



Chester G. Bullock and Associates

Consulting Engineers, Architectural Designers and Land Surveyors
A.C.N. 009 511 906 Phone (03) 6331 7100 Facsimile (03) 6331 7189

Facsimile Transmittal

To: TIA FITTINGS
Attention: BRUCE GUY
From: RICHARD FISHER
Project:

Fax: 63430711

Pages:

Date:

Project No.:

Notes:

BRUCE

COPY OF CERTIFICATE
FROM AYF. PLEASE NOTE
THE CREW WEIGHT AND
STABILITIES. MAYBE YOU
NEED TO PUT SOME WEIGHT
BACK IN OR RE-POSITION SOME
EXISTING?

REGARDS

RICHARDS

LAUNCESTON OFFICE
268 York Street, Launceston
Phone (03) 63317100
Fax (03) 63317189
Email cgb@tassie.net.au

POSTAL ADDRESS
PO Box 63
Riverside
Tasmania 7250

DEVONPORT OFFICE
58 Best Street, Devonport
Phone (03) 64235121
Fax (03) 64235122
Email cgb@tassie.net.au

TO: RICHARD FISHER

TEST IS \$50-00

New

IMS AMENDED TO JANUARY 1998 VPP: 15/OCT/98 15:48:40
 Cert No 711500 7115.DAT 15/OCT/98 15:48:20
 OFF Heas'd: 10/JAN/90 NAIAD.OFF 24/OCT/95 17:08:08

CENTERBOARD AND DRAFT

EDM	0.000	CBRE	0.000	CBMC	0.000	CBTC	0.000
WEBA	0.0	CBOA	0.000	KCDA	0.000	ECE	0.000
WEBC	0.0	CPDB	0.000	ENDPLATE ADJ (KEDA)	0.000		

PROPELLER AND INSTALLATION

PRD	0.520	PBW	0.133	PHD	0.063	PHL	0.125	ESL	0.910
STI	0.024	STZ	0.175	ST3	0.115	ST4	0.061	ST5	0.300
PSA	19.300	PSD	0.025	RIPA	0.0052				

FLOTATION DATA

FFPS	1.102	AFPS	0.899	SFFP	0.545	SAFP	10.545
FFM	1.231	FAM	1.037	FFPV	0.000	AFPV	0.000
FF	1.232	FA	1.037			SG	1.024

-INCLINING TESTS-

V1	16.800	PD1	44.000	PLN	1625.000	PL	1618.769
W2	33.600	PD2	88.000	GSA	0.178	RSA	46.2
W3	50.300	PD3	131.000	SMB	7.043	WD	12.100
W4	67.100	PD4	176.000	RH	130.7	RMC	130.7
W42	137.6	W420	124.0	R40	101.9	RM60	63.5
W490	16.9			CHEM ARM (CRA)	1.604		

CALCULATED LIMIT OF POSITIVE STABILITY: 104.7 DEGREES
 RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE 1.296

-HYDROSTATICS- MEASUREMENT TRIM—SAILING TRIM—

KEEL DRAFT	(DHKO)	2.263	(DHKA)	2.307
2ND MOMENT LENGTH	(LSM3)	9.660	(LSM1)	9.859
DISPLACEMENT (WEIGHT)	(DSPH)	6287	(DSPS)	7161
NETTED SURFACE	(NSM)	26.19	(WSS)	27.82
VCG FROM OFFSETS DATUM (FOR CLUB RM)	(VCGD)	0.106		
VCG FROM MEASUREMENT TRIM WATERLINE (VCGH)		0.241		
INTEGRATED BEAM ATTENUATED WITH DEPTH (B)		3.126		
MAXIMUM SECTION AREA	(ANST)	1.481		
BEAM/DEPTH RATIO	(BTR)	4.573		
EFFECTIVE DRAFT	(D)	1.999		
2° HEEL (LSM2)	9.667	25° HEEL (LSM3)	9.818	
SUNK (LSM4)	11.432	AVG LENGTH (L)	9.950	
TRIM: 1mm/78.738m-kg		SINK:	1mm/19.744kg	

SAIL AREA: MAIN + FORETRIANGLE + MIZZEN (SA) 79.00
MAIN: 49.25 SPIN: 99.40 GENOA: 45.98 MIZ 'H: 0.00

-FORETRIANGLE- MAIN & SPARS

IG	14.381	SPL	4.108	HB	0.170	TL	4.130
PH	0.124	J	1.20	HGT	1.20	MDT1	0.113
GO	0.153	LPG	6.04	HGU	2.06	MDL1	0.172
ISP	14.433	FSP	0.068	MGH	3.43	MDT2	0.058
JH	14.483	LP	6.11	HGL	4.52	MDL2	0.080
HBI	1.112	SFJ	0.070	MSV	30.9	HWT	212.0
MSL	14.26	MSW	7.39	F	15.230	MCG	4.675
SL	14.30	SMH	7.39	E	5.595	BD	0.265
SPS	3.460	LPIS	0.00	EC	5.595	CPW	2.080
TH	NO	JR	0.00	SAS	1.820	BAL	0.150

-MIZZEN-

IY	0.000	PY	0.000	HY	0.000	ILY	0.000
EB	0.000	EY	0.000	HGY	0.000	MBTY	0.000
YSD	0.00	ECY	0.000	MGY	0.000	MDTY	0.000
YSF	0.00	BASY	0.000	MGY	0.000	MDTY	0.000
YSPS	0.00	BALY	0.000	MGLY	0.000	MDLY	0.000
		HELY	0.000	BDY	0.000		

IMS RATING CERTIFICATE No. 711500
 Based on: FULL MEASUREMENT (Metric)
 NOT VALID AFTER 30/06/99

GPS: 627.8

IMS AMENDED TO JANUARY 1998
 Offshore Racing Council
 Ariadne House, Southampton, UK
 Copyright: 1998

RATING OFFICE: AUSTRALIAN YACHTING FED.
 Issued: 15/OCT/98
 Measured: 18/SEP/98

Designated: FARR
 Builder: NAUTICIL SYSTEMS
 Rig: FRACTIONAL SLOOP 148% Jib
 Keel/CB: FIXED KEEL
 Proprietary: EXPOSED FEATHERING
 Furacomm: YES
 Hull/Cast: CORED
 Forestay: ADJUST END
 Runners: 2 Sets
 Dates: AGE: 12/1984

Revalidation Authority: AIF
 Measurer: RICHARD FISHER

"I CERTIFY THAT I UNDERSTAND MY RESPONSIBILITIES UNDER THE IMS."

OWNER:
 BRUCE GUY
 19 PITTEN CREEK
 LAUNCESTON
 TAS. 7250

LIMITS AND REGULATIONS

Limit of Positive Stability: MEETS REQ
 Minimum Displacement: 3134kg: MEETS REQ
 Maximum Crew Weight: 766 kg.
 Stability Index: 102.8

NOTE TO OWNER: The range available to revise crew weight is 415-766 kg.

Measurement Inventory: 18/JUL/98
 Accommodation Length: 11.895m
 Accom Certificate: C/R DAF 0.65%
 Plan Approval: NONE FILED

WIND VELOCITY: 8kt 9kt 10kt 12kt 14kt 16kt 20kt

BEAT ANGLES:	64.0°	63.2°	41.9°	41.1°	40.8°	40.8°	41.6°	CHECKS/HR
BEAT YMG:	995.2	697.4	796.5	766.3	751.3	745.2	745.6	(293.4)
52°:	642.7	560.0	531.7	518.3	511.3	506.8	502.7	(3657.5)
60°:	600.6	530.7	508.1	497.1	490.5	485.8	480.4	(3773.5)
75°:	569.1	509.2	483.9	471.4	464.1	458.4	450.6	(3593.2)
90°:	567.9	502.2	477.7	462.0	448.4	438.9	429.1	(3406.7)
110°:	585.0	509.5	476.3	454.5	438.8	428.2	413.1	(3305.4)
120°:	628.1	530.2	488.1	460.9	440.2	423.3	398.6	(3369.4)
135°:	740.7	596.6	523.2	486.2	460.2	438.3	400.2	(3645.4)
150°:	896.6	710.7	597.5	529.0	491.2	464.6	422.4	(4112.0)
RUN YMG:	1035.3	820.7	690.0	595.7	535.8	498.2	449.5	(44625.2)
GYBE ANGLES:	140.2°	144.5°	150.3°	164.2°	169.9°	173.5°	174.9°	(1117.3)

NOTE: To convert any time allowance above to speed in knots: Kt = 3600/TA

Performance Line Scoring — Time Factor: 0.771 Distance Factor: 84.7

TIME ALLOWANCES FOR SELECTED COURSES

Wind/Lead YMG	1109.4	892.9	774.7	704.2	660.2	631.9	599.4	(5372.7)
Olympic 6-leg	1036.0	842.9	741.0	683.0	648.4	628.9	602.0	(5120.2)
Circular Randm	846.3	691.6	610.3	564.0	536.0	518.0	495.8	(4242.0)
Non-Spinnaker	923.0	744.9	649.0	592.9	558.4	536.2	509.9	(4514.3)
Ocean for PCS	980.9	771.4	653.7	581.0	532.9	499.0	452.3	(4471.2)

For Time-on-time method Thf = 0.9533

Facsimile Transmittal

To: AYF

Attention: TONY MOONEY

From: RICHARD FISHER

Project: NAIND MEASUREMENT

Fax: 02 99732883

Pages: i

Date: 15-12-98

Project No:

Notes:

TONY

LOOKS LIKE I MIS-READ TAPE.

NUMBERS SHOULD BE:

FIM 1.231

FAM 1.037

ALSO, ANOTHER OWNER HAS ENQUIRED
ABOUT COST OF TEST CERTIFICATES
WOULD YOU PLEASE FAX ME FEES?

REGARDS

RICHARD

LAUNCESTON OFFICE
268 York Street, Launceston
Phone (03) 63317100
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Email cgb@casere.net.au

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Tasmania 7250

DEVONPORT OFFICE
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Phone (03) 64235121
Fax (03) 64235122
Email cgb@casere.net.au

IMS RACING CERTIFICATE NO. 711500
 Based on: FULL MEASUREMENT (Metric)
 NOT VALID AFTER 30/06/99

IMS AMENDED TO JANUARY 1998
 Offshore Racing Council
 Ariadne House, Southampton UK
 Copyright 1998

YACHT DESCRIPTION
 Name: NAJAD
 Sail No: 5466
 Class: FARR 40
 LOA: 11.895m Beam(MB) 3.992m
 Designer: FARR
 Builder: NAUTECH SYSTEMS
 Rig: FRACTIONAL SLOOP 148% JIB
 Keel/CB: FIXED KEEL
 PropInst: EXPOSED FEATHERING
 FuelAccom: YES SPIN: SYMMETRIC
 HullConst: CORED RodConst: STROND
 Forestay: ADJUST FWD BoomMCL: HEAVY
 Spreaders: 2 Sets InfFesty: NONE
 Runners: 1 Set Jumpers: YES
 Dates: AGE: 12/1984
 COMMENTS

RATING OFFICE:
 Issued: AUSTRALIAN YACHTING FED.
 29/SEP/98
 Measured: ROLAND BAG 806,
 18/SEP/98
 N.Y. LON'S POINT,
 N.S.W. 2061
 Revalidation Authority: AYF
 Measurer: RICHARD FISHER

OWNER:
 BRUCE GUY
 19 PITTEN CRIEF
 LAUNCESTON
 TAS. 7250

LIMITS AND REGULATIONS

Limit of Positive Stability: MEETS REQ
 Minimum Displacement: 2946kg; MEETS REQ
 Maximum Crew Weight: 758 kg.
 Stability Index: 105.6
 NOTE TO OWNER: The range available to revise crew weight is 411-758 kg.

