

資料No 6. MINUTES OF THE MEETING

JAPANESE IMPLEMENTATION SURVEY TEAM

DR. YOSHIYUKI NAITO

Professor
Faculty of Engineering
Tokyo Institute of Technology

DR. EIJI SUITO

President
Maizuru Technical College
Professor Emeritus,
Kyoto University

MR. KENZABURO KASHIWAGI

President
Fukushima Technical College

MR. HAJIME NAGAHAMA

Deputy Director
Technical Education Division,
Higher Education Bureau,
Ministry of Education

MR. HIROICHI ONO

Deputy Director
Second Technical Cooperation
Division,
Economic Cooperation Bureau,
Ministry of Foreign Affairs

MR. HIROSHI SEKIGUCHI

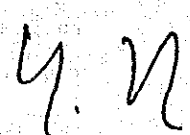
Officer, Overseas Centers
Division,
Social Development Department
J.I.C.A.

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TUP-TEAM

DR. JOSE R. VERGARA	President, TUP
DR. GALICANO J. DATU	Vice President for Academic Affairs, TUP
MR. BAYANI I. GUTIERREZ	Vice President for Administration and Development, TUP
MR. RADAMES M. DOCTOR	Director Curriculum Development Center, TUP
MR. CARLOS Q. TRINIDAD	Executive Director TUP-Cavite Campus
MR. FERNANDO S. ALFONSO	Assistant Executive Director IRTC, TUP
MRS. TERESITA R. BATANES	Administrative Officer TUP
MRS. CORAZON C.S. CONANAN	Budget Officer TUP



TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES
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MINUTES OF THE MEETING

29 March 1982
President's Conference Room
3:20 P.M.

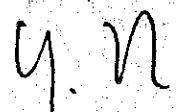
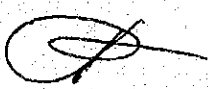
PRESENT: Japanese Team:

Dr. Yoshiyuki Naito
Dr. Eiji Suito
Mr. Kenzaburo Kashiwagi
Mr. Hajime Nagahama
Mr. Hiroshi Sekiguchi

T.U.P. Team:

President Jose R. Vergara
Vice President Bayani I. Gutierrez
Vice President Galicano J. Datu
Prof. Radames Doctor
Prof. Fernando S. Alfonso
Prof. Carlos Q. Trinidad
Mrs. Teresita R. Batanes
Mr Corazon Conanan

- I. Introduction of Japanese Team Members who are mainly from the Ministry of Education, Japan by Dr. Yoshiyuki Naito.
- II. Introduction of the Filipino Team Members by Dr. Jose R. Vergara.
- III. Dr. Naito presented the aims of the mission (team).
The aims are:
 1. to discuss the final form of record and discussion.
 2. to have information regarding the present Budget of the IRTC:
and how many staff of the IRTC from the Philippine government.The information regarding the budget should have been sent to JICA in September 1981.



President Vergara reasoned out that the budget was approved by the Batasang Pambansa in December 1981.

3. to make sure that there is no change in the characteristic of IRTC, if there is a change after the survey, discussion of record will be another item.
4. to make contents of the record of discussion of the project. This will be done in Japan few months later.

IV. Dr. Jose R. Vergara discussed what is required (by the Japanese Team) and the Assurances (by the TUP Team)

<u>Required</u>	<u>Assurances</u>
1. Budget	<u>1982 - ₱2,275. M</u>
	₱375,000.00 - Personnel
	900,000.00 - Operational & Maintenance
	1,000,000.00 - Equipment

2. Staffing

<u>Position</u>	<u>Number Needed</u>
Faculty staff trainers	30
Technicians	20
Janitors	6
Utility Maintenance	4
Security Guards	6
Driver/Messenger	2
Support Staff:	
Secretary	2
Clerk Typists	6
Illustrator	2
Snack/Lounge Staff	5
Program Assistant	1
Program Coordinator	1
Snack/Lounge Supervisor	1

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V. Dr. Datu discussed the staffing. Dr. Jose R. Vergara mentioned of assistance from Japan in faculty trainers.

VI. Questionnaires were distributed by a member of the Japanese team. Answers are expected by April 2.

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TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES
M a n i l a

MINUTES OF THE MEETING

31 March 1982
President's Conference Room
2:00 P.M.

PRESENT: Japanese Team

TUP Team:

Dr. Galicano J. Datu

Mr. Radames Doctor

Mr. Fernando Alfonso

Mrs. Corazon Conan

I. TOPIC: IRTC BUDGET

Dr. Naito inquired how much of the ₱10 M proposed budget for the next year could be made available. Mrs. Conan expects 20% of the amount. Dr. Naito inquired if the ₱375,000.00 allotment for personnel is enough to hire all the personnel (as per list). Mrs. Conan will prepare a special budget (to supplement).

Dr. Naito asked about the actual size of the Center's staff. Mr. Alfonso mentioned that some of those in the list were already hired - pulled from TUP, the skeleton force. Because of the limited budget, it is not possible to hire all those in the list. He added that since the staff is presently pulled from TUP, the 84 in the list will be maintained but by 1984 the number will be increased in as much as there is an increase of budget yearly.

Dr. Naito inquired about the breakdown of the proposed ₱10 M budget for next year. Mrs. Conan explained that of the ₱10,473,000.00, ₱3,473,000 is for personnel, ₱4,500,000.00 for operating expenses (gas, electricity, transportation, communication, maintenance of vehicles), ₱2,500.00 for equipment outlay (consumable materials for experiments including film strips, slides).

Mr. Naito asked about the salary of the staff and if the salary is determined by the TUP or the government, because according to him, in Japan, the government determines the salary of public officials. Mr. Doctor explained how salary is scaled in different universities and schools mentioning the right of the Board of Regents of the Universities to fix salaries. He also added that salary scale is dependent on the level of the school. Mrs. Conanan listed the average salary per annum of the different levels of faculty at TUP - Prof. - ₱36,000.00, Associate Prof. - ₱30,000.00, Assistant Prof. - ₱24,000.00, Instructor - ₱18,000.00. She added that the figures do not include extra compensation for evening services.

Mr. Naito asked whether the same titles for the faculty will be used for the Center's staff. Mr. Doctor said that at the stage no decision has been made by the University since the functions and the schedules of the staff have to be identified. Mr. Naito inquired whether such titles will be used when IRTC becomes operational and how many of each level will be in the staff. Mr. Doctor mentioned that the center is expecting to follow the pyramidal structure of TUP.

Mr. Suito was trying to compare salary of Center's staff with these of TUP. Mr. Doctor said that the probable idea is to give at least the same if not higher salary to trainers as an incentive and also keep them with the center and he added that such is one of the reasons why at present such titles of Prof. etc. are not given yet to the staff.

II. TOPIC - PURPOSE OF THE CENTER

The Japanese Experts

Mr. Naito noted the change in the purpose of the Center comparing the notes of the previous survey teams and the preliminary draft of executive brief. Mr. Alfonso said that the TUP is collating the pertinent notes (including the preliminaries) to explain this and will be answered with the questionnaire. He also noted the training areas listed in the executive brief reminded the team on the agreed areas with the cooperation which are Civil, Mechanical, Electrical, Electronics Engineering. Messrs. Doctor and Alfonso reasoned that

the listed training areas are long-term projections. Mr. Naito inquired whether TUP could take care of Audio-Visual Engineering since the Japanese government could not support this training area and TUP Team's answer was affirmative.

Dr. Naito inquired about the counterparts. Mr. Doctor answered that there would be at least one in each course but can have more depending on the scope of the programs. Mr. Naito inquired what is expected of the Japanese experts and Mr. Doctor said that TUP recognizes Japanese expertise especially in technological areas. The experts are expected to provide the conceptual framework, help in the preparation of softwares and identification of researchable areas. Dr. Datu added that the experts may either be from those presently with the government or those who have retired from government service. Mr. Doctor added further that any development will be kept within the existing equipment. The experts may also help in setting the minimum standards of training and the levels of instruction.

Dr. Naito wanted to be assured that the Japanese experts will work with the trainers and not the students. Dr. Datu assured him that expert and trainer will be on the same level. Mr. Naito inquired whether the experts will cooperate with IRTC only and Mr. Doctor said that the expert may be asked to share their expertise in the other colleges but such will be coursed thru the center.

Dr. Naito is suggesting (if possible) that the experts have a separate room from the faculty. Dr. Datu and Mr. Doctor said that such will be taken into consideration even if the adjacent Practical Arts Building need be utilized.

