

## ANNEX-5 UNDERTAKINGS REQUIRED OF THE GOVERNMENT OF FSM

In addition to the undertakings mentioned in the section 3. 6) of ANNEX-4, following necessary measures shall be taken by the Government of FSM on condition that the Grant Aid by the Government of Japan is extended to the Project.

1. to regulate and control fishing boats against usage of pontoons during their renovation;
2. to procure office furniture for the Project ;
3. to bear commissions of a Japanese bank for its banking services based upon the Banking Arrangement, namely the advising commission of the "Authorization to Pay" and other payment commissions;
4. to provide necessary permissions, licenses and other authorizations for implementing the Project;
5. to allocate appropriate budget from the Kosrae State Government for operation and maintenance of the facilities of the Project; and,
6. to bear all the expenses other than those covered by the Grant Aid, necessary for the Project.

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APPENDIX-4  
MINUTES OF DISCUSSION

(Consultation on the Draft of Basic Design)

MINUTES OF DISCUSSIONS  
ON  
THE BASIC DESIGN STUDY ON THE PROJECT FOR IMPROVEMENT OF THE  
FACILITIES FOR ARTISANAL FISHERIES SUPPORT STATION IN KOSRAE  
STATE  
IN  
THE FEDERATED STATES OF MICRONESIA  
( Consultation on the Draft Basic Design )

The Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched to the Federated States of Micronesia (hereinafter referred to as "FSM") the Basic Design Study Team on the Project for Improvement of the Facilities for Artisanal Fisheries Support Station in Kosrae State in FSM (hereinafter referred to as "the Project") in September 1998. As a result of the series of discussions, field surveys in FSM and technical examination in Japan, JICA prepared the Draft Basic Design on the Project.

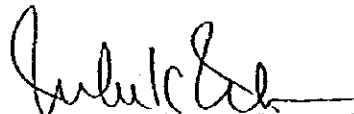
In order to explain and discuss with the Government of FSM the components of the Draft Basic Design, JICA sent to FSM the Draft Basic Design Explanation Team (hereinafter referred to as "the Draft Team"), which is headed by Mr. Hiroto Taguchi, Deputy Director, Fisheries Marketing Div., Fisheries Policy Planning Dept., Fisheries Agency and is scheduled to stay in the country from December 10, 1998 to December 19, 1998.

As a result of discussions, the parties have confirmed the main items described on the attached sheets.

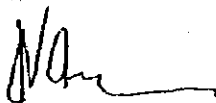
Pohnpei, December 18, 1998

田口 博人

Mr. Hiroto Taguchi  
Leader  
Draft Basic Design Explanation Team  
Japan International Cooperation Agency



Mr. Ieske K. Iehsi  
Deputy Secretary  
Department of Foreign Affairs  
The Federated States of  
Micronesia



Mr. Dais F. Aloka  
Director  
Department of Fisheries and Marine Resources  
Kosrae State Government

## ATTACHMENT

### 1. Major Components of the Draft Basic Design

The Government of FSM has agreed and accepted in principle the following major components of the Draft Basic Design proposed by the Draft Team.

#### OKAT SITE:

- 1) Construction of Artisanal Fisheries Support Station consisted of Ice Plant, Fish Handling Space, Meeting Room, Engine Repair Space, and Fisherman's Lockers, Generation Room, Gas Dispenser with necessary equipment
- 2) Renovation of Pontoon

#### LELU SITE:

- 1) Construction of FRP-Boat Maintenance Workshop with necessary equipment
- 2) Renovation of Pontoon

#### UTWE SITE:

- 1) Renovation of Pontoon

### 2. Responsible Agency and Implementing Agency

Kosrae State Government is the Responsible and Implementing Agency of the Project.

### 3. Management and Maintenance

Kosrae State Government will maintain and use properly the facilities constructed under the Project and assign the necessary staff for operation and maintenance of them.

### 4. Japan's Grant Aid System

- 1) The Government of FSM and the Government of Kosrae State has understood the system of Japan's Grant Aid Program described in ANNEX-1 and explained by the Draft Team.
- 2) The Government of FSM and the Government of Kosrae State will take necessary measures described in ANNEX-2 for smooth implementation of the Project on the condition that the Grant Aid from the Government of Japan is extended to the Project.

### 5. Further Schedule of the Study

The Draft Team will make the Final Report in accordance with the confirmed items and send it to the Government of FSM around March 1999.

## ANNEX-1 JAPAN'S GRANT AID SYSTEM

### 1. Grant Aid Procedures

- 1) Japan's Grant Aid System is executed through the following procedures.

Application Study	(Request made by a recipient country) (Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by the Japanese Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

- 2) Firstly, a request for the Grant Aid submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for the Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using a Japanese consulting firm.

Thirdly, the Government of Japan appraises the project so as to see whether or not it is suitable for the Grant Aid, basing on the Basic Design Study report prepared by JICA, and then it is submitted to the Cabinet for approval.

Fourthly, once the project is approved by the Cabinet, its implementation is officially determined by signing the Exchange of Notes between the Governments of Japan and of the recipient country.

Finally, in the course of implementation of the project, JICA will take charge of expediting the execution of the project by assisting the recipient country in such matters as preparing tenders, contracts and so on.

### 2. Basic Design Study

- 1) Contents of the Study

The aim of the Basic Design Study, conducted by JICA on the requested project, is to provide basic documents necessary for the appraisal of the project by the Government of Japan. The contents of the study are as follows:

- a) to confirm the background, objectives and benefits of the project and also institutional capacity of the agencies concerned of the recipient country necessary for the project implementation;
- b) to evaluate the appropriateness of the project from the technical, social and economic points of view;
- c) to confirm items agreed on by both parties concerning the basic concept of the project;
- d) to prepare a basic design of the project; and,
- e) to estimate costs of the project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the project. Therefore, the implementation of the project is confirmed by all relevant organizations of the recipient country in the Minutes of Discussions.

## 2) Selection of Consultants

For the smooth implementation of the study, JICA selects a consultant among those who registered at JICA by evaluating competitive proposals submitted by those consultants. The selected consultant carries out the Basic Design Study and prepare a report based on the terms of reference made by JICA.

