioning sector in the Sultanate of Oman and to assist the country in complying with the phase-out schedule applicable to CFC's under the Montreal Protocol by:

1. Increasing participants awareness about ozone depletion and the Montreal Protocol
2. Increasing participants awareness about the environmental and economic benefits of recovery and recycling of CFC refrigerant
3. Defining selection criteria for the selected service workshops and R&R centre.
4. Training refrigeration technicians and trainers from the local training institutes in the use, maintenance and repair of R&R equipment
5. Transferring R&R equipment to the selected service workshops and R&R centres.
6. Creating a R&R network for CFC refrigerants
7. Stimulating the development of a network for information sharing throughout the sector
8. Helping the country to achieve the phase-out in a co-ordinated, planned and cost-effective manner
9. Allowing existing CFC equipment to run until the end of its economic life by using recovered & recycled CFC refrigerants
10. Reducing the consumption of virgin CFC-12

Background

The recovery and recycling (R&R) programme is part of a comprehensive approach to reduce the CFC consumption in the refrigeration-servicing sector. This approach is defined in the Egypt Refrigerant Management Plan (RMP).

The R&R programme is funded through the Multilateral Fund (MLF) for the Implementation of the Montreal Protocol. UNIDO manages the implementation and provides technical and policy support. During an UNIDO tendering procedure in the year 2006, RTI Technologies USA received the contract for the equipment supply, technical services and training of trainers in Egypt.

In general, the most important sector in A5 countries in which ozone-depleting substances are used is the refrigeration sector, predominantly for the servicing of CFC containing equipment. Yet, poor servicing procedures such as flushing and venting often lead to the release of significant quantities of CFCs directly into the atmosphere.

The release of CFCs during repair and servicing can be reduced and ultimately avoided through training in good practices in refrigeration and recovery & recycling. The consumption of virgin CFC refrigerants is reduced once recovered and recycled refrigerants are used for recharging of refrigeration systems instead of virgin refrigerants. The availability of recovered and recycled refrigerants will allow existing refrigeration systems to run until the end of their economic life and thus contribute to a smooth-phase-out-of-CFC-refrigerants.

However, the supply of R&R equipment and the establishment of the R&R system alone does not ensure the successful operation of the system. It must be supported by a regulatory framework including legal and voluntary measures as well as incentive schemes.

A successful RMP will ensure that recovered or recycled refrigerants can compete economically with virgin refrigerants and that recovery & recycling is profitable for the individual service companies.

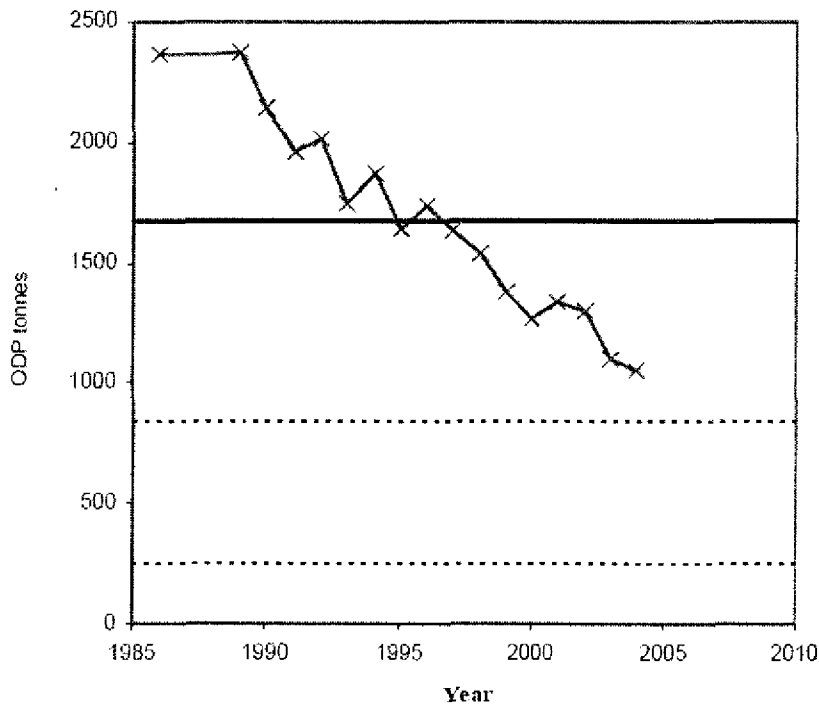
An abrupt non-availability of CFC refrigerants in the future may adversely affect the operation of important industries and will lead to disturb the overall sensitivity of cold storage chains of food, air-conditioning systems for public Institutions like hospitals and private used air-conditioner. Therefore, it is essential for CFC users to be able to reduce and subsequently phase-out their consumption in a co-ordinated, planned and cost-effective manner.