Dr. Naito asked about the people to be trained in Japan and inquired if it is possible for the Japanese government to join in selecting the trainers. Mr. Doctor said that the selection of trainers for fellowship shall involve the Experts and their recommendations to be strongly considered by the University. He further discussed the initial needs for technical assistant in terms of fellowships for about 5 senior staff in two groups (Planning & Management), the training maybe for 1 - 3 months. Also 20 trainers

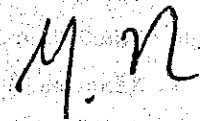
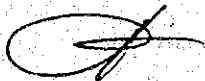
in two groups for skill training. He mentioned that 11 Japanese experts in groups of 3 & 8 are needed as advisers. The training for the trainers of about 20 maybe 10 - 12 months each training and that for 8 months the technical side and for 4 months the pedagogy. The training may start in May or June if feasible.

Dr. Naito inquired how the 11 Japanese experts will be distributed during the 3 years cooperation. Mr. Doctor answered that the initial plan is for each Japanese expert to stay for at least a year. Mr. Naito feared the difficulty of getting an expert to stay for a long term. Dr. Datu suggested that 2 experts in same line may come for the year each serving for 6 months and Dr. Naito said that the term may depend on the kind of expert hired. Mr. Doctor suggested the classification of the assignment terms depending on the expert's time, as follows:

- 1) short-term - 1 to 3 months
- 2) intermediate - 3 to 6 months
- 3) long-term - 6 months up

Dr. Naito asked whether the presently hired 10 trainers would operate the machine. Mr. Alfonso said its quite dangerous and Mr. Doctor told them that the machines will not be operated without the experts.

Dr. Naito emphasized again that experts will work with the trainers and TUP will take care of the technicians.



TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES
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MINUTES OF THE MEETING

1 April 1982
President's Conference Room
1:15 P.M.

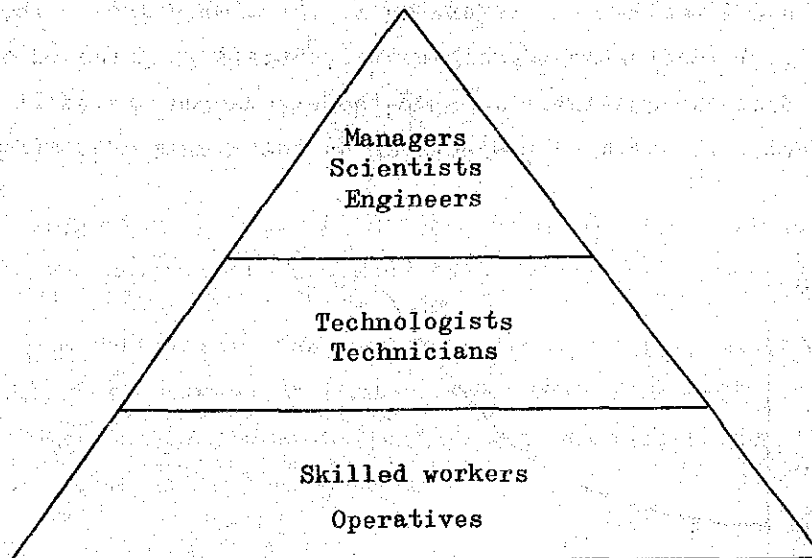
PRESENT: Japanese Team:

Dr. Yoshiyuki Naito
Mr. Kenzaburo Kashiwagi
Mr. Hajime Nagahama
Mr. Hiroshi Sekiguchi

T.U.P. Team:

Prof. Radames Doctor
Prof. Fernando S. Alfonso
Prof. Carlos Q. Trinidad

Dr. Naito asked for a brief definitions of terms regarding Technical, Technological and Technician as used in the TUP programs. Mr. Doctor defined the terms basing on the manpower structure used by industry.



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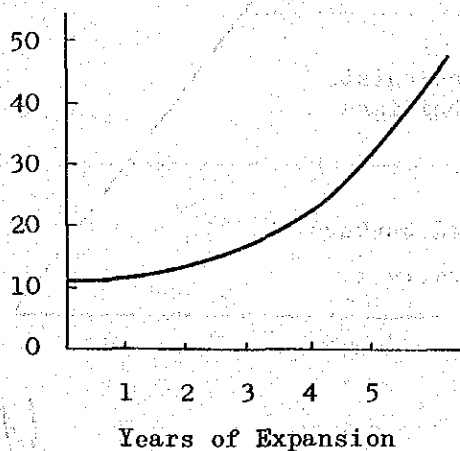
He differentiated the terms also according to TUP structure basing on the duration of the programs. For technical there are special, short-term or non-formal courses and the 2-year technical; for technician a 3-year term. The 4-year technological and the 5-year Engineering programs. The latter are the priorities of the IRTC and will include Theory, Laboratory and Practicum. He also added that the technological program intends to strengthen the engineering program. The professional program is mostly on industrial education.

Dr. Naito mentioned again that the Japanese experts will be only on the areas of Civil, Mechanical, Electrical and Electronics Engineering. He also compared the manpower structure of Japan with that illustrated by Mr. Doctor.

Mr. Sekiguchi asked for the difference between Technicians and Technologists. Mr. Doctor differentiated them in terms of education and functions stating that the technologist studies more Mathematics, Sciences, Human Relation whereas the technician is more involved in processes, tools, and materials. He also mentioned about the engineering technician who performs functions closer to the technologists and the industrial technician whose functions are closer to the skilled worker side.

Dr. Naito asked whether the other posts in the organization structure of the center could be filled up by June as scheduled and the TUP team answered in the affirmative and referring to the time chart he inquired whether activity 1 (Recruitment/Assignment of Staff) is going on and Mr. Trinidad said that the qualifications of those selected are still under study. Mr. Doctor illustrated projections on the hiring of staff.

No. of staff



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Dr. Naito suggested if the number could be increased and the TUP team said the budget has to be considered.

Mr. Sekiguchi mentioned that on the inauguration of the center in May the Japanese experts may not be around yet and the TUP team said that on the inauguration some Japanese Officials in Manila will be invited and added that Prime Minister Cesar Virata has assured his attendance. Dr. Naito inquired whether the MEC Minister is also coming and Mr. Trinidad answered in the affirmative, Minister Onofre D. Corpuz being the Chairman of the University's Board of Regents.

Dr. Naito commended the criteria for staff selection about the training abroad and Mr. Kashiwagi commented on the age recruitment. Mr. Alfonso said that of the 10 in the present staff mostly have had training in Japan and Mr. Trinidad mentioned of the Philippine government regulation on the age of the trainee which is not over 35 years and if the selected trainee is more than 30 years and his acceptance for training comes 2 years later then he may be disqualified. Messrs. Doctor and Trinidad mentioned also of the 1:3 years service contract of those trained abroad.

Dr. Naito asked whether there is a need for inspection of the center by the government before its operation and Mr. Doctor explained that in the university, all that is needed for the implementation of a proposal is the approval of the Board of Regents and Mr. Trinidad added that TUP being a chartered university, the Board of Regents set the standards. Dr. Naito mentioned that in Japan when there is a new organization (in schools), the Ministry of Education is informed and the government will inspect facilities and equipment for standardization.

Dr. Naito suggested the use of the term faculty staff instead of trainers in all communications furnished them and the TUP team agreed.

Dr. Naito mentioned again the changes made in the purpose of the center and Mr. Doctor explains that such were made in the light of the changes in the National Development Plans adding that the thrusts are expounded in the next 5-year beginning 1982.

TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES
M a n i l a

MINUTES OF THE MEETING

2 April 1982
President's Conference Room
9:30 A.M.

PRESENT: Japanese Team:

Dr. Yoshiyuki Naito
Dr. Eiji Suito
Mr. Kenzaburo Kashiwagi
Mr. Hajime Nagahama
Mr. Hiroichi Ono
Mr. Hiroshi Sekiguchi

TUP Team:

President Jose R. Vergara
Vice President Bayani I. Gutierrez
Vice President Galicano J. Datu
Prof. Radames Doctor
Prof. Fernando S. Alfonso
Prof. Carlos Trinidad

Prof. Doctor presented the agenda - submission of the answers to the questionnaire by the TUP Team and explanation of the form of Record of Discussion by the Japanese Team.

President Vergara mentioned about the adjusting position regarding operation of the center and reasoned out that at that time of negotiation, the school was more on the view of vocational technology training but since the school was mandated to be a university, hence the swing to the development of technological areas. He added that the adjusted role and character of IRTC is to provide the necessary facilities in training and research.

Explaining further, Prof. Doctor said that the expounded role of IRTC are: Firstly, to provide the "core" for the TUP System (main campus and

four regional institutes) and as a core, it will provide development primarily of engineering and technological education and research.

