No. 1

Japan International Cooperation Agency

Republic of the Marshall Islands
Ministry of Education

BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR
MARSHALL ISLANDS HIGH SCHOOL
UP-GRADING/DEVELOPMENT
IN
THE REPUBLIC OF THE MARSHALL ISLANDS

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SYSTEM SCIENCE CONSULTANTS INC.

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NOVEMBER 1993

SYSTEM SCIENCE CONSULTANTS INC.

PREFACE

In response to a request from the Government of the Republic of the Marshall Islands, the Government of Japan decided to conduct a basic design study on the Project for Marshall Islands High School Up-Grading/Development and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to the Marshall Islands a study team headed by Mr. Masao Takai, Director, Second Basic Design Study Division, Grant Aid Study and Design Department, JICA and constituted by members of System Science Consultants Inc., from June 1 to July 2, 1993.

The team held discussions with the officials concerned of the Government of the Marshall Islands, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to the Marshall Islands in order to discuss a draft report, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the Project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of the Marshall Islands for their close cooperation extended to the teams.

November 1993

Kensuke Yanagiya
President
Japan International Cooperation Agency

November 1993

Mr. Kensuke Yanagiya,
President
Japan International Cooperation Agency
Tokyo, Japan

LETTER OF TRANSMITTAL

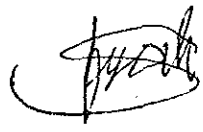
We are pleased to submit to you the basic design study report on the Project for Marshall Islands High School Up-Grading/Development in the Republic of the Marshall Islands.

This study was conducted by System Science Consultants Inc., under a contract to JICA, during the period of May 27, 1993 to November 19, 1993. In conducting the study, we have examined the feasibility and rationale of the Project with due consideration to the present situation of the Marshall Islands and formulated the most appropriate basic design for the Project under Japan's grant aid scheme.

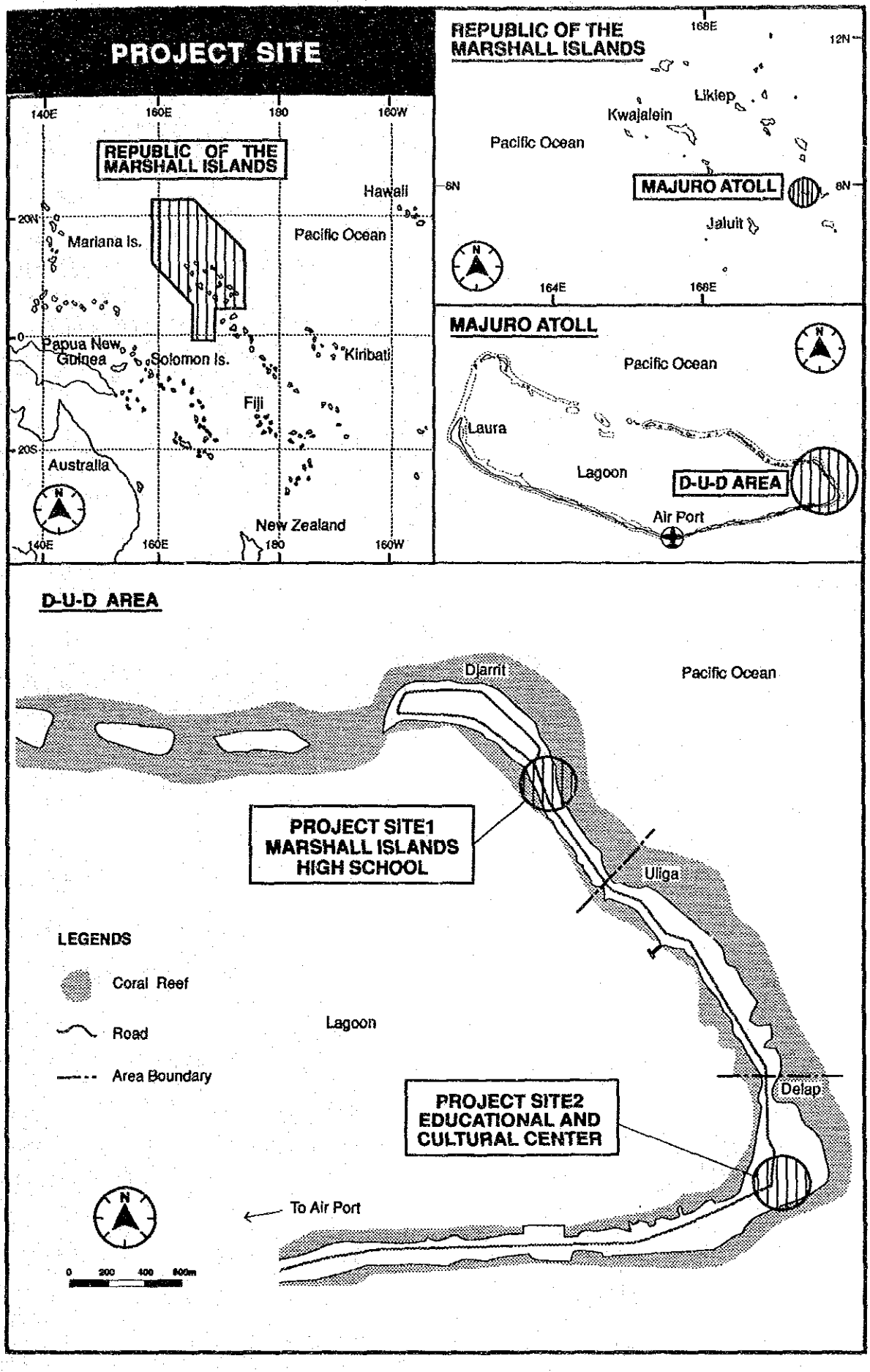
We wish to take this opportunity to express our sincere gratitude to the officials concerned of JICA, the Ministry of Foreign Affairs, and the Ministry of Education. We would also like to express our gratitude to the officials concerned of the Ministry of Education in the Republic of the Marshall Islands for their cooperation and assistance throughout our field survey.

Finally, we hope that this report will contribute to further promotion of the Project.