At the beginning of the implementation after the Exchange of Notes, JICA recommends the same consultant who participate in the Basic Design Study to the recipient country for the services of Detailed Design and construction supervision of the project in order to maintain the technical consistency between the Basic Design and the Detailed Design.

## 3. Japan's Grant Aid Scheme

### 1) What is the Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

### 2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

### 3) Period

The period of the Grant Aid means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Purchase of Products and Services

Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely consulting, contracting or procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

5) Necessity of Verification

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This verification is deemed necessary to secure accountability to Japanese taxpayers.

6) Undertakings required to the Government of the recipient country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

- (1) to secure land necessary for the sites of the project prior to commencement of the construction;
- (2) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities outside the site;
- (3) to secure buildings prior to the procurement in case the installation of the equipment;
- (4) to ensure tax exemption and prompt execution for unloading, customs clearance at the ports of disembarkation and internal transportation of the products purchased under the Grant Aid;
- (5) to exempt Japanese nationals from customs duties, internal taxes and other duties which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts;
- (6) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such as facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their works.

7) Proper Use

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign the necessary staff for this operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.

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- 8) **Re-export**  
The products purchased under the Grant Aid shall not be re-exported from the recipient country.
- 9) **Banking Arrangement (B/A)**
- a) The Government of the recipient country or its designated authority shall open an account in the name of the Government of the recipient country in a Japanese bank (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments to the Bank in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
  - b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of recipient country or its designated authority.

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## ANNEX-2

### UNDERTAKINGS REQUIRED OF THE GOVERNMENT OF FSM

In addition to the undertakings mentioned in the section 3. 6) of ANNEX-1, following necessary measures shall be taken by the Government of FSM on condition that the Grant Aid by the Government of Japan is extended to the Project.

1. to bear commissions of a Japanese bank for its banking services based upon the Banking Arrangement, namely the advising commission of the "Authorization to Pay" and other payment commissions;
2. to provide necessary permissions, licenses and other authorizations for implementing the Project;
3. to bear all the expenses other than those covered by the Grant Aid, necessary for the Project as appropriate.

### UNDERTAKINGS REQUIRED OF THE GOVERNMENT OF KOSRAE STATE

In addition to the undertakings mentioned in the section 3. 6) of ANNEX-1, following necessary measures shall be taken by the Government of Kosrae State on condition that the Grant Aid by the Government of Japan is extended to the Project.

1. to regulate and control fishing boats against usage of pontoons during their renovation;
2. to procure office furniture for the Project ;
3. to allocate appropriate budget from Kosrae State Government for operation and maintenance of the facilities of the Project;
4. to transport and install an emergency generator to the Okat Artisanal Fisheries Support Station Facilities;
5. to shift the electric line and poles outside the boundary of the Plan facilities; and,
6. to bear all the expenses other than those covered by the Grant Aid, necessary for the Project.

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APPENDIX—5  
COST ESTIMATION BORN BY THE GOVERNMENT OF FSM

(1) Costs to be borne by the Federated States of Micronesia

1) Transport of emergency generator	0.05 million yen
2) Shifting of power poles outside the site	0.20 million yen
3) Supply of furniture	<u>0.05 million yen</u>
Total	0.30 million yen