It will also set the standards in engineering and technological studies. Secondly, the IRTC will serve as an "arm" of TUP in monitoring of external standards. And as an "arm" the IRTC will not serve only the different colleges of the university, other schools and industry but it will also extend its services to the Asia Pacific Region since the member nations of the region have common socio-economic problems. He made mention also of the position of IRTC as being separate center under the university system establishing its own standards, its faculty profile and the programs needed.

Dr. Naito requested for clarification on the monitoring of standards. Prof. Doctor explained that monitoring involves information management scheme such as gathering of technological information, exchange of education experiences and exchange of personnel/staff, Standards relate to needs for the development of the country and in the light of such development, basic human resource development strategies are needed. To meet such needs, total human resource have to be mobilized through education (formal in school, or non-formal in industry and other types of organization) and within these strategies, the staff, facilities, supplies and curriculum are involved.

Mr. Sekiguchi explained the details of the form of the record of discussion which is to be signed by the heads of TUP and the next Japanese mission. Dr. Naito added that the form is common to all JICA projects and President Vergara notices that the language is documentary. President Vergara also mentioned of the route of the forms to JICA (TUP to NEDA to Foreign Affairs to Japanese Embassy to JICA). He also inquired of the possibility of annexing some forms used by Colombo Plan requests to shorten the period of submission and to prepare on the next mission. The Japanese team mentioned that this is not needed in the meeting.

President Vergara inquired when the next mission is coming and Dr. Naito answered that they have to discuss the proceedings. President Vergara has given the Japanese team the privilege to decide on the purpose of the center basing on the needs of the country and added that the TUP wants to develop an engineer who is not only good in theory but also can work in factories so that if the mission are for the establishment of the center as a College of Engineering then the President would accord provided that the center will also serve the interest and needs of IRTC and added that if

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such will be the arrangement, then he will have to correct the information in the just submitted answers to the questionnaire.

Mr. Sekiguchi explained further the procedure for the signing of Record of Discussion with the next Mission. President Vergara noticed that the former was insinuating the lack of communication and for that the President reasoned out that Dr. Watanabe expected before October 11, 1981 hence the information was not sent for evaluation. He added that since the present mission has seen the building and the equipment and they have become aware of the needs of the country, he was sensing that the present mission would agree to the present position of IRTC but according to the President it seems that they are with the Watanabe concept.

Dr. Naito mentioned that since the original plan of IRTC was for a College of Engineering, he said that Theory and Laboratory are important in the program hence the composition of the present mission. He recalled of the statements of Prof. Doctor on the contents of the program which are Theory, Laboratory and Practicum and mentioned that in Japanese Universities or Technical Colleges the emphasis is more on Theory and Laboratory and Practice is taken care of by Labor. President Vergara reasoned out that the center was established for developing country. President Vergara wanted that Theory and Laboratory of Engineering education will be taken care of by the IRTC and practice will be in Industry since the present equipment installed will not offer enough practice to cover industrial needs.

It was agreed that discussions will be continued on Monday, April 5, 1982 at about 9:30 A.M.

TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES
M a n i l a

MINUTES OF THE MEETING

5 April 1982
President's Conference Room
9:30 A.M.

PRESENT: Japanese Team:

Dr. Yoshiyuki Naito
Dr. Eiji Suito
Mr. Kenzaburo Kashiwagi
Mr. Hajime Nagahama
Mr. Hiroichi Ono
Mr. Hiroshi Sekiguchi

T.U.P. Team:

Vice President Galicano J. Datu
Vice President Bayani I. Gutierrez
Prof. Radames M. Doctor
Prof. Fernando S. Alfonso
Prof. Carlos Q. Trinidad

Discussion of the Main Brief of the Answers to the Questionnaire

Vice President Bayani I. Gutierrez opened the meeting by requesting the Japanese Team to assist the TUP in the implementation of the IRTC Project and their suggestions shall be considered strongly.

Dr. Galicano J. Datu informed the Team that Dr. Jose R. Vergara shall not be in the meeting and that the discussions shall now be conducted. Vice President Gutierrez and Dr. Datu mentioned that Prof. Doctor will speak for the TUP Team with their support statements, and discuss the Main Brief.

Prof. Doctor started by identifying the basic needs of the IRTC which are the upgrading of the faculty staff in certain aspects of the center, the further development of counterpart staff in terms of visits to and training in some selected technical training institutes in Japan and lastly, the full assistance by way of defining the programs, courses of study and content of technical cooperation scheme. He added that basing

on the basic needs, strategies were identified which included a 5-year projection of the budget, 5-year assistance from Japanese Experts and assistance for additional materials.

Dr. Naito suggested that the IRTC should be reflected higher in level than the Technical Institutes on the organizational structure reasoning that if it were on the same level then it must have the same facilities, the same rights and the same obligations which is the case. The TUP team agreed to the suggestion. Prof. Doctor mentioned that the chart defines the different divisions in the university not indicating hierarchy in functions and such chart is for budgetary purposes in the national government. He further added that a functional organizational chart will be structured to identify the responsibilities of each division.

Dr. Naito noticed that in the TUP organizational chart, IRTC is directly under the direction of the President whereas in the organizational chart for the assignment plan of the counterparts, the functions of the IRTC are directed by the Vice Presidents. Dr. Datu explained that the set-up in the latter chart pertains to internal relationship of the two Vice President and added that the direction of the IRTC will be directly from the President. Prof. Doctor added that the Vice Presidents are consulted on matters regarding budget, academic development and instruction. Dr. Datu suggested that since the relation of the Vice Presidents with IRTC is a sort of staff relation, then such could be reflected by broken lines and related horizontally in the organizational structure for the placement of counterparts.

On the integrated functions of the Center, Dr. Naito wanted some clarification on the Training Programs in Technology and Engineering. Prof. Doctor explained that the idea of the IRTC is to provide professional training thru entry, skills upgrading and re-training. Mr. Ono also asked on the relationship of IRTC and the existing programs. Dr. Datu explained the engineering program of the University stating that one type of entry is a graduate of the 2 or 3 year technical/technician programs who is entry to occupation and at the same time has the elements of engineering so that in the course of his study if he decides to exit from the program, the student had been prepared for an occupation and later he can continue with the engineering program if he decides so. He added further that IRTC should be supportive to the existing technician programs but main targets are the engineers.

On Research Programs, it was agreed that Quality Control be used instead of Quality Standards. Dr. Naito asked further explanation on the meaning of New Organization. Prof. Doctor explained that thru researches conducted by the IRTC it is possible to re-organize the existing organizations within the production line to maximize the materials and the manpower. Dr. Datu added that thru researches it is also possible to reduce production steps. It was agreed to delete the team processes in the first area and use Improved Production Processes instead of New Organization and Faculty and Staff Upgrading in place of Faculty and Staff Development.

Dr. Naito clarified that IRTC will be training senior students of the degree programs of the university.

Dr. Naito wanted the names of the members of the Implementation Committee. Prof. Doctor enumerated members the President, the Vice Presidents, the Executive Director, the Assistant Executive Director and others who may be requested by the President. It was agreed that the Implementation Committee will be also the steering committee during the 5-year development program.

Dr. Naito reminded the team on the private room for the Japanese experts and there was assurance on the TUP side and Vice President Gutierrez offered the Philjapa Room. Regarding the telephone system Prof. Doctor said that the Center has applied for installation but the date will be subject to negotiation within the schedule of the telephone company. Vice President Gutierrez assured that there will be one direct line telephone in each floor.

The plan for room assignment for each floor and the location of the equipment will be submitted at a later date as requested by the TUP Team since there will be an internal listing of machines yet.

Dr. Naito inquired about the waste water disposal and Prof. Doctor said that the water is treated in three separate septic tanks before its disposal into the river. He told Mr. Kashiwagi that the gas supply comes in cylinders.

Mr. Nagahama noticed the percent increase in the 4-year budget proposal and Prof. Trinidad explained the Philippine Budgetary System which is zero-based every year wherein the budget for the year maybe increased or de-

creased depending on the needs and an increase will be considered provided there is proper justification. Dr. Datu reasoned out that much money is really needed for the initial operation inasmuch as a high salary can be an incentive for qualified staff and there is allocation for other equipment and furniture. Dr. Naito requested for the inclusion of the breakdown of the budget for 1983.

Dr. Naito inquired whether the Team leader of the Japanese experts corresponds to the Executive Director of the Center and Prof. Doctor answered that the Team leader will cooperate with the Office of the President, the Vice Presidents, and Executive Director. Dr. Datu added that the Team leader may seek advice from the President but with the Executive Director he will cooperate, collaborate and coordinate.