A combination of containment practices such as recovery and recycling and conversion to alternative technologies are expected to ease the economic consequences of the phase-out. Training on good practices in refrigeration and an effective R&R programme combined with prudent retrofitting and timely replacement are part of the overall phase-



out strategy and will assist the Arab republic of Egypt in meeting the control measures under the Montreal Protocol - sustaining the freeze of Annex A CFCs from 1999 and the 50% reduction in 2005, the 85% reduction in 2007 and the phase-out in 2010.

Trend in Production and Consumption Annex A Group I - CFCs



- x— Consumption *
- Annex AI CFCs Freeze level (Average of 1995-1997 consumption)
- - - - - 50% Reduction (2005 Target)
- - - - - 85% Reduction (2007 Target)



Content of the workshops (seminars)

The training agenda was designed to ensure that the objectives set out for the seminar (see Section 2) were achieved.

The training workshop (seminar) included (but was not limited to) the following objectives.

- Introduction and demonstration of RTI refrigerant handling equipment.
- Safety recommendations and advices.
- Practical training of operation and maintenance of the supplied equipment.
- Partially related to the supplied equipment a theoretical and practical training about best practice of the use of the supplied equipment.
- Increasing participant awareness.
- Introduction and demonstration of procedures that eliminate refrigerant emissions during preventive and unscheduled maintenance and repair of CFC based refrigeration, air- condition and MAC systems.
- Introduction and comparison of new refrigerants like HFC's and HC's
- Impact of refrigerants (CFC, HFC, HC) in view of the environmental Global Warming process
- Impact of bad practices, maintenance and poor servicing equipment in view of the environmental Global Warming process
- Theoretical and practical training in retrofit procedures
- Theoretical and practical training in copper tube brazing
- Participants brazing procedure test according EN regulation DIN 13133 (examination)
- Theoretical an practical training on skills and knowledge for domestic refrigeration

During the sessions, time was allocated to encourage discussion and feedback of the content, technological changes and methodology used



Participants

In total 30 participants attended the R&R workshop. The list of participants is provided with annex B of this document.

The instructors for the workshop:

First workshop session 23rd to 25th November 2006

Mr. Rolf Huehren and Mr. Dennis Huehren from ICCT Co. Duesseldorf, Germany

Second workshop session 20th to 23rd December 2006

Mr. Rolf Huehren



Agenda for the first R&R workshop session in November 06

Wednesday, 22nd November 2006

07:20	Departure from Duesseldorf, Germany via Paris to Cairo	Dennis Huehren Rolf Huehren
19:05	Arrival at Cairo airport Welcome at the airport and delivery of to the hotel by Universal Co.	

Thursday, 23rd November 2006

08:45	Arrival at Giza Electrical School	Dennis Huehren Rolf Huehren
09:00 – 11:00	Introduction at Giza Electrical School Briefing with Mr. Walid Alsammak (NOU) and Mr. Edward I. Fahmy (Universal Co.) and members of Giza Electrical School	
11:00 – 12:30	RTI equipment check and site preparation <ul style="list-style-type: none">• Preparation of the seminar locality• Preparation of the equipment• Preparation of leaflets and printouts• Preparation of database and softcopies	
13:30 – 17:00	Power Point presentation <ul style="list-style-type: none">• R&R Strategy and environmental aspects• Safety and Containment Discussion	
17:45	Arrival at Hotel	