(2) Estimate conditions

1) Date of estimate

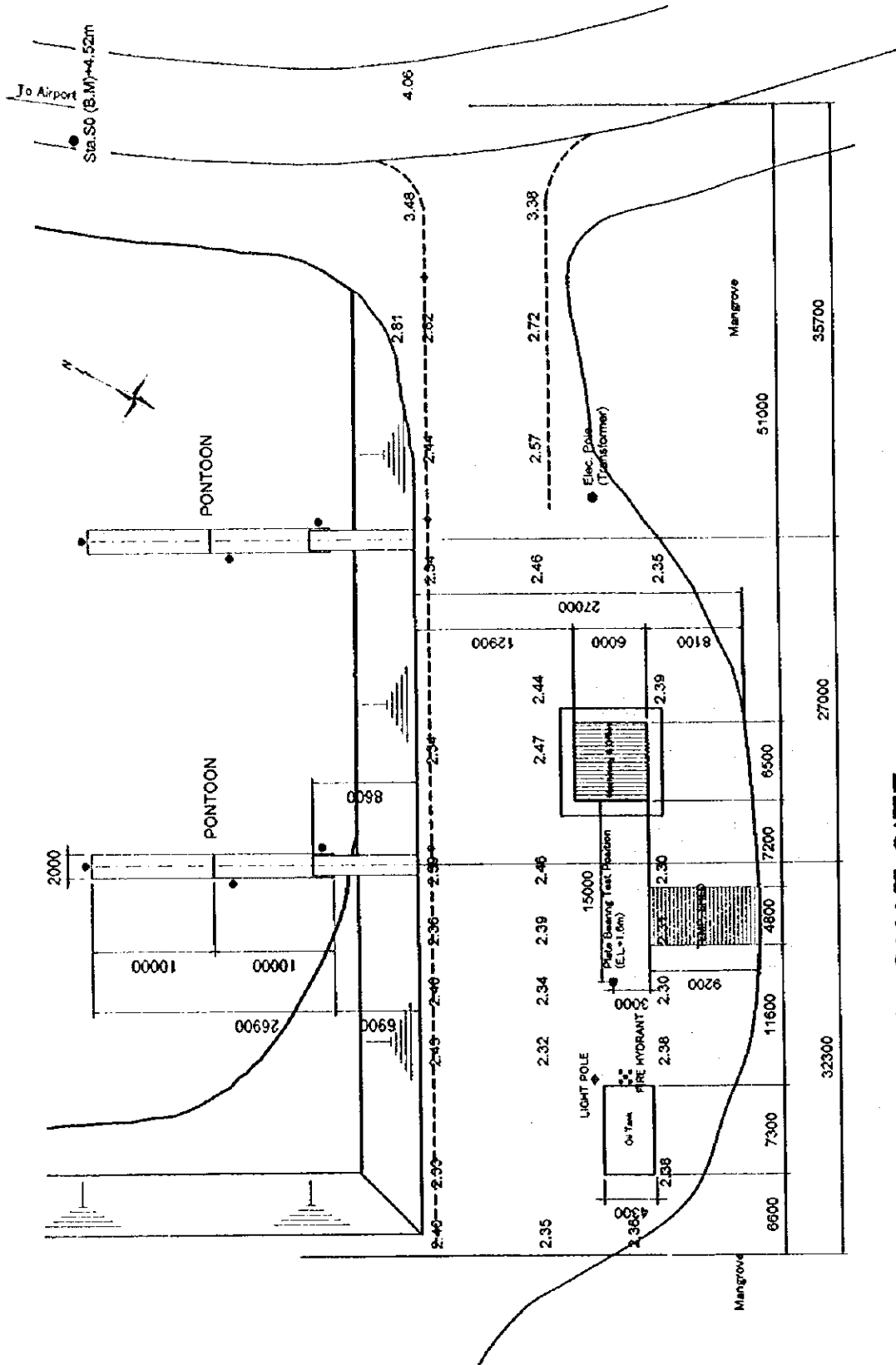
November 1998

2) Currency exchange rate

1.00 US\$ = 130.00 JP¥



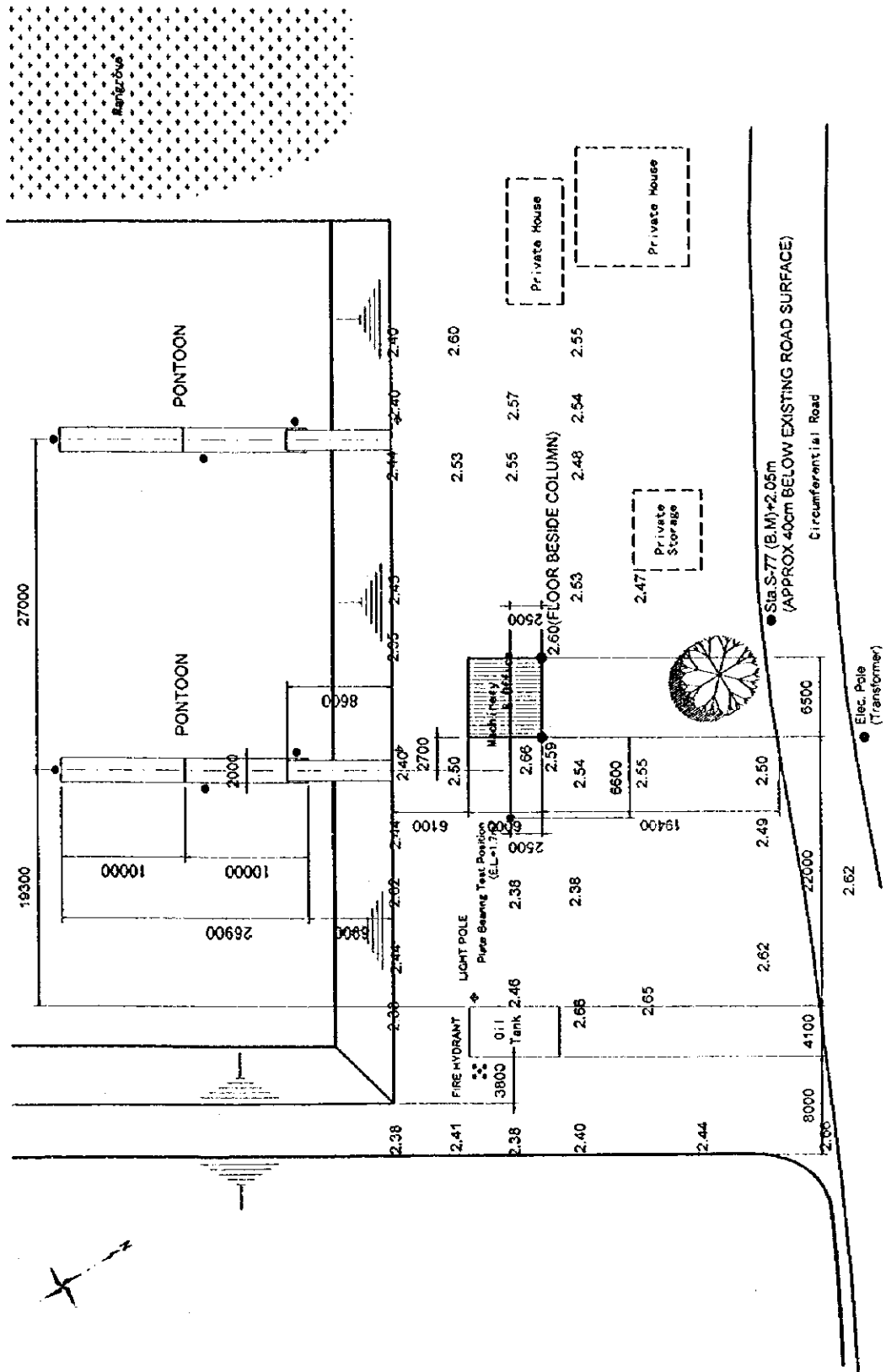
# APPENDIX-6-2 TOPOGRAPHIC SURVEY PLAN (OKAT)



**SURVEY PLAN : OKAT SITE Scale = 1 : 500**

Note: Units: Levels in meter, Distance in millimeter.

APPENDIX-6-3  
TOPOGRAPHIC SURVEY PLAN (UTWE)



**SURVEY PLAN : UTWE SITE**      Scale = 1 : 300      Note: Units: Levels in meter, Distance in millimeter.

## APPENDIX-7 METEOROLOGICAL DATA

### PRECIPITATION(mm)

Year/Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total	Average
1988	N.A.	N.A.	N.A.	258	457	195	368	323	345	277	233	425	2,881	320
1989	640	310	459	378	639	229	410	376	288	272	584	497	5,113	426
1990	310	229	517	338	466	347	367	377	352	306	323	283	4,246	354
1991	489	248	579	422	633	548	432	364	780	166	548	217	5,427	452
1992	471	20	88	219	313	254	347	291	217	356	324	370	3,275	273
1993	484	525	683	680	632	N.A.	384	445	322	215	298	710	5,377	489
1994	426	341	380	400	662	408	352	159	268	243	112	426	4,176	348
1995	222	279	303	543	428	390	351	313	282	227	333	459	4,129	341
1996	665	492	389	613	618	553	300	333	274	199	370	310	5,116	426
1997	387	454	81	610	260	187	405	358	445	485	137	218	4,027	336
1998	32	42	75	204	446	490	310	344	169				2,111	235
Average	415	297	355	424	505	360	366	335	340	275	326	391	4,300	366