Dr. Naito wanted some clarification on the Corporate Planning Function. Prof. Doctor explained that the Implementation Committee will not conduct the study themselves and the people involved in the corporate planning will study and analyze the needs of the center and results will be submitted to the Implementation Committee for review. Dr. Naito mentioned that for efficient corporate planning, the experts and the counterparts have to be consulted so that the experts will be working indirectly with the corporate planning.

On the role of the Japanese Experts, Dr. Naito commented on the use of the terms "assist", "instruct" and "cooperate." To him, if cooperate is used, there is no hierarchy. So it was agreed that the counterparts will work cooperatively with the Japanese experts who will be providing assistance and instruction.

On the qualifications of the counterparts, Prof. Doctor mentioned that the selected counterparts from the TUP faculty or from other institutions will possess the appropriate educational qualifications and experience in teaching the engineering area. Dr. Datu raised the possibility of a mismatch of the expert and counterpart in terms of professional degree mentioning the scarcity of Masters and Doctors in Engineering in the Philippines. Prof. Doctor mentioned of the preparation of the criteria for staff selection. Dr. Naito emphasized the need for a good staff it being the key to the development of IRTC. Prof. Doctor added that the prospective applicants will be interviewed by the steering committee and if the experts are around, they will be consulted but the final selection

will be by the TUP management. The President will recommend the selected staff to the Board of Regents for approval.

On the chart on activities/tasks, Dr. Naito's suggestion on the specificity of training programs for Engineering and Technological Education was considered. Prof. Doctor further explained that programming of training programs involves scheduling of the designed programs according to grade levels. He defined also training packages as modular in approach which may be semestral. It was agreed to rephrase Programming of Training Packages to Scheduling of Training Programs and to change the term Softwares to other Instructional Materials. He also mentioned that the identification and assignment of senior students will be on the part of TUP.

It was agreed that in each area, there will be an average of three (3) counterparts to be advised by the Japanese expert.

Prof. Doctor reasoned out for the extension of technical assistance to 5 years as this was the initial request of Vice President Gutierrez and that 3 years would not be enough to strengthen the center with the aid of the experts.

Dr. Naito could not commit on sending all the initially requested experts. The suggestion of Mr. Sekiguchi for the inclusion of a coordinator from JICA to assist the Chief technical adviser on the project was considered.

On the instructional materials needed Prof. Doctor reasoned out that such materials will be used as examples by the expert in his instruction to the counterpart.

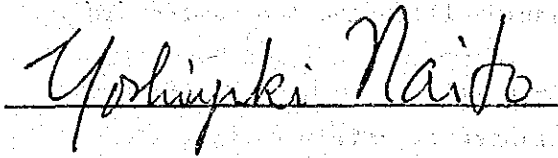
There was a correction of the statement on the correspondence on tax exemption being sent to the Minister of Finance instead to the Custom's Commissioner.

The submission of the final summary of the answers to the questionnaire and the signing of the minutes of the meetings were agreed to be done the following day, April 6, 1982 at 3:00 o'clock.

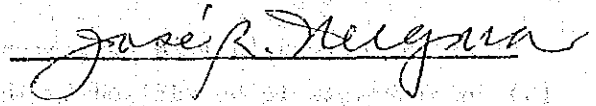
April 6, 1982

The Japanese Implementation Survey Team thru Dr. Yoshiyuki Naito, team leader and the TUP Team thru President Jose R. Vergara sat for a final discussion of the proceedings and outcome of the meetings.

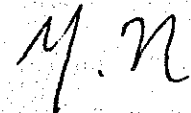
After some clarifications from both sides, the document on the minutes of the meeting was presented for final approval.



YOSHIYUKI NAITO
Team Leader



JOSE R. VERGARA
President



I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of Japan and the Government of the Republic of the Philippines will cooperate with each other in implementing the INTEGRATED RESEARCH AND TRAINING CENTER Project (herein after referred to as "the Project") for the purpose of promoting and strengthening education and research activities in the field of engineering, which contributes to the industrial development in the Republic of the Philippines.
2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. DISPATCH OF JAPANESE EXPERTS

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense services of the Japanese experts as listed in Annex II through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Japanese experts referred to in 1 above and their families will be granted in the Republic of the Philippines the privileges, exemptions and benefits no less favourable than those accorded to experts of third countries working in the Republic of the Philippines under the Colombo Plan Technical Cooperation Scheme.

III. PROVISION OF MACHINERY AND EQUIPMENT

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide at its own expense such machinery, equipment and other materials necessary for the implementation of the Project as listed in Annex III through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The articles referred to in 1 above will become the property of the Government of the Republic of the Philippines upon being delivered c.i.f., to the Philippines authorities concerned at

the ports and/or airports of disembarkation, and will be utilized exclusively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

IV. TRAINING OF PHILIPPINE PERSONNEL IN JAPAN

1. In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to receive at its own expense the Philippine personnel connected with the Project for technical training in Japan through the normal procedures under the Colombo Plan Technical Cooperation Scheme.
2. The Government of the Republic of the Philippines will take necessary measures to ensure that the knowledge and experience acquired by the Philippine personnel from technical training in Japan will be utilized effectively for the implementation of the Project.

V. SERVICES FOR PHILIPPINE COUNTERPART PERSONNEL AND ADMINISTRATIVE PERSONNEL

1. In accordance with the laws and regulations in force in the Republic of the Philippines, the Government of the Republic of the Philippines will take necessary measures to secure at its own expense necessary facilities and services for Philippine counterpart personnel and administrative personnel as listed in Annex IV.
2. As to the Philippine counterpart personnel, the Government of the Republic of the Philippines will endeavor to allocate the necessary number of suitably qualified personnel corresponding to each Japanese expert to be dispatched by the effective and successful transfer of technology under the Project.

VI. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES

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

- (1) Land, building and facilities as listed in Annex V;
 - (2) Supply of replacement of machinery, equipment, instrument, vehicles, tools, spareparts and any other materials necessary for the implementation of the Project other than those provided through JICA under III above;
 - (3) Cost of internal travel of the Japanese experts on official business within the framework of the Colombo Plan Technical Cooperation Scheme;
 - (4) Suitably furnished accomodations for the Japanese experts and their families.
2. In accordance with the laws and regulations in force in the Philippines, the Government of the Republic of the Philippines will take necessary measures to meet:
- (1) Expenses necessary for the transportation within the Philippines of the articles refered to in III above as well as for the installation, operation and maintenance thereof;
 - (2) Custom duties, internal taxes and any other charges, imposed in the Philippines on the articles referred to in III above;
 - (3) All running expenses necessary for the implementation of the Project.

VII. ADMINISTRATION OF THE PROJECT

1. The President of the TUP will bear the overall responsibility for the implementation of the Project.
2. The Dean of IRTC will be responsible for the administration of the implementation of the Project.
3. The Japanese Team Leader will provide necessary technical and managerial advice on the project to the Dean of IRTC and if deemed necessary, to the President of TUP or any other persons in close consultation with the Dean of IRTC.
4. The Japanese experts will give technical guidance and advice to the Philippine counterpart personnel concerning the following matters:

(1) Training programmes and training curriculum in each course.

(2) Installation, operation and maintenance of machinery and equipment provided by the Japanese Government.

5. For the effective and successful implementation of the Project, the Steering Committee will be established with the members as listed in Annex VI.

VIII. CLAUSE AGAINST JAPANESE EXPERTS

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

IX. MUTUAL CONSULTATION

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

X. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be

ANNEX.

