

FINAL REPORT ON
THE ACHIEVEMENTS OF JICA-AMTA TECHNICAL CO-OPERATION
FOR
THE ARAB MARITIME TRANSPORT ACADEMY

MAY 1983

JAPANESE ADVISORY TEAM
JAPAN INTERNATIONAL CO-OPERATION AGENCY



国際協力事業団

22472



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DATE : May 1st, 1983.

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Dr. Gamal El Din Moukhtar,
Director General,
Arab Maritime Transport Academy.

Dear Director General Dr. Moukhtar,

We have the pleasure to submit the final report on the achievements of the JICA-AMTA technical co-operation for the Arab Maritime Transport Academy, which summarizes the achievements of the JICA-AMTA Project performed from November 1976 to May 1983.

We are very glad to report that the technical co-operation is completed successfully and has obtained excellent results. It has also helped to promote the mutual good understanding and close friendship between our two countries.

We would like to undertake this opportunity to express our deep appreciation for your attentive considerations and co-operation for the technical co-operation activities during the JICA-AMTA project extended over a long period of time. Moreover, we are very grateful to your staff members concerned and all counterparts for their friendly and sincere co-operation with us during our work.

With the best regards, I remain,

Yours truly,

Capt. Yoshio Chihara,
Chief Advisor,
Japanese Advisory Team.
Japan International Co-operation Agency

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A. HISTORICAL BACKGROUND

In October 1972, the Arab Maritime Transport Academy (AMTA) - as a regional institution of the Arab League - was established in Alexandria for the purpose of training personnel to work in the field of maritime transport, with the technical and financial aid of the UNDP/IMCO.

In July 1974, due to the request of the Government of Egypt concerning technical co-operation for the AMTA, the Government of Japan dispatched the Preparation Survey Team organized by the Japan International Co-operation Agency (JICA) for the purpose of a feasibility study.

In October 1975, for the purpose of planning the technical co-operation, the Preliminary Survey Team of JICA was dispatched.

In November 1976, for the purpose of working out the details of the co-operation, the Implementation Survey Team of JICA was dispatched, and the Record of Discussion (R/D) between the Japanese Survey Team and the Egyptian Governmental Authorities concerned - concerning the AMTA project in view of the system of the Japanese Overseas Technical Centre Services being bilateral co-operation - was signed by the two parties, which defined the duties and responsibilities of each side and was retained valid for a period of four years.

In May 1977, on the basis of the afore-mentioned R/D, the van of the Japanese experts was dispatched to the AMTA, and the field activities of the technical co-operation were inaugurated.

In March 1978, the permanent Committee for Transportation and Communications of the Arab League decided to cancel the utilization of the facilities of the AMTA's permanent premises at El-Tarh area on the Abu-Quir bay, of which the construction works had almost been completed, because of the possibility of pollution occurring through the fertilizer factory - constructed afterwards - adjacent to the premises.

In April 1979, the Ministry of Maritime Transport and the AMTA succeeded in securing the land for the new permanent premises at El Montada, Abu-Quir as a substitute for the premises at El-Tarh, and in June of 1980 the construction works at El Montada were commenced.

In October 1980, owing to terminate the period of the JICA-AMTA project on November 5, 1980, the Evaluation Team of JICA was dispatched with the objective of final evaluation of the project, and on the basis of the results of the evaluation, further co-operation between the JICA and the AMTA was proposed in the new R/D in which the Japanese experts and the terms of their dispatch in respective fields were defined to start a new phase of extension; the longest extension period among that of the experts was one year and six months from November of 1980. In September 1981, the construction of the buildings and the installation of the equipment provided by the JICA in the new premises at El Montada were almost completed, and the first session for all courses of the S.S.T.C. was commenced in the new facilities.

In May 1982, the JICA-AMTA technical co-operation in the system of the Japanese Overseas Technical Co-operation Centre in accordance with the R/D signed on October 15, 1980 was terminated, but on the basis of the request of the AMTA through the Egyptian Government, the Japanese Government decided to extend the period of assignment of two experts from along the existing, to continue following up the co-operation for the AMTA till May 8, 1983.

In May 1983, the JICA-AMTA project was completely terminated.

D. ACHIEVEMENTS

1. Dispatch of Japanese Experts:

The JICA dispatched long-term experts to the AMTA during the period of the JICA-AMTA Project (hereinafter referred to as the Project) as shown in Table 1.

The number of man/month of every calendar year of the dispatched experts including short-term experts is indicated in Table 2.

2. Disposition of counterparts and their technical training in Japan:

(1) Disposition of counterparts

The AMTA arranged the counterpart personnel such as administration staff, instructors and trainers in the respective fields during the period of the Project as shown in Table 3.

(2) Technical Training in Japan

The JICA accepted the counterparts to visit Japan for observation tours or technical training courses as shown in Table 3. The number of the accepted counterparts of every calendar year is indicated in Table 4.

3. Provision of equipment:

The JICA provided training aids basically for the Specialized Seamen Training Centre (S.S.T.C.), along with the Department of Nautical Studies and the Department of Marine Engineering Studies.

The following are the main training aids:-

For the Specialized Seamen Training Centre

- * A 30 ton training launch (MARS).
- * A life boat, lifesaving apparatus and fire fighting appliances.
- * Nautical and signalling instruments.
- * A marine radar.
- * A steering system simulator.
- * Meteorological observation equipment

- * Seamanship equipment.
- * Cargo winches and cargo handling instruments.
- * Ship models.
- * Diesel driven A.C. generator plant (2 sets of generator)
- * A complete oil purifier set.
- * A complete set of cold storage unit.
- * Automatic control panels.
- * Electric circuit training apparatus and experiment equipment.

For the Department of Nautical Studies

- * A tanker operation simulator.
- * A cargo oil control simulator.
- * A cargo oil pump simulator.
- * Ship condition calculators.
- * Measurement instruments.
- * Audio-visual teaching aids.

For the Department of Marine Engineering Studies

- * A 2-cycle marine diesel engine plant including a remote control system, a dynamometer, a complete set of auxiliary machinery, a cooling tower and heat exchangers, and other accessories and materials.

The value of training aids provided amounts to approximately one and a half million U.S. Dollars (U.S.\$1.5 Million).

4. Buildings and facilities:

The construction of the buildings and installation of the equipment for the implementation of the Project were completed in the progress as shown in Table.5.

The location of the educational building of the S.S.T.C., the workshops and others at El Montada premises is shown in Fig. 1 and the arrangement of the equipment in their buildings as shown in Fig. 2, 3 and 4.

The arrangement of the equipment in the Tanker Operation Simulator (TOS) Laboratory of the main building in Miami area, Sidi Bishr is shown in Fig. 5.