Very truly yours,



Kyoichi Sugiyama
Project manager,
Basic design study team on the
Project for Marshall Islands High School
Up-Grading/Development in
the Republic of the Marshall Islands
System Science Consultants Inc.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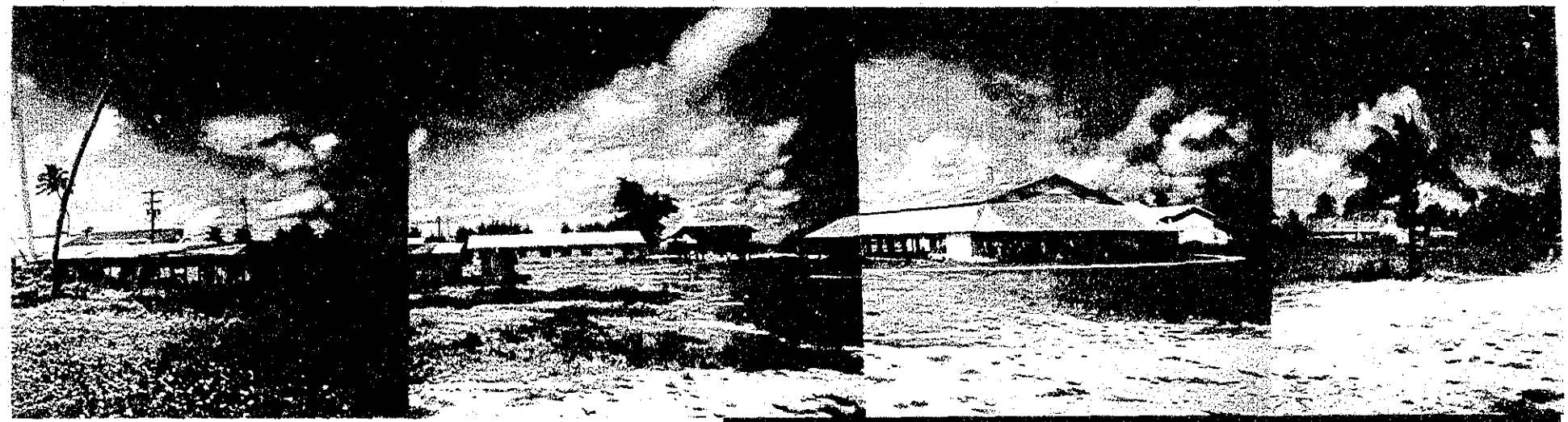
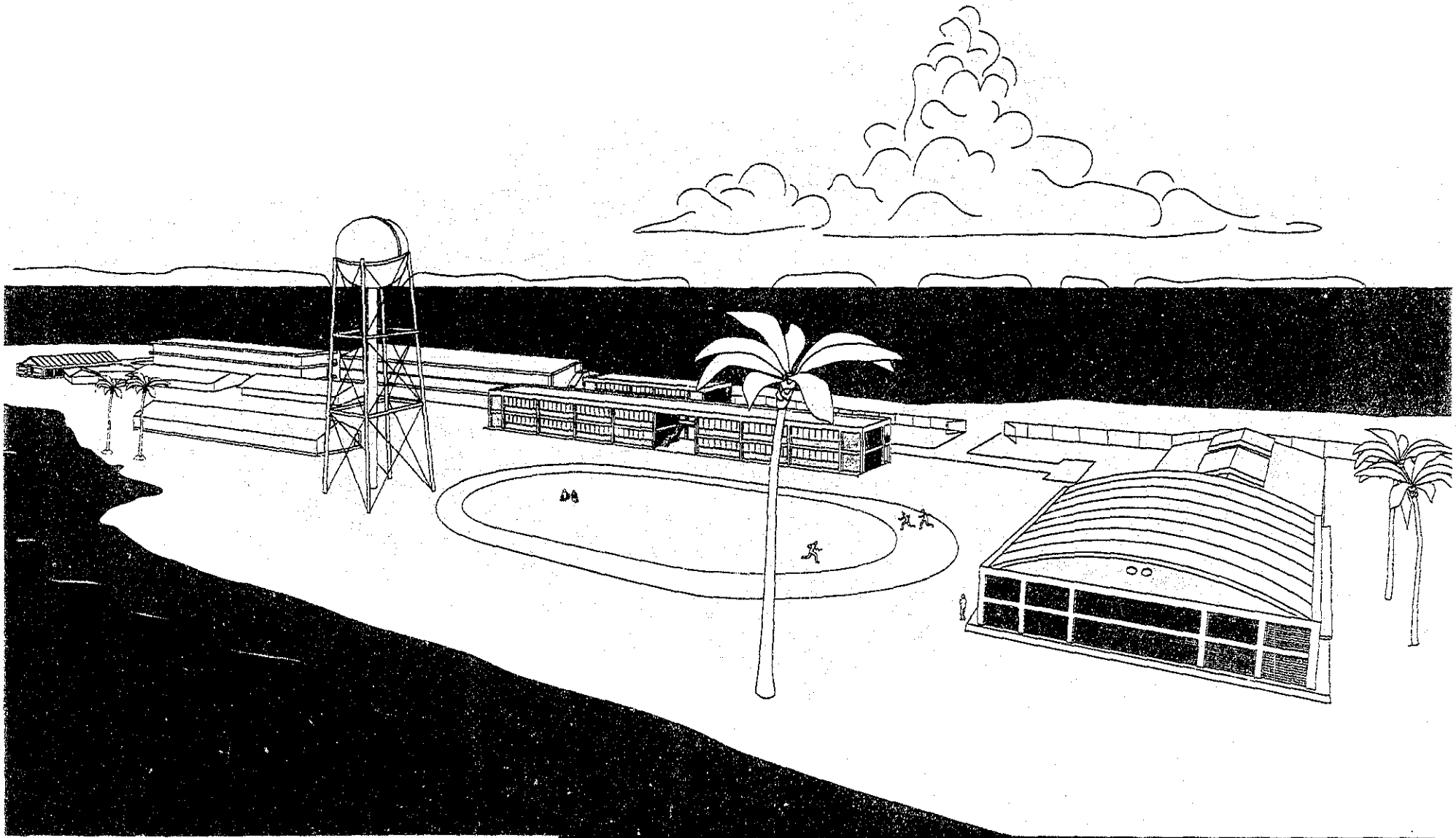
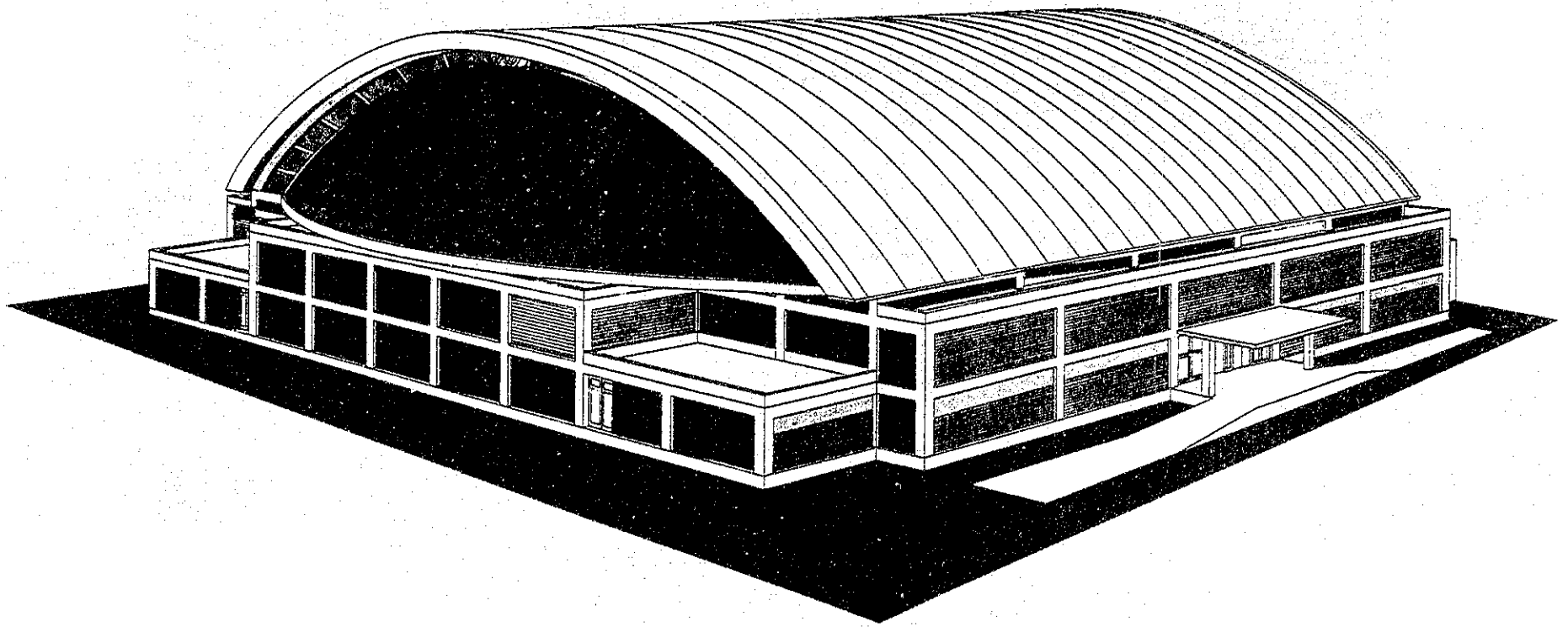