III. LIST OF ARTICLES

1. Equipment for civil engineering
2. Equipment for electrical engineering
3. Equipment for mechanical engineering
4. Some other equipment related to the Project

IV. LIST OF PHILIPPINE STAFF

	NUMBER
1. Dean	1
2. Associate Dean (Education and Training)	1
3. Associate Dean (Research and Development)	1
4. Specialists	
(1) Mechanical Engineering	5
(2) Automotive Engineering	3
(3) Electrical Engineering	5
(4) Civil Engineering	5
(5) Computer Engineering	3
(6) Research and Development	5
5. Administrative Staff	
(1) Administrative Officers	
(2) Accounting Officers	
(3) Secretaries	
(4) Typists	
(5) Storekeepers	
(6) Drivers	
(7) Others	

V. LIST OF LAND, BUILDINGS AND FACILITIES

1. Land
2. Buildings and facilities
 - (1) Dean IRTC's room
 - (2) Team Leader's room
 - (3) Japanese Experts' rooms
 - (4) Training rooms
 - (5) Classrooms
 - (6) Administrative Staff room

- (7) Printing & Copy room
- (8) Conference rooms
- (9) Library
- (10) Others

VI. MEMBERS AND FUNCTIONS OF THE STEERING COMMITTEE

1. Members

Japanese Side

Team Leader

Representative of Manila
Office (JICA)

Philippine Side

President of TUP

Vice President of TUP
Dean of IRTC, TUP

Observer

Representative from the Embassy of Japan

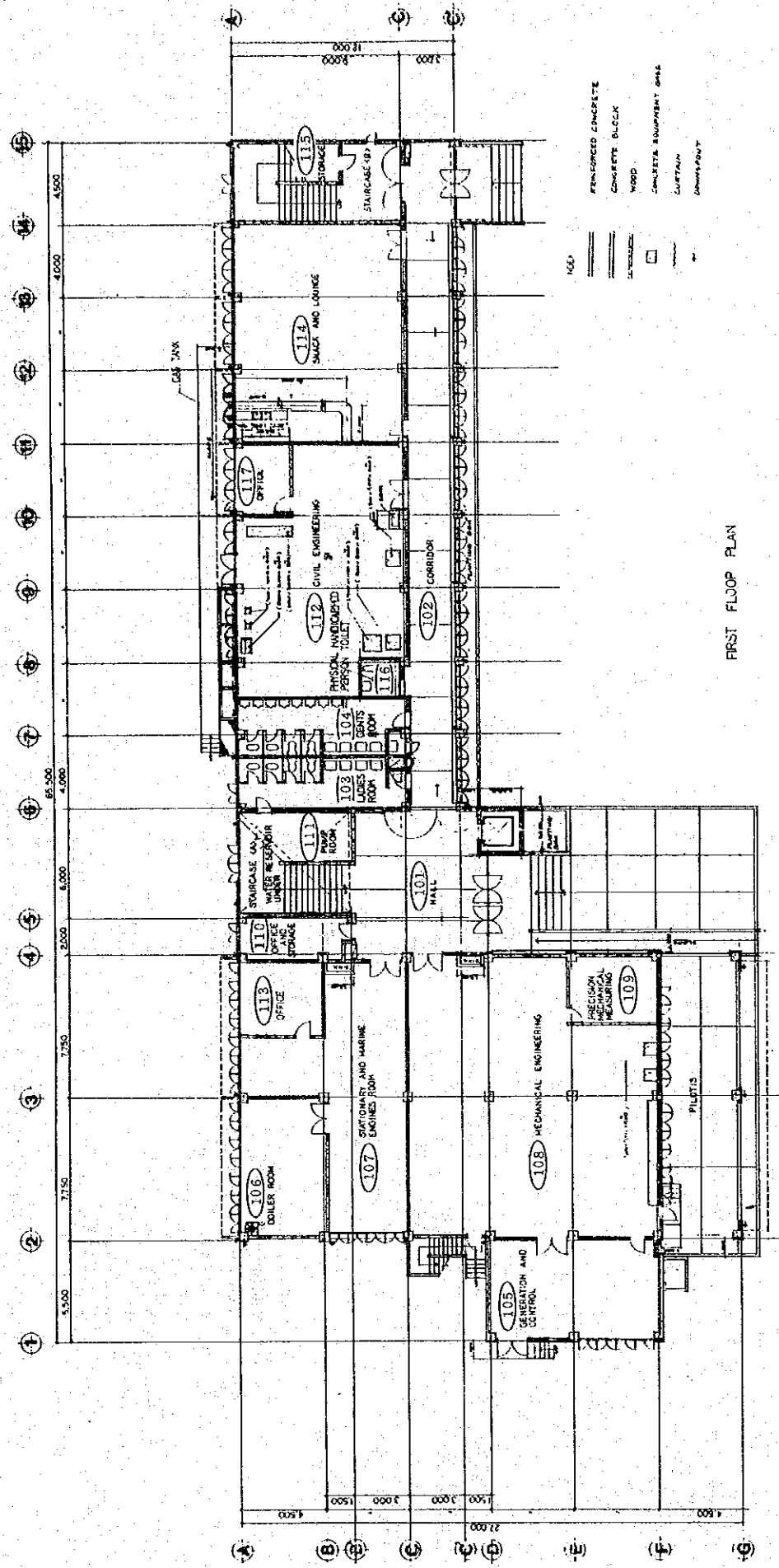
2. Functions - Held at least once a year and whenever deemed necessary

- (1) To review the overall progress of Tentative Implementation Schedule in line with the Master Plan of the Project.
- (2) To review those measures taken by the Government of Japan:
 - a) Dispatch of Japanese experts.
 - b) Acceptance of Philippine counterpart personnel in Japan for training
 - c) Provision of machinery and equipment.
- (3) To review those measures taken by the Government of the Republic of the Philippines:
 - a) Allocation of necessary budget (including local cost expenditures).
 - b) Allocation of necessary counterpart personnel.
 - c) Utilization of machinery and equipment provided by the Government of Japan.
- (4) To formulate the Annual Operational Plan of the Project

- (5) And, to recommend to the two Governments particularly on;
- a) Budgetary matters.
 - b) Recruitment and appointments of the Philippine counterpart personnel.
 - c) Selection and effective utilization of machinery and equipment.
 - d) Appropriate dispatch of Japanese experts.
 - e) Acceptance of Philippine counterpart personnel in Japan for training.
 - f) Others.

資料紙 8. センター完成平面図及び設置設備リスト一覽

The Integrated Research And Training Center In The Technological University of The Philippines



FIRST FLOOR PLAN

#1105室 発電と制御室

1. ディーゼル発電装置一式 デンヨーDCA-125AMT

#1106室 ボイラ室

1. ボイラ, タービン etc 実験装置一式 新日鉄

#1107室 機付と船用エンジン室

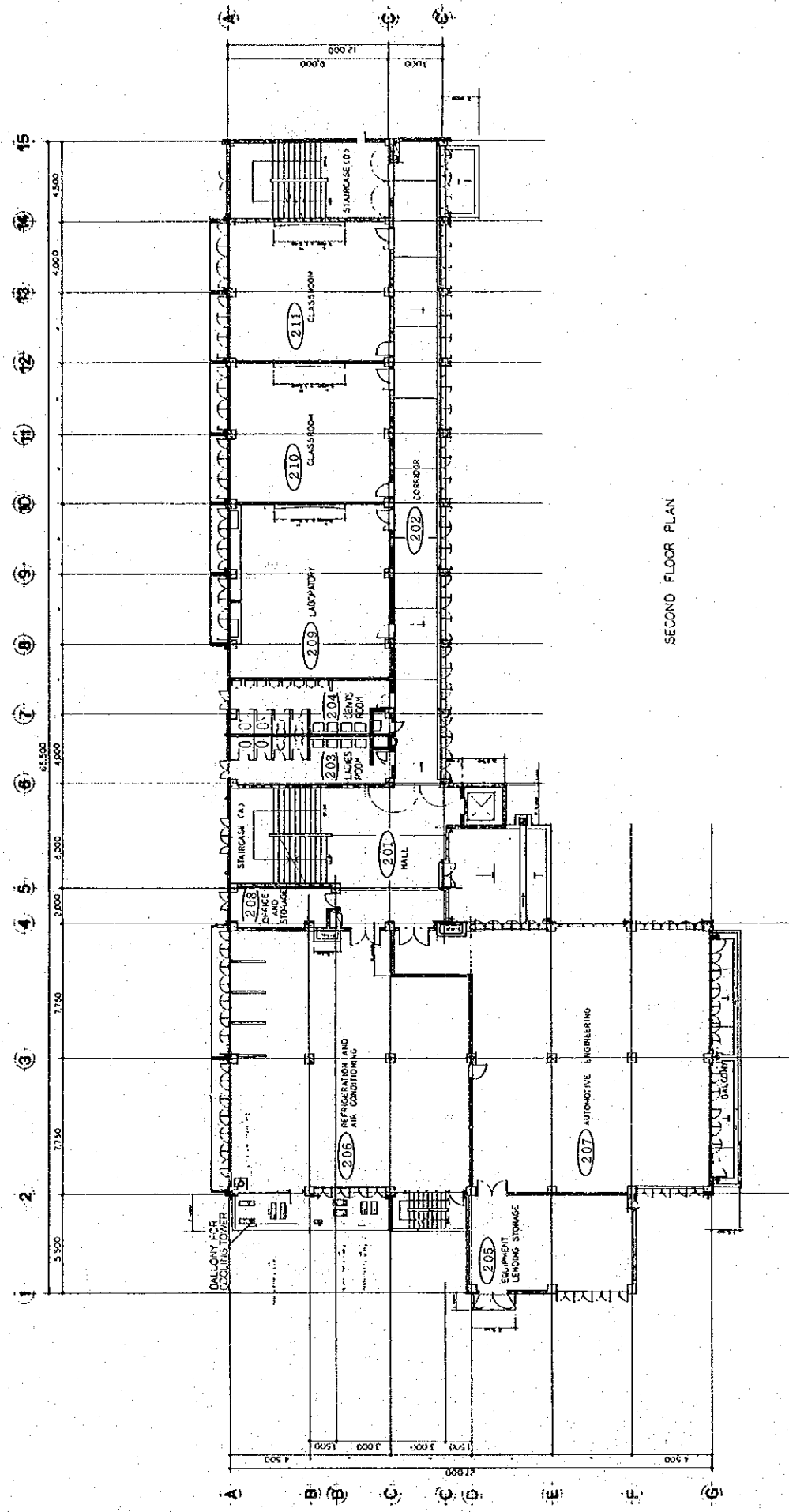
1. 噴射ポンプ ディーゼル機器 5760-102
2. エンジン分所機 バンザイ 17-520A