5. Development of training programmes:

For the Specialized Seamen Training Centre

(1) Preparation and application of the training programmes:

In order to set up a 20 week course of studies for each of the Deck Basic Course, Mechanical and Electrical Basic courses, - of which the objective is to train and qualify the students to develop their practical knowledge and skills necessary for working on board ships as ordinary seamen of sailors, mechanics or electricians, based upon improving the existing course a 14-week -, the following training programme for each course was prepared in due consideration of the IMO "Convention on BTCW 1978" and the ILO-IMO "Document for Guidance" from September 1977 to August 1978 jointly by the Japanese experts and the instructors of the S.S.T.C., and was put into practice from the second session of the end of February 1978.

- * Curriculum
- * Syllabus
- * Training scheme for course of studies
- * Schedule of lessons based on the weekly lesson timetable
- * Plan for executing practical training (the Deck basic course only).
- * System of evaluation on the training.

The training programme for each course was followed up and revised, and finally compiled in a manual.

(2) Preparation of teaching materials:

The text books for the various subjects were compiled in English by the Japanese experts and were translated into Arabic by the counterpart instructors.

Other teaching materials for the various subjects such as diagrams of wall charts and original drawings for a slide projector and overhead projector were also prepared in Arabic.

The manual for the sea oriented training of a 10-day cruise on board the training ship AIDA III was compiled in English by the Japanese experts.

(3) Questionnairing for following-up of the graduates:

In order to obtain information to improve the education and

training at the SSTC, a questionnaire on the circumstances after graduation from the SSTC was distributed among graduates at the end of every session from the first session of the academic year 1981 to the first session of the academic year 1982. The number of answers from the graduates to the questionnaire was not enough to prepare any statistics, but the results of the questionnaire were valuable for bringing out some problems on the education and training at the SSTC.

For the Tanker Operation Course (TOC) of the Department of Nautical Studies

(1) Preparation & application of the training programme

In order to establish a new short course of a four-week for the TOC, of which the objective is to train and qualify experienced captains and deck officers to develop their practical knowledge and skills necessary for working on board tankers,

The training programme was prepared in consideration of the IMO "Convention on STCW 1978" from October 1978 to February 1979 jointly by the Japanese expert and the counterpart, and the first TOC was inaugurated in May 1979.

- * Curriculum
- * Syllabus
- * Training scheme for course of studies
- * Lesson schedule for the course
- * Operation scheme of the TOC for the academic year

And after following up and revising the programme, a final training programme and operation scheme for the TOC were set up at the 6th TOC in May 1980, in which the TOC was scheduled to hold three to five times a year a four-week course for less than nine participants.

(2) Preparation of teaching materials:

The text book was compiled in English by the Japanese expert in co-operation with the counterpart, and also films and video tapes of teaching materials for the various subjects were prepared as audio-visual teaching aids. Various diagrams of original drawings of a slide projector and an overhead projector were prepared.

For the Practical Training on the Two-Cycle Diesel Engine (2CDE)
of the Department of Marine Engineering Studies:

In order to provide the students in the classroom studies of the Phase I of the Academy with sufficient and effective practical training on the 2CDE, the following training programme was prepared from August to November 1981 by the Japanese expert in co-operation with the counterpart.

* Programme of practice and experiment for the cadets of each grade.

* The training subjects and training hours.

Also a text book consisting of two volumes and a guide book on experiment were prepared.

6. Technical transfer:

In addition to the technical training in Japan, the Japanese experts gave technical advices and guidance concerning the operation and maintenance of the training aids and the teaching techniques in using the aids to the counterparts at the BBTC, the TOC of the Nautical Department and the Practical Training on 2CDE of the Marine Engineering Department.

The technical transfer was completed successfully at each field.

7. Study on the sea training system for the AMTA:

On the basis of the request of the AMTA, the Japanese experts studied the sea training system of the AMTA from October 1982 to March 1983 for the purpose of setting up a skeleton of sea training system to execute the new project for the reformation of the sea training programmes in the AMTA, which is scheduled to be carried out into effect as from the academic year 1983/1984.

The following reports were submitted to the AMTA:

Report No. 1 : Recommendation for Development of Organization for Sea training.

Report No. 2 : Study's Scheme of Guided Sea Training in the Phase II of the Academy.

C. CONCLUSION

- (1) At the termination of the Project, the JICA-AMTA technical co-operation is observed to have successfully accomplished the purpose of the R/D signed on November 6th, 1976. Moreover, in view of the results so far achieved, the AMTA is viewed to have obtained almost all the basic shorebased aids of education and training necessary for a sea training institution based on the technical co-operation of the UNDP/IMCO, JICA, etc., and also to have almost settled the educational system and its basis, except the sea training system, after ten years of the Academy's establishment. From now on, the AMTA is expected to concentrate its effort on strengthening the educational system and its basis as well as the sea training system.

- (2) In spite of having met some unexpected obstacles, the co-operation activities of the Project including visits of the 28 counterparts to Japan as shown in Table 4, extended over just six years since starting its field activities at the AMTA is observed to promote remarkably the mutual good understanding and close friendship between the two countries.

*** **

Table 1. List of the Long-term Experts dispatched from Japan

Category	Name	Sponsoring Employer	Period of Assignment
Chief Advisor	Noubaki KOJIMA	The Institute for Sea Training	6 May, '77 - 5 May, '79
	Keiji KISHIMOTO	- do -	16 Apr. '79 - 10 May, '81
	Yoshio CHIHARA	- do -	15 Apr. '81 - 10 May, '83
Deck Department	Takashi SUZUKI	NIPPON YUSEN KAISHA CO., LTD.	6 May, '77 - 5 May, '79
	Kyoichi NASUNO	- do -	16 Apr. '79 - 9 Nov. '81
Mechanical Department	Katsuji ISHI	Mitsui O.S.K. Line Co., Ltd.	16 Jun. '77 - 30 Sep. '78
	Kiyoshi MISAWA	Institute for Sea Training	22 Sep. '78 - 25 Mar. '81
	Takero SUNAGAWA	- do -	11 Mar. '81 - 10 May, '83
Electrical Department	Seiichi KIKUSHIMA	Mitsui O.S.K. Line	29 Aug. '77 - 28 Aug. '79
	Toshihiko MUKAI	- do -	13 Aug. '79 - 9 Nov. '81
Nautical Dept. Tanker Operation Course	Tsuguo ARIMA	Japan Line Co., Ltd.	12 May, '78 - 14 Mar. '81
M. Engineering Dept. (2 CRE)	Kunihiko TOMIURA	Y.S. LINE Co., Ltd.	7 May, '79 - 9 May, '82
	Yoshihisa KONDO	JICA	15 May, '77 - 20 Oct. '79
Co-ordinator	Kazuo SASANO	- do -	9 Oct. '79 - 9 May, '82

Table 2 . Number of Man/Months of Experts
dispatched from Japan

Type of Dispatch	Calendar year								Total
	1976	1977	1978	1979	1980	1981	1982	1983	
Long-term Experts (Man x month)	-	34	68	82	84	75	29	8*	380
Short-term Experts (ditto)	-	-	1	2	3	13	-	-	19
Total (ditto)	-	34	69	84	87	88	29	8	399

* As of May 8th, 1983.