Friday, 24th November 2006

08:45	Arrival at Giza Electrical School	Dennis Huehren Rolf Huehren
09:00 – 09:30	Review of the first day	
09:30 – 13:00	Power Point presentation and introduction of the RTI R&R equipment <ul style="list-style-type: none"> • RTI RRC770 	
14:00 – 17:00	Power Point presentation and introduction of the RTI R&R equipment <ul style="list-style-type: none"> • TX200 • Handling of the R&R equipment RRC770 and TX200 • Technical components of the R&R system • Equipment specifications • Methods of refrigerant identification and analysis • Practical instructions and exercises Discussion	
17:45	Arrival at Hotel	

Saturday, 25th November 2006

08:45	Arrival at Giza Electrical School	Dennis Huehren Rolf Huehren
09:00 – 09:30	Review of the second day	
09:30 – 13:00	Power Point presentation <ul style="list-style-type: none"> • Evacuation of a refrigeration or AC system • Handling of the R&R equipment RRC770 and TX200 • Technical components of the R&R system • Equipment specifications 	
14:00 – 17:00	Practical instructions and exercises <ul style="list-style-type: none"> • Refrigeration System Retrofit CFC to HFC, CFC to HC Discussion	
17:45	Arrival at Hotel	
19:00 – 22:00	Meeting with Universal Co. and NOU <ul style="list-style-type: none"> • Preparation of second workshop session in December 06 	



Sunday, 26th November 2006

07:25 – 10:30	Departure to Germany	Dennis Huehren Rolf Huehren
---------------	----------------------	--------------------------------

Agenda for the second R&R workshop session in December 06

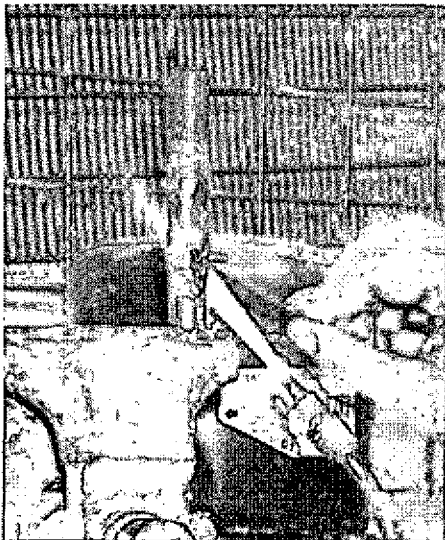
Tuesday, 19th December 2006

12:30	Departure from Duesseldorf, Germany via Munich to Cairo	Rolf Huehren
19:15	Arrival at Cairo airport	

Wednesday, 20th December 2006

08:45	Arrival at Giza Electrical School	Dennis Huehren Rolf Huehren
09:00 – 09:30	Registration of participants	
09:30 – 13:00	Power Point presentation <ul style="list-style-type: none"> • Retrofit • Recovery- and Retrofit-friendly plants • Lubricants • Handling of Lubricants • Separate Oil and Refrigerants • European Regulations (EN 378 – 2037/2000) 	
14:00 – 17:00	<ul style="list-style-type: none"> • Practical Experiences • In- depth practical demonstration • Dismantling of the compressor • Oil- measuring by weight • Identification of contaminations (Oil-Test) • Visible inspection of Oil (color and condition) • Filter-Drier replacement • Necessity of Suction-Line Filters • Using of Nitrogen in different matters esp. Oil-decanting • Using of a Vacuum-Pump during filling procedure with oil • Helpful tools • Charging the compressor with Ester-Oil <p>Discussion</p>	
17:45	Arrival at Hotel	

Thursday, 21st December 2007

<p>08:45 09:00 – 09:30 09:30 – 10:30</p>	<p>Arrival at Giza Electrical School Registration of participants Power Point presentation</p> <ul style="list-style-type: none"> • Best Practice in Brazing <p>Discussion Preparation of the seminar locality</p>	<p>Rolf Huehren</p>
<p>10:30 – 13:00</p>	<p>Practical instructions and exercises</p> <ul style="list-style-type: none"> • Brazing of copper-copper connections • Soft copper tubes diameter 12mm and 16mm with several different expanded sleeve joints • copper-phosphorus solder only 	
<p>14:00 – 17:00</p>	<p>Brazing procedure test for 31 participants</p> <ul style="list-style-type: none"> • Assessment according EU DIN 13133 regulation • 16mm diameter soft copper 50mm long with two expanded sleeve joints connected to a straight soft copper tube about 50mm length each <div data-bbox="511 1142 954 1680" data-label="Image">  </div>	
<p>17:45</p>	<p>Arrival at Hotel</p>	