MARSHALL ISLANDS HIGH SCHOOL SITE PHOTO

EDUCATIONAL AND CULTURAL CENTER SITE PHOTO



MARSHALL ISLANDS HIGH SCHOOL PERSPECTIVE DRAWING



EDUCATIONAL AND CULTURAL CENTER PERSPECTIVE DRAWING

SUMMARY

SUMMARY

The Republic of the Marshall Islands (RMI) is located in the Central Pacific in a narrow area of 181 km², consisting of 29 atolls and 5 islands. It is estimated that the population which was 43,380 in 1988 increased rapidly to approximately 50,000 in 1992, and this high increase rate will continue hereafter. Especially in Majuro, the capital of the Republic, the population which is growing rapidly not only due to a natural population growth but also migration from outer islands has reached about half the total population in the country. Owing to this rapid natural growth over half of the population is under 15 years of age, and this rapid increase in the school age population, compounded by problems of shortage and deterioration of the educational facilities, have triggered the need to secure more proper school education facilities.

In the RMI, which became independent in 1986, it is extremely difficult for the youth without experience and high skills to find jobs because industries have not developed adequately since the formation of the self-sustaining economy started quite recently, and the major employment positions are occupied by foreign workers. Consequently, some of the youth are shut out from employment opportunities and find no prospective future. Therefore, improvement of the social education of the youth is the top priority issue to be resolved.

According to the educational policy in the Second Five-Year Development Plan, the objective of public high schools is to provide the education emphasizing vocational training, and it is also considered to be significant to facilitate social education for youth. Marshall Islands High School (MIHS), the only public high school in Majuro which was established in 1962, has faced the problems of conspicuous deterioration of school buildings, shortage of classrooms to meet the demand of increasing number of students in secondary education, and a lack of training equipment to enhance the effect of vocational education. Meanwhile, the RMI has not provided a desirable environment to foster sound youth due to the shortage of social education facilities, sports and recreation facilities, and non-formal educational facilities for unenrolled youth. Under such circumstances, the government of the RMI requested a grant aid from the government of Japan for the Project for Marshall Islands High School Up-Grading/Development (the Project), which comprises the construction of some additional school buildings of MIHS, upgrading of the educational equipment, and construction of the Educational and Cultural Center (ECC).

In response to the request from the government of the RMI, the government of Japan decided to conduct a basic design study on the Project, and the Japan International Cooperation Agency (JICA) sent the study team from June 1 to July 2, 1993. The study team confirmed the background of the request and the objective of the Project, and conducted a study on the current conditions and future prospects of the nation's secondary and social education and natural conditions of the Project site. After the team returned to Japan, the survey materials were examined and analyzed, and further studies were made regarding the contents and appropriateness of the Project. Based on the results, the basic design was conducted on the facilities and equipment with appropriate scale and contents, and a draft report was prepared. JICA dispatched a mission to the RMI from September 12 to September 24, 1993 to explain and discuss the draft final report, and to confirm the contents of the basic design study with the government of the RMI.

The results of the study clarifies that the objective of the Project is to construct some additional school buildings of MIHS, to improve the vocational training equipment and to construct the Educational and Cultural Center for the following purposes.