Table 3 . List of Counterparts

Cate- gory	Rank	Name of Counterpart	Duration enrolled as a Counterpart	Period of Training Visit to Japan	Type of Training
Administration	Director General	Gamal El Din Moukhtar	May, '77- May, '83	17 Sep.-3 Oct. '79	Individual
	D.D.G. for Educa- tion & Training	Alphonse H. Sadek	May, '77- Mar. '80	1 Jun.-22 Jun. '76	Individual
	- Do -	Sameeh Ahmed Ibrahim	May, '77- May, '83	5 Apr.-25 Apr. '77	Individual
	Ex-Head of Cood. of Education	Moustafa Abdel Aziz	May, '77- May, '83	23 Sep.-15 Oct. '78 25 Nov.- 8 Dec. '81	Individual AMTA's Expense
	Head of Coodina- tion of Education	Ibrahim Hussein Ibrahim	May, '77- May, '83	-----	
S.S.P.C.	Principal	Yousri Abu El Nasr	May, '77- May, '83	5 Apr.-25 Apr. '77	Individual
	Lecturer (Nav.)	Hussein Khalil Hassanein	May, '77- Feb. '79	22 Apr.-22 Dec. '77	Group & Individual
	- Do -	Amin Arif Mohamed	Mar. '79- May, '83	21 Oct.-19 Nov. '80	Grup & Individual
	- Do -	Mohamed Hafiz El Kahky	Feb. '81- May, '83	14 Oct.-19 Nov. '82	Group
	Lect er (Mech.)	Ashraf Anwar Thabet	May, '77- May, '83	15 May,-22 Jul. '80	Individual
	- Do -	Osama Mohamed Motaweh	May, '77- Jun. '79 Jun. '81- Feb. '83	17 Oct.-19 Dec. '78	Group & Individual

(cont.)

Lecturer (Mech.)	Mohamed Nabil El Sobki	Jul. '79- May, '83	16 Oct.-18 Dec. '81	Group & Individual
Trainer (Mech.)	El Sayed El Sayed EL Bawab	May, '77- May, '83	27 Jul.-27 Sep. '81	Individual
Lecturer (Elect.)	Mohamed Aly Nowar	May, '77- Nov. '77	-----	
- Do -	Hosam El Din El Mahdi	Dec. '77- Mar. '78	-----	
- Do -	El Faruk Moustafa	Mar. '78- Aug. '78	-----	
- Do -	Mohamed Ragab Amin	Sep. '78- May, '83	15 May, -22 Jul. '80	Individual
Trainer (Elect.)	El Hussein Hamza El Said	May, '77- May, '83	5 Aug.-27 Sep. '81	Individual
Ex-Head of Dept.	Mohamed Fouad Farid	May, '77- May, '83	1 Feb.-31 Mar. '78 6 Mar.-28 Mar. '79	Individual Individual
Lecturer (TOC)	Mohamed K. Rageb	Feb. '79- Sep. '80	-----	
- Do -	Mohamed Mamdouh Hamalawy	Sep. '80- May, '83	12 Jul.-27 Sep. '81	Individual
Trainer (TOC)	Saied Gouda	Feb. '80- May, '83	-----	
Ex-Head of Dept.	Ahmed Hasan Maamoun	May, '77-Sep. '80	23 Sep.-15 Oct. '78	Individual
Head of Dept.	Mohamed Ali Lotfi	Sep. '80-Oct. '82	-----	

S. S. P. C.

Nautical Dept.
(C.O.C.)

M. Engr.
Dept.
(SCDE)

Marine Engineering Dept. (2CDE)						
Lecturer (2CDE)	Rabbi A. El Malt	Mar. '79- Nov. '79	-----			
- Do -	Sami Mina Botros	Nov. '79- Aug. '80	-----			
- Do -	Mohamed El Saied Morsi	Jan. '80- May, '83	6 Feb. - 13 Mar. '80	Individual		
- Do -	Ibrahim Mohamed El Mohr	Jul. '79- May, '81	4 Jul. - 21 Sep. '80	Individual		
- Do -	Nabil Hafez Agamy	Nov. '80- May, '83	4 Aug. - 17 Sep. '82	Individual		
Trainer (2CDE)	Ragab Mohamed Hamedo	Nov. '80- May, '83	30 Jan. - 8 Mar. '83	Individual		
Head of Dept.	Abdel Wahab Fahmy	May, '82- May, '83	25 Nov. - 8 Dec. '81	Individual G-C base		
Senior Eng. Adv'r	Adel Ali Soliman	May, '82- May, '83	expected in the middle of Oct. '83	Individual		
Sea Train- ing						

Table 4 . Number of the Counterparts accepted in Technical Training in Japan

Rank of Counterpart	Calendar year								Total
	1976	1977	1978	1979	1980	1981	1982	1983	
Directors (2 - 3 weeks)	2	2	2	2	-	2*	1*	-	11
Lecturers (2 - 3 months)	-	1	2	1	5	2	1** 2	(1)	14(15)
Trainers (2 - 3 months)	-	-	-	-	-	2	-	1	3
Total	2	3	4	3	5	6	4	1(1)	28(29)

* : Observation tour of Japan at the AMTA's expense
 ** : ditto for two weeks
 *** : The number scheduled to be accepted.

Table 5 . Record of the Progress in the Construction and the Installation

Building (Equipment)	Construction of building		Installation of equipment		Date of Operation
	started	finished	started	finished	
SSTC Educational building (for Deck Studies)	June 1980	Sept. 1981	Apr. 1981	Sept. 1981	Sept. 1981
No. 4 Workshop of SSTC (for Mechanical & Ele- ctrical studies)	June 1980	Oct. 1980	Feb. 1981	May 1981	Sept. 1981
Cargo Handling Section of SSTC (for Deck Studies)	June 1980	Apr. 1982	Apr. 1981	Apr. 1982	May 1982
No. 1 Workshop of M. Engineering Dept. (2CDE* Plant)	June 1980	Apr. 1981	Apr. 1981	Sept. 1981	Mar. 1982
Tanker Operation Simulator Laboratory of Nautical Dept. (COC**, TOS***, etc.)	July -- 1978 (Aug. 1979 Extension work)	Dec. 1978 Dec. 1979	(COC) Oct. 1978 (TOS) Dec. 1979	(COC) Mar. 1979 (TOS) Nov. 1980	(COC) May 1979 (TOS) Dec. 1980

* : Two cycle diesel engine
 ** : Cargo oil control simulator
 *** : Tanker operation simulator

- 1. Diesel Workshop (No.1)
 - 2. Metal cutting Workshop (No.2)
 - 3. Repair and Maintenance Workshop (No.3)
 - 4. Mechanical & Electrical Workshop (No.4)
 - 5. Main Educational Building
 - 6. Fire Fighting Building
 - 7. Cargo Handling Section
- Pre-existing buildings