### Maximum Temperature(°C)

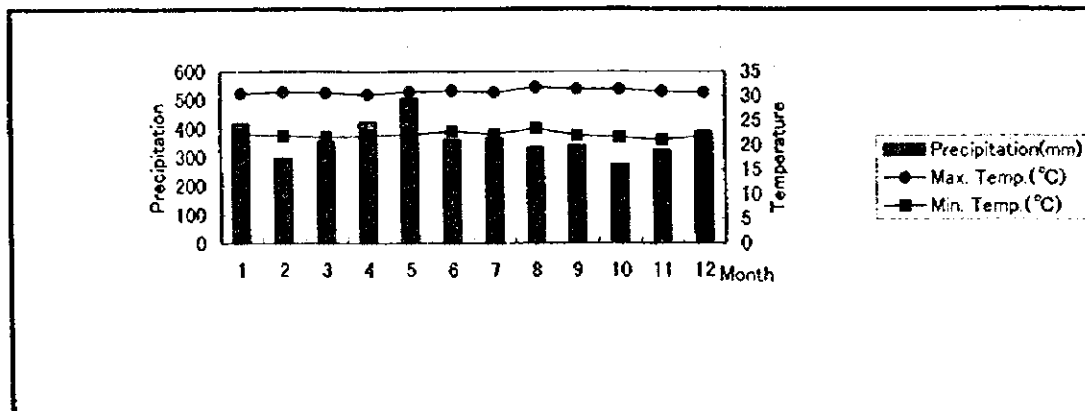
Year/Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
1988	N.A.	N.A.	N.A.	26.91	28.55	30.68	28.73	30.93	30.58	30.90	30.56	30.05	29.77
1989	31.79	30.37	30.58	30.51	32.15	30.63	28.47	31.01	31.11	31.38	29.03	30.77	30.65
1990	30.39	30.92	31.23	27.00	30.70	31.37	31.81	36.31	31.40	31.02	31.45	26.94	30.88
1991	30.62	30.53	30.18	31.22	31.19	31.68	31.49	30.15	31.21	31.39	30.56	31.29	30.96
1992	30.36	31.37	31.04	31.29	30.95	31.11	31.11	31.54	32.74	32.06	29.46	31.37	31.20
1993	28.33	30.56	27.78	31.67	30.56	N.A.	30.96	31.54	31.82	31.59	31.90	30.79	30.68
1994	28.89	31.11	31.11	31.11	31.11	31.67	31.23	31.67	31.11	31.22	31.98	31.05	31.10
1995	31.09	30.77	30.77	31.15	31.40	31.09	31.36	31.67	31.71	31.57	31.61	31.79	31.33
1996	30.64	30.65	30.81	30.61	30.73	30.63	31.20	31.40	31.98	31.92	31.33	31.90	31.15
1997	31.17	30.58	31.65	30.76	30.98	31.26	31.22	30.06	30.48	30.95	30.98	31.34	30.95
1998	31.04	31.25	31.13	31.26	30.97	30.67	31.17	33.00	31.56				31.34
Average	30.43	30.81	30.63	30.32	30.84	31.08	30.80	31.75	31.43	31.40	30.89	30.73	30.93

### Minimum Temperature(°C)

Year/Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Average
1988	N.A.	N.A.	N.A.	24.09	23.41	26.46	22.42	23.62	23.84	23.52	21.48	22.55	23.49
1989	24.82	23.15	23.20	23.41	22.78	22.94	20.63	30.78	22.65	23.00	18.98	23.39	23.31
1990	23.43	23.25	22.44	20.17	22.17	24.12	22.57	26.86	21.87	21.78	21.75	23.46	22.82
1991	22.04	22.92	21.09	21.56	21.74	22.07	21.86	20.25	20.50	20.06	18.17	19.91	21.01
1992	20.85	21.50	20.86	21.09	20.63	20.79	20.93	20.92	21.78	21.01	21.19	21.11	21.06
1993	21.11	19.44	17.78	18.33	19.44	N.A.	20.88	20.88	21.44	21.21	21.30	20.90	20.25
1994	19.44	21.67	21.11	21.67	21.11	21.67	23.62	22.78	20.56	22.48	22.90	22.90	21.83
1995	23.99	21.75	21.07	21.07	21.09	21.11	21.68	22.14	22.06	21.94	21.39	21.20	21.71
1996	21.51	22.86	24.02	24.39	24.41	23.92	24.27	23.47	21.81	19.62	20.72	21.63	22.72
1997	21.43	21.33	22.12	20.91	21.84	21.21	21.33	21.72	21.07	21.43	21.91	22.40	21.56
1998	22.33	21.55	22.21	24.32	24.32	23.22	23.44	23.83	23.68				23.21
Average	22.10	21.94	21.59	21.91	22.09	22.75	22.15	23.39	21.93	21.60	20.98	21.94	22.03

### SUMMARY OF METEOROLOGICAL DATA(April 1988~ Sept. 1998)

Year/Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total	Average
Precipitation(mm)	415	297	355	424	505	360	366	335	340	275	326	391	4,300	366
Max. Temp.(°C)	30.4	30.8	30.6	30.3	30.8	31.1	30.8	31.8	31.4	31.4	30.9	30.7		30.9
Min. Temp.(°C)	22.1	21.9	21.6	21.9	22.1	22.8	22.1	23.4	21.9	21.6	21.0	21.9		22.0
(Max. + Min.)/2=	26.3	26.4	26.1	26.1	26.5	26.9	26.5	27.6	26.7	26.5	25.9	26.3		26.5