TIME ALLOWANCES IN SEC/MI BY TRUE WIND VELOCITY & ANGLE

Wind Velocity:	6kt	8kt	10kt	12kt	14kt	16kt	20kt	CHECKSUM
BEAT ANGLES:	44.0°	43.2°	42.1°	41.5°	41.2°	41.4°	42.3°	(295.7)
BEAT WIG:	990.7	858.7	800.4	771.8	758.2	753.1	755.6	(5688.5)
R 60°:	598.1	530.1	507.8	496.8	490.3	485.6	480.4	(3776.9)
E 75°:	566.3	507.3	482.1	469.9	462.5	456.7	448.7	(3393.5)
A 90°:	565.3	500.3	475.8	459.0	445.1	435.6	425.4	(3306.5)
C 110°:	581.4	507.0	473.5	451.3	435.3	424.3	407.9	(3280.7)
h 120°:	622.9	527.8	485.4	457.7	436.3	413.4	392.3	(3340.8)
135°:	732.8	592.9	520.8	483.5	456.9	434.1	393.3	(3614.3)
150°:	886.1	705.3	594.4	526.8	488.7	461.7	417.4	(4080.4)
RUN WIG:	1023.2	814.4	686.3	593.2	533.8	496.9	446.1	(4593.0)
GYBE ANGLES:	140.3°	144.7°	150.7°	164.3°	169.7°	173.3°	174.5°	(1117.5)

NOTE: To convert any time allowance above to speed in knots: Kt = 3600/TA
 Performance Line Scoring -- Time Factor: 0.773 Distance Factor: 84.4
 TIME ALLOWANCES FOR SELECTED COURSES

Wind/True WIG	1103.8	890.6	774.5	705.4	662.3	634.6	602.7	(5373.9)
Olympic 0-Leg	1031.6	847.4	747.3	684.6	650.7	629.5	605.1	(5184.2)
Circular Bnda	841.9	689.1	609.0	563.3	537.6	517.5	495.4	(4251.9)
Non-Spinaker	917.8	741.8	647.3	592.1	558.1	536.1	510.1	(4503.3)
Ocean for PCs	977.0	769.0	652.1	579.7	531.6	497.3	449.6	(4456.3)

For Time-on-time method THF = 0.9535
 ILC Weighted Avg: 707.9

IMS AMENDED TO JANUARY 1998 YPP: 29/SEP/98 10:04:58
 Cert No 711500 7115.DAT 29/SEP/98 10:03:06
 OFF Meas'd: 10/JAN/90 NAJAD.OFF 24/OCT/95 17:08:06

CENTERBOARD AND DRAFT

ECH	0.000	CBRC	0.000	CBMC	0.000	CBTC	0.000
WCBA	0.0	CBDA	0.000	KCDA	0.000	ECE	0.000
WCBE	0.0	CBDB	0.000	ENPLATE ADJ (KEDA)	0.000		

PROPELLER AND INSTALLATION

PRD	0.520	PBM	0.133	PHD	0.063	PHL	0.125	ESL	0.910
ST1	0.024	ST2	0.115	ST3	0.115	ST4	0.061	ST5	0.300
PSA	19.300	PSD	0.025	PIPA	0.0052				

FLOATION DATA

FFPS	1.102	AFPS	0.899	FGO	0.554	LBG	9.970
FFH	1.321	FAH	1.037	FFPV	0.000	AFPV	0.000
FF	1.322	FA	1.037	SG		SG	1.024

INCLINING TESTS

U1	16.800	PD1	44.000	PLM	1625.000	PL	1818.789
U2	33.600	PD2	88.000	GSA	0.178	RSA	46.2
U3	50.300	PD3	131.000	SAB	7.043	MD	12.100
U4	67.100	PD4	176.000	RA	130.7	RMC	130.7
RM2	138.9	RM20	124.3	RM40	102.5	RM60	67.4
RM90	21.9	CREW ARM (GRA)					1.602

CALCULATED LIMIT OF POSITIVE STABILITY: 109.5 DEGREES
 RATIO STABILITY CURVE AREAS: POSITIVE/NEGATIVE 1.651

HYDROSTATICS

KEEL DRAFT	(DHKO)	2.226	(DHKA)	2.270
2ND MOMENT LENGTH	(LSMO)	9.355	(LSMI)	9.568
DISPLACEMENT (WEIGHT)	(DSPM)	5546	(DSPS)	6405
WETTED SURFACE	(WSS)	25.08	(WSS)	26.75
VCG FROM OFFSETS DATUM (For CLUB RH)	(VCGD)	0.007	(VCGG)	0.176
VCG FROM MEASUREMENT TRIM WATERLINE (VCGN)				0.176
MAXIMUM SECTION AREA	(AMST)			1.356
BEAM/DEPTH RATIO	(BTR)			4.822
EFFECTIVE DRAFT	(D)			1.976
2° HEEL (LSH2)	9.569	25° HEEL (LSH5)	9.538	
SUNK (LSM4)	11.361	AVG LENGTH (L)	9.741	
TRIM: 1mm/8.383m=kg		SINK: 1mm/19.169kg		

SAIL AREA: MAIN + FORETRIANGLE + MIZZEN (SA) 79.00
 MAIN: 49.25 SPIN: 99.40 GENOA: 45.98 MIZZEN: 0.00

FORETRIANGLE

IG	14.381	SPL	4.708	HB	0.170	TL	4.130
HW	0.124	J	4.108	MGT	1.20	MDT1	0.113
SO	0.153	LPG	6.04	HGU	2.06	MCLT	0.172
ISP	14.433	FSP	0.068	HGH	3.43	MDT2	0.058
IH	14.483	LP	6.11	MGL	4.52	MDL2	0.080
H81	1.170	SFJ	0.070	HSM	30.9	MWT	212.0
MSL	14.26	MSHW	7.39	P	15.230	NGS	4.675
SL	14.30	SNW	7.39	E	5.595	SD	0.265
SPS	3.660	LPIS	0.00	EC	5.595	CPH	2.080
TH	RG	JR	0.00	BAS	1.820	BAL	0.150

MIZZEN

IY	0.000	PY	0.000	BY	0.000	TLY	0.000
EB	0.000	EY	0.000	HGY	0.000	MDTY	0.000
Y50	0.00	ECY	0.000	HGY	0.000	MDLY	0.000
Y5F	0.00	BALY	0.000	HGY	0.000	MDTY	0.000
Y5MG	0.00	HBY	0.000	BDY	0.000	MDLY	0.000

Att Richard Fisher

To
BRUCE GUY

From
RICHARD

BRUCE
PRELIMINARY ONLY FROM AYP
ORIGINAL WILL GET TO YOU SOON
GPH OF 598.9 COMPARES WELL TO
INTRIGUE (599.0)

IMS AMENDED TO JANUARY 1995 VPP. 27/OCT/95 08:51:48
 Cert No 711500 7115.DAT 27/OCT/95 08:48:58
 OFF News'd: 10/JAN/90 NAIRD.OFF 24/OCT/95 17:08:08

----- CENTERBOARD AND DRAFT -----
 ECM 0.000 CBRC 0.000 CBTC 0.000
 UCBA 0.0 CBDA 0.000 KCDA 0.000 EEE 0.000
 UCBB 0.0 CBDB 0.000 ENDPATE ADJ (KEDA) 0.000
 PROPELLER AND INSTALLATION
 PRD 0.520 PBR 0.133 PHD 0.063 P 0.125 ESL 0.910
 STI 0.024 ST2 0.115 ST3 0.115 ST4 0.061 ST5 0.500
 PSA 19.300 PSD 0.025 PIPA 0.0052

----- FLOTATION DATA -----
 FFN 1.160 FFPS 1.102 FGO 0.554 SG 1.027
 FAH 1.132 AFPS 0.899 LBG 9.970 PL 3830.000
 AV 25.000 APD 70.000 AVG 6.042 RM 243.5
 BN 50.000 BPD 137.000 BND 6.042 RMC 243.5
 CN 25.000 CPD 68.000 CVD 6.042
 DM 50.000 DPD 38.000 DVD 6.042
 RM2 252.7 RM20 237.0 RM40 209.7 RM60 163.8
 RH90 96.6 CREW ABM (CRA) 1.570

CALCULATED LIMIT OF POSITIVE STABILITY: 146.4 DEGREES
 RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE: 18.459

----- HYDROSTATICS ----- MEASUREMENT TRIM--SAILING TRIM--
 KEEL DRAFT (DHKO) 2.237 (DHKA) 2.290
 2ND MOMENT LENGTH (LSHO) 9.348 (LSM1) 9.583
 DISPLACEMENT (WEIGHT) (DSPW) 5859 (DSPS) 6859
 WETTED SURFACE (WSH) 25.36 (WSS) 26.98
 VCG FROM OFFSETS DATUM (FOR CLUB RM) (VCGD) -1.124
 VCG FROM MEASUREMENT TRIM WATERLINE (VCGM) -0.975
 INTEGRATED BEAM ATTENUATED WITH DEPTH (IB) 3.061
 MAXIMUM SECTION AREA (AMS1) 1.472
 BEAM/DEPTH RATIO (BTR) 4.455
 EFFECTIVE DRAFT (D) 1.987
 2° HEEL (LSM2) 9.5B3 25° HEEL (LSM3) 9.532
 SUNK (LSM4) 10.958 AVG LENGTH (L) 9.622
 TRIM: 1mm/8.193mm-kg SINK: 1mm/19.023kg

SAIL AREA: MAIN + FORETRIANGLE + MIZEN (SA) 78.43
 MAIN: 46.68 SPH: 99.09 DEMOR: 46.55 MIZ 'M: 0.00

----- FORETRIANGLE ----- MAST-----
 IG 14.381 SPL 4.108 HB 0.210 TL 4.130
 MV 0.124 J 4.108 MGT 1.09 MDT1 0.113
 GO 0.153 LPG 6.09 MGV 1.96 MDT2 0.172
 LSP 14.433 FSP 0.068 MGV 3.41 MDT2 0.058
 MH 14.483 LP 6.16 MGL 4.51 MDT2 0.080
 HBI 1.093 SFJ 0.070 MSW 26.8 BATX 1.988
 MXSL 14.226 HXSHW 7.39 P 15.230 BAL1 1.700
 SA 14.20 SMV 7.39 E 5.595 BL2 2.970
 SPS 3.660 PAL 0.150 BAS 1.820 BL3 3.890
 LPTS 0.000 BO 0.265 BLP 3.10 BL4 1.370
 CPA 2.080

----- MIZEN -----
 LY 0.000 PY 0.000 BY1 0.000 NOTTY 0.000
 EB 0.000 EY 0.000 BY2 0.000 MDT1Y 0.000
 YB 0.000 BAY 0.000 BY3 0.000 MDT2Y 0.000
 YSF 0.000 BAYL 0.000 BY4 0.000 MDT2Y 0.000
 YSNB 0.000 BOY 0.000 BY5 0.000 TLY 0.000
 HBYL 0.000 HBY 0.000 HBYT 0.000 HBYT 0.000

UIC WEIGHTED AVERAGE: 565.0

IMS AMENDED TO JANUARY 1995
 Offshore Racing Council
 19 St James's Place London
 Copyright 1995

ISSUED OFFICE: AUSTRALIAN YACHTING FED.
 27/OCT/95
 Measured: LOCKED BAG 806,
 30/SEP/95 MILSON'S POINT,
 W.S.W. 2061

Revalidation Authority: AYP
 Measurer: RICHARD FISHER

"I CERTIFY THAT I UNDERSTAND MY
 RESPONSIBILITIES UNDER THE IMS."