- To facilitate the expansion and improvement of the high school facilities to provide the capacity for an increasing enrollment population.
- To upgrade the environment for effective learning and training to raise the advancement and graduation rates.
- To produce human resources with capabilities and skills to meet the demands of the public and private sectors.
- To reduce the shortage of sports facilities to facilitate sports activities for youth and community.
- To provide opportunities to hold classes and non-formal education for all the community to facilitate social education for youth.

MIHS is a four-year high school with a curriculum which is divided into general education for the first two years and vocational and advanced general education for the last two years. In vocational education the basic skill courses are compulsory for the first two years, and elective courses that are in high demand in the country are provided in the latter two years.

It is expected that the enrollment number in 1995, the target year of the Project, will be 881 which is about a 20 percent increase over 1992, and it is planned that ten teachers will be employed to cope with the increasing number of students.

The Educational and Cultural Center will be under the jurisdiction of MIHS and the principal of MIHS will be responsible for its management. The activities performed in the Center include (i) special heritage culture classes of MIHS and drama, (ii) community or high school tournament sports, and (iii) social education including sound youth activities and vocational training programs. Three staff members will be employed for the Center to be in charge of the scheduling , operation and maintenance of the facilities.

MIHS, located in the Rita District of DUD in Majuro, has a campus of approximately 4.5 ha with 13 school buildings. It is necessary to reconstruct three general classroom buildings, a sports shell and a dormitory which have been extremely deteriorated, and expand the vocational training rooms. Therfore the Project includes the construction of (i) General Classroom & Administration Building, (ii) Special Classroom Building, (iii) Sports Shell, (iv) Dormitory, and (v) the electrical wiring to supply power for the training equipment in the existing vocational training building, and (vi) the leveling of the Sports Ground. Further, in the existing vocational training building and Special Classroom Building, training equipment for nine vocational courses (Woodworking, Construction, Auto-Mechanics, Drafting, Cooking, Sewing, Computer, Secretarial Type, and Agriculture) and equipment for maintenance and parts assembly will be installed.

The basic design study team conducted the basic design of the Educational and Cultural Center based on the conditions of the Project site after they confirmed with the government of the RMI that the Educational and Cultural Center will be located next to Nitijela Hall in Delap district in DUD on a site with an area of approximately 1 ha.

However, when the team explained the draft report, the government of the RMI requested them to change the Project site for the Center. After the field survey stage of the basic design study, the government of RMI decided to build a convention hall adjacent to Nitijela Hall, and change the Project site to the old airport site. According to the instructions by the government of Japan concerning the request for the site change, the mission dispatched to explain the draft report made the following requests to the government of the RMI.

(i) The government of the RMI should make an official request to the government of Japan concerning the site change of the Educational and Cultural Center.
(ii) The government of the RMI should make a decision at a Cabinet meeting that the Educational and Cultural Center will be located in a new site.
(iii) The government of the RMI should secure the land for the new Project site.

When the government of Japan accepts the clarifications to the above-mentioned three points, a supplementary study will be conducted concerning the site for the Educational and Cultural Center at the old airport site.

When the draft report was explained, the government of the RMI approved the contents of the facilities of the Educational and Cultural Center which consists of two basketball courts, an indoor bleachers with a capacity of approximately 600 and a stage.

Therefore, this report has been prepared based on the premise of the result of the basic design study only, excluding a study on a new site for the Educational and Cultural Center.

The followings are the result on this premise.

The area of the MIHS buildings and Educational and Cultural Center to be upgraded and constructed in the Project is shown in the following table.

Table List of Rooms by Building in the Project (1/2)

Name of Room	Area (m^2)	Remarks
1. General Classroom & Administration Bldg.		
A (1st Floor)		(1st Floor Area : 847.44m^2)
1) Principal's Room	24.00	
2) Deputy Principal's Room	30.00	15.00 m^2 x 2
3) Counselor Room	24.00	12.00 m^2 x 2
4) Office	75.00	Including Teacher Work Room
5) Conference Room	48.00	
6) First Aid Room	15.00	
7) Library	168.00	
8) Others	473.44	Including Toilet, Machine Room, and Water Reservoir.
B (2nd Floor)		(2nd Floor Area : 847.44 m^2)
1) General Classroom	504.00	7 Classrooms : 72.00 m^2 each
2) Others	343.44	Including Storage, Machine Room, and Void.
Total Area	1,694.88m^2	
2. Special Classroom Bldg.		
A (1st Floor)		(1st Floor Area : 333.84 m^2)
1) Cooking Practice Room	120.00	
2) Secretarial Type Practice Room	58.00	
3) Others	155.84	Including Preparation Room, Storage, Machine Room, etc.
B (2nd Floor)		(2nd Floor Area : 333.84 m^2)
1) Sewing Practice Room	96.00	
2) Computer Practice Room	82.00	
3) Others	155.84	Including Preparation Room, Storage, Machine Room, etc.
Total Area	667.68m^2	
3. Sports shell		
1) Arena	813.00	
2) Others	149.50	Including Locker Room, Stage, Storage
Total Area	962.50m^2	
4. Dormitory		Including 9 Bedrooms.
Total Area	302.40m^2	
5. Existing vocational training bldg. (Only 1st Floor Rehabilitation)	Electric Wiring of Storage, Wood Working Room and Auto-Mechanics Room	

Table List of Rooms by Building in the Project (2/2)

6. Educational and Cultural Center		
A (1st Floor)		(1st Floor Area : 2,640.00 m^2)
1) Arena	1,470.00	
2) Office Room	10.50	
3) Locker Room	60.00	30.00 m^2x 2, Including shower booth
4) Stage	150.00	
5) Toilet	60.00	30.00 m^2x 2
6) Others	889.50	Including downstairs of Indoor Bleachers, Entrance Hall, etc.
B (2nd Floor)		(2nd Floor Area : 870.00 m^2)
1) Indoor Bleachers	367.00	2.5m higher than 1st floor in steps.
2) Others	503.00	Including Water Reservoir, Void, etc.
Total Area	3,510.00m^2	

It is planned that MIHS will employ ten teachers to cope with the increasing number of enrollments, and three staff members for the newly constructed Educational and Cultural Center. Although the teachers with adequate capabilities are lacking in the country, it is anticipated that the in-service teacher education program will enable the school to hire ten new teachers with satisfactory capabilities and qualifications.