## RESULTS OF PLATE BEARING TEST

### Plate Bearing Test

Project Title:	The Project for Improvement of the Facilities for Artisanal Fisheries Support Station in Kosrae State
Date:	28 Sept. 1998
Site:	Lelu (for test position, see Appendix-6-1 "Topographic Survey Plan")
Depth:	G.L. -0.70m (E.L. +2.30m)
Weather:	Fair
Inspector:	K.Watanabe, T.Inki

Load (tf)	Effect. Load (tf/m <sup>2</sup> )	Duration (min)	Time h:m	Gauge Reading (1/100mm)			Avg. Displmnt (mm)	Accum. Disp. (mm)	Remarks
				①	②	③			
0.00	0.00	0	10:40	0	0	0	0.000	0.00	
0.60	8.49	0	10:43	3	2	0	0.017	0.02	
		1	10:44	3	2	0	0.017	0.02	
		2	10:45	3	2	1	0.020	0.02	
		5	10:48	3	2	1	0.020	0.02	
		10	10:53	4	3	2	0.030	0.03	
		15	10:58	4	3	2	0.030	0.03	
		20	11:03	4	3	5	0.040	0.04	
1.00	14.15	25	11:08	5	5	7	0.057	0.06	
		30	11:13	6	5	8	0.063	0.06	
		0	11:14	0	0	0	0.000	0.00	
		1	11:15	3	1	2	0.020	0.02	
		2	11:16	4	1	2	0.023	0.02	
		5	11:19	5	1	3	0.030	0.03	
		10	11:24	6	2	6	0.047	0.05	
1.25	17.68	15	11:29	11	2	12	0.083	0.08	
		20	11:34	12	3	13	0.093	0.09	
		25	11:39	15	4	17	0.120	0.12	
		30	11:44	18	5	17	0.133	0.13	
		0	11:45	48	26	19	0.310	0.31	
		1	11:46	50	27	20	0.323	0.32	
		2	11:47	51	27	20	0.327	0.33	
1.50	21.22	5	11:50	54	26	20	0.333	0.33	
		10	11:55	55	26	21	0.340	0.34	
		15	12:00	56	26	22	0.347	0.35	
		20	12:05	54	26	23	0.343	0.34	
		25	12:10	54	27	22	0.343	0.34	
		30	12:15	52	27	22	0.337	0.34	
		0	12:16	80	41	44	0.550	0.55	
1.50	21.22	1	12:17	84	41	49	0.580	0.58	
		2	12:18	86	41	52	0.597	0.60	
		5	12:21	86	42	54	0.607	0.61	
		10	12:26	87	42	55	0.613	0.61	
		15	12:31	87	42	58	0.623	0.62	
		20	12:36	88	42	58	0.627	0.63	
		25	12:41	89	42	58	0.630	0.63	
30	12:46	89	43	59	0.637	0.64			

to be cont'd

## RESULTS OF PLATE BEARING TEST

## Plate Bearing Test

Project Title	The Project for Improvement of the Facilities for Artisanal Fisheries Support Station in Kosrae State								
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cont'd

1.75	24.76	0	12:47	109	68	78	0.850	0.85	
		1	12:48	110	70	79	0.863	0.86	
		2	12:49	110	71	79	0.867	0.87	
		5	12:52	113	74	80	0.890	0.89	
		10	12:57	113	78	83	0.913	0.91	
		15	13:02	114	79	84	0.923	0.92	
		20	13:07	118	80	85	0.943	0.94	
		25	13:12	119	81	86	0.953	0.95	
		30	13:17	119	81	86	0.953	0.95	
2.25	31.83	0	13:48	170	130	173	1.577	1.58	
		1	13:49	170	130	173	1.577	1.58	
		2	13:50	170	130	173	1.577	1.58	
		5	13:53	170	131	173	1.580	1.58	
		10	13:58	170	131	173	1.580	1.58	
		15	14:03	170	131	173	1.580	1.58	
		20	14:08	170	131	173	1.580	1.58	
		25	14:13	170	131	173	1.580	1.58	
		30	14:18	170	132	175	1.590	1.59	

## RESULTS OF PLATE BEARING TEST

### Plate Bearing Test

Project Title	The Project for Improvement of the Facilities for Artisanal Fisheries Support Station in Kosrae State
Date:	29 Sept. 1998
Site:	Okat (for test position, see Appendix-6-2 "Topographic Survey Plan")
Depth:	G.L.-0.65m (E.L.+2.00m)
Weather:	Cloudy occasionally fair (light rain)
Inspector:	K.Watanabe, T.Inki

Load (tf)	Effect. Load (tf/m <sup>2</sup> )	Duration (min)	Time h:m	Gauge Reading (1/100mm)			Avg. Displmnt (mm)	Accum. Disp. (mm)	Remarks
				①	②	③			
0.00	0.00	0	14:15	0	0	0	0.000	0.00	
1.00	14.15	0	14:18	45	40	52	0.457	0.46	
		1	14:19	47	40	52	0.463	0.46	
		2	14:20	48	42	52	0.473	0.47	
		5	14:23	50	42	52	0.480	0.48	
		10	14:28	51	42	53	0.487	0.49	
		15	14:33	52	44	53	0.497	0.50	
		20	14:38	56	44	53	0.510	0.51	
1.50	21.22	25	14:43	58	46	54	0.527	0.53	
		30	14:48	58	46	55	0.530	0.53	
		0	14:49	122	111	97	1.100	1.10	
		1	14:50	127	111	97	1.117	1.12	
		2	14:51	127	112	98	1.123	1.12	
		5	14:54	136	112	98	1.153	1.15	
		10	14:59	136	113	99	1.160	1.16	
1.80	25.46	15	15:04	137	113	101	1.170	1.17	
		20	15:09	138	113	103	1.180	1.18	
		25	15:14	138	114	103	1.183	1.18	
		30	15:19	139	114	105	1.193	1.19	
		0	15:20	155	145	157	1.523	1.52	
		1	15:21	156	145	159	1.533	1.53	
		2	15:22	157	145	159	1.537	1.54	
2.00	28.29	5	15:25	159	146	160	1.550	1.55	
		10	15:30	164	147	160	1.570	1.57	
		15	15:35	164	147	161	1.573	1.57	
		20	15:40	169	147	162	1.593	1.59	
		25	15:45	169	148	162	1.597	1.60	
		30	15:50	169	148	162	1.597	1.60	
		0	15:51	179	179	180	1.793	1.79	
2.00	28.29	1	15:52	180	180	180	1.800	1.80	
		2	15:53	180	180	180	1.800	1.80	
		5	15:56	180	180	180	1.800	1.80	
		10	16:01	181	180	180	1.803	1.80	
		15	16:06	181	181	181	1.810	1.81	
		20	16:11	185	182	181	1.827	1.83	
		25	16:16	185	182	182	1.830	1.83	
30	16:21	185	182	182	1.830	1.83			



