Table 1A

AWARENESS

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

1.	ALOGSYS	log sytem
2.	ALOGWORK	log work
3.	APROCURE	procument spare
4.	ALIST	initial spare
5.	ADEMAND	demand process
6.	ADELIVER	spare deliver
7.	APROAMP	procedure amp
8.	APROEMRG	procedure emrerg
9.	APROREFT	procedure slipping
10.	ASDLAKDL	SDL/AKDL
11.	ASPAREFT	spare refir
12.	A5YRS	5 yrs base spare
13.	ASSC	sqn support
14.	AOSL	OSL
15.	AOPS	spare for ops
16.	AILS	ILS
17.	AILSCONP	ILS concept
18.	AMECH	mechanism

		Mean	Std Dev	Cases
1.	ALOGSYS	3.2742	.8526	62.0
2.	ALOGWORK	3.2419	.8432	62.0
3.	APROCURE	3.1774	.8594	62.0
4.	ALIST	3.0000	.8493	62.0
5.	ADEMAND	3.7581	.8432	62.0
6.	ADELIVER	3.6935	.8216	62.0
7.	APROAMP	3.6290	.8728	62.0
8.	APROEMRG	3.6129	.8936	62.0
9.	APROREFT	3.7258	.8132	62.0
10.	ASDLAKDL	3.6613	.8482	62.0
11.	ASPAREFT	3.6290	.7941	62.0
12.	A5YRS	2.5968	.9489	62.0
13.	ASSC	3.1452	.8842	62.0
14.	AOSL	3.6935	.8216	62.0
15.	AOPS	3.4194	.7798	62.0
16.	AILS	2.9355	.9729	62.0
17.	AILSCONP	2.8548	1.0218	62.0
18.	AMECH	3.3226	.8253	62.0

Statistics for	Mean	Variance	Std Dev	N of Variables
SCALE	60.3710	123.5487	11.1152	18

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
ALOGSYS	57.0968	110.2856	.7001	.9395
ALOGWORK	57.1290	110.9339	.6702	.9401
APROCURE	57.1935	110.8800	.6592	.9403
ALIST	57.3710	111.3519	.6402	.9406
ADEMAND	56.6129	111.2247	.6529	.9404
ADELIVER	56.6774	110.1565	.7374	.9389
APROAMP	56.7419	108.9487	.7595	.9383
APROEMRG	56.7581	108.9733	.7384	.9387
APROREFT	56.6452	110.3310	.7350	.9389
ASDLAKDL	56.7097	110.8652	.6698	.9401
ASPAREFT	56.7419	111.1126	.7052	.9395
A5YRS	57.7742	108.9646	.6908	.9397
ASSC	57.2258	111.4564	.6058	.9413
AOSL	56.6774	110.5172	.7153	.9393
AOPS	56.9516	111.7517	.6786	.9400
AILSCONP	57.4355	109.2335	.6574	.9405
AILSIMPL	57.5161	110.1555	.5757	.9424
AMECH	57.0484	113.1288	.5547	.9422

Reliability Coefficients

N of Cases = 62.0 N of Items = 18

Alpha = .9432

Table 1B

DEFECT RECTIFICATION EFFECIENCY

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

1.	ECMECH	effc mechanical
2.	ECELECT	effc electric
3.	ECWEAPON	effc weapon
4.	ECHULL	effc hull

		Mean	Std Dev	Cases
1.	ECMECH	3.1935	.8462	62.0
2.	ECELECT	3.2419	.8432	62.0
3.	ECWEAPON	2.8387	.8336	62.0
4.	ECHULL	3.5161	.8247	62.0

Statistics for	Mean	Variance	Std Dev	N of Variables
SCALE	12.7903	6.8897	2.6248	4

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
ECMECH	9.5968	3.7200	.7517	.6589
ECELECT	9.5484	3.9238	.6750	.7007
ECWEAPON	9.9516	4.5058	.4773	.7985
ECHULL	9.2742	4.4318	.5120	.7818

Reliability Coefficients

N of Cases = 62.0 N of Items = 4

Alpha = .7911

Table 1C

EFFECTIVENESS IN DEFECT RECTIFICATION

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

1.	EVMECH	effv mecahnical
2.	EVELECT	effv electric
3.	EVWEAPON	effv weapon
4.	EVHULL	effv hull

		Mean	Std Dev	Cases
1.	EVMECH	3.3387	.8287	62.0
2.	EVELECT	3.3710	.8344	62.0
3.	EVWEAPON	2.8710	.8775	62.0
4.	EVHULL	3.5000	.7629	62.0

Statistics for	Mean	Variance	Std Dev	N of Variables
SCALE	13.0806	6.5344	2.5562	4

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
EVMECH	9.7419	3.4077	.7975	.5985
EVELECT	9.7097	3.4881	.7540	.6233
EVWEAPON	10.2097	4.1684	.4454	.7930
EVHULL	9.5806	4.7393	.3652	.8186

Reliability Coefficients

N of Cases = 62.0 N of Items = 4

Alpha = .7753

TABLE 1D

SHIP STAFF INVOLVEMENT AND DEPENDENCY

R E L I A B I L I T Y A N A L Y S I S - S C A L E (A L P H A)

1.	SFOLLDEM	storedem
2.	SREFDEF	refer defect
3.	SMGDEF	manage defect
4.	SCOMPQTY	complain qty
5.	SCOMPQLY	complain qly
6.	SIDSPR	ident spare
7.	SASTBASE	assist base staff
8.	SCOMPDLY	compalin delay
9.	SRESPDEF	respond defect
10.	SRLYBASE	rely base staff