In the RMI the electricity charges of public facilities is not paid by the relevant authorities but by the Ministry of Finance directly. Therefore, the annual operation and maintenance cost except electricity charges required after the completion of the Project is expected to be approximately $11,800 at MIHS, and approximately $7,500 at the Educational and Cultural Center; approximately $19,300 in total.

The limited revenue of the RMI is supplemented by subsidies from the US. As the annual budget for MIHS has been largely appropriated to cover personnel costs, operational costs has often dropped to less than ten percent of the whole budget. As the operation and maintenance costs of the Project are equal to about half of the operational costs of MIHS in 1992, it is necessary for the Ministry of Education to secure a budget for the new operational costs in order to perform operation and maintenance of the Project without any problem. As the Project was requested to solve the youth problem, which is the most serious problem encountered to the government of the RMI, the government will make the utmost efforts to secure a budget for the operation and maintenance costs.

The Project will be executed after the Exchange of Notes is concluded between the government of Japan and the government of the RMI. The implementation of the Project will be divided into two phases ; the first phase for the construction of some additional school buildings of MIHS to meet the increasing enrollment population, and the second phase for the upgrading of the educational equipment and the construction of the Educational and Cultural Center to enhance vocational and social education.

However, the implementation plan and estimation are based on the premise that the Educational and Cultural Center will be located in the site which was confirmed at the basic design study. The work schedule required for the execution is expected to be about 14.5 months for the first phase (4 months for detailed design and tender, and 10.5 months for construction), and about 15.0 months for the second phase (4 months for detailed design and tender, and 11.0 months for construction and procurement). The work allotted to the RMI is estimated to be approximately $255,000. The content of both phases of the Project is described in the following table.

Table Work Phase of the Project

Phase	Content of work
1st Phase	Construction of General Classroom & Administration Bldg., Special Classroom Bldg., Sports Shell, and Dormitory. Leveling work of 200m field track. Electricity wiring work of the existing vocational training bldg.
2nd Phase	Construction of Educational and Cultural Center. Upgrading of vocational training equipment.

The implementation of the Project will enable MIHS to accept 20 percent more students, and to improve school facilities and training equipment to better suit the needs of class and to carry out effective training programs. Further, facilities for sports popular in the country will be improved, the social education will be available for the community, and an environment to foster sound youth will be facilitated. As these factors will make a great contribution to raising the academic level of secondary education and relieving the problems of youth through improved employment opportunities and organized social activities, it is considered to be appropriate to implement the Project under grant aid.

In order to effectively use facilities and equipment provided by the Project, we would like to suggest that the government of the RMI take the following actions.

(i) Upgrading school facilities and equipment will greatly enhance educational effectiveness, but on the other hand, it is essential to raise the quality of the teachers. Therefore, it is necessary to improve the level of the teachers as a whole by employing new teachers with a Professional Certificate I, and by carrying out the in-service training without fail.

(ii) Guidelines for the teachers of the vocational courses with newly upgraded equipment should be prepared, and they should be used to help the students not only to acquire application skills in the operation of the equipment but also to cultivate the operation and maintenance ability by imposing collective responsibility for the operation and maintenance of the equipment used by the practice group.

(iii) Efforts should be made to secure a budget for the operation and maintenance of new buildings as well as to cut expenses.

(iv) Regulations on using the Educational and Cultural Center should be formulated, and the staff members who are capable of properly operating and maintaining the Center should be employed.

ABBREVIATIONS

(1) Name of Organizations

AIDAB : Australian International Development Assistance Bureau
CIP : Capital Improvement Project
CMI : College of Marshall Islands
JICA : Japan International Cooperation Agency
JOCV : Japan Overseas Cooperation Volunteers
MEC : Marshall Energy Company
MIHS : Marshall Islands High School
MWSC : Majuro Water & Sewer Co. Ltd.
NTA : National Telecommunication Authority
PCV : Peace Corps Volunteers
RMI : Republic of the Marshall Islands
UNDP : United Nations Development Program
UNV : United Nations Volunteers

(2) Others

E/N : Exchange of Notes
DUD : Delap, Uliga and Djarrit
GDP : Gross Domestic Product

Exchange Rate

1 Dollar (US $) = 113.64 Yen (As of July 1993)

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[Appendix]

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CHAPTER 1 INTRODUCTION

CHAPTER 1 INTRODUCTION

In the Republic of the Marshall Islands (RMI), over half of the population is under 15 years of age due to an increasing birth rate, and it is considerably concentrated in the urban area, especially in Majuro, the capital which contains half of the entire population of the nation due to migration from the outer atolls.

The rapid increase in the number of enrolled students as well as a shortage and aging of educational facilities have accelerated the need to secure more facilities and equipments of the school education. The government has yet to achieve a self-reliant economy, due to its relatively recent start, which has contributed to a high unemployment rate among the nation's youth. Subsequently, it has become a vital issue to develop a comprehensive secondary educational system. The social education with a main focus on the sound fostering of the youth is also emphasized as some of them suffer from social illnesses.

Marshall Islands High School (MIHS) which is the only public high school in Majuro was established in 1962. According to its current educational policy, more emphasis is placed on vocational training in public high school education. However, MIHS has been unable to provide effective education because of the considerable aging of school buildings and a shortage of classrooms in the face of an increasing number of students. Under these circumstances, the government of the Marshall Islands requested grant aid from the government of Japan for the construction of a portion of its school buildings and improvement of equipment used in vocational training and the construction of an Educational and Cultural Center with the function to provide the social education.

In response to this request, the government of Japan decided to conduct a basic design study on the Project for Marshall Islands High School Up-Grading/Development (the Project), and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent a basic design study team headed by Mr. Masao Takai, Director, Second Basic Design Study Division, Grant Aid Study and Design Department, JICA to conduct a field survey from June 1 to July 2, 1993. In the field survey the background of the request and the objective of the Project were confirmed, and the grant aid system of the government of Japan was explained to the officials concerned in the government of the Marshall Islands. The scope of the responsibilities of the two governments was also confirmed, and a survey was made concerning the natural conditions of the construction

site, infrastructure as well as the organizational system of MIHS and the Educational and Cultural Center, and plans for class management, etc. After the team returned to Japan, the survey materials were examined and analyzed, and further studies were made regarding the content and appropriateness of the Project. Based on the results, a basic design was conducted on the facilities and equipment with appropriate scale and content , and a draft report was prepared.