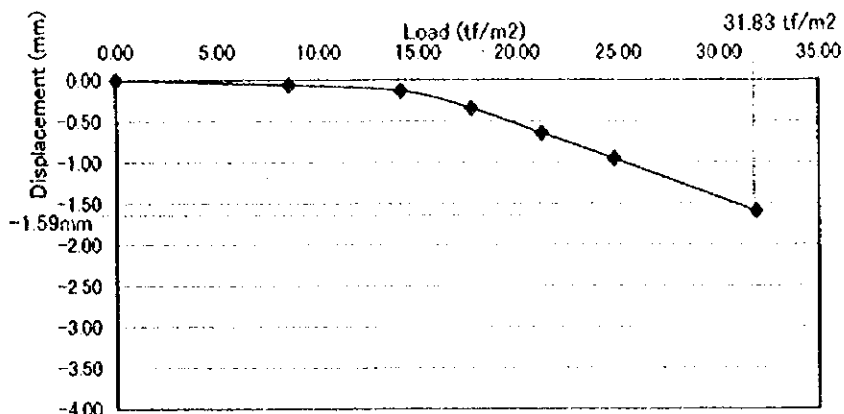
## RESULTS OF PLATE BEARING TEST

### Plate Bearing Test

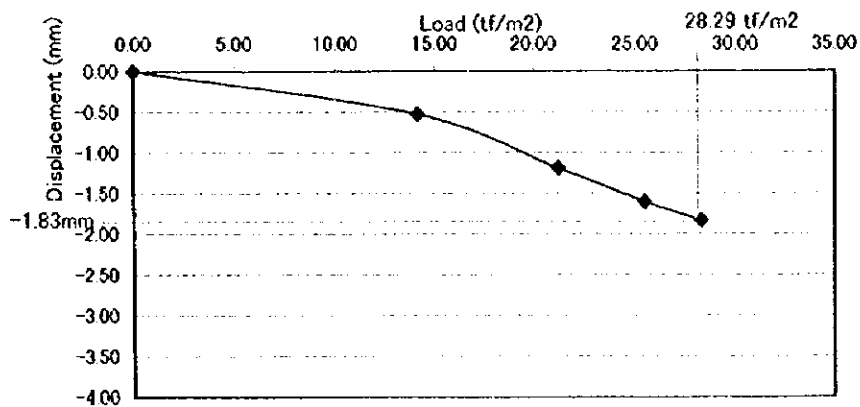
Project Title:	The Project for Improvement of the Facilities for Artisanal Fisheries Support Station in Kosrae State
Date:	29 Sept. 1998
Site:	Utwe (for test position, see Appendix-6-3 "Topographic Survey Plan")
Depth:	G.L.-0.80m (E.L.+1.70m)
Weather:	Cloudy occasionally fair (light rain)
Inspector:	K.Watanabe, T.Inki

Load (tf)	Effect. Load (tf/m <sup>2</sup> )	Duration (min)	Time h:m	Gauge Reading (1/100mm)			Avg. Displmnt (mm)	Accum. Disp. (mm)	Remarks
				①	②	③			
0.00	0.00	0	09:48	0	0	0	0.000	0.00	
1.00	14.15	0	09:51	3	2	0	0.017	0.02	
		1	09:52	3	2	3	0.027	0.03	
		2	09:53	3	3	3	0.030	0.03	
		5	09:56	3	8	9	0.067	0.07	
		10	10:01	0	10	9	0.063	0.06	
		15	10:06	0	10	9	0.063	0.06	
		20	10:11	2	10	9	0.070	0.07	
		25	10:16	2	14	13	0.097	0.10	
		30	10:21	3	14	14	0.103	0.10	
1.50	21.22	0	10:23	95	112	191	1.327	1.33	
		1	10:24	102	117	199	1.393	1.39	
		2	10:25	109	119	201	1.430	1.43	
		5	10:28	112	123	204	1.463	1.46	
		10	10:33	117	124	208	1.497	1.50	
		15	10:38	117	127	210	1.513	1.51	
		20	10:43	118	127	210	1.517	1.52	
		25	10:48	119	127	211	1.523	1.52	
		30	10:53	120	127	211	1.527	1.53	
2.00	28.29	0	10:55	145	219	287	2.170	2.17	
		1	10:56	154	224	284	2.207	2.21	
		2	10:57	158	227	303	2.293	2.29	
		5	11:00	163	232	307	2.340	2.34	
		10	11:05	165	237	314	2.387	2.39	
		15	11:10	168	237	315	2.400	2.40	
		20	11:15	172	238	316	2.420	2.42	
		25	11:20	173	238	317	2.427	2.43	
		30	11:25	175	241	320	2.453	2.45	
2.25	31.83	0	11:27	235	289	393	3.057	3.06	
		1	11:28	241	290	400	3.103	3.10	
		2	11:29	244	292	406	3.140	3.14	
		5	11:32	249	295	410	3.180	3.18	
		10	11:37	250	300	415	3.217	3.22	
		15	11:42	250	304	415	3.230	3.23	
		20	11:47	250	307	415	3.240	3.24	
		25	11:52	253	308	416	3.257	3.26	
		30	11:57	253	309	416	3.260	3.26	