OWNER: BRUCE GUY
 19 PILITEN CRIEF
 LAUNCESTON
 TAS. 7250

Limit of Positive Stability: MEETS REQ Measurement Inventory: 12/MAR/87
 Minimum Displacement 2947kg; MEETS REQ Accommodation Length: 11.895m
 Maximum Crew Weight: 740 kg. Accom Certificate: CRUISER/RACER
 Stability Index: 143.0 ABS Plan Approval: NONE FILED

NOT TO OWNER: The range available to revise crew weight is 525-962 kg.

WIND VELOCITIES IN SEC/MI BY TRUE WIND VELOCITY & ANGLE

Wind Velocity:	6kt	8kt	10kt	12kt	14kt	16kt	20kt	CHECKSUM
DEAT ANGLES:	46.2°	43.7°	41.6°	39.8°	38.6°	37.9°	37.6°	(285.4)
BEAT WNG:	976.4	806.5	732.2	693.9	671.6	658.4	647.6	(5186.6)
52°:	620.5	530.8	498.9	483.2	473.5	466.7	458.6	(3532.2)
R 60°:	577.7	510.3	483.8	467.1	456.5	449.3	439.6	(3384.3)
E 75°:	547.5	496.8	471.6	452.5	436.8	424.2	408.8	(3238.2)
A 90°:	549.0	490.0	462.2	441.6	425.4	413.3	396.5	(3178.1)
C 110°:	559.9	499.1	470.3	447.4	426.6	407.9	378.3	(3189.5)
H 120°:	596.1	515.4	482.4	457.9	435.9	415.4	380.4	(3283.5)
I 135°:	715.1	573.1	511.8	482.0	459.0	438.0	398.5	(3577.5)
150°:	872.7	695.2	580.2	518.7	487.0	463.5	422.2	(4029.5)
RUN WNG:	1007.7	791.2	669.9	581.3	525.3	492.4	447.8	(4615.6)
GRIBE ANGLES:	138.0°	142.4°	149.5°	165.4°	172.0°	175.3°	175.7°	(11118.3)

NOTE: To convert any time allowances above to speed in knots: Kt = 3600/TA

WIND-AVERAGED TIME ALLOWANCES FOR SELECTED COURSES

Windward WNS	1079.9	878.4	774.1	717.1	685.1	666.7	649.4	6450.70
Leeward WNG	1075.9	820.8	685.1	578.9	541.2	501.2	449.0	(4652.1)
Olympic 6-leg	907.3	802.2	637.9	437.7	400.9	376.9	346.9	(4859.8)
Circular Round	876.3	663.7	581.9	534.5	504.8	484.5	457.7	(4042.6)
Non-Spinnaker	897.2	720.4	623.7	566.4	530.5	506.4	476.7	(4321.7)
Ocean for PCS	940.9	777.0	621.8	550.4	502.9	469.2	422.3	(4244.4)

IMS RACING CERTIFICATE No. 711500
 Based on: FULL MEASUREMENT (Metric)
 NORVALAD AFTER 30/06/95
 609.4

IMS AMENDED TO JANUARY 1995
 Offshore Racing Council
 19 St. James's Place, London
 W1C 2BS
 Copy to: IMS

YACHT DESCRIPTION
 Name: NAJAD
 Sail No: 5466
 Class: FARR 40
 LOA: 11.895a Beam(MB): 4.013m
 Designer: FARR
 Builder: NAUTECH SYSTEMS
 Rig: FRACTIONAL SLOOP 150% JIB
 Keel/CB: FIXED KEEL
 Proprietary: EXPOSED FEATHERLING
 FwdAccom: YES SPIN: SYMMETRIC
 HullConst: CORED RodCast: STANDARD
 Foresay: ADJUST FWD Infesty: NONE
 Spreaders: 2 Sets Jumpers: YES
 Runners: 1 Set Battens: LONG
 Dates: AGE: 12/1984

RATING OFFICE:
 Issued: AUSTRALIAN YACHTING FED.
 30/NOV/95
 Measured: LUCKED GAG 806,
 HILSON'S POINT,
 W.S.N. 2061
 Revalidation Authority: AYT
 Measurer: RICHARD FISHER
 "I CERTIFY THAT I UNDERSTAND MY
 RESPONSIBILITIES UNDER THE IMS."
 OWNER: Bruce Guy
 BRUCE GUY
 19 PATTEN CREEK
 LAUNCESTON
 TAS. 7250

rig data from ior cert.

LIMITS AND REGULATIONS

Limit of Positive Stability: MEETS REQ
 Minimum Displacement: 2983kg; MEETS REQ
 Maximum Crew Weight: 740 kg.
 Stability Index: 117.9
 ABS Plan Approval: NONE FILED

NOTE TO OWNER: The range available to revise crew weight is 446- 824 kg.

TIME ALLOWANCES IN SEC/MI BY TRUE WIND VELOCITY & ANGLE

Wind Velocity:	5kt	8kt	10kt	12kt	14kt	16kt	20kt	CHECKSUM
BEAT ANGLES:	46.3°	44.2°	42.3°	41.1°	40.5°	40.2°	40.5°	(295.1)
BEAT WNG:	985.2	827.7	761.9	728.5	710.6	701.5	694.7	(5410.1)
52°:	624.7	538.9	511.2	498.5	491.2	486.3	480.0	(3630.8)
60°:	580.0	514.3	492.1	481.2	474.1	468.9	461.4	(3472.0)
75°:	547.6	497.9	475.0	459.9	450.4	443.8	433.4	(3308.0)
90°:	548.9	491.9	467.6	452.7	441.7	429.3	411.6	(3243.7)
110°:	596.8	514.7	482.1	458.4	438.0	419.3	389.2	(3298.5)
120°:	718.9	573.2	511.2	481.6	459.0	438.3	399.9	(3582.1)
135°:	877.9	686.4	580.2	518.0	486.5	463.3	422.4	(4034.7)
150°:	1013.7	792.6	669.9	581.1	524.8	491.9	447.7	(4621.7)
GYBE ANGLES:	137.8°	142.1°	149.0°	165.1°	171.9°	175.4°	175.7°	(1117.0)

NOTE: To convert any time allowance above to speed in knots: Kt = 3600/TA

WIND-AVERAGED TIME ALLOWANCES FOR SELECTED COURSES

Windward WNG	1102.2	994.7	894.8	752.0	723.2	708.7	696.6	(5692.2)
Leeward WNG	1059.7	822.5	685.6	598.8	540.9	500.9	448.9	(4657.3)
Olympic 5-Leg	1011.6	817.9	715.6	657.5	622.6	600.4	573.1	(4998.7)
Circular Rndm	834.2	672.1	592.3	546.8	519.0	500.5	441.1	(4131.0)
Non-Spinmaker	956.4	729.4	633.8	577.7	543.1	520.6	493.5	(4404.5)
Ocean for PCS	954.4	743.6	634.6	563.7	516.8	483.4	436.4	(4358.9)

IMS AMENDED TO JANUARY 1995
 Cert No 711500
 OFF Meas'd: 10/JAN/90 NAJAD OFF
 24/OCT/95 17:08:08

CENTERBOARD AND DRAFT
 ECB 0.000 CBRC 0.000 CBPC 0.000 CBTC 0.000
 ECB4 0.0 CBDA 0.000 KCDA 0.000 ECE 0.000
 ECB8 0.0 CBDB 0.000 ENDPATE ADJ (KEDA) 0.000
PROPELLER AND INSTALLATION
 PRD 0.520 PBH 0.133 PHD 0.063 PHL 0.125 ESL 0.970
 STI 0.024 ST2 0.115 ST3 0.115 ST4 0.061 ST5 0.300
 PSA 19.300 PSD 0.025 PTFA 0.0052

FLOTATION DATA
 FFM 1.198 FFS 1.102 F60 0.554 SG 1.027
 FAM 1.088 AFPS 0.899 LBS 9.970 VD 11.820
 V1 20.900 P01 40.000 PUM 1623.000 PL 1618.769
 V2 41.700 P02 85.000 GSA 0.178 RSA 46.2
 V3 62.600 P03 133.000 RM 161.6 RMC 161.6
 V4 83.500 P04 187.000
 RM2 169.8 RM20 155.8 RM40 132.6 RM60 93.1
 RM90 61.1 CREW ARM (CRA) 1.560

CALCULATED LIMIT OF POSITIVE STABILITY: 120.9 DEGREES
RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE 3.175
HYDROSTATICS MEASUREMENT TRIM--SAILING TRIM--
 KEEL DRAFT (OHKO) 2.247 (DHKA) 2.297
 2ND MOMENT LENGTH (LSM2) 9.407 (LSM1) 9.623
 DISPLACEMENT (WEIGHT) (DSPM) 6020 (DSPS) 6959
 WETTED SURFACE (WSN) 25.72 (WSS) 27.35
 VCG FROM OFFSETS DATUM (FOR CLUB RM) (YCGO) -0.259
 VCG FROM MEASUREMENT TRIM WATERLINE (YCGM) -0.114
 INTEGRATED BEAM ATTENUATED WITH DEPTH (B) 3.091
 MAXIMUM SECTION AREA (AMS1) 1.476
 BEAM/DEPTH RATIO (BTR) 4.497
 EFFECTIVE DRAFT (D) 1.991
 2° HEEL (LSM2) 9.626 25° HEEL (LSM3) 9.568
 SWAG (LSM4) 11.058 AVG LENGTH (L) 9.680
 TRIM: 1mm/8.450m-kg SINK: 1mm/19.332kg