Friday, 22nd December 2006

10:00 09:00 – 16:00	Arrival at Giza Electrical School Assessment of 34 test pieces	Rolf Huehren
16:45	Arrival at the Hotel	

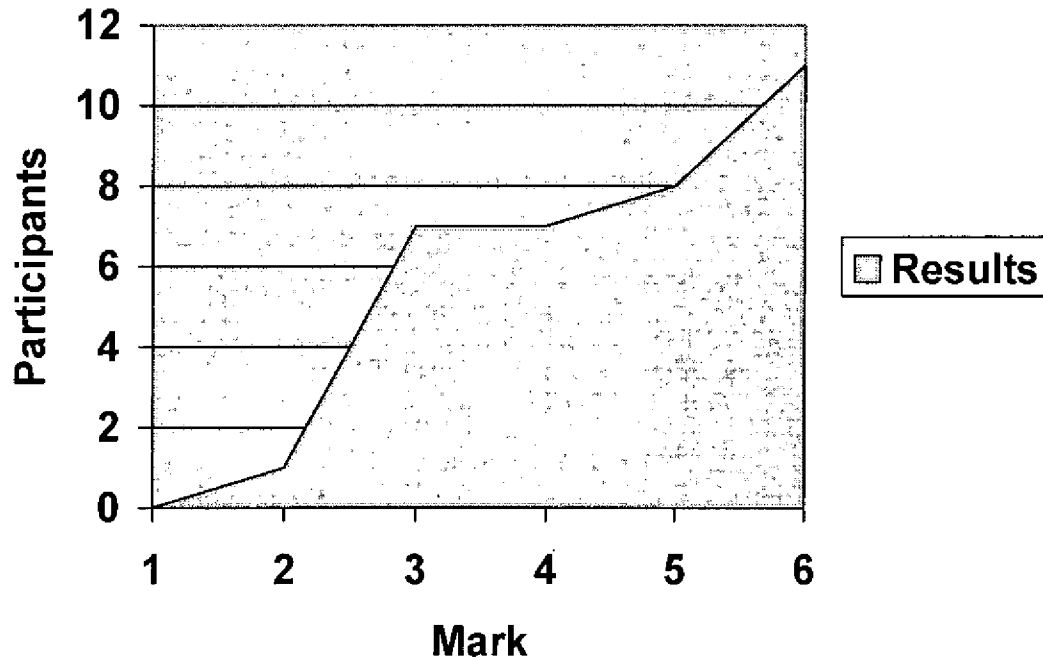
Saturday, 23rd December 2006

08:45 09:00 – 09:30 09:30 – 10:00	Arrival at Giza Electrical School Review of the last day Power Point presentation <ul style="list-style-type: none"> • Parts of Domestic Refrigeration 	Rolf Huehren
14:00 – 17:00	Practical instructions and exercises Step by step demonstration and explanation <ul style="list-style-type: none"> • Domestic refrigeration cycle error analysis and fault isolation • System pressure analysis • Electrical measurements • Refrigeration cycle preparation • Using of Nitrogen in different matters • Oil change at a hermetic compressor • Use of Quick Couplers "HANSEN" for domestic refrigeration • System evacuation • Refrigeration System Retrofit CFC R12 to HFC R134a • Refrigerant charge determination • Hermetic system preparation • Leak test • System brazing • Electrical measurements <p>Discussion</p>	
17:45	Arrival at Hotel	

Tuesday, 26th December 2006

10:30 – 19:30	Departure to Germany	Rolf Huehren
---------------	----------------------	--------------

Results of the third day Brazing assessment



Basis of evaluation

Determination of assessment score in coordination with the trainers

Mark	Importance	Appraise Point in %
1	Very Excellent	90 to 100
2	Excellent	80 to 90
3	Very Good	60 to 80
4	Good	50 to 60
5	Bad	31 to 49
6	Very Bad	1 to 30

Workshop Overall Results

The objectives set out for the seminar were fully met through the appropriate design of the workshop agenda whose sessions addressed all relevant issues.