- 1. Diesel Workshop (No.1)
- 2. Metal cutting Workshop (No.2)
- 3. Repair and Maintenance Workshop (No.3)
- 4. Mechanical & Electrical Workshop (No.4)
- 5. Main Educational Building
- 6. Fire Fighting Building
- 7. Cargo Handling Section

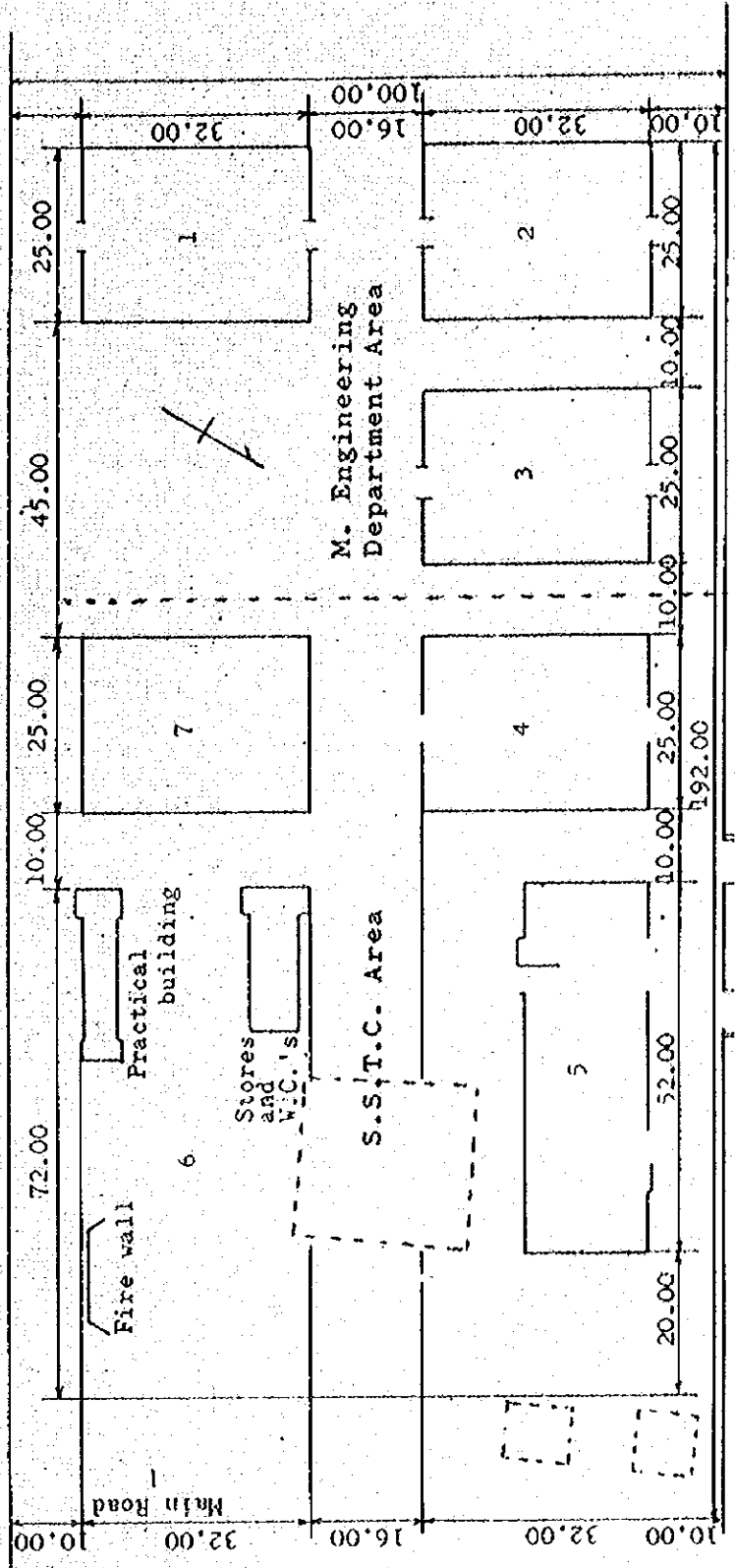


Fig. 1 . Location of the Building at El Montada premises

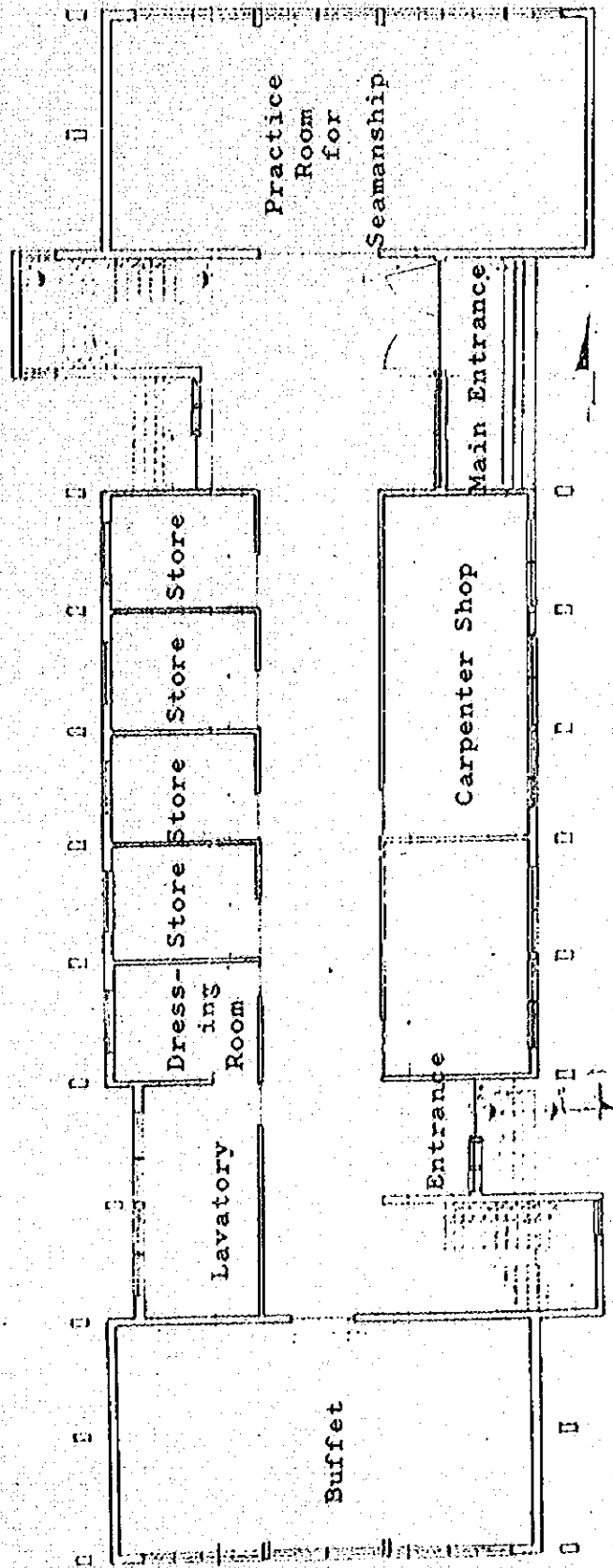


Fig. 2-1. Plan of SSTC Educational Building (Ground Floor)