SAIL AREA: RAIN + FORETRIANGLE + MIZZEN (SA) 78.43
MAIN: 48.68 SPIN: 99.09 GENDR: 46.35 MIZ'N: 0.00
FORETRIANGLE MAIN MAST--BTMS
 JG 14.361 SPL 4.108 HB 0.210 TL 4.130
 MV 0.124 J 4.108 MGT 1.09 MDT1 0.113
 GO 0.153 LPG 5.09 MGV 1.96 MDT2 0.172
 LSP 14.433 FSP 0.048 MGL 3.41 MDT2 0.080
 IM 14.463 LP 6.16 MSH 26.8 BATX 1.988
 HSI 1.105 SFJ 0.070 P 15.230 SL1 1.700
 MXSL 14.26 MXXSM 7.39 E 5.595 BL2 2.970
 SL 14.20 SHM 7.39 B 1.820 BL3 3.890
 SPS 3.660 BAL 0.150 BAS 1.820 BL4 1.370
 LPLS 0.00 BD 0.265 BLP 3.10 BL5 0.000
 CPV 2.080

WIND-AVERAGED TIME ALLOWANCES FOR SELECTED COURSES
 WINDWARD WNG 1102.2 994.7 894.8 752.0 723.2 708.7 696.6 (5692.2)
 LEeward WNG 1059.7 822.5 685.6 598.8 540.9 500.9 448.9 (4657.3)
 OLYMPIC 5-LEG 1011.6 817.9 715.6 657.5 622.6 600.4 573.1 (4998.7)
 CIRCULAR RNDM 834.2 672.1 592.3 546.8 519.0 500.5 441.1 (4131.0)
 NON-SPINMAKER 956.4 729.4 633.8 577.7 543.1 520.6 493.5 (4404.5)
 OCEAN FOR PCS 954.4 743.6 634.6 563.7 516.8 483.4 436.4 (4358.9)

ILL WEIGHTED AVERAGE: 603.6

IMS RATING CERTIFICATE No. 711500
Based on: FULL MEASUREMENT (Metric)
NOT VALID AFTER 30/06/97

IRS AMENDED TO JANUARY 1996
Offshore Racing Council
19 St James's Place, London
Copyright 1996

IMS AMENDED TO JANUARY 1996 YIP: 10/JUL/96 11:57:10
Cert No 711500 7115.DAT 30/NOV/95 14:01:24
OFF Meas'd: 10/JAN/90 MALAD.OFF 24/OCT/95 17:08:08

--- YACHT DESCRIPTION ---
Name: NALAD
Sail No: 5466
Class: FARR 40
LOA: 11.895m Beam(MB) 4.003m
Designer: FARR
Builder: NAUTECH SYSTEMS
Rig: FRACTIONAL SLOOP 150% Jib
Keel/CB: FIXED KEEL
PropInst: EXPOSED FEATHERING
FuelAccom: YES SPIN: SYMMETRIC
HullConst: CORED RndConst: STNDRD
Forestry: ADJUST FND Infesty: NONE
Spreads: 2 Sets Jumpers: YES
Runners: 1 Set Battens: LONG
Dates: AGE: 12/1984
COMMENTS:
rig data from for cert.

RATINGS OFFICE: **Whitbread**
Issued: AUSTRALIAN YACHTING FED.
10/JUL/96 LOCKED BAG 8064
Measured: MILSON'S POINT,
30/SEP/95 N.S.W. 2061
Revalidation Authority: AYF
Measurer: RICHARD FISHER
"I CERTIFY THAT I UNDERSTAND MY
RESPONSIBILITIES UNDER THE IMS."
OWNER:
BRUCE GUY
19 PITTEN CRIEF
LAUNCESTON
TAS. 7250

--- CENTERBOARD AND DRAFT ---
ECH 0.000 CBRC 0.000 CBNC 0.000 CBTE 0.000
WCA 0.0 CBDA 0.000 KCDA 0.000 ECE 0.000
VCBB 0.0 CBDB 0.000 EMPPLATE ABJ (KEDA) 0.000
PROPELLER AND INSTALLATION
PRD 0.520 PBA 0.133 PHD 0.063 PHL 0.125 ESL 0.970
STI 0.024 STZ 0.115 STS 0.115 ST4 0.061 ST5 0.500
PSA 19.300 PSP 0.025 PIPA 0.0052
--- FLOTATION DATA ---
FFM 1.198 FFS 1.102 FGO 0.554 SG 1.027
FAM 1.088 AFP 0.899 LBG 9.970 WD 11.820
W1 20.900 PW1 60.000 PLM 1625.000 PL 1618.769
W2 41.700 PW2 85.000 GSA 0.178 RSA 46.2
W3 62.600 PW3 133.000 RM 142.9 RMC 142.9
W4 83.500 PW4 187.000 SMB 7.038
W5 150.4 RW20 136.8 RW40 114.9 RW60 77.6
RW80 29.4 CREH ARM (CRA) 1.616
CALCULATED LIMIT OF POSITIVE STABILITY: 113.3 DEGREES
RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE 2.051
--- HYDROSTATICS --- MEASUREMENT TRIM---SAILING TRIM---
KEEL DRAFT (DHKO) 2.247 (DHKA) 2.294
2ND MOMENT LENGTH (LSM2) 9.405 (LSM1) 9.606
DISPLACEMENT (WEIGHT) (DSPH) 6020 (DSPS) 6902
WETTED SURFACE (MSH) 25.72 (MFS) 27.23
VCS FROM OFFSETS DATUM (FOR CLUB RM) (VCSO) -0.061
VCS FROM MEASUREMENT TRIM WATERLINE (VCSM) 0.064
INTEGRATED BEAR ATTENUATED WITH DEPTH (B) 3.083
MAXIMUM SECTION AREA (AMS1) 3.659
BEAR/DEPTH RATIO (BTR) 4.570
EFFECTIVE DRAFT (E) 1.990
2° HEEL (LSM2) 9.608 25° HEEL (LSM3) 9.553
SUNK (LSM2) 11.051 AVG LENGTH (L) 9.676
TRIM: 1mm/5.650m²g SINK: 1mm/19.332kg

--- LIMITS AND REGULATIONS ---

Limit of Positive Stability: MEETS REQ Measurement Inventory: 18/NOV/95
Minimum Displacement: 2979kg MEETS REQ Accommodation Length: 11.895m
Maximum Crew Weight: 740 kg. Accoms Certificate: CRUISER/RACER
Stability Index: 110.4 Plan Approval: NOTE FILED
NOTE TO OWNER: The range available to revise crew weight is 425-785 kg.

--- TIME ALLOWANCES IN SEC/MI BY TRUE WIND VELOCITY & ANGLE ---

Wind Velocity:	6kt	8kt	10kt	12kt	14kt	16kt	20kt	CHECKSUM
BEAT ANGLES:	45.6°	43.7°	42.3°	41.3°	40.9°	40.9°	41.3°	(296.0)
BEAT VMS:	993.1	841.2	778.1	746.2	729.8	721.0	713.6	(5523.0)
52°:	633.3	547.7	519.0	505.7	498.4	493.1	486.5	(3683.7)
R 60°:	589.8	520.1	497.6	486.7	479.7	474.2	466.5	(3514.6)
E 75°:	537.5	501.2	477.0	462.8	454.7	448.2	438.2	(3339.6)
A 90°:	537.5	494.6	470.0	456.6	442.0	430.7	417.3	(3268.7)
C 110°:	570.1	501.6	471.4	449.6	432.6	419.5	402.3	(3247.1)
H 120°:	608.9	519.8	482.9	457.2	436.1	417.9	390.5	(3313.3)
135°:	726.1	581.8	514.5	481.8	457.2	435.4	396.5	(3593.3)
150°:	882.9	694.2	586.0	521.1	486.8	461.8	419.2	(4052.0)
RUN VMS:	1019.5	801.6	676.6	585.6	527.5	482.5	443.5	(4548.8)
GYBE ANGLES:	139.6°	143.0°	149.7°	165.1°	171.3°	174.8°	175.4°	(1118.7)

NOTE: To convert any time allowance above to speed in knots: Kt = 3600/TA

--- WIND-AVERAGED TIME ALLOWANCES FOR SELECTED COURSES ---

Windward VMS	119.2	919.7	821.1	759.5	742.2	727.6	714.5	(3811.1)
Leeward VMS	1057.2	822.5	690.7	602.4	542.9	501.3	446.7	(4680.1)
Olympic 6-leg	1022.6	808.7	726.4	668.1	633.0	610.4	587.3	(5071.3)
Circular Run	833.2	679.7	599.0	553.0	524.8	506.2	481.8	(4177.7)
Non-Spinnaker	907.6	731.3	631.5	580.9	546.5	524.2	496.7	(4423.6)
Ocean for PCS	946.9	757.3	661.5	569.6	521.9	488.0	449.6	(4394.4)

SAIL AREA: MAIN + FORETRIANGLE + MIZZEN (SA) 78.43
MAIN: 48.58 SPIN: 99.09 GENOA: 46.35 MIZEN: 0.00
--- FORETRIANGLE --- MAIN --- MAST-BTMS ---
IG 14.381 SPL 4.128 HB 0.210 TL 4.130
HM 0.124 J 4.108 MGT 1.09 MDT1 0.113
GO 0.153 LFG 6.09 MGV 1.96 MDL1 0.172
LSP 14.433 FSP 0.068 MGM 3.41 MBT2 0.058
IH 14.483 LP 6.16 MGL 4.51 MDL2 0.080
HB1 1.106 SFJ 0.070 MSW 26.8 BMT3 1.288
MXSL 14.26 MYSW 7.39 P 15.230 BL1 1.700
SL 14.20 SMW 7.39 E 5.595 BL2 2.970
SPS 3.690 BAL 0.150 BAS 1.820 BL3 3.890
LPTS 0.00 BO 0.265 BLP 3.10 BL4 1.370
CPV 2.030 MMT 0.00 MCG 0.000 BL5 0.000

--- MIZZEN ---
BY 0.000 PY 0.000 BY1 0.000 BY2 0.000 MDT1Y 0.000
EB 0.000 EY 0.000 BY3 0.000 BY4 0.000 MDT2Y 0.000
YSD 0.000 BABY 0.000 BY5 0.000 MDT3Y 0.000
YSF 0.000 SALLY 0.000 BY6 0.000 MDT4Y 0.000
YSMG 0.000 BOY 0.000 BY7 0.000 MDT5Y 0.000
MRTY 0.000 WRV 0.000 MDT6Y 0.000
--- ITC OF RATED COURSES --- AVERAGE: 993.1

INS PATING CERTIFICATE NO. 711500
 Based on: FULL MEASUREMENT (Metric)
 NOT VALID AFTER 30/06/97

INS AMENDED TO JANUARY 1996
 Offshore Racing Council
 19 St James's Place, London
 Copyright 1996
 676.3

YACHT DESCRIPTION
 Name: NALD
 Sail No: 5466
 Class: FARR 40
 LOA: 11.895m Beam(MB): 4.003m
 Designer: FARR
 Builder: NAUTEC SYSTEMS
 Rig: FRACTIONAL SLOOP 150% Jib
 Keel/CB: FIXED KEEL
 Proprietary: EXPOSED FEATHERING
 Padlock: YES
 Hull/Gunst: SPIN: SYNTHETIC
 Mast/Gunst: STANDBO
 Foresails: ADJUST FND
 In-Tree: NONE
 Spradals: 2 Sets
 Runners: 1 Set
 Dates: AGE: 12/1984
 Comments: Rig data from for cert.