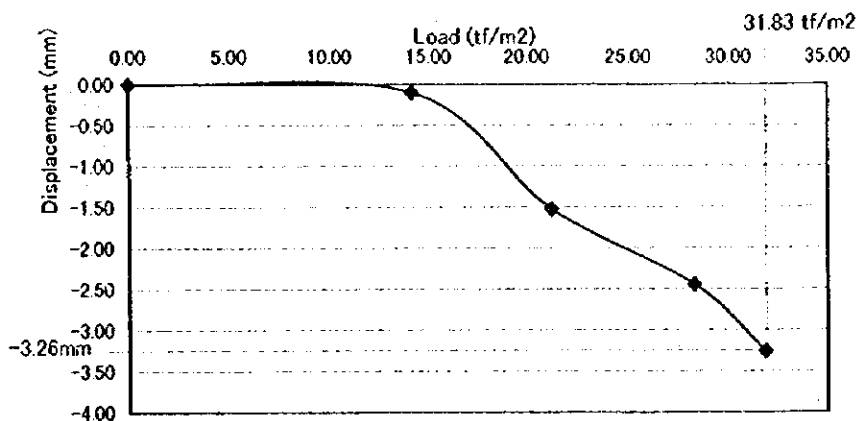
APPENDIX-8-2  
LOAD - DISPLACEMENT CURVE



Load - Displacement Curve (Lelu)

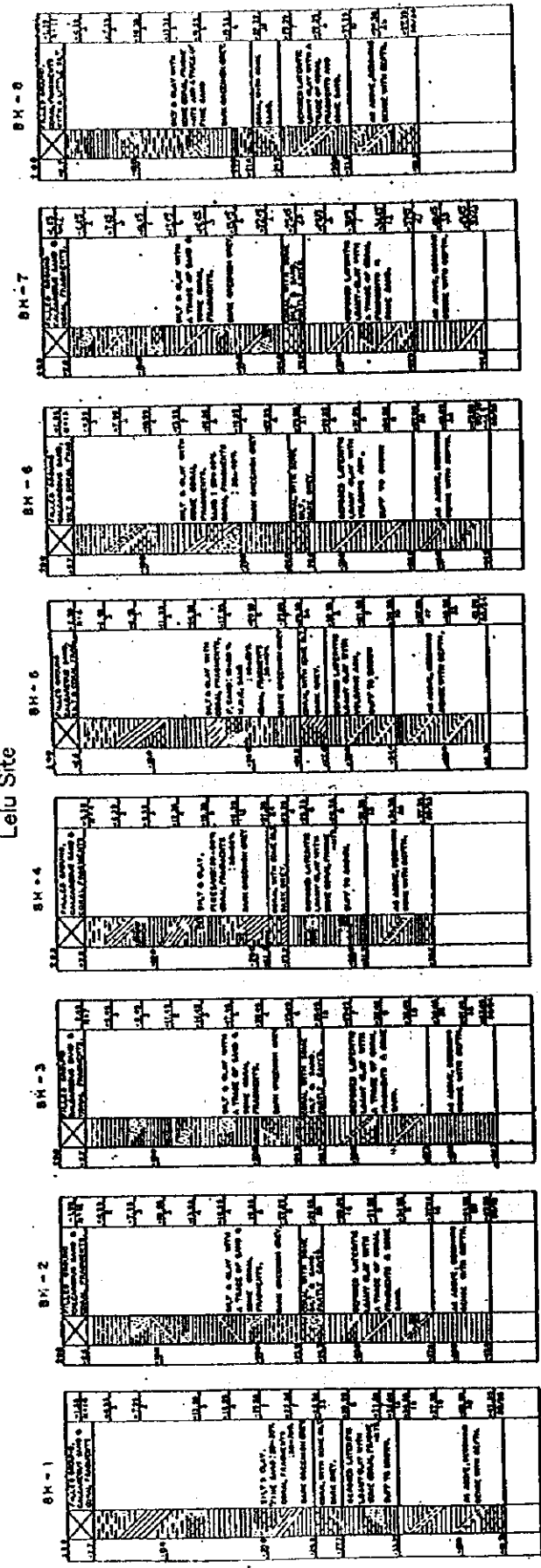


Load - Displacement Curve (Okat)

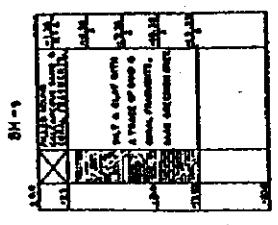


Load - Displacement (Utwe)

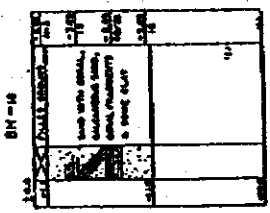
Lelu Site



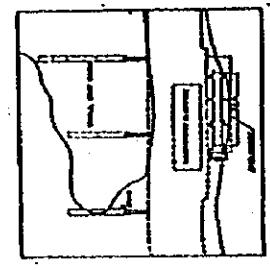
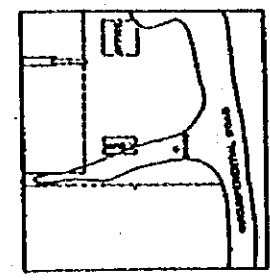
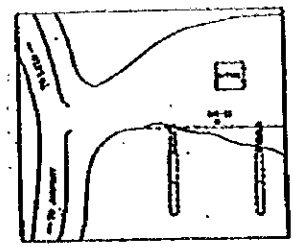
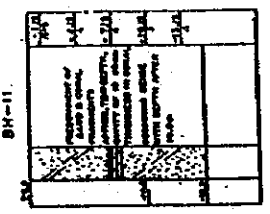
Lelu Site