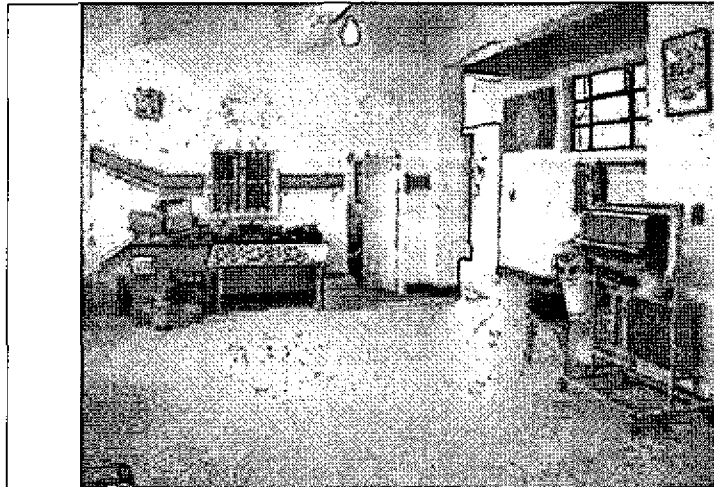
Follow-up

The R&R programme is part of the Arab Republic of Egypt RMP. As such, it will be accompanied by other RMP elements such as public awareness raising, training and policy development.

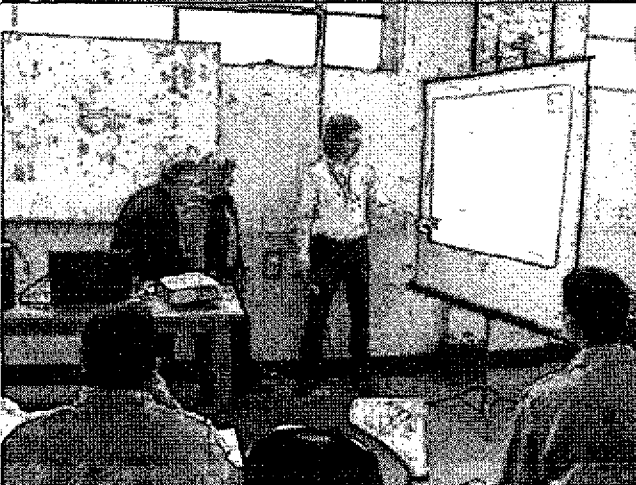
The NOU will establish a monitoring mechanism to ensure that the objectives of the R&R programme are met and will produce a follow-up report on the operation and performance of the R&R system after completion.

Next planned workshop for the training of technicians organized by the national NOU, the German GTZ and Universal Co. will take place in February 2007. Defined locations are training facilities in Cairo, Alexandria and Aswan.