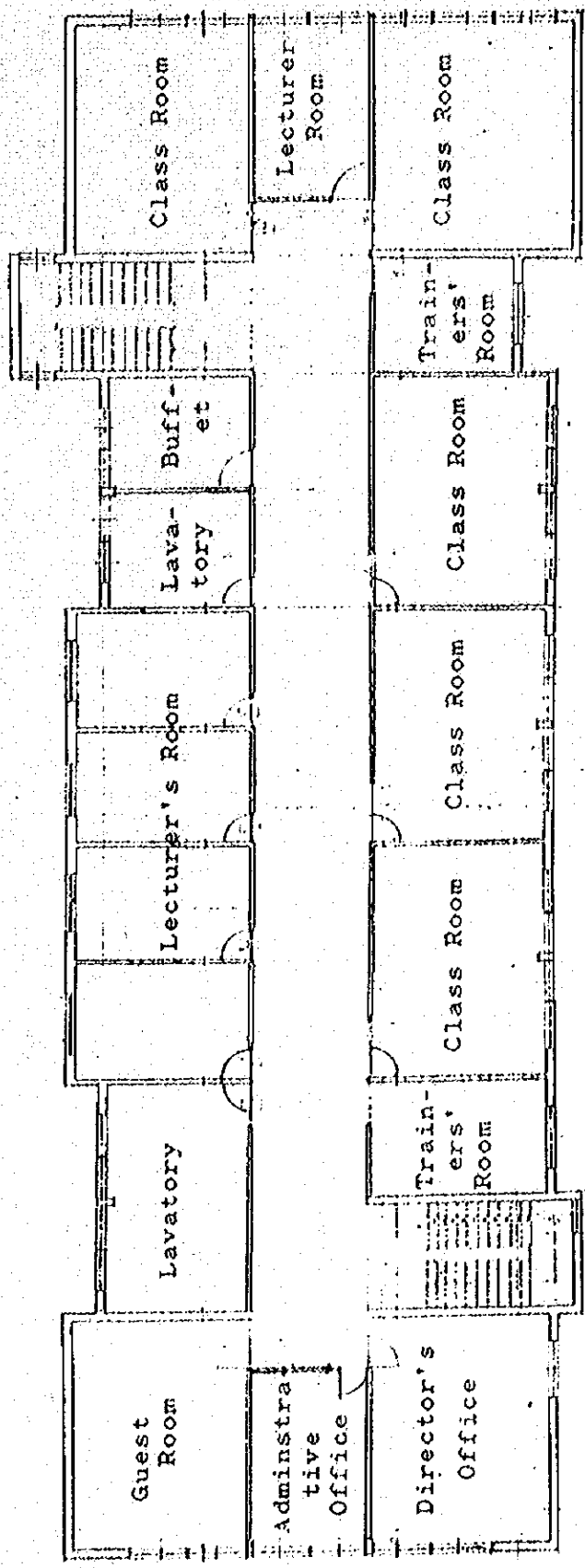


Fig. 2-2. Plan of SHSU Educational Building (1st Floor)

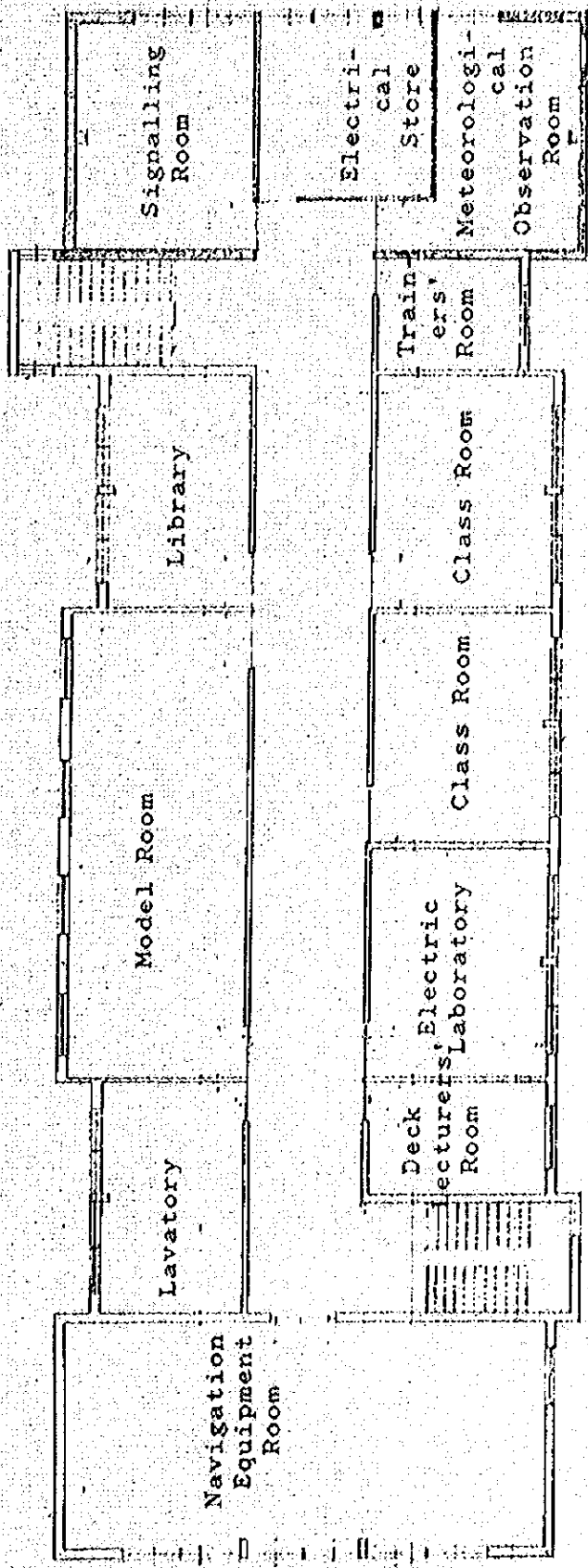


Fig. 2-3. Plan of SSIC Educational Building (2nd Floor)

1. Simulator
2. Motor Generator for Radar
3. Power Transformer
4. Radar
5. Screen
6. Overhead Projector
7. Steering Stand
8. Rudder Angle Indicator
9. Hydraulic Pump Unit
10. Steering Gear

11. Magnetic Compass
12. Exhibits of Nautical Instruments
13. Chart Table
14. Models of Light House
15. Tranceiver for Radar
16. Dual Channel Recorder
17. Gyro Pilot Starter
18. Junction
19. Main Switchboard
20. Non Fuse Breaker