		Mean	Std Dev	Cases
1.	SFOLLDEM	4.0484	.7981	62.0
2.	SREFDEF	3.9677	.6767	62.0
3.	SMGDEF	3.7419	.6998	62.0
4.	SCOMPQTY	3.4355	.9165	62.0
5.	SCOMPQLY	3.0161	1.1234	62.0
6.	SIDSPR	3.7097	.7764	62.0
7.	SASTBASE	4.0323	.9227	62.0
8.	SCOMPDLY	4.0968	1.0513	62.0
9.	SRESPDEF	3.8226	.9148	62.0
10.	SRLYBASE	2.8548	.8267	62.0

Statistics for	Mean	Variance	Std Dev	N of Variables
SCALE	36.7258	25.2515	5.0251	10

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Alpha if Item Deleted
SFOLLDEM	32.6774	21.6975	.3923	.7553
SREFDEF	32.7581	22.2192	.4035	.7550
SMGDEF	32.9839	23.1637	.2373	.7716
SCOMPQTY	33.2903	20.1766	.5143	.7388
SCOMPQLY	33.7097	19.7832	.4209	.7551
SIDSPR	33.0161	20.8686	.5329	.7388
SASTBASE	32.6935	19.8882	.5482	.7338
SCOMPDLY	32.6290	18.3683	.6412	.7170
SRESPDEF	32.9032	20.5479	.4662	.7456
SRLYBASE	33.8710	23.0650	.1893	.7795

Reliability Coefficients

N of Cases = 42.0 N of Items = 10

Alpha = .7694

Table 2 - Awareness

Descriptive Statistics

Area of Awareness	N	Minimum	Maximum	Mean	Std. Deviation
RMN Log System	62	2.00	5.00	3.2742	.85256
Log Sys Work	62	2.00	5.00	3.2419	.84321
Procument of Spare	62	1.00	5.00	3.1774	.85936
Formulation of Initial Spare	62	1.00	5.00	3.0000	.84930
Demand Process	62	1.00	5.00	3.7581	.84321
Delivery Method of Spare	62	1.00	5.00	3.6935	.82161
AMP Procedure	62	1.00	5.00	3.6290	.87279
Emergency Docking Procedure	62	2.00	5.00	3.6129	.89360
Slipping Procedure	62	2.00	5.00	3.7258	.81320
SDL/AKDL	62	1.00	5.00	3.6613	.84821
Spare Requirement for Refit	62	2.00	5.00	3.6290	.79412
5 yrs Base Spare	62	1.00	4.00	2.5968	.94885
Sqn Support Concept	62	1.00	5.00	3.1452	.88423
OSL	62	1.00	5.00	3.6935	.82161
Delivery of Spare for Operational Ship	62	1.00	5.00	3.4194	.77984
ILS Concept	62	1.00	5.00	2.9355	.97293
ILS Implementation	62	1.00	5.00	2.8548	1.02184
Mechanism of Log Support at Sea	62	1.00	5.00	3.3226	.82530
Total Awareness	62	1.00	3.00	1.9516	.79810
Valid N (listwise)	62				

TABLE 3 – CROSS TABULATIONS

3A - TOTAL AWARENESS - YEARS OF SERVICE WITH THE FLEET

Crosstab

			Total Awareness			Total
			Not aware	Aware	Much Aware	
RMNSVC	3-5 Years	Count	10	8	5	23
		% within RMNSVC	43.5%	34.8%	21.7%	100.0%
		% within total awareness	47.6%	34.8%	27.8%	37.1%
		% of Total	16.1%	12.9%	8.1%	37.1%
	6-10 Years	Count	7	8	2	17
		% within RMNSVC	41.2%	47.1%	11.8%	100.0%
		% within total awareness	33.3%	34.8%	11.1%	27.4%
		% of Total	11.3%	12.9%	3.2%	27.4%
	11-15 Years	Count	2	5	9	16
		% within RMNSVC	12.5%	31.3%	56.3%	100.0%
		% within total awareness	9.5%	21.7%	50.0%	25.8%
		% of Total	3.2%	8.1%	14.5%	25.8%
	16-20 Years	Count	2	2	2	6
		% within RMNSVC	33.3%	33.3%	33.3%	100.0%
		% within total awareness	9.5%	8.7%	11.1%	9.7%
		% of Total	3.2%	3.2%	3.2%	9.7%
Total		Count	21	23	18	62
		% within RMNSVC	33.9%	37.1%	29.0%	100.0%
		% within total awareness	100.0%	100.0%	100.0%	100.0%
		% of Total	33.9%	37.1%	29.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.999	6	.125
Likelihood Ratio	10.261	6	.114
Linear-by-Linear Association	3.759	1	.053
N of Valid Cases	62		

a 5 cells (41.7%) have expected count less than 5. The minimum expected count is 1.74.

3B – TOTAL DEFECT RECTIFICATION EFFECTIVENES – YEARS OF SERVICE WITH THE FLEET

Crosstab

			Total Effectiveness			Total
			Not Effective	Effective	Very Effective	
RMNSVC	3-5 Years	Count	11	4	8	23
		% within RMNSVC	47.8%	17.4%	34.8%	100.0%
		% within total effectiveness	50.0%	20.0%	40.0%	37.1%
		% of Total	17.7%	6.5%	12.9%	37.1%
	6-10 Years	Count	3	9	5	17
		% within RMNSVC	17.6%	52.9%	29.4%	100.0%
		% within total effectiveness	13.6%	45.0%	25.0%	27.4%
		% of Total	4.8%	14.5%	8.1%	27.4%
	11-15 Years	Count	8	3	5	16
		% within RMNSVC	50.0%	18.8%	31.3%	100.0%
		% within total effectiveness	36.4%	15.0%	25.0%	25.8%
		% of Total	12.9%	4.8%	8.1%	25.8%
	16-20 Years	Count		4	2	6
		% within RMNSVC		66.7%	33.3%	100.0%
		% within total effectiveness		20.0%	10.0%	9.7%
		% of Total		6.5%	3.2%	9.7%
Total		Count	22	20	20	62
		% within RMNSVC	35.5%	32.3%	32.3%	100.0%
		% within total effectiveness	100.0%	100.0%	100.0%	100.0%
		% of Total	35.5%	32.3%	32.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.624	6	.049
Likelihood Ratio	14.486	6	.025
Linear-by-Linear Association	.402	1	.526
N of Valid Cases	62		

a 3 cells (25.0%) have expected count less than 5. The minimum expected count is 1.94.