RATINGS OFFICE: 10/HR/96
 Issued: 30/SEP/95
 Measured: 30/SEP/95
 Revalidation Authority: AYC
 Measurer: RICHARD FISHER
 * I CERTIFY THAT I UNDERSTAND MY RESPONSIBILITIES UNDER THE INS. *

LIMITS AND REGULATIONS
 Limit of Positive Stability: MEETS REG
 Minimum Displacement: 2977kg MEETS REG
 Maximum Crew Height: 170.4
 Stability Index: 110.4
 Measurement Inventory: 18/NOV/95
 Accommodation Length: 11.895m
 Accred Certificate: CRUISE/RACER
 Plan Approval: NONE FILED

NOTE TO OWNER: The range available to revise crew weight is 425-785 kg.
 TIME ALLOWANCES IN SEC/MI BY TRUE WIND VELOCITY & ANGLE
 Wind Velocity: 5kt 8kt 10kt 12kt 14kt 16kt 20kt

BEAT ANGLES:	45.6°	43.7°	42.3°	41.3°	40.9°	40.9°	41.3°	(296.0)
BEAT WIND:	993.1	841.2	778.1	746.2	729.8	721.0	713.6	(3583.0)
52°:	633.3	547.7	519.0	505.7	498.6	493.1	486.5	(3583.7)
60°:	589.3	520.1	497.6	486.7	479.7	474.2	466.5	(3514.5)
E 75°:	537.5	501.2	477.0	462.8	454.7	448.2	438.2	(3359.6)
A 90°:	537.5	496.8	470.0	456.6	442.0	430.7	417.3	(3268.7)
C 110°:	570.4	501.5	471.4	449.6	432.6	419.5	402.3	(3247.1)
H 120°:	608.9	519.8	482.9	457.2	436.1	417.9	399.5	(3393.3)
135°:	725.1	581.8	514.5	481.8	457.2	435.4	394.5	(3393.3)
150°:	882.9	694.2	586.0	521.1	486.8	461.8	419.2	(4092.0)
RUN WIND:	1019.5	801.6	676.6	585.6	527.5	492.5	445.5	(4545.8)
GRDE ANGLES:	139.4°	143.0°	149.7°	165.1°	171.3°	174.8°	175.4°	(1118.7)

NOTE: To convert any time allowance above to speed in knots: Kt = 3600/TA
 WIND-AVERAGED TIME ALLOWANCES FOR SELECTED COURSES
 Upward WIND: 1136.2 919.7 831.3 759.5 742.2 727.6 714.5 (5341.1)
 Downward WIND: 1052.2 828.5 690.7 602.4 542.9 501.3 446.7 (4490.1)
 Diagonal 6-Teg: 1022.6 826.7 726.4 668.1 633.0 610.4 582.1 (5071.3)
 Circular Rdm: 834.2 679.7 597.0 553.0 524.8 506.2 481.8 (4177.7)
 Main Spinnaker: 907.6 731.1 636.4 580.9 546.5 524.2 496.7 (4423.6)
 Down for PCS: 950.8 757.8 641.5 569.6 521.9 482.0 440.7 (4324.2)

INS AMENDED TO JANUARY 1996
 7115 PAT 30/NOV/95 14:01:24
 Cent No 711500
 Off Meas'd: 10/JAN/90 NAIRD OFF 24/OCT/95 17:08:08

ECM	0.000	CEBC	0.000	CSMC	0.000	CEIC	0.000
WGBA	0.0	CBDA	0.000	KCDA	0.000	ECE	0.000
WGBB	0.0	CSDB	0.000	ENPLATE ADJ (KEVA)	0.000		
PRD	0.520	PHV	0.133	PHD	0.063	PHL	0.125
ST1	0.024	ST2	0.115	ST3	0.115	ST4	0.061
PSA	19.300	PSD	0.025	PIPA	0.0052		

FIM	1.198	FFPS	1.102	FGD	0.554	SG	1.027
FAM <td>1.088</td> <td>AFPS</td> <td>0.899</td> <td>LBG</td> <td>2.970</td> <td>XD</td> <td>11.820</td>	1.088	AFPS	0.899	LBG	2.970	XD	11.820
W1	20.900	PD1	40.000	PLM	1625.000	PL	1618.769
W2	41.700	PD2	85.000	GSA	0.178	PSA	46.2
W3	62.600	PD3	133.000	RM	142.9	RMC	142.9
W4	83.500	PD4	187.000	SMB	7.038		
RM2	150.4	RM20	136.8	RM40	114.9	RM60	77.6
RM90	29.4			CREW ARM (CRA)	1.616		

CALCULATED LIMIT OF POSITIVE STABILITY: 113.3 DEGREES
 RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE 2.051
 HYDROSTATICS
 MEASUREMENT TRIM—SAILING TRIM
 KEEL DRAFT (DHKO) 2.247 (DHKA) 2.294
 2ND MOMENT LENGTH (LSMO) 9.405 (LSM1) 9.606
 DISPLACEMENT (WEIGHT) (DSPM) 6020 (DSPS) 6902
 WETTED SURFACE (USM) 25.72 (USS) 27.23
 VCG FROM GUNTS DATUM (FOR CLUB RM) (VCSO) -0.081
 VCG FROM MEASUREMENT TRIM WATERLINE (VCGM) (VCGH) 0.024
 INTEGRATED BEAM ATTENUATED WITH DEPTH (B) (AMST) 3.083
 MAXIMUM SECTION AREA (AMST) 1.459
 BEAM/DEPTH RATIO (BTR) 4.570
 EFFECTIVE DRAFT (EDR) 1.990
 2° HEEL (LSM2) 9.608 25° HEEL (LSM3) 9.553
 SUNK (LSM4) 11.081 AVG LENGTH (L) 9.676
 TRIM: 3mm/5.450m-kg SINK: 1mm/19.332kg

SAIL AREA: MAIN + FORETRIANGLE + MIZZEN (SA)	78.43		
MAIN: 48.48	SPIN: 97.09	GENOA: 46.55	MIZZEN: 0.00
FORETRIANGLE: 16.198	RAIN: 0.210	MAST-BRHS: 4.130	
LG 14.381	SP1 4.108	HB 1.02	ND11 0.113
HW 0.124	J 4.108	MGT 1.96	ND11 0.172
HW 0.153	LPB 6.09	MGM 3.47	MD12 0.058
ISP 14.433	FSP 0.068	MGL 4.51	MD12 0.080
IM 14.483	LP 6.16	MGL 26.8	BATX 1.988
MB1 1.106	SF3 0.070	MSW 15.230	BL1 1.700
MXSL 14.26	MXSMU 7.39	P 5.595	BL2 2.970
SL 14.20	SNM 7.39	E 1.820	BL3 3.890
SPS 3.600	RML 0.150	BL4 1.370	RLS 0.000
LP13 0.000	BD 0.265	BLP 3.10	
CPV 2.030	MWT 0.000	MCG 0.000	

FX	0.000	FY	0.000	BY1	0.000	BDTY	0.000
EB	0.000	BY	0.000	BY2	0.000	HOLTY	0.000
YSD	0.000	BDY	0.000	BY3	0.000	MDTY	0.000
YGF	0.000	DMT	0.000	BY4	0.000	MD2TY	0.000
YSMG	1.000	BDY	0.000	BY5	0.000	TY	0.000
MDTY	0.000	MDY	0.000	MDYU	0.000	MDYV	0.000

IIC WIND-VELOCITY: 693.1

INS RATING CERTIFICATE No. 711500
Based on: FULL MEASUREMENT (Metric)
NOT VALID AFTER 30/06/97

INS AMENDED TO JANUARY 1996
Offshore Racing Council
19 St James's Place, London
Copyright 1996

INS AMENDED TO JANUARY 1996 VPP: 10/JUL/96 11:57:10
Cert. No 711500 7115.DAT 30/NOV/95 14:01:24
OFF. Meas'd: 10/JAN/90 NAVAL.OFF 24/OCT/95 17:08:08

YACHT DESCRIPTION
Name: NAVAL
Sail No: 5466
Class: FARR 40
LOA: 11.895m Beam(MB) 4.003m
Designer: FARR
Builder: NAUTECH SYSTEMS
Rig: FRACTIONAL SLOOP 150Z Jib
Keel/CB: FIXED KEEL
Proprietor: EXPOSED FEATHERING
Fuddeck: YES
Hull/CB: CORED
Forestay: ADJUST FWD
Spreaders: 2 Sets
Runners: 1 Set
Dates: AGE: 12/1/1984

RATING OFFICE:
Issued: 10/JUL/96
Measured: 30/SEP/95
Revalidation Authority: AYF
Measurer: RICHARD FISHER
*I CERTIFY THAT I UNDERSTAND MY RESPONSIBILITIES UNDER THE INS.
OWNER: BRUCE GUY
19 PITTED CREEK
LANCASTER TAS. 7250

LIMITS AND REGULATIONS

Limit of Positive Stability: MEETS REQ
Minimum Displacement: 2979kg MEETS REQ
Maximum Crew Weight: 740 kg.
Stability Index: 110.4
Accommodation Length: 11.895m
Accom Certification: CRUISER/RACER
Plan Approval: NONE FILED

NOTE TO OWNER: The range available to revise crew weight is 425-785 kg.