JICA dispatched a mission to explain the draft report headed by Mr. Eiichiro Cho, First Project Management Division, Grant Aid Project Management Department, JICA from September 12 to 24, 1993 to carry out the final confirmation of the content of the basic design.

When the draft report was explained, the government of the RMI requested to change the Project site for the Educational and Cultural Center which is one of the requested facilities. Since a study has not been conducted concerning a new site for ECC at the old airport site, this report is based on the results of the basic design only, including basic design of the facilities and equipment which are considered to be the most appropriate for the implementation of the Project, implementation organization, Project evaluation and recommendations. Member list of the study team, field survey schedule, member list of concerning party, and minutes of discussions are included in the attached Appendix.

CHAPTER 2 BACKGROUND OF THE PROJECT

CHAPTER 2 BACKGROUND OF THE PROJECT

2.1 General Description of the Republic of the Marshall Islands

The Republic of the Marshall Islands is located in the Central Pacific between 4 degrees and 14 degrees North and 160 degrees and 173 degrees East. It consists of 29 flat atolls and 5 islands spreading over a sea area of 2,131,000 km^2 with a small land area of 181 km^2. It is estimated that the population which was 43,380 in 1988 has increased rapidly to approximately 50,000 in 1992.

It is believed that migration to the Marshall Islands started around 1300 B.C. The history of the islands was recorded only after they were discovered by the Spanish in the 16th century as there was no written language prior to this time. In the 19th century it was governed under German colonial policy as a German protectorate; and in 1914 it was placed under the mandatory administration of Japan as a mandate of the League of the Nations. In 1947 after the World War II, it was governed under the US trusteeship as a trust territory of the United Nations. In 1979 a constitution was enacted and an autonomous government was established. In 1982 the Compact of Free Association was signed with the US, and in 1986 it became a nation in the Free Association. In the same year the US trusteeship was terminated and its independence as a nation was achieved.

Although the total gross domestic product of the Marshall Islands indicates a large growth, worker income stemming from the public sector and the military facilities in Kwajalein comprises about 70 percent (1991) of this figure. Although worker income originating from the private sector comprises a high ratio of the sales surplus, it is mainly concentrated in the wholesale, retail, and service industries, following by copra processing in the manufacturing sector. Transitions in the gross domestic product are given in the following table.

Table 1 Transitions In Gross Domestic Product (GDP)

	1983	1985	1987	1989	1991
(1) Employees' Income	22.27	25.80	39.94	43.89	52.73
(i) Public Sector	10.82	11.81	15.57	19.21	22.70
(ii) Private Sector	5.29	6.56	13.58	17.03	16.15
(iii) Military Facilities (Kwajalein)	5.67	6.72	9.57	6.35	11.22
(iv) Others	0.49	0.71	1.22	1.30	2.66
(2) Sales Surplus	14.45	14.10	18.63	20.09	16.77
(3) Fixed Capital Consumption	1.73	1.93	2.90	2.90	3.09
(4) Indirect Tax	3.72	3.37	3.35	3.26	3.10
[Total] GDP	42.17	45.20	64.82	70.14	75.69
GDP Per Capita	1,233	1,232	1,643	1,579	1,576

Source) Statistical Abstract (1990-1991), Office of Planning and Statistics
Unit) Million Dollars, Dollar for GDP per capita.
Note1) Indirect tax includes deduction of subsidy.

Approximately 60 percent of the national revenue of the Republic is funded from the US in the form of grants. Over 10 percent of the nation's expenditure is spent on its social infrastructure in order to establish the foundation of the promotion of industries. However, the greatest problem which the government faces now is how to solve the problem of the fiscal deficit after financial assistance from the US is reduced. Transitions in the revenue and expenditure are shown in the following table.

Table 2 Transitions In National Revenue and Expenditure

	1989	1990	1991
(1) Revenue	89.51	105.01	94.12
(i) US Grant Aid	53.21	65.78	54.71
(ii) Tax Income	13.73	13.79	14.67
(iii) Others	22.57	25.44	24.74
(2) Expenditure	85.75	96.50	99.48
(i) Government Office Expenses	26.87	30.23	33.73
(ii) Capital Investment Project	12.02	15.27	12.43
(iii) Debt Payment	11.52	13.91	13.35
(iv) Others	35.34	37.09	39.97
(3) Balance	3.76	8.51	-5.36

Source) Statistical Abstract (1990-1991), Office of Planning and Statistics
Unit) Million Dollars
Note) US direct grant aid includes all the aids such as Compact Fund, TTPI, etc.

2.2 Outline of Educational Sector

2.2.1 System of Primary/Secondary/Higher Education

(1) Educational Policy and System

Under the current educational system of the Republic the eight years of compulsory primary education is provided for children between the ages of 6 to 14(grades 1-8), but only about 78 percent of the school age population is enrolled. The succeeding four years of secondary education (grades 9-12) has an enrollment rate of about 43 percent in the school year of 1992. The school year in the Republic starts in August and ends in May of the following year.

The Ministry of Education in the Republic have conducted a program emphasizing vocational training and an in-service training in the public high schools based on the statement of the Ten-Year Education Master Plan formulated in 1989. The vocational training in public high schools aims at fostering technician with high level skills required in the public and private sectors by providing sufficient technical training. Furthermore, in the secondary education the in-service training program for teachers has been conducted to enhance the level of the overall education to overcome the shortage of highly qualified teachers.

(2) Educational Budget

The fiscal year in the Republic begins in October and ends in September of the following year, and the annual budget for the next fiscal year is formulated in June. It is a major issue to cope with the increasing number of students and raise the salary of the teachers in the face of an insufficient educational budget, and it is pointed out that especially salaries which are lower than in other sector have been obstacles to recruiting capable teachers.

Subsidies from the national government to cover the operating costs of primary and secondary schools, excluding teacher salaries, have been appropriated. In the primary education $21 per student is provided annually; in the secondary education $52 to each public school.

For the private schools the subsidy to cover the operation cost totaling $300,000 annually is appropriated. In 1992 $300,000 was allocated in addition as special subsidy for construction of the facilities of private schools.