3C – TOTAL DEFECT RECTIFICATION EFFECTIVENESS – RANK (JUNIOR/SENIOR)

Crosstab

			Total Effectiveness			Total
			Not effective	Effective	Very Effective	
RANK1	Junior	Count	20	13	18	51
		% within RANK1	39.2%	25.5%	35.3%	100.0%
		% within total effectiveness	90.9%	65.0%	90.0%	82.3%
		% of Total	32.3%	21.0%	29.0%	82.3%
	Senior	Count	2	7	2	11
		% within RANK1	18.2%	63.6%	18.2%	100.0%
		% within total effectiveness	9.1%	35.0%	10.0%	17.7%
		% of Total	3.2%	11.3%	3.2%	17.7%
Total		Count	22	20	20	62
		% within RANK1	35.5%	32.3%	32.3%	100.0%
		% within total effectiveness	100.0%	100.0%	100.0%	100.0%
		% of Total	35.5%	32.3%	32.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.031	2	.049
Likelihood Ratio	5.660	2	.059
Linear-by-Linear Association	.020	1	.887
N of Valid Cases	62		

a 3 cells (50.0%) have expected count less than 5. The minimum expected count is 3.55.

Table 4A Descriptive Analysis For Each Variable on Customers (Mean Analysis)

Table 4A-1 Efficiency – Rank

Descriptive Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Efficiency Mechanical	Junior	51	3.1176	.88650	1.00	5.00
	Senior	11	3.5455	.52223	3.00	4.00
	Total	**62**	**3.1935**	**.84618**	**1.00**	**5.00**
Efficiency Electrical	Junior	51	3.2157	.85589	2.00	5.00
	Senior	11	3.3636	.80904	2.00	4.00
	Total	**62**	**3.2419**	**.84321**	**2.00**	**5.00**
Efficiency Electronics & Weapon	Junior	51	2.8235	.76696	1.00	5.00
	Senior	11	2.9091	1.13618	1.00	4.00
	Total	**62**	**2.8387**	**.83359**	**1.00**	**5.00**
Efficiency Hull	Junior	51	3.5098	.85726	1.00	5.00
	Senior	11	3.5455	.68755	2.00	4.00
	Total	**62**	**3.5161**	**.82466**	**1.00**	**5.00**

(Note: Senior are Cdr and Captain)

Table 4A-2 Efficiency - Branch

Descriptives Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Efficiency Mechanical	Executive	29	3.2759	.70186	2.00	4.00
	Technical	25	3.1200	1.01325	1.00	5.00
	Supply	8	3.1250	.83452	2.00	4.00
	Total	**62**	**3.1935**	**.84618**	**1.00**	**5.00**
Efficiency Electrical	Executive	29	3.1724	.71058	2.00	4.00
	Technical	25	3.3600	.99499	2.00	5.00
	Supply	8	3.1250	.83452	2.00	4.00
	Total	**62**	**3.2419**	**.84321**	**2.00**	**5.00**
Efficiency Electronic & Weapon	Executive	29	2.7586	.78627	1.00	4.00
	Technical	25	2.8800	.83267	2.00	5.00
	Supply	8	3.0000	1.06904	1.00	4.00
	Total	**62**	**2.8387**	**.83359**	**1.00**	**5.00**
Efficiency Hull	Executive	29	3.6207	.67685	2.00	5.00
	Technical	25	3.4400	1.04403	1.00	5.00
	Supply	8	3.3750	.51755	3.00	4.00
	Total	**62**	**3.5161**	**.82466**	**1.00**	**5.00**

Table 4A-3 Efficiency – Years of Service

Descriptive Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Efficiency Mechanical	3 - 5 yrs	23	3.1304	.86887	2.00	5.00
	6 - 10 yrs	17	3.2941	.84887	2.00	5.00
	11 - 15 yrs	16	3.1250	.71880	2.00	4.00
	16 - 20 yrs	6	3.3333	1.21106	1.00	4.00
	Total	**62**	**3.1935**	**.84618**	**1.00**	**5.00**
Efficiency Electrical	3 - 5 yrs	23	3.1739	.88688	2.00	5.00
	6 - 10 yrs	17	3.3529	.78591	2.00	5.00
	11 - 15 yrs	16	3.0000	.81650	2.00	4.00
	16 - 20 yrs	6	3.8333	.75277	3.00	5.00
	Total	**62**	**3.2419**	**.84321**	**2.00**	**5.00**
Efficiency Electronics & Weapon	3 - 5 yrs	23	2.8696	1.05763	1.00	5.00
	6 - 10 yrs	17	2.8824	.60025	2.00	4.00
	11 - 15 yrs	16	2.6875	.70415	2.00	4.00
	16 - 20 yrs	6	3.0000	.89443	2.00	4.00
	Total	**62**	**2.8387**	**.83359**	**1.00**	**5.00**
Efficiency Hull	1= 3 - 5 yrs	23	3.3478	.88465	2.00	5.00
	2= 6 - 10 yrs	17	3.7647	.83137	2.00	5.00
	3= 11 - 15 yrs	16	3.5000	.51640	3.00	4.00
	4 = 16 - 20 yrs	6	3.5000	1.22474	1.00	4.00
	Total	**62**	**3.5161**	**.82466**	**1.00**	**5.00**