TIME ALLOWANCES IN SEC/MT BY TRUE WIND VELOCITY & ANGLE

Wind Velocity:	6kt	8kt	10kt	12kt	14kt	16kt	20kt
----------------	-----	-----	------	------	------	------	------

BEAT ANGLE:	45.6°	43.7°	42.3°	41.3°	40.9°	40.9°	41.3°	CHECKSUM (296.0)
BEAT WIND:	993.1	841.2	778.1	746.2	729.8	721.0	713.6	(5523.0)
52°:	633.3	547.7	519.0	505.7	498.4	493.1	486.5	(3663.7)
R 60°:	589.8	520.1	497.6	486.7	479.7	474.2	466.5	(3514.6)
E 75°:	557.5	501.2	477.0	462.8	454.7	448.2	438.2	(3339.6)
A 90°:	557.5	494.6	470.0	456.6	442.0	430.7	417.3	(3206.7)
C 110°:	570.1	501.6	471.4	449.9	432.6	419.5	402.3	(33247.1)
H 120°:	608.9	519.8	482.9	457.2	436.1	417.9	390.5	(3313.3)
135°:	726.1	581.8	514.5	481.8	457.2	435.4	396.5	(3592.3)
150°:	882.9	694.2	586.0	521.1	486.8	461.8	419.2	(4052.0)
RUN WIND:	1019.5	801.6	676.6	585.6	527.5	492.5	445.5	(4548.8)
GYBE ANGLE:	139.4°	143.0°	149.7°	165.1°	171.3°	174.8°	175.6°	(1118.7)

NOTE: To convert any time allowance above to speed in knots: Kt = 3600/T/A

WIND-AVERAGED TIME ALLOWANCES FOR SELECTED COURSES

Windward WNS	1116.2	919.7	821.1	769.5	742.2	727.6	714.8	(5811.1)
Leeward WNS	1067.2	828.9	690.7	602.4	542.9	501.3	446.7	(4680.1)
Olympic 6-leg	1022.6	828.7	726.4	668.1	633.0	610.4	582.3	(5071.5)
Circular Rhin	833.2	679.7	579.0	524.8	506.2	481.8	441.7	(4172.7)
Non-Spinnaker	907.6	731.3	636.4	580.9	546.5	524.2	496.7	(4423.6)
Ocean for PTS	964.9	757.9	641.5	569.6	521.9	498.0	440.6	(4584.4)

CENTREBOARD AND DRAFT

CBM	0.000	CBRC	0.000	CBCC	0.000	CBTC	0.000
KCDA	0.0	CBDA	0.000	KCDA	0.000	ECE	0.000
UCBB	0.0	CBDB	0.000	ENDPLATE ADJ (KCBM)	0.000		

PROPELLER AND INSTALLATION

PRO	0.520	PHW	0.133	PHD	0.063	PHL	0.125	ESL	0.910
ST1	0.024	ST2	0.115	ST3	0.115	ST4	0.061	ST5	0.300
PSA	19.300	PSD	0.025	PIPA	0.0052				

FLUTATION DATA

FFM	1.198	FFPS	1.102	F90	0.554	SG	1.027
FAR	1.088	AFPS	0.899	LB6	9.970	HP	11.820
W1	20.900	P01	40.000	PLH	1625.000	PL	1618.769
W2	41.700	P02	85.000	GSA	0.178	RSN	46.2
W3	62.600	P03	133.000	RM	142.9	RMC	142.9
W4	83.500	P04	187.000	SMB	7.038		
RW2	150.4	RW20	136.8	RM40	114.9	RM60	77.6
RM90	29.4			CREW ARM (GRA)	1.616		

CALCULATED LIMIT OF POSITIVE STABILITY: 113.3 DEGREES
RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE 2.051

MEASUREMENT TRIM—SAILING TRIM—

KEEL DRIFT	(DRKO)	2.247	(DRKA)	2.294
2ND MOMENT LENGTH	(LSM2)	9.405	(LSM1)	9.605
DISPLACEMENT (WEIGHT) (DSPW)	6020	(DSPS)	6902	
WEG FROM OFFSETS DATUM (FOR CLUB RM)	(WSS)	25.72	(WSS)	27.25
VCG FROM MEASUREMENT TRIM WATERLINE	(VCGM)	0.064	(VCGS)	0.064
INTEGRATED BEAM ATTENUATED WITH DEPTH (B)	(B)	3.085		
MAXIMUM SECTION AREA	(AMS)	1.459		
BEAM/DEPTH RATIO	(BTR)	4.570		
EFFECTIVE DRAFT	(D)	1.990		
2° HEEL (LSM2)	9.608	25° HEEL (LSM3)	9.553	
SINK (LSM4)	11.081	AVG LENGTH (L)	9.676	
TRIM:	1mm/8.450m—kg	SINK:	1mm/19.532kg	

SAIL AREA: MAIN + FORETRIANGLE + MIZZEN (SA) 78.43
MAIN: 48.68 SPIN: 99.09 GENOA: 46.35 MIZEN: 0.00

FORETRIANGLE	MAIN	MAST	BITNS
JG	14.381	SPL	4.108
MW	0.124	J	4.108
GP	0.153	LP6	6.09
ISO	14.433	FSP	0.068
IN	14.483	LP	6.16
HBI	1.106	FEJ	0.070
MAST	14.26	KXSMH	7.39
SL	14.20	SMW	7.39
SPS	3.660	BAL	0.150
LP15	0.00	BD	0.265
CPW	2.080	MWT	0.00

MIZZEN

LY	0.000	PY	0.000	BY1	0.000	MDTY	0.000
EB	0.000	EY	0.000	BY2	0.000	MDL1Y	0.000
YSD	0.00	BADY	0.000	BY3	0.000	MDTY2	0.000
YSM	0.00	BADY	0.000	BY4	0.000	MDL2Y	0.000
YSMS	0.00	BDY	0.000	BY5	0.000	MDTY	0.000
HBLY	0.000	HBV	0.000	MBUY	0.00	MBVT	0.00

ILC WEIGHTED AVERAGE: 693.1

THE AYF RECOMMENDS
THIS YACHT BE GIVEN A
1.67%
ALLOWANCE



Chester G Bullock & Associates

Consulting Engineers, Architectural Designers and Land Surveyors

Facsimile transmittal

To: AYF
Attention: Tony Mooney
From: Richard Fisher
Project: NAIAD Measurement
Project No.:

Fax: 02 99232883

Date: 6 October 1998

Pages 1

Notes:

TONY

SORRY ABOUT ALL THE FIX/IG AROUND WITH NAIAD (7115). OWNER FAXED ME A COPY OF HIS CERTIFICATE. AND ASKED QUESTION WHY CREW WT WAS 758 NOT 780. THOUGHT AT FIRST YOU HAD CORRECTED UP. I WAS WRONG. LOOKS LIKE FLOTATION DATA HAS LIMITED IT TO THAT. THEN I NOTICED STABILITY INDEX WHICH IS VASTLY DIFFERENT TO PREVIOUS. COULD YOU PLEASE CHECK INPUT DATA FOR ME? I HAVE A SUSPICION THAT I HAVE THE TWO FREEBOARD MEASUREMENTS TRANSPOSED! ANY CHANCE OF RUNNING A TEST CERTIFICATE WITH THEM THE OTHER WAY AROUND? ie IFM=1.037, FAME=1.321. I CAN CONFIRM THIS BY RE-MEASUREMENT THIS SUNDAY AT OPENING DAY!

SORRY ABOUT STUFFING YOU AROUND.

REGARDS

RICHARD FISHER

Document1

LAUNCESTON OFFICE
268 York Street, Launceston
Phone (03) 63317100
Fax (03) 63317188
Email cgb.l@tassie.net.au

POSTAL ADDRESS
PO Box 63
Riverside
Tasmania 7250

DEVONPORT OFFICE
56 Best Street, Devonport
Phone (03) 64235121
Fax (03) 64235122
Email cgb.d@tassie.net.au

Yacht Name

NAIAD

1996

IMS MEASUREMENT DATA SHEET

Certificate No

IKA 7115

01	Yacht Name (24) NAIAD			Sail No(12) S466			Owners Name (36) BRUCE GUY					
02	Designer (18) FARR			Builder (18) NAUTIC SYSTEMS			Address (36) 19 PITTS CREEK					
03	Measurer (18) RICHARD FISHER 7006			Class (18) FARR 40			Suburb (36) LANCASTON					
04	CertNo(6)	Reval Auth(12)	Meas Date	Float Date	H	P	State	Postcode				
		AYF	D H Y 13 9 98	D M Y 18 7 98			TAS	7250				
05	Comment (36) BOAT RE-INCLINED AFTER REMOVING INTERNAL BALLAST						Comment (36)					
06	MAST WEIGHED, CREW Wt ADJUSTED, HEADSAIL RE-MEASURE, NEW SPINAKER											
07	File.off(12)	!ECH	!KCA	!KCSA	!CBDA	!VCBB	!CBDB	!CBRC	!CBRC	!CBTC	!AGE DATE	
08	!PT!PRD	!ESL	!PSA	!PHD	!PHL	!PSO	!ST1	!ST2/APH	!ST3/APT	!ST4/APB	!ST5	!PBW
09	!FFH	!TAM	!FGO	!LBG	!SG	!PLM	!WMAH					
	1.321	1.037		1.024	1.625							
10	!W1	!WD	!PD1	!W2	!ZERO	!PD2	!W3	!GSA	!PD3	!W4	!RSA	!PD4
	16.8	12.10	44.0	33.6	0.0	88.0	50.3	0.178	131.0	67.1	146.24	176.0
11	!IG	!SP	!HW	!GO	!SPS	!J	!SPL/TPS	!LPG	!FSP	!SMW	!SL	!HBS
							6.04		7.39	14.30		
12	!BAS	!P	!E	!BAL	!SD	!HB	!BLP	!BL1	!BL2	!BL3	!BL4	!BL5
13	!HDT1	!MDL1	!HDT2	!MDL2	!TL	!HDT1Y	!MDL1Y	!HDT2Y	!MDL2Y	!TLY	!MGU	!MGM
14	!BADY/BADS	!PY/PSF	!EY/EF	!BALY/BALF	!BDY/BDF	!HBY/HBF	!BLPY/BLPF	!BY1/BS1	!BY2/BS2	!BY3/BS3	!BY4/BS4	!BY5/BS5
15	!IY/BADX	!EB	!IS	!YSF/OF	!MGTY/GF	!MGLY/HF	!YSD/S4	!YSNG/SS	!MGUY	!MGMY	!MGT	!MGL
16	!CREW	!SFJ	!CPW	!SPR!JMP!IB	!IF	!FST!REG!CNS!ACC!ABS!RUD!AGE!SPN!RIG!TWS!CM!NOR!NWT	!VCG	!BWT	!LOA			
	780									212	14.675	30

MEASURERS SIGNATURE

RICHARD FISHER 7006

YACHT NAME: MAHAD
 SAIL NUMBER: 5466

Measurement Inventory Date: 18/7/98
 Position Measured: 18/7/98

FOR THE INFORMATION OF OWNER AND CREW:

With certain exceptions, the Rule requires the yacht to be measured with gear and fixtures aboard as when raced, in quantity, weight and location. The validity of the Rating Certificate is dependent on a true and proper completion of this inventory form and continued maintenance of the yacht in accordance with this inventory.
 Rule references: 102.6, 301, 302, 303, 313, 314, 315 and 402.2
 The owner shall complete this inventory together with the Measurer and check and initial each item. If the owner is not present the following must be signed prior to issuing the rating certificate.

I authorize _____ as my representative and understand my responsibilities under the Rule.