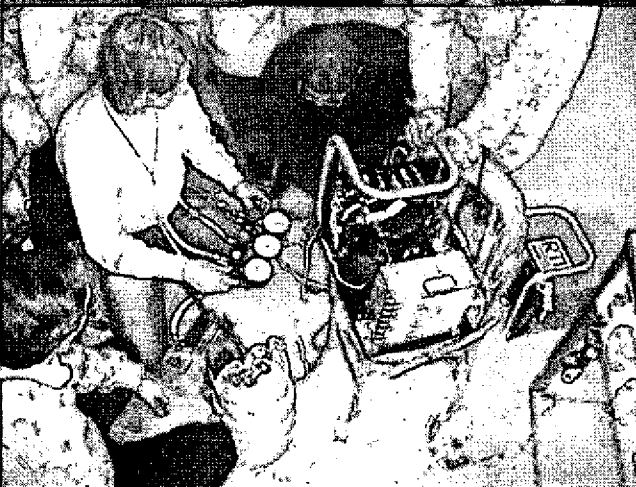
Annex A: Workshop Pictures



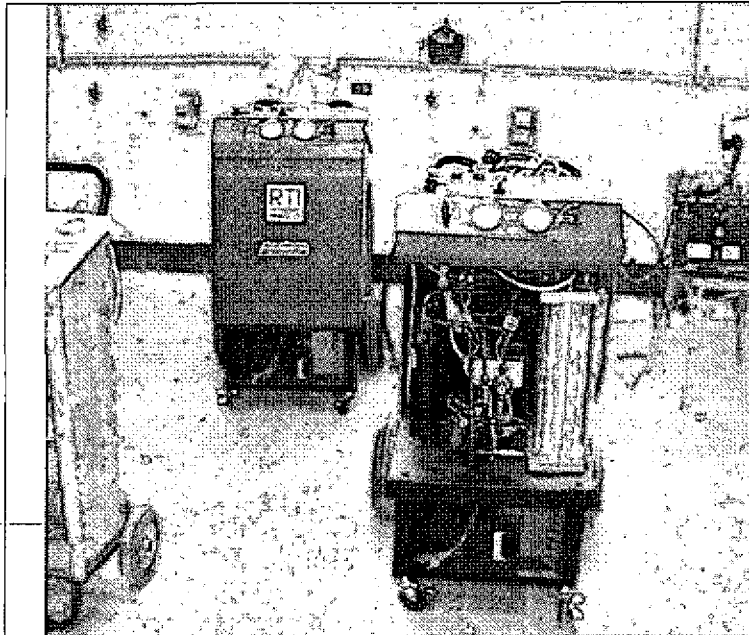
The Workshop Area at
Giza Electrical School
different demonstration units
available



Theoretical Power Point
Presentation
Trainer Dennis Huehren



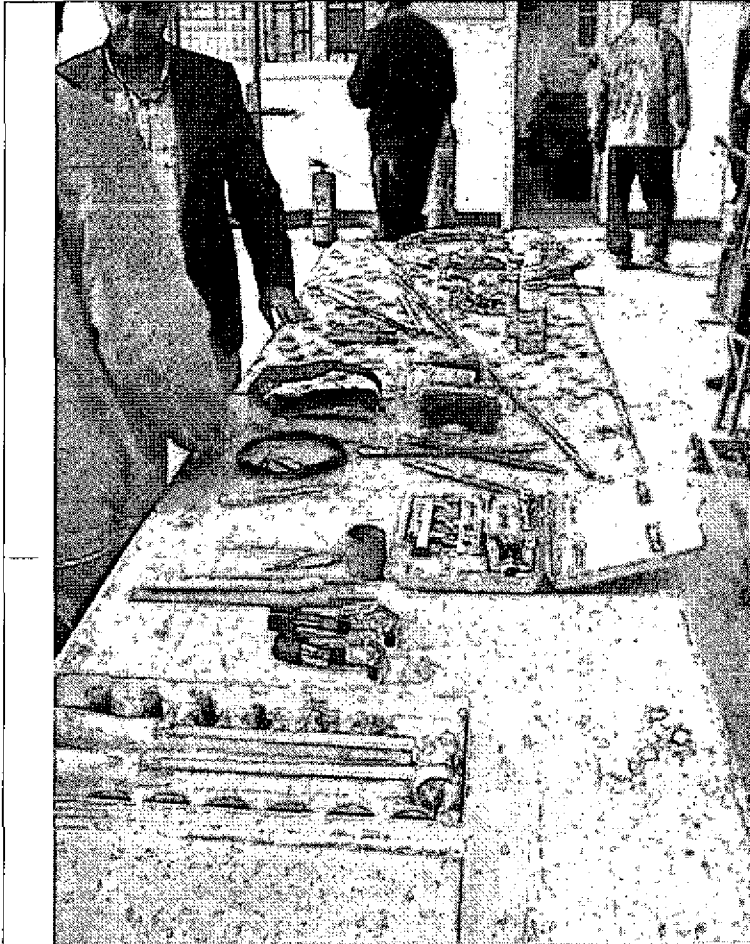
Practical training with RTI
recovery unit TX200
Trainer Dennis Huehren