Table 4A-4 Efficiency – Class of Ship

Descriptives Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Efficiency Mechanical	FAC M	7	2.8571	.89974	2.00	4.00
	Corvette	20	3.1500	.81273	2.00	4.00
	Frigate	12	3.3333	.65134	2.00	4.00
	MCMV	4	3.0000	.81650	2.00	4.00
	MPCSS	12	3.4167	1.16450	1.00	5.00
	PC/OPV	7	3.1429	.69007	2.00	4.00
	Total	**62**	**3.1935**	**.84618**	**1.00**	**5.00**
Efficiency Electrical	FAC M	7	2.8571	.89974	2.00	4.00
	Corvette	20	3.0500	.75915	2.00	4.00
	Frigate	12	3.2500	.75378	2.00	4.00
	MCMV	4	3.2500	.95743	2.00	4.00
	MPCSS	12	3.6667	1.07309	2.00	5.00
	PC/OPV	7	3.4286	.53452	3.00	4.00
	Total	**62**	**3.2419**	**.84321**	**2.00**	**5.00**
Efficiency Electronic & Weapon	FAC M	7	2.5714	.78680	2.00	4.00
	Corvette	20	2.5000	.82717	1.00	4.00
	Frigate	12	3.0000	.73855	2.00	4.00
	MCMV	4	3.0000	.81650	2.00	4.00
	MPCSS	12	3.4167	.90034	2.00	5.00
	PC/OPV	7	2.7143	.48795	2.00	3.00
	Total	**62**	**2.8387**	**.83359**	**1.00**	**5.00**
Efficiency Hull	FAC M	7	3.1429	.69007	2.00	4.00
	Corvette	20	3.5000	.76089	2.00	5.00
	Frigate	12	3.5000	.79772	2.00	5.00
	MCMV	4	3.7500	.50000	3.00	4.00
	MPCSS	12	3.5000	1.24316	1.00	5.00
	PC/OPV	7	3.8571	.37796	3.00	4.00
	Total	**62**	**3.5161**	**.82466**	**1.00**	**5.00**

Table 4A-5 Efficiency – Number of Ship Served

Descriptive Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Efficiency Mechanical	1 Ship	18	3.0556	.87260	2.00	4.00
	2 Ships	16	3.0625	.77190	2.00	5.00
	3 Ships	18	3.5000	.78591	2.00	5.00
	4 Ships	7	3.1429	.69007	2.00	4.00
	5 Ships	2	4.0000	.00000	4.00	4.00
	6 All	1	1.0000	.	1.00	1.00
	Total	**62**	**3.1935**	**.84618**	**1.00**	**5.00**
Efficiency Electrical	1 Ship	18	3.1667	.85749	2.00	4.00
	2 Ships	16	3.1875	.83417	2.00	5.00
	3 Ships	18	3.3333	.84017	2.00	5.00
	4 Ships	7	2.8571	.69007	2.00	4.00
	5 Ships	2	4.0000	.00000	4.00	4.00
	6 All	1	5.0000	.	5.00	5.00
	Total	**62**	**3.2419**	**.84321**	**2.00**	**5.00**
Efficiency Electronics & Weapon	1 Ship	18	2.7222	.82644	1.00	4.00
	2 Ships	16	2.6875	.87321	1.00	4.00
	3 Ships	18	3.1111	.83235	2.00	5.00
	4 Ships	7	2.5714	.53452	2.00	3.00
	5 Ships	2	3.0000	1.41421	2.00	4.00
	6 All	1	4.0000	.	4.00	4.00
	Total	**62**	**2.8387**	**.83359**	**1.00**	**5.00**
Efficiency Hull	1 Ship	18	3.6667	.68599	2.00	5.00
	2 Ships	16	3.1875	.91059	2.00	5.00
	3 Ships	18	3.7222	.75190	2.00	5.00
	4 Ships	7	3.5714	.53452	3.00	4.00
	5 Ships	2	4.0000	.00000	4.00	4.00
	6 All	1	1.0000	.	1.00	1.00
	Total	**62**	**3.5161**	**.82466**	**1.00**	**5.00**

Table 4A-6 Overall Satisfaction of Customer on Efficiency (Defect Rectification)

	N	Mean	Std. Deviation	Minimum	Maximum
Efficiency Mechanical	**62**	**3.1935**	**.84618**	**1.00**	**5.00**
Efficiency Electrical	**62**	**3.2419**	**.84321**	**2.00**	**5.00**
Efficiency Electronics & Weapon	**62**	**2.8387**	**.83359**	**1.00**	**5.00**
Efficiency Hull	**62**	**3.5161**	**.82466**	**1.00**	**5.00**

Table 5 Descriptive Analysis For Each Variable on Customers (Mean Analysis)

Table 5A-1 Effectiveness – Rank

Descriptive Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Effectiveness Mechanical	Junior	51	3.3137	.86000	1.00	5.00
	Senior	11	3.4545	.68755	2.00	4.00
	Total	**62**	**3.3387**	**.82866**	**1.00**	**5.00**
Effectiveness Electrical	Junior	51	3.3529	.86772	1.00	5.00
	Senior	11	3.4545	.68755	2.00	4.00
	Total	**62**	**3.3710**	**.83438**	**1.00**	**5.00**
Effectiveness Electronic & Weapon	Junior	51	2.8824	.86364	1.00	5.00
	Senior	11	2.8182	.98165	1.00	4.00
	Total	**62**	**2.8710**	**.87748**	**1.00**	**5.00**
Effectiveness Hull	Junior	51	3.4902	.78416	1.00	5.00
	Senior	11	3.5455	.68755	2.00	4.00
	Total	**62**	**3.5000**	**.76287**	**1.00**	**5.00**