Signed: _____ (Owner)

1. Interior Ballast (302.2(b) & 402.2(h))

Description	Weight	Distance from stem	Owner	Initials	Measurer
a. <u>NIL (PREVIOUS BALLAST REMOVED)</u>					
b. _____					
c. _____					
d. _____					
e. _____					
f. _____					

2. Anchor(s) at least one on board and chains (402.2(h))

a. <u>CBR</u>	<u>25</u>	<u>6.1</u>	<u>BOY</u>	<u>✓</u>	<u>✓</u>
b. <u>DAWFOORTH</u>	<u>17</u>	<u>6.1</u>	<u>BOY</u>	<u>✓</u>	<u>✓</u>

3. Batteries (402.2(h))

a. <u>2 x TRUCK</u>	<u>40</u>	<u>8.0</u>	<u>BOY</u>	<u>✓</u>	<u>✓</u>
b. _____					

4. Tools

a. _____	<u>40</u>	<u>8.0</u>	<u>BOY</u>	<u>✓</u>	<u>✓</u>
b. _____					

5. Engine (or job in fixed stowage) (402.2(i))

Make	Model	Capacity	Distance from stem	Condition at time of measurement	Yes/No
<u>MANUJ</u>	<u>4.1104</u>	<u>35HP</u>	<u>8.0</u>	<u>DRY</u>	<u>✓</u>

6. Tanks (including portable tanks, fuel, water, holding tanks, etc.) (402.2(i))

Type	Capacity	Distance from stem	Condition at time of measurement	Yes/No
a. <u>FUEL</u>	<u>515</u>	<u>7.1</u>	<u>DRY</u>	<u>✓</u>
b. <u>WATER</u>	<u>150.0</u>	<u>6.4</u>	<u>DRY</u>	<u>✓</u>
c. <u>WATER</u>	<u>150.0</u>	<u>6.4</u>	<u>DRY</u>	<u>✓</u>
d. _____				
e. _____				
f. _____				

BOY
✓

7. List of items normally found but placed on the cabin sole about the mast for measurement (402.2(a) & 402.2(d))

a. _____					
b. _____					
c. _____					
d. _____					

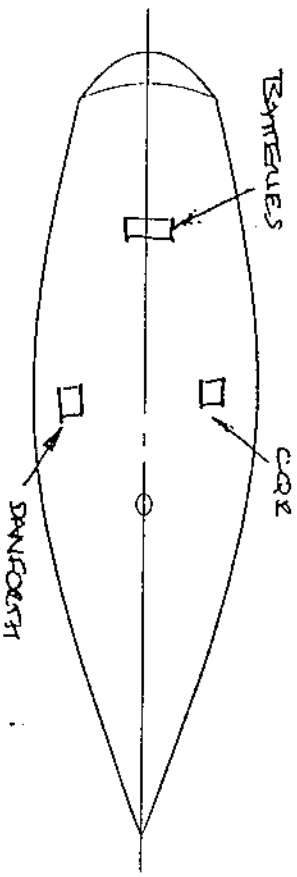
8. One set only of portable deck equipment on the cabin sole about the mast for measurement (402.2(a) & 402.2(d))

Description	Weight	Distance from stem	Owner	Initials	Measurer
<u>TRIAL WEIGHT</u>			<u>BOY</u>	<u>✓</u>	<u>✓</u>

9. Other major items and items unusual in weight, quantity or location (402.2(i))

a. _____					
b. _____					
c. _____					
d. _____					
e. _____					
f. _____					
g. _____					
h. _____					
i. _____					

10. Diagram major fixed items; ballast, tanks, etc. using line codes (h, fa, etc.)



11. I, the Owner / Representative, certify that this is a true record of stowage at the time of measurement (402.2(i))

Block letters: BRUCE R. GUY
 Signature: BOY
 Date: 18/7/98

Measurer's Name and Signature: 7006

APPENDIX 2 -- MEASUREMENT CONDITION CHECK LIST & INVENTORY

This check list is intended to help the owner prepare the yacht for measurement. Each item checked will be initialed by the owner and Measurer. The completed document will be returned to the Rating Office for retention. The yacht shall be completed and equipped for sailing. There shall be no sails aboard at the time of the check below deck.

		-Initials	
		Owner	Measurer
1.	All sails removed from the yacht.	BDY	B
2.	Ballast sealed to hull structure and anchors, chain and batteries fixed in clearly marked stowage.	BDY	B
3.	Heads, bowls, sinks, etc. are dry.	BDY	B
4.	Bilges and other possible areas where water may collect are dry	BDY	B
5.	Tankage and voids condition checked.	BDY	B
6.	Navigational and cooking equipment stowed as specified.	BDY	B
7.	No clothing, bedding, food or stores on board	BDY	B
8.	Mattresses, cushions and pillows stowed in normal position (dry)	BDY	B
9.	No portable equipment in front of the mast	BDY	B
10.	Safety equipment stowed in normal position but not forward of the mast	BDY	B
11.	All stowages opened and checked	BDY	B
12.	No liferaft or dinghy on board	BDY	B
13.	Centreboards raised unless to be locked down whilst racing		N/A.
14.	Sheets, guys, etc. on cabin sole abaft the mast in accordance with 402.2(a)2.	BDY	B
15.	Measurement bands PAINTED on spars	BDY	B
16.	All standing rigging tight	BDY	B
17.	Running rigging tight. Halyards led to the foot of the mast and tails to their normal operating position	BDY	B
18.	Running backstays aft and tight, running forestays to the mast	BDY	B
19.	Masts raked aft to the limit of adjustment, not forward of vertical	BDY	B
20.	Boom at low point, horizontal, centred and secured against movement	BDY	B
21.	Spinnaker pole(s) on deck in normal stowage. (No. .../....) (If a yacht's poles are not being used for inclination, they must be removed when inclining)	BDY	B

Signed BDY (Owner) [Signature] (Measurer)

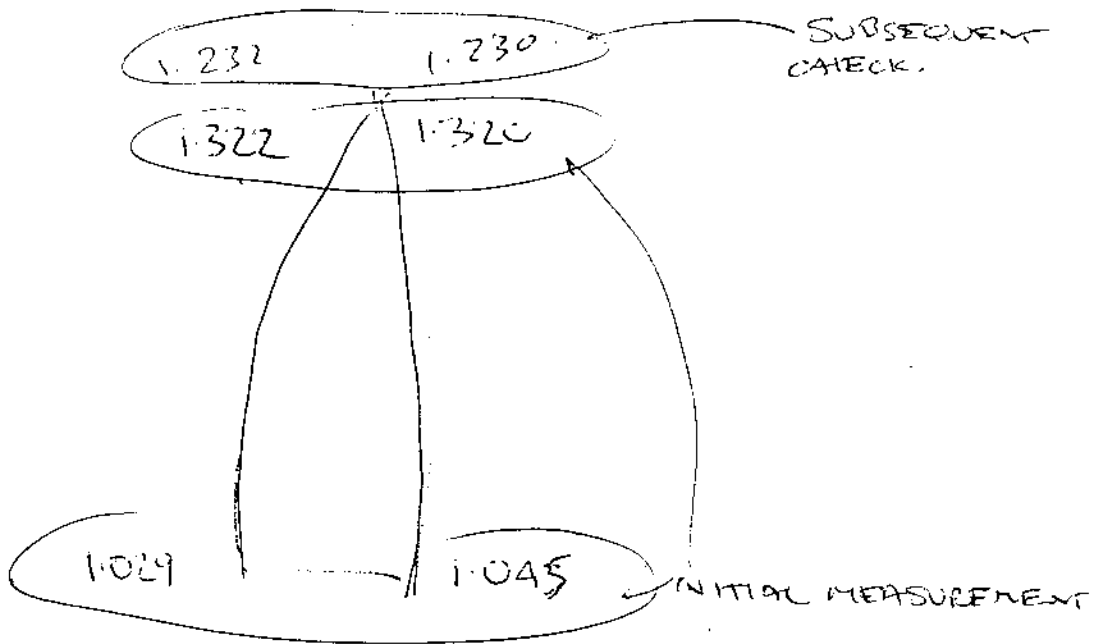
Dated: 18/7/98

11. 1. 1998

10-7-98

P1	Q1	Q2	Q3
4x37lbs	-	220	45
3	1	175	13
2	2	132	44
1	3	93	14
-	4	44	

WB 1210



Fixed lead weights removed

1995
IMS MEASUREMENT DATA SHEET

Certificate No
KA 711500

Yacht Name NAIAD		Sail No(12) 5466	Owners Name (36) BRUCE GUY		
Yacht Name (24) NAIAD		Builder (18) NAUTECH SYSTEMS	Address (36) 19 PITTEN CREEF		
Designer (18) FARR		Class (18) FARR 40	Suburb (36) LAUNCESTON		
Measurer (18) RICHARD FISHER 7006					
CertNo(6) 711500	Reval Auth(12)	Meas Date D M Y 11 3 97	Float Date D M Y	M PI State TAS	Postcode 7250
Comment (36) NEW MAINSAIL		Comment (36)			
Comment (36)		Comment (36)			

07	File.off(12)	!ECH	!KCOA	!WCBA	!CBOA	!WCBB	!CBOB	!CBRC	!CBMC	!CBTC	!AGE DATE	
08	!PT!PRD	!ESL	!PSA	!PHD	!PHL	!PSD	!ST1	!ST2/APH	!ST3/APT	!ST4/APB	!ST5	!PBW
09	!FFM	!FAH	!FGO	!LBG	!SG	!PLH	!WHAH					
						30.9						
10	!W1	!WD	!PD1	!W2	!ZERO	!PD2	!W3	!GSA	!PD3	!W4	!RSA	!PD4
				0.0								
11	!IG	!ISP	!HW	!GO	!SPS	!J	!SPL/TPS	!LPG	!FSP	!SHW	!SL	!HBS
12	!BAS	!P	!E	!BAL	!BO	!HB	!BLP	!BL1	!BL2	!BL3	!BL4	!BL5
						0.170	2.65	1.60	2.56	3.39	4.15	4.82
13	!HDT1	!MDL1	!HDT2	!HDL2	!TL	!HDT1Y	!MDL1Y	!HDT2Y	!MDL2Y	!TLY	!HGU	!HGH
											2.06	3.43
14	!BADY/BADS	!PY/PSF	!EY/EF	!BALY/BALF	!BDY/BDF	!HBY/HBF	!BLPY/BLPF	!BY1/BS1	!BY2/BS2	!BY3/BS3	!BY4/BS4	!BY5/BS5
15	!IY/BADX	!EB	!IS	!YSF/OF	!MGTY/GF	!NGLY/HF	!YSD/S4	!YSHG/S5	!HGUY	!HGHY	!HGT	!HGL
											1.20	4.52
16	!CREW	!SFJ	!CPU	!SPR!JHP!IB	!IF	!FST!REG!CNS!ACC!ABS!RUD!AGE!SPI!RIG!WSC!						!LOA

MEASURERS SIGNATURE

 7006.