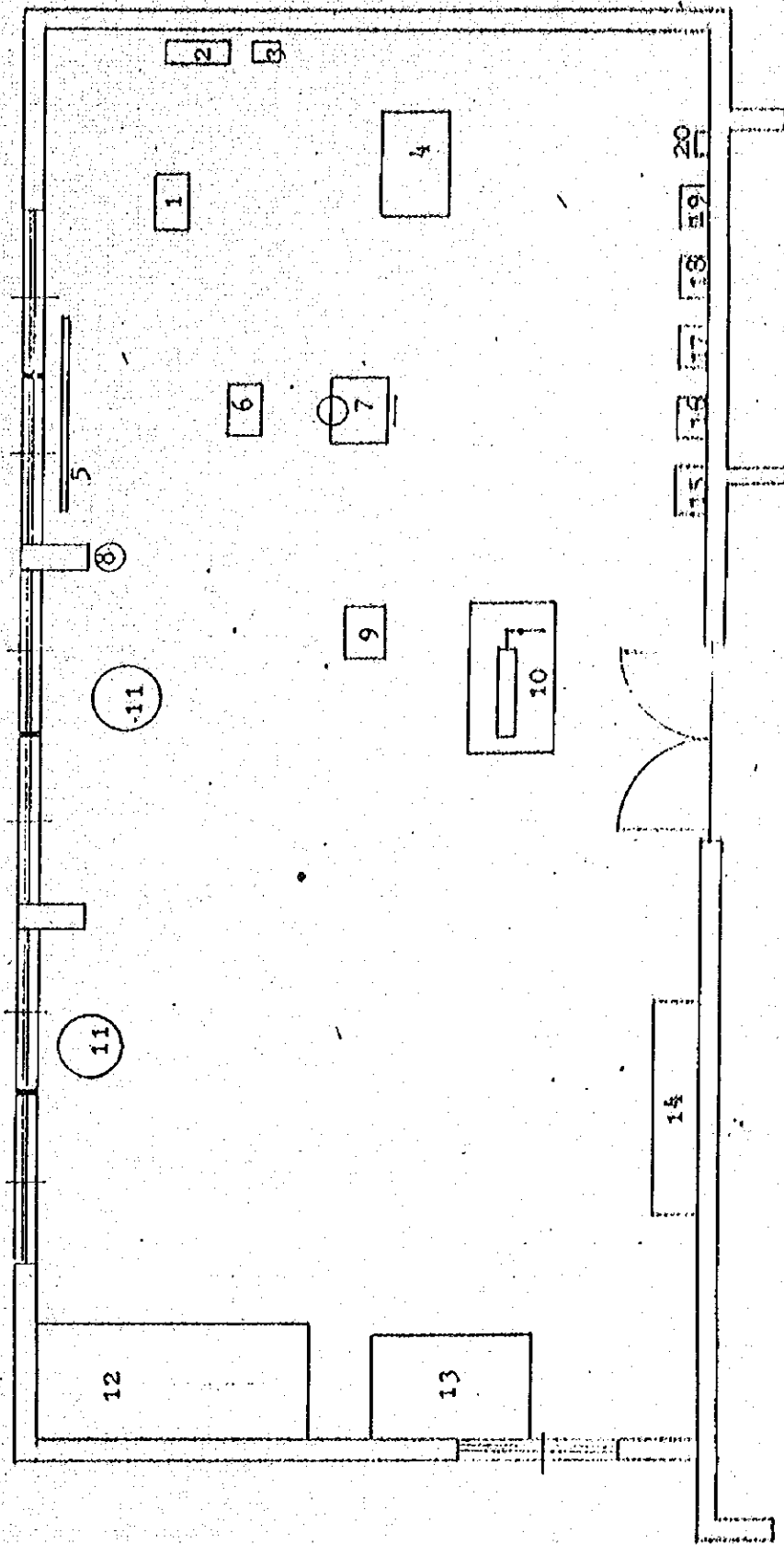


Fig. 2-4. General Arrangement of Navigation Equipment Room in SSIC Educational Building