#1108室 機械工学

1. 放電加工機 JAPAX DP20
2. ホブ盤 日本機械 NJ-300
3. 棒車形削り盤 カラツ GS-101A
4. プラスチック成形機 ブラキ PN-60
5. 円筒研削盤 シギヤ CP-27-40
6. 精密旋盤 ワシノ LR-55A
7. 立フライス盤 大阪機工 MH-2V
8. 万能工具研削盤 牧野 C-40
9. 卓上ボール盤 日立 BE-360B
10. エヤコンプレッサー
11. グライダ
12. 工具・ダージ類一式

#1112 土木工学

1. 万能試験機 島津 VMH-100
2. Liguia Limitテストセット マルト S02A
3. ミキサ " SE-20
4. Composition テストセット " SG-10
5. 強化テスト装置 " S43-2UL-1
6. モンクリートコア穴あけ機 " CE-74B
7. モルタルフローレープ " C54
8. 半自動 Vicat 装置 " C57B
9. 油圧スラビンダノン " CE-81
10. コンクリートミキサ室 " C39-2
11. 麻痺試験機 " C79
12. アスファルトオープン " A9
13. 片アオープン " GB-19
14. セメント用オートクレーブ " C22
15. 2" キューブ成形機 " C49
16. 重量試験機 " CD-11B, C33-2 CHB-5
17. 透心抜き取り装置 (透心分級機) " A100-M
18. 延性試験機 " A6
19. セイボルト粘度計 " A3-2
20. 加振機 " C84-1
21. トランシット 測器社 TM20ES
22. キャップモット マルト C129
23. コンプレッサ " S18-t-2a
24. プルベイングリング " POT-30



SECOND FLOOR PLAN

206室 冷媒、空調

- | | | | |
|--------------------|-------|------|-----------|
| 1. 凝結装置 | 高 | 木 | TA-400L |
| 2. " | " | " | TWX-504L |
| 3. ファンコイルユニット | " | " | RA-130S |
| 4. " | " | " | RA-230S |
| 5. 制氷機 | " | " | " |
| 6. AC、アーク溶接機 | ナショナル | 中 | YK-306F-3 |
| 7. ガス溶接装置 | 田 | ダイキン | タナキット |
| 8. エアークラ | イ | フタ | TP-22NB |
| 9. コンプレッサ | 高 | 木 | PC 3000AR |
| 10. 冷凍庫 | ナショナル | 木 | NR-450EA |
| 11. 冷凍機 | 高 | 木 | " |
| 12. 冷蔵庫、エヤコン制御ユニット | " | " | " |
| 13. 部品、工具、測定器一式 | " | " | " |

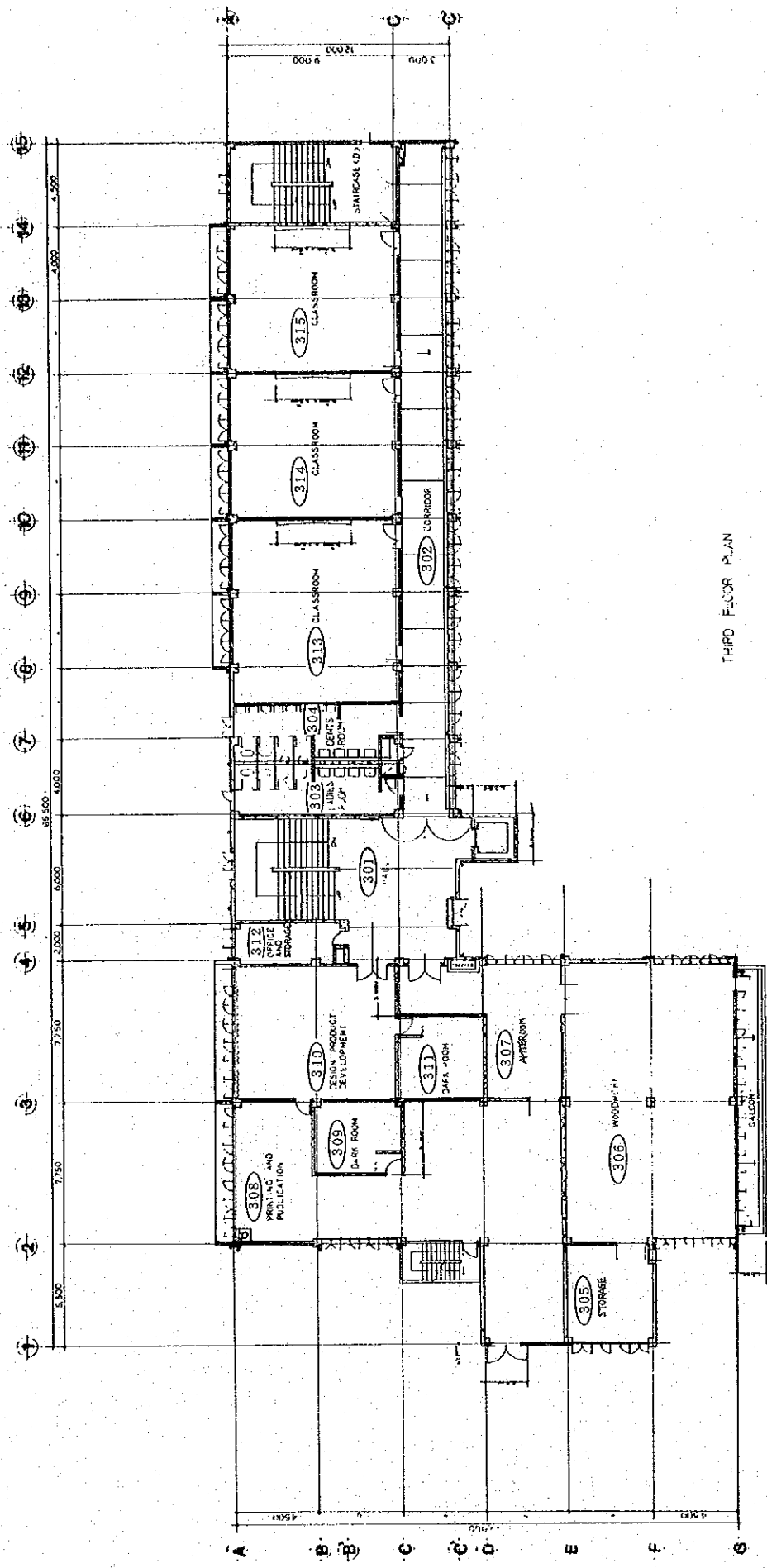
- | | | |
|-------------------|------|-----------|
| 14. 油圧ディスクブレーキモデル | イセザキ | 2255 |
| 15. 油圧ドラム | " | 2250 |
| 16. 圧縮計 | " | CGS-1 |
| 17. 回転速度計 | " | 2C07 |
| 18. テスタ | " | VAR-2 |
| 19. 排ガス分析機 | " | EGA-4A |
| 20. 点火V-Aテスタ | " | I VA-2 |
| 21. パッケージ実電機 | " | HR-MAX70D |
| 22. シンロスコープ | " | 2800 |
| 23. エンジン点火テスタベッド | " | " |
| 24. 自動車 | トヨタ | COASTER |

207室 自動車工学

- | | | |
|---------------------|------|-------|
| 1. Wankel エンジンモデル | イササキ | 2300 |
| 2. 4サイクルガソリンエンジンモデル | " | 2204 |
| 3. ディーゼルエンジンモデル | " | 2208 |
| 4. 2サイクル | " | 2200 |
| 5. エンジンカットモデル | " | 2060 |
| 6. キヤボックス | " | 12009 |
| 7. エアブレ-キシスタム | " | 12056 |
| 8. 燃料噴射ポンプ | " | 12015 |
| 9. 点火コイルシスタム | " | 12215 |
| 10. かじ取りモデル | " | 2100 |
| 11. デアモデル | " | 2110 |
| 12. 変速機モデル | " | 2125 |
| 13. 遊星歯車モデル | " | 2600 |