In the public primary and secondary education in the Republic, basically the tuition of public schools is free. However, beginning in 1993 an enrollment fee of $10 for primary school students and $20 for secondary school students will be required annually. The total cost for private schools averages about $600 annually, with a tuition cost of about $500 to $550, and enrollment fee of $30 to $40, and other

miscellaneous fees of about $10 to $80. But students enrolled in private schools are generally from middle or upper class families, who plan to go on to colleges, and very few of them leave school due to financial reasons.

(3) Primary Education

In 1992 the total number of elementary schools in the Republic was 103, of which 77 were public schools and 26 were private schools, and the number of students was 12,237 including 6,220 males and 6,017 females. The number of teachers was 339 in public schools and 197 in private schools which indicates lower teacher to student ratio in the private schools. In Majuro the total number of students was 5,092 including 3,375 in nine public schools and 1,717 in ten private schools, which was about 40 percent of the total number of students in the country.

Table 3 Number of Students in Public & Private Elementary Schools

Unit: Person

Grade	1	2	3	4	5	6	7	8	Total
Male Students	1026	937	730	842	741	698	654	592	6220
Female Students	970	829	722	782	772	702	652	588	6017
Total	1996	1766	1452	1624	1513	1400	1306	1180	12237
Percentage (%)	16.3	14.4	11.9	13.3	12.4	11.4	10.7	9.6	100.0

Source) Head Start-Elementary-Secondary School Enrollment, National Standard Bureau, MOE

In DUD (3 districts of Delap, Uliga and Djarrit) in the center of Majuro, the number of elementary school students has increased so rapidly that 263 eighth graders had classes in the school building of Marshall Islands High School in 1992 due to the shortage of school facilities. Moreover, it is expected that, in 1993, 293 students in the same grade will be required to study in the above-mentioned school and old government office buildings. As the number of elementary school students increases radically, the students in grade 7 and 8 will be integrated into the middle school and take classes in the other building. However, the building for middle school has not been secured, and it is planned to construct a school building funded by the Asian Development Bank (ADB). It is necessary to expand the school facilities and equipment as the number of students are increasing more rapidly in the lower grades.

(4) Secondary Education

In 1992 the number of high schools was 11 including two public and nine private schools. The number of high school students in Majuro was 1,744 which was about 71 percent of the total. There were 444 students in Kwajalein and 226 in Jaluit which was about 18 percent and 9 percent of the total number of students respectively. One private school is located in Ailinglaplap, but it is small in scale as it has been built quite recently.

The number of students per teacher is 14.7 in public schools, and 18.0 in private schools, for an average 16.6 student to teacher ratio. According to the nation's educational standard in the Republic, the ideal student to teacher ratio in vocational subjects is targeted at 16, which is fairly close to the average number in the whole country, but it is an urgent issue to raise the number of highly qualified teachers in view of the ever rising students population.

The following table indicates the number of students of public and private high schools in each district.

Table 4 Number of Students/Teachers of Public/ Private High Schools (1992)

Unit: Person

		Public School			Private School				Total
		Jaluit (1)	Majuro (1)	Total (2)	Kwajalein (3)	Majuro (5)	Ailinglaplap (1)	Total (9)	(11)
No. of Teachers		19	45	64	27	55	2	84	148
No. of Students	9	61	224	285	168	401	22	591	876
	10	68	222	290	110	247	16	373	663
	11	44	150	194	107	210	0	317	511
	12	41	117	158	59	173	0	232	390
	Total	226	713	939	444	1031	38	1513	2453
Student/Teacher Ratio		11.9	15.8	14.7	16.4	18.7	19.0	18.0	16.6

Source) Head Start-Elementary-Secondary School Enrollment, National Standard Bureau, MOE

(5) Higher Education

The College of Marshall Islands (CMI) which is a two year system college was established in 1990. The number of students enrolled in 1990 was 147 which increased to 557 in 1992. It consists of a General Academy and Technical Training Academy (Auto-Mechanics and Business), and it is planned to open a Construction Department. During summer holidays a re-education course for teachers is

implemented under a program sponsored by the Ministry of Education using the computer room of the Business Department of the college.

But both of the curriculum and facilities of the college have not reached a sufficient level, and a program is being formulated to renovate it to a four year university and improve the curriculum and facilities so that it can meet the technical needs of the business community.

The data at the RMI Scholarship Office indicates that 185 students are studying abroad as of 1993 on scholarship. Furthermore, many of the students apply directly to the US Student Financial Aid Program. Consequently, it is believed that the actual number of students studying abroad is higher than the official figure.

2.2.2 Outline of Marshall Islands High School and Private High School

(1) Marshall Islands High School

1) Educational system and Outline

Marshall Islands High School was established in September 1962. MIHS is the only public high school in Majuro which provides a four year secondary education.

The first two years of this four year period (grades 9-10) is dedicated to general education, while the last two years (grades 11-12) is taken up studying either vocational or college preparatory subjects. At the 11th grade, a student is required to select a course on pursuing either higher education or vocational training. However, all students are required to take the basic technical subjects in the first two years of their education. The educational system of MIHS is illustrated below.

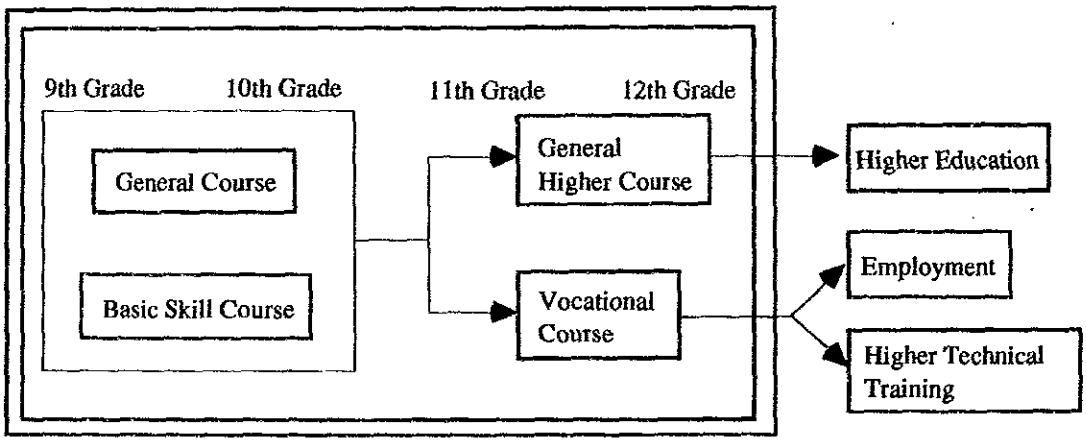

Figure 1 Educational System of MIHS

2) Number of Students and Course Content

(i) Number of Students

In 1992 the number of students is 713, and the number of the whole class is 25. The number of students by grade in 1992 is shown below.