Table 5A-2 Effectiveness – Branch

Descriptives Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Effectiveness Mechanical	Executive	29	3.3793	.82001	1.00	4.00
	Technical	25	3.3600	.86023	2.00	5.00
	Supply	8	3.1250	.83452	2.00	4.00
	Total	**62**	**3.3387**	**.82866**	**1.00**	**5.00**
Effectiveness Electrical	Executive	29	3.3793	.77523	1.00	4.00
	Technical	25	3.4400	.91652	2.00	5.00
	Supply	8	3.1250	.83452	2.00	4.00
	Total	**62**	**3.3710**	**.83438**	**1.00**	**5.00**
Effectiveness Electronics & Weapon	Executive	29	2.8276	.84806	1.00	4.00
	Technical	25	2.8800	.88129	2.00	5.00
	Supply	8	3.0000	1.06904	1.00	4.00
	Total	**62**	**2.8710**	**.87748**	**1.00**	**5.00**
Effectiveness Hull	Executive	29	3.6207	.62185	2.00	5.00
	Technical	25	3.4000	.95743	1.00	5.00
	Supply	8	3.3750	.51755	3.00	4.00
	Total	**62**	**3.5000**	**.76287**	**1.00**	**5.00**

Table 5A-3 Effectiveness – Years of Service

Descriptives Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Effectiveness Mechanical	3 - 5 yrs	23	3.3478	.83168	2.00	5.00
	6 - 10 yrs	17	3.5294	.71743	2.00	5.00
	11 - 15 yrs	16	3.0625	.92871	1.00	4.00
	16 - 20 yrs	6	3.5000	.83666	2.00	4.00
	Total	**62**	**3.3387**	**.82866**	**1.00**	**5.00**
Effectiveness electrical	3 - 5 yrs	23	3.2609	.86431	2.00	5.00
	6 - 10 yrs	17	3.5882	.61835	3.00	5.00
	11 - 15 yrs	16	3.0625	.92871	1.00	4.00
	16 - 20 yrs	6	4.0000	.63246	3.00	5.00
	Total	**62**	**3.3710**	**.83438**	**1.00**	**5.00**
Effectiveness Electronics & Weapon	3 - 5 yrs	23	2.9130	1.04067	1.00	5.00
	6 - 10 yrs	17	2.8235	.52859	2.00	4.00
	11 - 15 yrs	16	2.8125	.91059	1.00	4.00
	16 - 20 yrs	6	3.0000	1.09545	2.00	5.00
	Total	**62**	**2.8710**	**.87748**	**1.00**	**5.00**
Effectiveness Hull	3 - 5 yrs	23	3.3478	.83168	2.00	5.00
	6 - 10 yrs	17	3.7647	.66421	3.00	5.00
	11 - 15 yrs	16	3.4375	.51235	3.00	4.00
	16 - 20 yrs	6	3.5000	1.22474	1.00	4.00
	Total	**62**	**3.5000**	**.76287**	**1.00**	**5.00**

Table 5A-4 Effectiveness – Class of Ship

Descriptives Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Effectiveness Mechanical	FAC M	7	3.1429	1.21499	1.00	4.00
	Corvette	20	3.1500	.74516	2.00	4.00
	Frigate	12	3.4167	.66856	2.00	4.00
	MCMV	4	3.5000	.57735	3.00	4.00
	MPCSS	12	3.5833	.99620	2.00	5.00
	PC/OPV	7	3.4286	.78680	2.00	4.00
	Total	**62**	**3.3387**	**.82866**	**1.00**	**5.00**
Effectiveness Electrical	FAC M	7	3.0000	1.15470	1.00	4.00
	Corvette	20	3.1500	.74516	2.00	4.00
	Frigate	12	3.4167	.66856	2.00	4.00
	MCMV	4	3.2500	.95743	2.00	4.00
	MPCSS	12	3.8333	.93744	2.00	5.00
	PC/OPV	7	3.5714	.53452	3.00	4.00
	Total	**62**	**3.3710**	**.83438**	**1.00**	**5.00**
Effectiveness Electronic & Weapon	FAC M	7	2.5714	.97590	1.00	4.00
	Corvette	20	2.5000	.88852	1.00	4.00
	Frigate	12	3.0000	.60302	2.00	4.00
	MCMV	4	2.7500	.50000	2.00	3.00
	MPCSS	12	3.5833	.90034	2.00	5.00
	PC/OPV	7	2.8571	.69007	2.00	4.00
	Total	**62**	**2.8710**	**.87748**	**1.00**	**5.00**
Effectiveness Hull	FAC M	7	3.2857	.48795	3.00	4.00
	Corvette	20	3.4500	.68633	2.00	4.00
	Frigate	12	3.5000	.79772	2.00	5.00
	MCMV	4	3.7500	.50000	3.00	4.00
	MPCSS	12	3.5000	1.16775	1.00	5.00
	PC/OPV	7	3.7143	.48795	3.00	4.00
	Total	**62**	**3.5000**	**.76287**	**1.00**	**5.00**