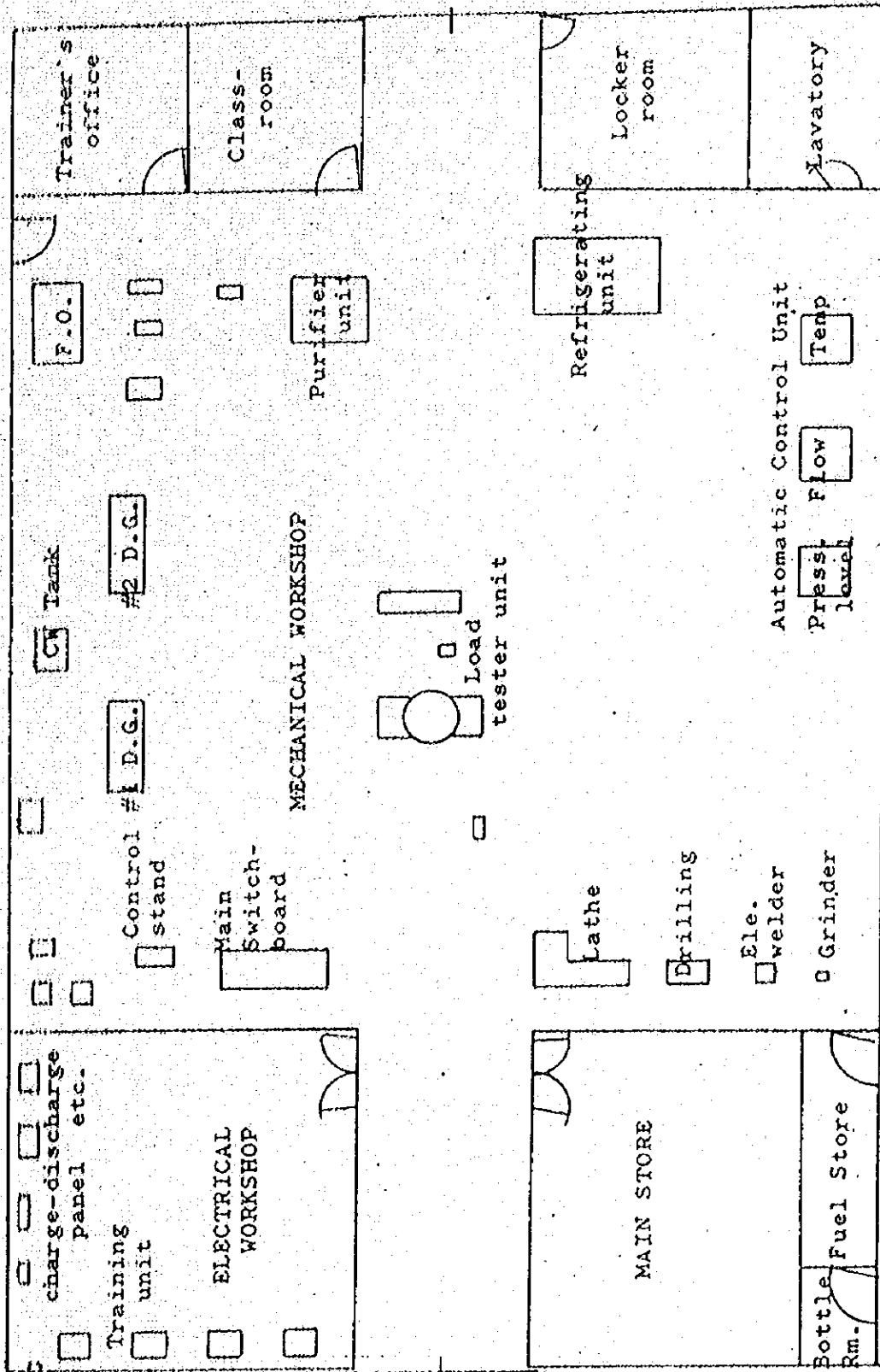


Fig. 3. General arrangement in No.4 Workshop of the S.S.T.C.

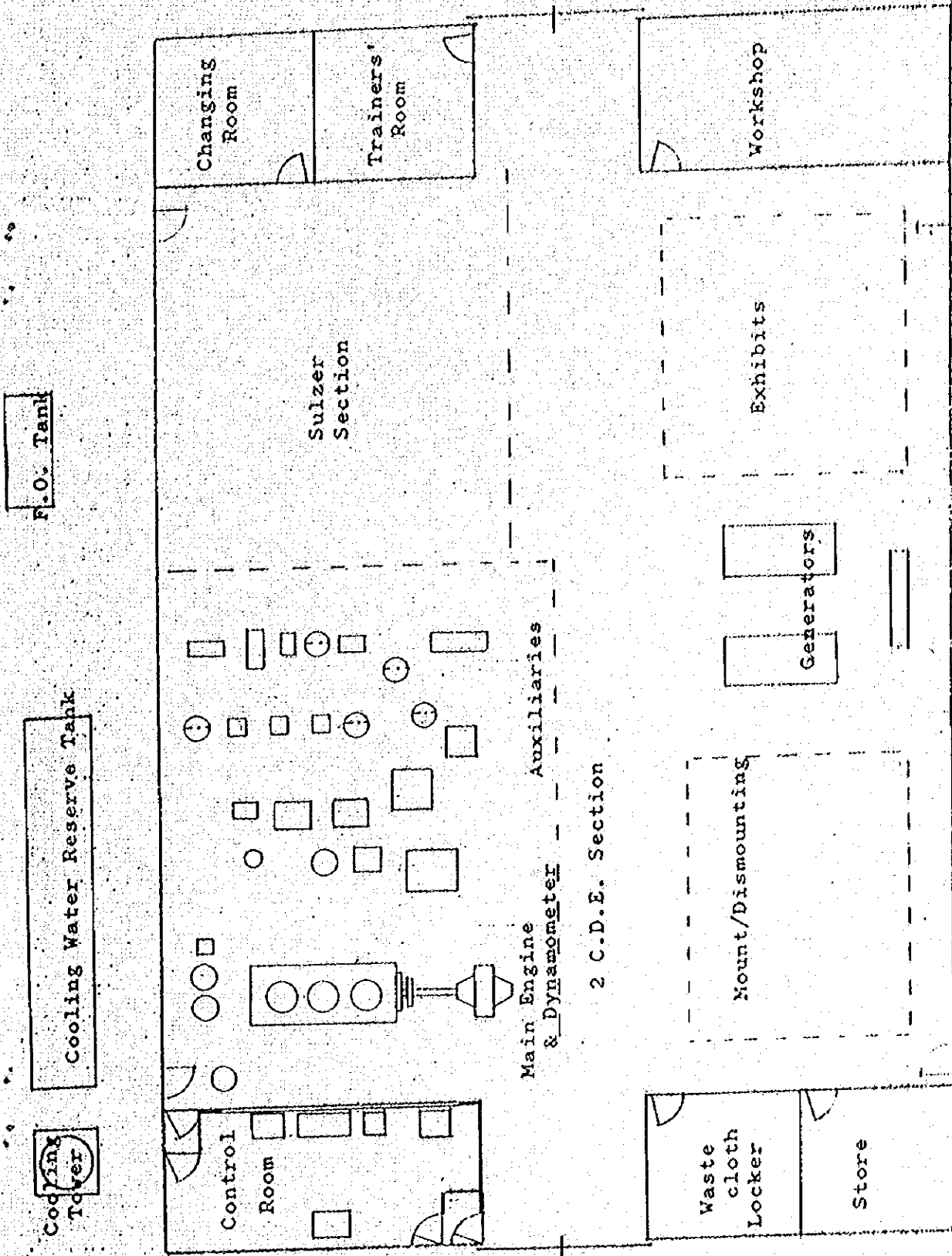
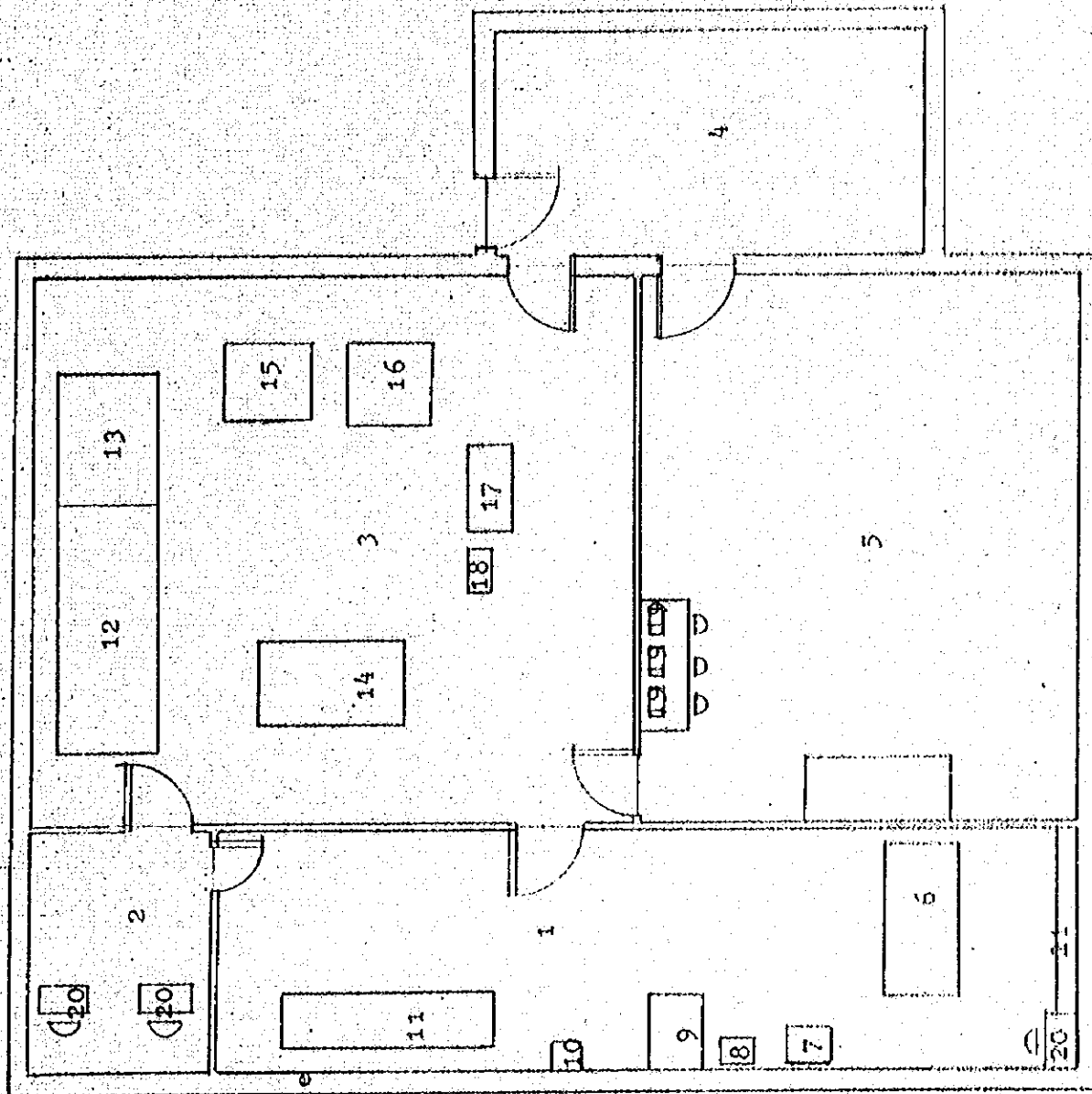
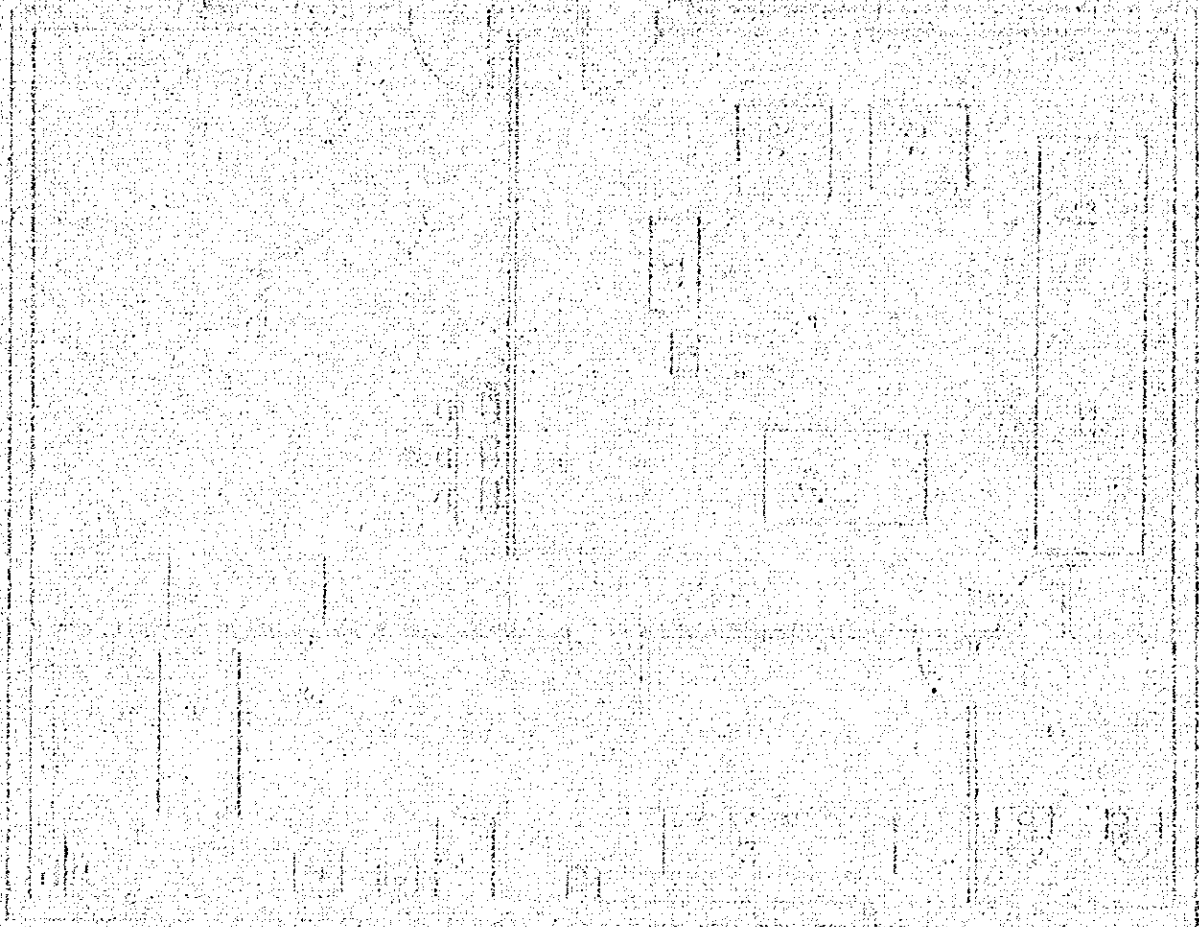