Utwe Site



Okat Site



APPENDIX-9  
EQUIPMENT LIST

No.	Description	Unit	Qty(Lelu)	Qty(Okal)
<b>A &lt; FRP Boat Moving Unit --- for Lelu site&gt;</b>				
1	Boat dolly for Catamaran type boat	unit	1	-
2	Slings belt 75mm x 10m	coil	2	-
3	Chain block w./trolley 1.5ton lifting capacity	set	2	-
<b>B &lt;FRP Boat Repair Tools and Materials --- for Lelu site&gt;</b>				
1	Balance 2Kg	unit	1	-
2	Mohair roller for laminating 2 kinds/set	set	5	-
3	Aluminum roller 2 kinds/set	set	5	-
4	Scraper	pc.	10	-
5	Painter's mask 10 pcs./set	set	1	-
6	Anti-dust goggles	pc.	2	-
7	Rubber hammer 1/2 lbs	pc.	1	-
8	Air hose reel	unit	2	-
9	Air hose band and check	set	5	-
10	Paint spray gun	unit	1	-
11	Air duster	unit	1	-
12	Air impact wrench	unit	1	-
	wrench bit Length: 36, 80mm each 100pcs.	pc.	100	-
13	Air drill	unit	1	-
	Metal cutting tip	pc.	1	-
14	Air action sander	unit	1	-
	Sandpaper #240,320,400/each 100 sheets	set	1	-
15	Electric drill	unit	1	-
	Drill needles 25 pcs./set (SUS)	set	2	-
16	Electric sander 100mm dia.	unit	1	-
	Disk paper #30, 50, 100/ each 50pcs.	pc.	5	-
	Cutting wheel	pc.	100	-
17	Electric belt sander belt: 30x530mm	unit	1	-
	Spare Sandpaper #100, 150, 400/each 40 pcs.	set	40	-
18	Electric polisher 240w	unit	1	-
	Pad sets 3 kinds/4 pcs.	set	1	-
19	Electric circular saw 160mm dia.	unit	1	-
	Spare blade	pc.	1	-
20	Electric plane width: 82mm	unit	1	-
21	Electric zig saw allowable thick: 50mm	unit	1	-
	Spare blade 5 pcs./set	set	10	-

**APPENDIX-9  
EQUIPMENT LIST**

No.	Description	Unit	Q'ty(Lelu)	Q'ty(Okat)	
22	Electric fan w/ air duct	unit	1	-	
23	B Iyep cramp (50,100,150,250)	4 kinds each 5 pcs.	set	1	-
24	Sandpaper	#80, 150, 240, 400/each 100 sheets	set	1	-
25	Sealing agent	330cc capacity	pc.	20	-
26	Sealing gun		pc.	1	-
27	Release agent	300cc capacity	pc.	1	-
28	Acetone	16 lit./can	pc.	3	-
29	Hardner	5 kg/can	pc.	1	-
30	Gelcoat resin	5kg/can	pc.	8	-
31	Polyester putty	1kg/can	pc.	3	-
32	FRP resin		Kg	420	-
33	Glass fiber mat cloth		Kg	150	-
34	Glass fiber, roving cloth		m2	140	-
<b>C &lt;Maintenance Equipment and Tools --- for Okat site&gt;</b>					
1	Hydraulic Press	15ton	unit	1	-
2	Bench drill	13mm dia.	unit	1	1
	Spare drill needles	25 pcs./set	set	2	2
3	Parts washin machine	Tank capacity 70lit.	unit	1	1
4	High-speed cut off machine	300mm dia.	unit	1	1
	Spare wheels	5 pcs./set	set	1	1
5	Electric hand drill		unit	1	1
6	Bench grinder	150mm dia.	set	1	1
7	Electric hand disk sander	100mm dia.	unit	1	-
	sanding wheels		pc.	20	-
8	Air compressor	2.2Kw	unit	1	-
		0.4Kw	unit	-	1
9	Electric arc welder	150A	unit	1	1
	welding rods	3.2 & 4.0mm/each 20kg	kg	40	40
10	Vise		pc.	1	1
11	Anvil	10kg	pc.	1	1
12	Steel shelves (A)	1.8 x 1.86 x 1.0, 480kg/shelf	unit	2	-
13	Steel shelves (B)	1.8 x 1.55 x 0.6, 500kg/shelf	unit	2	2
14	Pan rack	0.89 x 0.84 x 0.5, 18bxes	unit	3	2
15	Parts wagon	4 racks	unit	1	1
16	Tool stand	4 racks	unit	1	1

**APPENDIX-9  
EQUIPMENT LIST**

No.	Description	Unit	Qty(Lelu)	Qty(Okat)
17	Grease pump 300cc capacity w/ 5 kinds of micro hose	pc.	1	1
18	Air hose reel	unit	1	1
19	Hose band and air check	set	5	5
20	Air duster	unit	1	1
21	Air impact wrench 2 kinds	unit	1	1
	wrench bit Length:36, 80mm 100pcs each	pc.	100	100
	micro cuttin wheel 6 kinds/each 5pc./set	set	3	3
22	Tap dice set 3mm - 12mm/8 kinds	set	1	1
23	Torque wrench 3 kinds	set	1	-
24	Surface plate 300x300x75	pc.	1	-
25	Hand torch lump	pc.	1	1
26	Hand vice 200mm	pc.	4	-
27	Bearing puller Type: NHBP-FS	set	1	-
28	Gear wrench 1:4	set	1	-
29	Test hammer 100g	pc.	1	-
30	Chipping hammer	pc.	1	1
31	Terminal kit	set	1	1
32	Heli-sert kit	set	1	-
33	Spark plug cleaner	set	1	1
34	Crank aligner for outboard mortor	set	1	-
35	Outboard mortor stand for 40ps mortor	unit	2	2
36	Test propeller 8ps, 25ps & 40ps	set	1	-
37	Genral tools Wrench, ring wrench, socket wrench, extension bar, ratchet handle, screw driver, pliers, hammer gap gauge, plug wrench, etc.	set	1	1
38	Special Tools for outboard mortor (for 8ps, 25ps, 40ps)			
	Basic tools	unit	1	-
	for Bearing	unit	1	-
39	File set (ceramics) fien, rough each10 pcs./set	set	1	1
40	Punch set 7 kinds/set	set	1	1
41	Electrical repair kit	set	1	1
<b>D &lt;Measuring Devices --- for Okat site&gt;</b>				
1	Square 150 x 100mm	pc.	1	-
2	Level Block V type	set	1	-

APPENDIX-9  
EQUIPMENT LIST

No.	Description	Unit	Qty(Lelu)	Qty(Okat)
3	Dial gauge	set	2	-
4	Magnetic stand	pc.	1	-
5	Micro meter	pc.	1	-
6	Calipper	pc.	1	-
7	Circuit tester	unit	1	-
8	Timing light	unit	1	-
9	Timing tester	unit	1	-
10	Spark volt checker	unit	1	-
11	Comperssion gauge	unit	1	-
12	Cylinder gauge	unit	1	-
13	Digital Tachometer	unit	1	-









JICA