Table 5 Number of Students By Grade in MIHS (1992)

Grade	No. of Class	No. of Students by Class								Total
9	8	28	28	29	27	27	29	29	27	224
10	6	33	38	39	37	37	38	-	-	222
11	6	26	24	25	28	27	20	-	-	150
12	5	22	28	25	22	20	-	-	-	117
										713

About 60 percent of the students are from Majuro, and the remainder are from outside of Majuro Atoll. The ratio of students according to their hometown is shown as follows.

Table 6 Native Place of Students of MIHS

Native Place	1988	1989	1990
Majuro	59 %	55 %	63 %
Outer Islands	41 %	45 %	37 %

(ii) Classes

Classes are held from Monday to Friday. One class is 50 minutes and 8 classes are given in one day with a one hour recess for lunch. Class hours are repeated daily every week. Supplementary classes are held for students who are doing poorly after regular classes. They are often given in the subjects of English and science. In response to this situation, slower classes will be provided from 1993 to reduce dropouts for the students who cannot keep pace with the normal class. The textbooks are provided without charge to the students for one year, returned at the end of the school term, and then provided to the next students. As the budget is

limited for textbook renewals, the same textbooks are used for seven to eight years in some of the subjects.

(iii) After Graduation Course

About 70 percent of the graduates of MIHS go on to higher education, most of whom enter CMI, and a few study abroad. About 10 percent of the graduates are employed, and about 20 percent return home without a job, which indicates the difficulty in finding a job in the country. The courses taken by the graduates in 1990-1991 are described as follows.

Table 7 Courses After Graduation at MIHS

Courses	1990	1991
(i) Colleges including Technical Schools	82 (75 %)	76 (68 %)
(ii) Employed	14 (13 %)	13 (12 %)
(Major Employments)	Office, Sailor, Government Office, Teacher, Restaurant, Electric Company, Supermarket	Office, Hotel, Supermarket, Hospital
(iii) Housework/Unemployed	15 (14 %)	23 (20 %)
Graduates	111 (100 %)	112 (100 %)

3) Vocational Training

(i) Courses

The aim of vocational training at MIHS is to foster self-reliance in the students after graduation and the basic technical knowledge is provided toward achieving this aim. All the students learn basic skill subjects at grades 9-10, and those who select the vocational course at grade 11 will choose more practical courses in technical fields to achieve their own goals in life. Major fields include Woodworking/Construction, Auto-Mechanics, Drafting, Home Economics, Business, Agriculture and Electrics. The number of students who studied technical subjects in 1992 is shown in the following table.

Table 8 Number of Students Taking Vocational Course (1992)

Course		Grade 9	Grade 10	Grade 11	Grade 12
Wood Working	Wood Working	113	-	-	-
Construction	Construction	-	15	10	10
Auto-Mechanics	Auto-Mechanics	-	6	22	12
Drafting	General Drafting	-	-	-	-
	Architectural Drafting	-	9	15	10
	Mechanical Drafting	-	-	-	-
Home Economics	Cooking	111	-	-	-
	Food Service	-	-	15	14
	Sewing	-	115	-	-
	Clothing Construction	-	15	10	10
Business	Computer	-	222	17	15
	Secretarial Type	-	22	15	12
	Accounting	-	12	9	11
Agriculture	Agriculture	224	-	11	8
Electrics	Electrics	-	107	7	6

(ii) Class Method of Practical Training

In MIHS the ideal number of students per teacher in practical training classes is regarded as 16 to 18 for effective guidance and training. However, as the class is divided into several groups to obtain good effect and efficiency in conjunction with subject content, a shortage of teachers and facilities/equipment produced disparities between subjects. On-the-job training (OJT) is also given away from the school in the latter part of grade 12.

4) Teaching Staff

The number of teachers in 1992 was 42 including 20 Marshallese, 18 foreign contract personnel, 2 Japan Overseas Cooperation Volunteers (JOCV) teaching staff, and one Peace Corps Volunteers (PCV). Thus, more than half are foreign teachers.

5) Current Condition of Facilities and Equipment

(i) School Building

The oldest buildings in MIHS are 3 general classroom buildings [(ii)-(iv) in the following table] and the sports shell built in 1968 which have been extremely aged after they are used for over 25 years. From 1992 the general classroom buildings have been used by grade 8 of the elementary schools, and not used by the students of MIHS. The general classes of MIHS are given in general classroom building 1,

2nd floor of vocational training building 1, and the science building. The vocational classes are given on the 1st floor of the vocational training building 2. The current building situation in MIHS is described as follows.

Table 9 Building Condition in MIHS

Name of Building	Floor	Floor Area(m^2)	Structure	Major Room
(i) General classroom bldg. 1	2	1,978	RC	General classroom.
(ii) General classroom bldg. 2	1	238	CB	General classroom, Electrics Room
(iii) General classroom bldg. 3	1	238	CB	General classroom
(iv) General classroom bldg.4	1	243	CB	General classroom, Teachers' Office
(v) Vocational training bldg. 1	2	2,082	S	Workshop (Auto-Mechanics, Construction, Wood Working), Nutrition, Home Economics, General classrooms, General Drafting
(vi) Vocational training bldg. 2	1	407	CB	Deputy Principal's Room, Sewing/Clothing Construction, Food Service, Secretarial Type
(vii) Vocational training bldg. 3	1	271	RC	Outboard Engine
(viii) Science bldg.	1	798	CB	Science general classroom, Chemistry Laboratory, Biology Laboratory
(ix) Sports shell	1	1,265	RC	Basketball Court (1), Stage, Storage
(x) Administration bldg.	1	390	CB	Principal's Room, Registration Office, Deputy Principal's Room, Counselor Room, First Aid Room, Teachers' Lounge Room, Library
(xi) Computer media center	1	370	CB	Scholarship Office, Secretarial Type, Computer, Media Center
(xii) Dormitory	1	181	CB	6 Bedrooms