209室 実験装置

- | | |
|-----------|-----|
| 1. 基礎実験装置 | 5点 |
| 2. 物理 | 46点 |
| 3. 化学 | 11点 |
| 4. 地理学 | 1点 |



THIRD FLOOR PLAN

#305室 木工

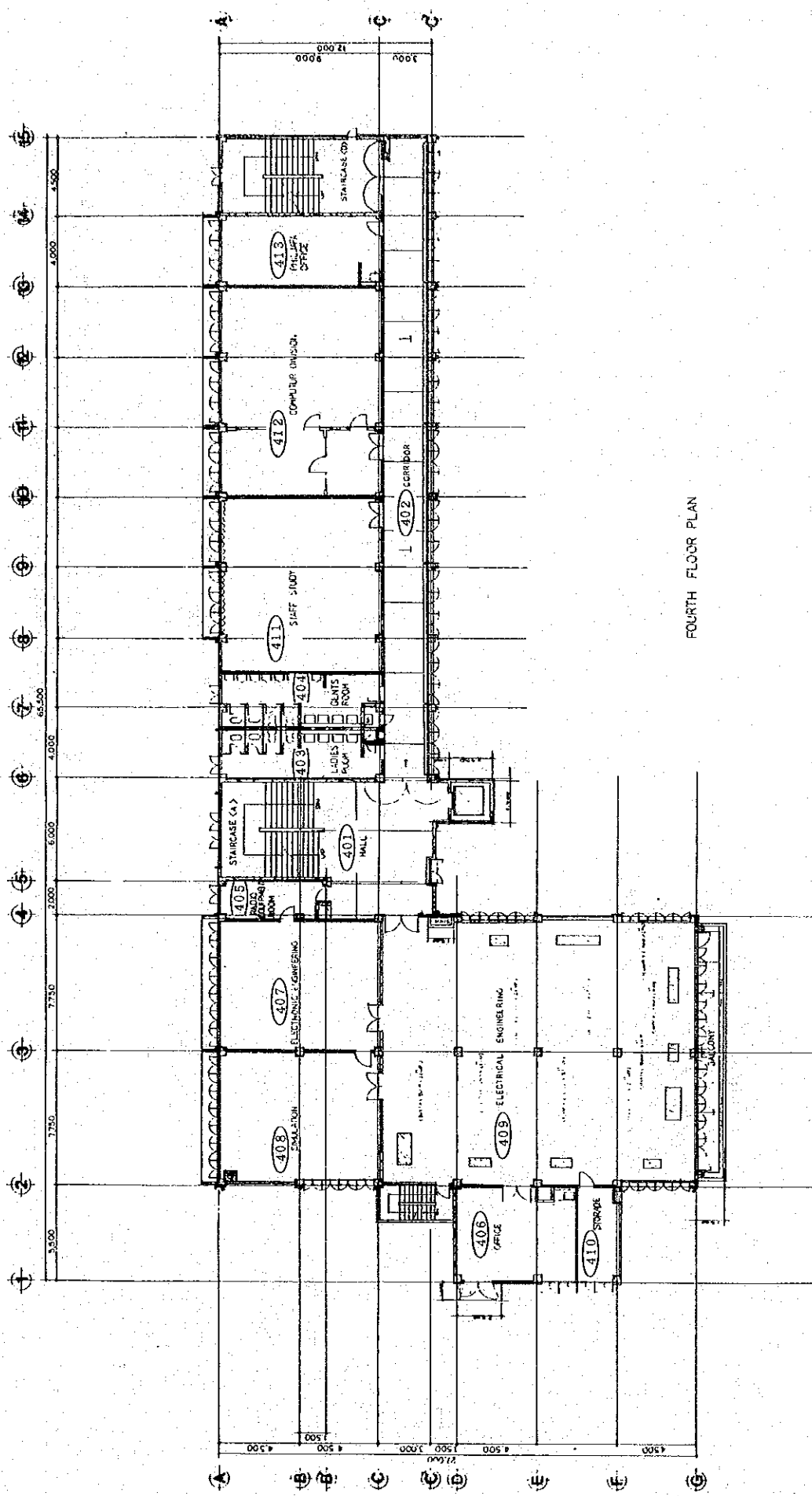
1. 木工ならい旋盤 ホクサン CL-3AS
2. Corner locking Machine シューダ CL-132
3. Router Machine " RO-116
4. ベンドソー シモヒラ JB-S70
5. スビントルサンダ シューダ SS-111
6. ベルトサンダ BAN IRON DB-500
7. 平削盤 シューダ SP-153
8. 手動平削盤 HP-152D
9. 自動旋盤工具研削盤 SG-113A

#310室 設計・空室・開発

1. 複写機 リコ-DT-850
2. ジェット複写機 " DRY100
3. 35mmカメラ キヤノン
4. カラー写真引伸し器 LUCKY G70
5. トラクタタイプ製図機 武藤 WA220
6. 製図用具 "
7. 8m/mプロジェクタ エルモ GS-1200
8. スクリーン " HS-4
9. OHP " HP2450
10. スライドプロジェクタ " AS-3000A
11. カセットレコーダ ナショナル RX5120F
12. T.P.用マーカ リン 261

#308室 印刷と発行

1. 製本機 IBM SELECTRIC
2. プロセスカメラ DS C-650-D
3. オフセットプレス リービ 640K
4. 印刷機 DS P-804-C
5. 裁断器 ナガイ NC-61-SH
6. 乾燥キャビネット DS D-Z-C
7. 恒温セウ DS 51X61
8. 印刷機 DS P-604-D
9. オフセット印刷機 リービ 2700CD
10. ライトテーブル DS LT-7-F
11. 濃度計 DS DM-273
12. " " -257
13. ライトテーブル DS LT-8-F
14. 恒温セウ DS 29X36
15. フィルム乾燥キャビネット DS S-24-D



FOURTH FLOOR PLAN

#407室 電子工学

- | | | | |
|----|----------------|------|----------------------|
| 1 | 基本電気回路実験装置 | ヤマト | ET-EX1 M30B |
| 2 | 半導体特性測定回路 | " | ET-SCM3 M30B |
| 3 | トランジスタ入力回路実験装置 | " | ET-PS1 M30B |
| 4 | 半導体応用装置 | " | ET-PS2 M30D |
| 5 | 振動回路装置 | " | ET-OS1 M30B |
| 6 | 増幅回路装置 | " | ET-AMPI |
| 7 | バイアス回路パネル | " | ET-AMP3-1 |
| 8 | A.P.増幅回路パネル | " | ET-AMP3-2 |
| 9 | 差動増幅回路パネル | " | "-3 |
| 10 | AM変調, 復調回路実験装置 | " | ET-MOD1 M30C |
| 11 | AM変調, 受信回路実験装置 | " | ET-ATRI |
| 12 | FM変調, 復調回路実験装置 | " | ET-MOD2-1,3,5,6 |
| 13 | パルス回路実験装置 | " | ET-PC1 M30B |
| 14 | TV同期回路システム | " | ET-TV2 |
| 15 | シーケンス制御回路 | " | ET-SEC3, ET-SEC3-4 |
| 16 | ロジック回路回路 | " | ET-LC10-1,5 |
| 17 | ロジック回路実験装置 | " | ET-LC20, ET-LSI M30B |
| 18 | フィードバック回路回路 | ヤマビシ | YFB-101 |
| 19 | マイクろ過測定回路 | " | SPC14T370 |
| 20 | サーボ機構制御回路システム | ヤマト | ET-SA1 |
| 21 | コンピュータ制御回路システム | " | ET-DC50M50 |
| 22 | コンピュータ基本実験装置 | " | ET-YEAC10 M30C |
| 23 | インターフェース | " | ET-SEC-1F |
| 24 | A/D変換回路パネル | " | ET-AD1 M30C |
| 25 | A/D変換回路パネル | " | ET-DA1-1 |
| 26 | オシロスコープ | 岩 | SS-5215 |
| 27 | 自在計数器 | " | VC-6145 |
| 28 | RCオンレータ | リーダー | LAG-120 |
| 29 | AC電圧計 | 菊水 | 1633A |
| 30 | 指示ジェネレータ | リーダー | LSW-250 |
| 31 | パターングェネレータ | " | LCG-391 |
| 32 | デジタル計算機 | ヒオキ | 3205 |
| 33 | ひずみ計 | リーダー | LDM-170 |