Table 5A-5 Effectiveness – Number of Ships Served

Descriptives Statistics

		N	Mean	Std. Deviation	Minimum	Maximum
Effectiveness Mechanical	1 Ship	18	3.2222	.80845	2.00	4.00
	2 Ships	16	3.4375	.72744	2.00	5.00
	3 Ships	18	3.6111	.77754	2.00	5.00
	4 Ships	7	2.7143	.95119	1.00	4.00
	5 Ships	2	4.0000	.00000	4.00	4.00
	6 All	1	2.0000	.	2.00	2.00
	Total	**62**	**3.3387**	**.82866**	**1.00**	**5.00**
Effectiveness Electrical	1 Ship	18	3.2778	.82644	2.00	4.00
	2 Ships	16	3.3750	.71880	2.00	5.00
	3 Ships	18	3.5556	.78382	2.00	5.00
	4 Ships	7	2.7143	.95119	1.00	4.00
	5 Ships	2	4.0000	.00000	4.00	4.00
	6 All	1	5.0000	.	5.00	5.00
	Total	**62**	**3.3710**	**.83438**	**1.00**	**5.00**
Effectiveness Electronic & Weapon	1 Ship	18	2.6667	.84017	1.00	4.00
	2 Ships	16	2.8750	.88506	1.00	4.00
	3 Ships	18	3.1667	.78591	2.00	5.00
	4 Ships	7	2.4286	.78680	1.00	3.00
	5 Ships	2	2.5000	.70711	2.00	3.00
	6 All	1	5.0000	.	5.00	5.00
	Total	**62**	**2.8710**	**.87748**	**1.00**	**5.00**
Effectiveness Hull	1 Ship	18	3.6111	.69780	2.00	5.00
	2 Ships	16	3.2500	.77460	2.00	5.00
	3 Ships	18	3.6667	.68599	2.00	5.00
	4 Ships	7	3.5714	.53452	3.00	4.00
	5 Ships	2	4.0000	.00000	4.00	4.00
	6 All	1	1.0000	.	1.00	1.00
	Total	**62**	**3.5000**	**.76287**	**1.00**	**5.00**

Table 5A-6 Overall Satisfaction of Customer on Effectiveness (Defect Rectification)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Effectiveness of Hull Defect Rectification	62	1.00	5.00	3.5000	.76287
Effectiveness of Mechanical Defect Rectification	62	1.00	5.00	3.3387	.82866
Effectiveness of Electrical Defect Rectification	62	1.00	5.00	3.3710	.83438
Effectiveness of Electronics and Weapon Defect Rectification	62	1.00	5.00	2.8710	.87748
Total Effectiveness of Defect Rectification	62	1.00	3.00	1.9677	.82914
Valid N (listwise)	62				

Table 6 Descriptive Analysis For Each Variance On Customers -Ship Staff Involvement and Dependency

Table 6A-1 Ship Staff Involvement – Types of Ships Served

Descriptives

		N	Mean	Minimum	Maximum	Std. Deviation
Complain Quantity of OSL Supplied	1= FAC M	7	3.4286	1.00	5.00	1.27242
	2= corvette	20	3.5000	2.00	5.00	.94591
	3= frigate	12	3.3333	2.00	4.00	.65134
	4= MCMV	4	3.7500	3.00	5.00	.95743
	5= MPCSS	12	3.2500	2.00	5.00	1.05529
	6= PC/OPV	7	3.5714	3.00	5.00	.78680
	Total	62	3.4355	1.00	5.00	.91653
Complain Quality of OSL Supplied	1= FAC M	7	3.2857	1.00	5.00	1.25357
	2= corvette	20	3.0500	1.00	5.00	1.27630
	3= frigate	12	3.0000	1.00	5.00	1.04447
	4= MCMV	4	3.7500	3.00	5.00	.95743
	5= MPCSS	12	2.9167	2.00	5.00	.90034
	6= PC/OPV	7	2.4286	1.00	4.00	1.13389
	Total	62	3.0161	1.00	5.00	1.12340
Ship Staff Compalin Delay of Spare Deliver	1= FAC M	7	3.8571	1.00	5.00	1.46385
	2= corvette	20	4.0500	1.00	5.00	1.23438
	3= frigate	12	4.2500	3.00	5.00	.86603
	4= MCMV	4	4.2500	3.00	5.00	.95743
	5= MPCSS	12	4.1667	2.00	5.00	1.02986
	6= PC/OPV	7	4.0000	3.00	5.00	.57735
	Total	62	4.0968	1.00	5.00	1.05130
Ship Staff Required to Identify Spare	1= FAC M	7	3.5714	3.00	4.00	.53452
	2= corvette	20	3.8000	2.00	5.00	.95145
	3= frigate	12	3.8333	3.00	5.00	.57735
	4= MCMV	4	3.7500	3.00	5.00	.95743
	5= MPCSS	12	3.7500	2.00	5.00	.86603
	6= PC/OPV	7	3.2857	3.00	4.00	.48795
	Total	62	3.7097	2.00	5.00	.77644
Ship Staff Assist base staff	1= FAC M	7	4.1429	3.00	5.00	.69007
	2= corvette	20	4.1500	2.00	5.00	.98809
	3= frigate	12	3.8333	2.00	5.00	.93744
	4= MCMV	4	4.0000	3.00	5.00	.81650
	5= MPCSS	12	4.0833	2.00	5.00	.99620
	6= PC/OPV	7	3.8571	2.00	5.00	1.06904
	Total	62	4.0323	2.00	5.00	.92271
Ship Staff Know Where to Refer	1= FAC M	7	3.8571	3.00	5.00	.69007
	2= corvette	20	4.1500	3.00	5.00	.74516
	3= frigate	12	3.9167	3.00	5.00	.66856
	4= MCMV	4	3.7500	3.00	4.00	.50000
	5= MPCSS	12	3.6667	3.00	5.00	.65134
	6= PC/OPV	7	4.2857	4.00	5.00	.48795
	Total	62	3.9677	3.00	5.00	.67673