Fig. 4. General Arrangement of No. 1 Workshop in Montada



1. T.O.S. Room
2. Lecturers' Office
3. C.O.C. Room
4. Reading Room
5. Class Room
6. Graphic Display
7. Computer Cabinet
8. Teletypewriter
9. Instructors' Console
10. Stabilizer
11. Cargo Oil Control Console.
12. Hydraulic Control Unit (A)
13. Hydraulic Control Unit (B)
14. Control Console
15. Float Gauge
16. Water Tank
17. Pneumatic Indicator.
18. Sink
19. Desk Type ships Condition Calculator.
20. Desk
21. Shelf.

Fig. 5. General Arrangement in the Tanker Operation Simulator Laboratory of the main Building in Miami Area



1. The object is a rectangular block with a central rectangular section. The central section is defined by a horizontal line and several vertical lines, creating a series of vertical channels or segments. The grid lines are spaced evenly, providing a scale for the object's dimensions.

2. The object is shown in a perspective view, with the top and front faces visible. The grid lines are drawn on the top face, extending across the entire width and length of the object.

3. The object is composed of several layers or segments, as indicated by the vertical lines in the central section. The top layer is the most prominent, and the other layers are stacked below it.

4. The object is shown in a perspective view, with the top and front faces visible. The grid lines are drawn on the top face, extending across the entire width and length of the object.