- 34 電流計 横河
 35 スライダック ヤマシ
 36 電源 メトロニクス 523B

#409室 電気工学

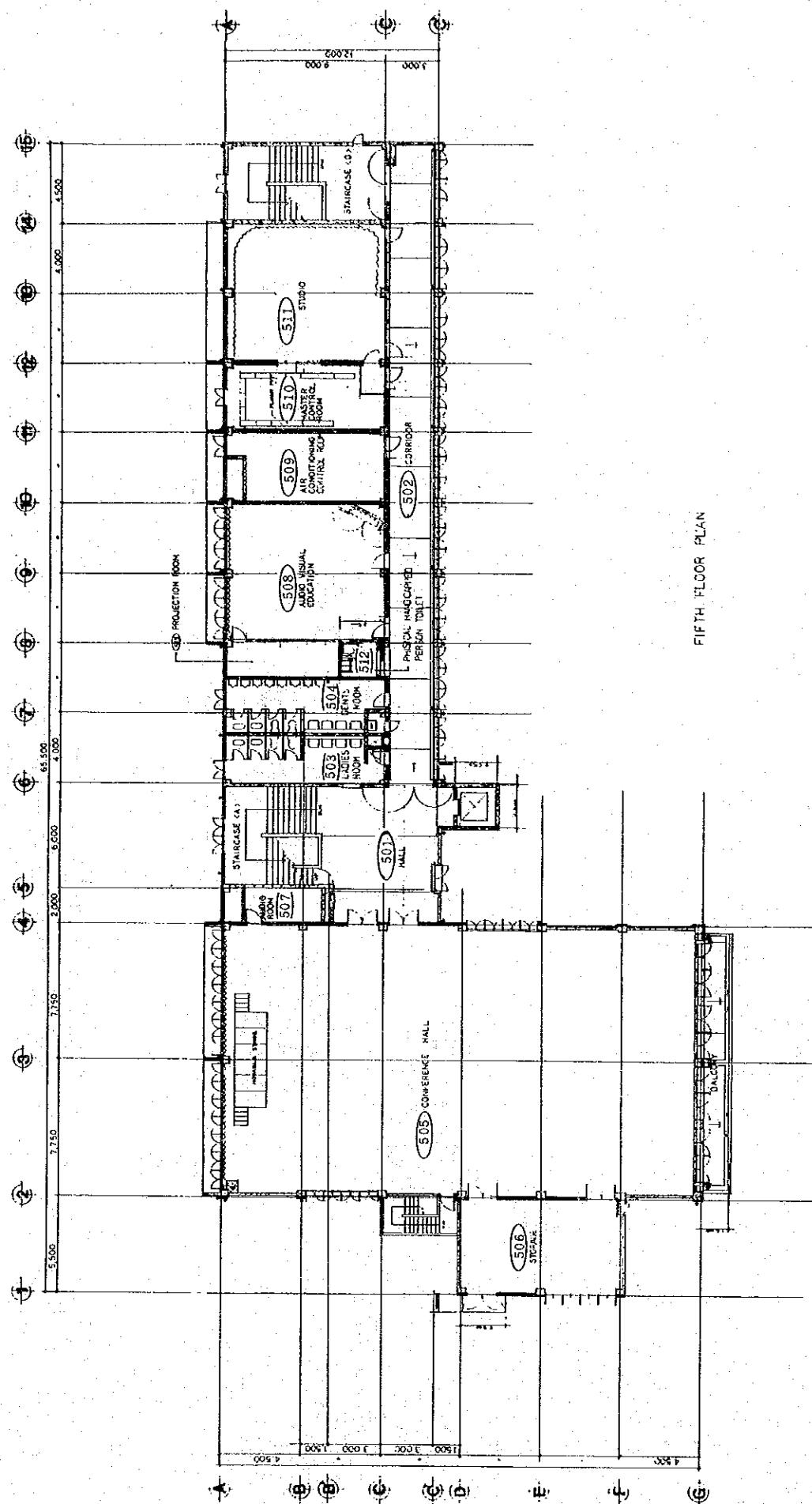
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|----|------------------|-------|
| 1 | M-G制御回路システム | セイコク社 |
| 2 | 自動制御システム | " |
| 3 | 変圧機 | 東京変圧器 |
| 4 | ワードレオナード制御システム | セイコク社 |
| 5 | DC, AC用M-G制御システム | " |
| 6 | 伝送回路システム | SC-1 |
| 7 | 電気式動力計 | DYM-3 |
| 8 | L.C.R負荷抵抗機 | " |
| 9 | ポータブル発電機 | デンヨウ |
| 10 | 同期発電機操作システム | セイコク社 |
| 11 | DC電源 | " |

#411室 スタック室

- | | | |
|---|------------|---------|
| 1 | スライドプロジェクタ | エルモ |
| 2 | スクリーン | HS-4 |
| 3 | OHP | HP-2450 |
| 4 | 8%プロジェクタ | GS-1200 |
| 5 | トランプ製図機 | WA220 |
| 6 | 複写用テーブル | リコー |

#412室 コンピュータ室

- | | |
|---|----------|
| 1 | 自動取用エアコン |
| 2 | パソコン |



FIFTH FLOOR PLAN

#507室 オーディオ室

1. 制御コンソール WL-615KN
2. アンブ WU-P23
3. プレーヤ SL-Q2XN
4. カセットデッキ RS-M88-NT
5. レシーバ WX-940
6. モニタスピカ WS-1250
7. マイク用スタンド WN-138
8. オーディオケーブル WM-831
9. ボリュームボックス WZ-530A

#505室 会議用ホール

1. フライレスマイク WX-470
2. スピーカ WS-3250
3. マイク WM-323B
4. フロア・スタンド WN-501

#508室 視聴教室

1. 100 in ビデオプロジェクタ VPK-720
2. スピーカーシステム PA-100
3. U matic VTR VO-2610
4. β max VTR SLO-323
5. 学習機 (含VTR)
6. 照燈、スクリーン
7. ケーブル
8. 16%プロジェクタ 16-F
9. 8%プロジェクタ ST-1200HD
10. スライドプロジェクタ AS-3000A
11. 予備ランプ HP-2450
12. OHP

#510室 スタジオ (MASTER CONTROL ROOM)

1. 特殊な効果発生器
2. 配電器

3. カラーモニター、TV B/Wモニター、V
4. カラーVTRモニター
5. カラーVTRモニター
6. B/W VTRカメラ
- 7.ズームレンズ
8. クロームアップレンズ
9. B/Wカメラスタンド
10. 接続ケーブル
11. 接続パネル
12. ライン選択卓
13. 制御コンソール
14. U matic VTR
15. コントロールユニット
16. 18 in カラーモニター、TV
17. VTR接続ケーブル
18. ステレオアンブ
19. ステレオアンブレコーダ
20. マイクロホンミキサ
21. マイクロホン
22. スタンド
23. ビームスタンド
24. コンデンサマイク
25. スタジオスピーカ
26. カセットテープレコーダ
27. オーディオケーブル
28. オーディオコンソール
29. U matic VTR
30. β max
31. ケーブル
32. カラーモニター、TV
33. 照燈器
34. 同上コンソール
35. カメラ制御コンソール
36. ACカメラアダプタ
37. ラック
38. U matic用テープ
39. "
40. β max用テープ
41. "
42. テレシネ
43. 16%TVフィルムプロジェクタ

TC-707SD

- MX-20
- F-560
- A-12
- E-302
- PCM-150
- SS-R3
- TC-K61
- MSD-1
- VO-2610
- SLO-323
- PVM-8000
- SBA32
- MLD-1
- CCU-1800
- RMM-1800
- KCA-60
- KCA-30
- L-500
- L-250
- VCR-2
- SC-10S-EIA24

1. スタジオ用VTRシステム (カラー) ノー
2. 三脚
3. カメラケーブル
4. ヘッドホンセット
5. フレキシブルワイヤ
6. フォーミング
7. VTRモニター、TV
8. モニタラック
9. 10. 11. 照燈器
12. スポットライト
13. ハログンライト
14. キングライト
15. ライト用スタンド
16. 予備ランプ
17. レール
18. ボータブルカメラ
19. " VTR (U matic)
20. バッテリーパック
21. ACカメラアダプタ
22. 三脚
23. カメラ用ケーブル
24. バッテリー充電器

- EC-10A
- RK-64A
- PC-2A
- P-LAMP-SC
- EX-LAMP-SC
- REMOCON-SC
- TED-1
- 特注
- DR-10A
- 特注
- EDS-1
- PS-X55
- EDS-1
- BTS-1
- TLD-1

JICA