Table 6A-2 Ship Staff Dependency of Base Support – Type of Ship Served

		N	Mean	Minimum	Maximum	Std. Deviation
Follow Storedem	1= FAC M	7	4.4286	4.00	5.00	.53452
	2= corvette	20	3.9000	2.00	5.00	.91191
	3= frigate	12	4.0000	3.00	5.00	.85280
	4= MCMV	4	4.5000	4.00	5.00	.57735
	5= MPCSS	12	3.9167	3.00	5.00	.79296
	6= PC/OPV	7	4.1429	3.00	5.00	.69007
	Total	62	4.0484	2.00	5.00	.79810
Ship Staff Managed Defect Using OSL	1= FAC M	7	3.7143	3.00	4.00	.48795
	2= corvette	20	3.6000	2.00	5.00	.75394
	3= frigate	12	3.8333	3.00	5.00	.71774
	4= MCMV	4	3.7500	3.00	4.00	.50000
	5= MPCSS	12	3.6667	2.00	5.00	.77850
	6= PC/OPV	7	4.1429	3.00	5.00	.69007
	Total	62	3.7419	2.00	5.00	.69978
Ship Staff Respond to URDEF within Ship Capability	1= FAC M	7	4.0000	3.00	5.00	.57735
	2= corvette	20	3.6500	2.00	5.00	1.08942
	3= frigate	12	4.0000	2.00	5.00	.95346
	4= MCMV	4	3.7500	3.00	4.00	.50000
	5= MPCSS	12	4.0000	2.00	5.00	1.04447
	6= PC/OPV	7	3.5714	3.00	4.00	.53452
	Total	62	3.8226	2.00	5.00	.91480
Ship Staff Rely on Base Staff For Defect Rectification	1= FAC M	7	2.7143	2.00	3.00	.48795
	2= corvette	20	2.7500	1.00	4.00	.78640
	3= frigate	12	3.0833	2.00	5.00	.90034
	4= MCMV	4	3.0000	3.00	3.00	.00000
	5= MPCSS	12	3.0000	2.00	5.00	1.12815
	6= PC/OPV	7	2.5714	2.00	4.00	.78680
	Total	62	2.8548	1.00	5.00	.82674

QUESTIONNAIRE FOR RESEARCH ON LOGISTICS SUPPORT SYSTEM AND ITS EFFECTIVENESS IN SUPPORTING AND MAINTAINING A MISSION READY FLEET IN THE ROYAL MALAYSIAN NAVY

Purpose of the Research

1. The general purpose of this study is to determine the **perception** of RMN fleet officers on the **effectiveness** of RMN logistics support system in supporting and maintaining RMN fleet at the mission ready state. In defining the limits of this study, IPDA/UM identified the title of the study areas to be addressed. Based on the title given, a detail review has been made leading to the development of the following specific **research objectives**:

a. To **assess** the **effectiveness**, **deficiency and areas** for improvement of the RMN logistics support system through the RMN fleet officers' perspective.

b. To **determine** the RMN fleet officers' awareness of RMN logistics support system.

c. To **determine** the needs of clients, which is the fleet.

d. To **recommend** changes to the RMN Logistics Support System based on the data analysis and related findings.

Guide on Answering the Questions

2. Respondents involved in this study are requested to provide their answers in the most transparent and sincere way possible in order to reflect the true situation and hence allow the researchers to recommend appropriate actions for consideration by the higher authority. There is no right or wrong answers. Respondents should not spend too much time in addressing the questions.

3. The questionnaire consist of 4 parts (Part I – Awareness, Part II – Effectiveness and Efficiency, Part III – Recommendations and Part IV – Service/Experience Onboard). Respondents are required to answer all parts. For Part III, a **NIL** remarks is required to indicate that respondent do not have any recommendation. Additional A4 paper may be use for recommendations where a point form answers is much appreciated.

Conclusion

4. Your participation is much appreciated. Thank you.

PART I – AWARENESS OF RMN LOGISTICS SUPPORT SYSTEM

THE FOLLOWING ARE STATEMENTS REGARDING YOUR AWARENESS OF RMN LOGISTICS SUPPORT SYSTEM. PLEASE INDICATE THE EXTENT TO WHICH YOU ARE AWARE OF THE SYSTEM BY CIRCLING THE APPROPRIATE NUMBER AGAINST EACH STATEMENT USING THE FOLLOWING SCALES:

1	Not aware at all
2	Quite aware but not knowledgeable
3	Just Aware
4	Aware and knowledgeable
5	Very much aware and conversant

1. Are you aware of the overall RMN logistics support system?

1 2 3 4 5

2. Are you aware of how RMN logistics support system works?

1 2 3 4 5

3. Are you aware of how the procurement process of spares is made in the RMN?

1 2 3 4 5

4. Are you aware of how initial carried onboard spares list is formulated?

1 2 3 4 5

5. Are you aware of the demand process for spares in supply depots?

1 2 3 4 5

6. Are you aware of how spares are delivered to you when a demand is made?

1 2 3 4 5

7. Are you aware of the procedures for ship undergoing Assisted Maintenance Period/Self Maintenance Period?

1 2 3 4 5

8. Are you aware of the procedures for ship undergoing emergency docking?

1 2 3 4 5

9. Are you aware of the procedures for ship undergoing Refit/Slipping?

1 2 3 4 5

10. Are you aware of the defect list production (SDL and AKDL) for Refit/Slipping/DED.

1 2 3 4 5

11. Are you aware of the spares requirement when ship undergoing for Refit/Slipping/DED.

1 2 3 4 5

12. Are you aware of the Five Years Base Spares?

1 2 3 4 5

13. Are you aware of the Squadron Support Concept?

1 2 3 4 5

14. Are you aware of the requirement of carried onboard spares (OSL)?

1 2 3 4 5

15. Are you aware of delivery process of spares for RMN ships in operations at sea?

1 2 3 4 5

16. Are you aware of Integrated Logistic Support concept (ILS) ?

1 2 3 4 5

17. Are you aware of ILS concept implementation in RMN?

1 2 3 4 5

18. Are you aware of the **mechanism** of logistics support (replenishment of POL, ration, refuelling, ammunitioning, medical assistance and repairs) for operational ships at sea.