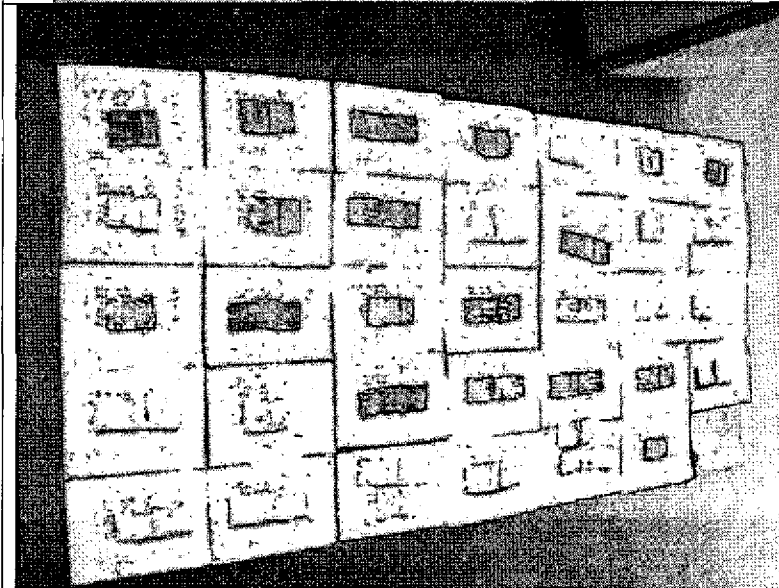
Practical training with RTI MAC
unit RRC770
Trainer Dennis Huehren



Practical training of
Brazing
Trainer Rolf Huehren



Practical training of
Brazing and copper tube
treatment
Trainer Rolf Huehren



Brazing procedure test
according EU DIN 13133
regulation

Annex B: List of Trainers Participants

Serial	Names	Associations
1	Yasser Eisyed Selim Ali	Elbadrasheen Secondary Industrial School
2	Salah Bayoumi AbdelRahim Hekal	Bahtim Secondary Industrial School
3	Rafaat Mostafa Mousa	Bahtim Secondary Industrial School
4	Saria Ahmed Abd Elrahman	Bahtim Secondary Industrial School
5	Elsayed Abdel Nabi Abdel aziz	Elgiza Electricity Secondary School
6	Amr Aly Farghaly Ahmed	Elgiza Electricity Secondary School
7	Essam Ibrahim AbdelHamid	Elbadrasheen Secondary Industrial School
8	Mohamed Ali Ali Mohamed	Elahram Secondary Industrial male school
9	Mohamed Abdel Latif Ali	Refrigeration and A/C supervisor from the Elnozha educational sector
10	Mohamed Mokhtar Mohamed Ahmed	Galal Fahmy advanced Technical School
11	Selim Mohamed Selim El Sherif	Teacher in the Galal Fahmy advanced Technical School
12	El Mewafaq Ahmed Abou Elela Khalil	Teacher in Galal Fahmy advanced Technical School
13	Mohamed Saad Abbass Mohamed	Teacher in Elgiza Electricity Secondary School
14	Amer Elsayed Mahmoud El Sayed	Teacher in Banha Mechanical Secondary School
15	Mohamed Fouad Abbass	Teacher in Industrial Abdeen Secondary School
16	Abdel Sttar Fouad Abdel Elsattar	Teacher in Industrial Abdeen Secondary School
17	Ehab Abdel Azeem Mahmoud	Teacher in Industrial Abdeen Secondary School
18	Mahfouz rahim Eskander	Teacher in Elgiza Secondary Electricity School

19	Mahmoud Elsyed Abdel Aziz Zayed	Technician in Elagina Scenter for Mac
20	Magdy Mohamed Hassan	Elgiza Electricity Secondary School
21	Mahmoud Ashour	Elgiza Electricity Secondary School
22	Khaled Osman Mohamed	Elgiza Electricity Secondary School
23	Atef Sedik Masouad	Elgiza Electricity Secondary School
24	Albert Ibrahim Meshreky	Universal Company
25	Tarek Ahmed Hassan	
26	Sammar Abdel Gabar	
27	Osama Abdel Tawab	
28	Tarek Ahmed Soliman	
29	Hany Fouad Gaballa	
30	Nadia Abdel Samee	