1 2 3 4 5

PART II – EFFECTIVENESS/EFFICIENCY IN THE RMN LOGISTICS SUPPORT SYSTEM

THE FOLLOWING ARE SOME ASPECTS CONCERNING YOUR SATISFACTION OR DISSATISFACTION WITH THE PRESENT RMN LOGISTICS SUPPORT SYSTEM. PLEASE INDICATE YOUR LEVEL OF SATISFACTION OR DISSATISFACTION WITH EACH OF THE STATEMENT USING THE FOLLOWING SCALE. **EFFICIENTLY** SHALL BE ASSESSED WITH RESPECT TO THE SPEED OF ACTION (EXAMPLE: RESPONSE TIME AND FAULT FINDING TIME) AND **EFFECTIVELY** WITH RESPECT TO QUALITY OF JOB DONE (EXAMPLE: DONE RIGHT THE FIRST TIME).

1	Very Dissatisfied
2	Dissatisfied
3	Neither Satisfied nor Dissatisfied
4	Satisfied
5	Very satisfied

1. Are the mechanical breakdowns of your ship(s) efficiently rectified?

1 2 3 4 5

2. Are the mechanical breakdowns of your ship(s) effectively rectified?

1 2 3 4 5

3. Are the electrical breakdowns of your ship(s) efficiently rectified?

1 2 3 4 5

4. Are the electrical breakdowns of your ship(s) effectively rectified?

1 2 3 4 5

5. Are electronics and weapon system/mission related breakdowns of your ship(s) efficiently rectified?

1 2 3 4 5

6. Are electronics for weapon system/mission related equipment breakdowns of your ship(s) effectively rectified?

1 2 3 4 5

7. Are hull repairs on your ship(s) efficiently rectified?

1 2 3 4 5

8. Are hull repairs on your ship(s) effectively rectified?

1 2 3 4 5

THE FOLLOWING STATEMENTS DESCRIBE YOUR SHIP'S STAFF INVOLVEMENT IN ENSURING YOUR SHIP IS AT ITS HIGHEST MISSION READY STATE WITH THE PRESENT RMN LOGISTICS SUPPORT SYSTEM. PLEASE STATE YOUR ASSESSMENT BY MARKING (**X**) IN THE APPROPRIATE SPACES ON THE SCALE.

9. Your staff do follow-up for spares demanded.

Never __ __ __ __ __ Constantly
1 2 3 4 5

10. Your staff knew where to refer in assessing a defect.

Never __ __ __ __ __ Constantly
1 2 3 4 5

11. Your staff managed to repair defects using carried onboard spares.

Never __ __ __ __ __ Constantly
1 2 3 4 5

12. Your staff complained on insufficient quantity of carried onboard spares demanded from/issued by FSD.

Never __ __ __ __ __ Constantly
1 2 3 4 5

13. Your staff complained on the quality of carried onboard spares issued.

Never __ __ __ __ __ Constantly
1 2 3 4 5

14. Your staff required to identify spares prior to issue.

Never ___ ___ ___ ___ ___ Constantly
1 2 3 4 5

15. Your staff assisted base staff to execute repair.

Never ___ ___ ___ ___ ___ Constantly
1 2 3 4 5

16. Your staff complained delays in the delivery of spares.

Never ___ ___ ___ ___ ___ Constantly
1 2 3 4 5

17. Your staff responded on the defect rectification of URDEF within their capabilities.

Never ___ ___ ___ ___ ___ Constantly
1 2 3 4 5

18. Your staff relied on base staff support on defect rectification.

Never ___ ___ ___ ___ ___ Constantly
1 2 3 4 5

PART III. RECOMMENDATION.

PLEASE STATE YOUR RECOMMENDATION(S) TO IMPROVE RMN LOGISTICS SUPPORT SYSTEM IN ORDER TO INCREASE ITS EFFECTIVENESS IN PREPARING A HIGH MISSION READY FLEET. THE STATEMENTS BELOW IS INTENDED TO ASSIST YOU.

1. Present RMN Logistics Support System is efficient and effective. However the following areas need some improvements. (State the areas of concerned and your recommendation. It should be in line with your answers in the previous questions). Additional A4 page may be used. A **NIL** remark is required to indicate that respondent do not have any recommendation.

2. Present RMN Logistics Support System is not efficient at all. Ships that are not mission capable are left idle (remain in operations capable only) for an extended period. The following are the **major areas** and some of the measures to rectify the situation. (State the areas of concerned and your recommendation. It should be in line with your answers in the previous questions). Additional A4 page may be used. A **NIL** remark is required to indicate that respondent do not have any recommendation.

PART IV – SERVICE AND EXPERIENCE ONBOARD SHIP

PLEASE CIRCLE THE ANSWER THAT DESCRIBE YOURSELF

1. Given below are the periods of service onboard ship(s) that you have served since you were commissioned. What is the **total period** you served with the fleet since you were commissioned in the RMN?

1 3– 5 years
2 6 – 10 years
3 11 – 15 years
4 16 – 20 years

2. What class of ship(s) have you served?

1 FAC (M)
2 Corvette
3 Frigate
4 MCMV
5 MPCSS
6 Patrol
7 All the above

3. What is the class of your **present** ship?

1 FAC (M)
2 Corvette
3 Frigate
4 MCMV
5 MPCSS
6 Patrol

4. Your rank is

1 Sub/Lt
2 Lt
3 Lt Cdr
4 Cdr
5 Captain

5. Your branch is

1 Executive 2 WE 3 ME 4 Supply