NAIAD (NEW MANUSAL)

11-3-97.

HIB 0.170
BLP 2.050
MGT 1.20
MGV ~~2.09~~ 2.06
MGM 3.43
MGL 4.52
MSWEIGHT. 65 lbs 30.9 kg

BL1 1.60
BL2 2.56
BL3 3.390
BL4 4.150
BL5 4.820





To AYF

FAX NO. 02 9232883 REF NO. _____

ATTENTION TONY MOONEY SENT BY RICHARD FISHER

TRANSMITTED 1 SHEETS INCLUDING THIS PAGE DATE 26-10-95

PROJECT NAIAD MEASUREMENT

REMARKS

TONY

I HAVE MANAGED TO GET TO NAIAD THIS MORNING (6:00AM!) & HAVE TAKEN FOLLOWING (HOPEFULLY FINAL) MEASUREMENTS.

- TL = 4.130
- MDT1 = 0.113
- MDL1 = 0.172
- MDT2 = 0.058
- MDL2 = 0.080
- W MAIN = 26.8 kg's.

BRUCE GUY NEEDS HIS GERT BY NEXT WEDNESDAY. WHAT ARE HIS CHANCES?

(WEDNESDAY IS WHEN HE LEAVES FOR MELBOURNE FOR MELB - BORNIE STARTS ON FRIDAY)

MANY THANKS
Richard Fisher

1994
IMS MEASUREMENT DATA SHEET

Certificate No
KA

Yacht Name NAIAD		Sail No(12) 5466		Owners Name (36) BRUCE GUY.								
Designer (18) FARR		Builder (18) NAUTECH SYSTEMS		Address (36) 19 PITTEN CREEF,								
Measurer (18) RICHARD FISHEL 7006		Class (18) FARR 40		Suburb (36) LAUNCESTON								
CertNo(6)	Reval Auth(12) AYF	Meas Date 30 9 95	Float Date 12 3 87	State TAS	Postcode 7250							
Comment (36) NEW HULL MEASUREMENT 2 INCLINATIONS FROM IOR.		Comment (36)										
Comment (36) RIG MEASUREMENTS FROM IOR CERT - EXCEPT FOR NEW MAIN		Comment (36)										
File.Off(12) NAIAD	TECH	KCDA	WCBA	CBDA	WCBB	CBDB	CBRC	CBNC	CBTC	AGE DATE 1984		
PT/PRD 2.0520	ESL 0.910	PSA 19.3°	PHD 0.063	PHL 0.125	PSD 0.025	ST1 0.024	ST2/APH 0.115	ST3/APT 0.115	ST4/APB 0.061	ST5 0.300	PBW 0.133	
FFH 1.160	FAM 1.132	FGO 0.554	LBG 9.970	SG 1.027	PLM -	WMAIN						
W1 -	WD -	PD1 -	W2 -	ZERO 0.0	PD2 -	W3 -	WGA -	PD3 -	W4 -	RSA -	PD4 -	
IG 14.381	ISP 14.433	IHW 0.124	IGO 0.153	SPS 3660	J 4.108	SPL 4.108	LPG 6090	FSP 0.068	SHW 7.390	SL 4.20	HBS -	
BAS 1.820	P 15.230	E 5.595	BAL 0.150	BD 0.265	HB 0.21	BLP 3.10	BL1 1.700	BL2 2.970	BL3 3.89	BL4 1.37	BL5 -	
MDT1	MDL1	MDT2	MDL2	TL	MDT1Y	MDL1Y	MDT2Y	MDL2Y	TLY	MGU 1.96	MGM 3.41	
BADY/BADS	PY/PSF	EY/EF	BALY/BALF	BODY/BDF	HBV/HBF	BLPY/BLPF	BY1/BS1	BY2/BS2	BY3/BS3	BY4/BS4	BY5/BS5	
LY/BADX	EB	IS	YSF/OF	HGTY/GF	HGLY/HF	YSD/S4	YSMG/S5	S6	HGT 1.09	HGL 4.51		
CREW 740kg	SFJ 0.070	CP 2080	SPRD 2	JMP 2	IB 1	IF 2	FST 1	REGS 2	CNST 1	ACCM 1	ABS 0	RUD 0

MEASURERS SIGNATURE
Richard Fishel 7006

366

FOR AMENDED TO JANUARY 1995

 * SHUZZLEBUBBLE VI
 * 5466
 * RATING 30.06 FEET
 * DESIGNER : FARR
 * BUILDER : HAUTECH SYSTM
 * RIG : FRACTIONAL
 * KEEL : FIXED
 * PROPPELLER: FEATHERING
 * MY RESPONSIBILITIES AS
 COVERED IN THE IOR
 INSTALLED: EXP SHAFT
 SIGNED:

REVAL AUTHORITY:
 NOT VALID AFTER: 30/06/96
 ISSUED: 19/10/95
 BY: --

L. BOYLE
 14 BRUCE STREET
 KOGARAH BAY 2217

AUSTRALIAN YACHTING FED.
 LOCKED BAG 806,
 WILSON'S POINT,
 N.S.W. 2061

MEASUREMENT INVENTORY TO FORM PAGE 3
 FLOTATION DATE: 12/3/87
 SPECIFIC GRAVITY (SG): 1.027

---COMMENTS---
 HULL/INCLINED BY TWO MEASURERS
 DETAILS TAKEN FROM CERTIFICATE NZ 70380
 FOR AUSTRALIAN YCF

---HULL & APPERDAGES---		---DATES---	
LOA	11.992 BHAX	MOD HULL	O/
FF	1.151	SERIES	O/
FFG	0.554 B	RIG	0/1984
AGO	1.468 BUL	AGE	12/1984
LBG	9.970 BF		
GSDA	0.468 BFI		
GLAI	0.000 BAI		
GDGF	0.416 BA		
FD	1.519 GD		
CPD	1.616 Y		
MO	1.490 GDFI		
OND	1.135 DM		
WLH1	1.010 GNT		
TUL1	3.234 TUL2		
EU	265.000 EWO		
PSD	0.000 ST1		
CD	0.000 WCBA		
DMC	0.000 CDBB		

---HEADSAIL---		---DATES---	
J	14.433 SPL	MOD HULL	O/
J	4.108 Pmax	SERIES	O/
LPB	6.070 DMV	RIG	0/1984
LPLS	0.000 HES	AGE	12/1984
FSP	0.068 SPS		
FJ	0.164 SFJ		
FBI	1.114 ISP		
JG	14.281 TC1		

MEASURED ON: 11/12/87 BY: BPTHOMAS/MLREAV/VDEN

THESE HAS DOUBLE TRENDETION

CERTIFICATE NO. KA26858 SHUZZLEBUBBLE VI
 5466 (PAGE 2)

---FREGBOARD---		---RM---		---PROP---	
FJS	1.776 DNS	1.638 ARM	144.63 PF	0.950	
FFS	1.760 PDS	0.180 BRM	147.80 PS	0.515	
FFJS	1.750 ESOS	-0.089 CRM	148.88 DF	0.029	
FFDS	1.729 MDIAS	0.000 DRM	146.73 EMF	0.002	
FBI	1.728 BBS	0.674 RIK	147.01 PROD	0.500	
FBS	1.739 BSC	0.000 RNC	147.01 PDC	0.799	
FMS	1.729 CFFI	0.000 TR	29.892 RD	2.256	
FAS	1.747 FFM	1.160 SV	-1.163		
FAS	1.748 FAN	1.132 W	183.383		

---L/FC---		---D---		---DC---	
FOC	0.116 AGSL	2.472 FOJ	0.403 DB	2.074	
ADC	-0.172 APSL	3.177 FDIC	0.393 DD	0.183	
AOCC	-0.172 BAPSL	3.303 ICMDI	0.000 DSPL	5461.7	
AOCF	0.137 APSLC	3.303 ICMDI	0.503		
AOCG	-0.481 ACG1	-0.434 ICMDI	0.000		
YCOR	0.000 ACG2	-0.481 MDI	0.377		
FB	0.937 HGLA	1.874 ICMDI	0.000 ICMD	0.000	
FH	1.740 HGLI	2.105 OMDI	0.022 IMD	0.000	
CCAI	0.000 ROR	1.025 MDIA	0.287 IOMD	0.000	

---HEAD/MAIN---		---PENALTY---		---MIZZEN & PEN---		---SCH & PEN---	
LP	6.16 SL	0.000	0.000	RSAY	0.00	RSAB	0.00
RSAF	43.71 SPS	0.000	0.000	RSAC	0.00	RSAG	0.00
SAM	34.34 HBS	0.000	0.000	YSAC	0.00		
MSAM	18.90 HB	0.000	0.000	RSAC	0.00	HB	0.000
RSAM	33.15 BD	0.000	0.000	HB	0.000	BD	0.000
RGF	0.9652 BAS	0.000	0.000	HB	0.000	BAS	0.000
SATC	-0.37 I/P	0.000	0.000	BDY	0.000	I/PSF	0.000
RSAT	76.49 BCP	0.000	0.000	BADY	0.000	BLPS	0.000
RSAL	43.10 BTRS	0.000	0.000	I/PY	0.000	BTNSF	0.000
SPIN	59.15 NG	0.000	0.000	BLPY	0.000		
SHR	15.7119			BTHY	0.000		
S	8.7459 SCF	1.0000					

---LIMITS---		---RATING VALUES---		---L/A---	
BL1	1.175 BL3	1.902 BLP	3.045		
BL2	1.399 BL4	1.902 HB	0.224		
L	10.0254 SC	8.7459 MAF	1.0000	SCA	9.1957
B	3.7060 BC	0.0618 DLF	1.0087	DLFA	1.0282
D	1.1906 FC	-0.0507 LRP	1.0000	CBFA	1.0000
CGF	0.9480 CBF	1.0000 HR	9.7770	CGFA	0.9680
EPF	0.9481 SBF	1.0000 R	9.1622	MR2A	10.2101
TPF	1.0000 CSF	1.0000		RA	30.0596
SAIL LIMITS R=50.1 FT. JIBS OVER 1.14: 3 SPINNERS: 4					
MAXIMUM CREW: WEIGHT LIMIT= 762					

14.3



To AYF

FAX NO. 02 9232883 REF NO.

ATTENTION Tony Money SENT BY RICHARD FOSTER

TRANSMITTED 1 SHEETS INCLUDING THIS PAGE DATE

PROJECT NAIAD MEASUREMENT

REMARKS

Tony
WITH REGARD TO THE MEASUREMENT
OF THE FAIRAC "NAIAD" (EX
SUZZLEBUBBLE VI), THE OWNER
COULD ONLY SUPPLY ME WITH
WHAT COULD ONLY BE DESCRIBED
AS A POOR QUALITY COPY OF
ITS OLD IOR CERTIFICATE
(KA26858). IS THERE ANY CHANCE
OF SENDING (FAXING) ME A
BETTER COPY OF IT SO I CAN
TRANSFER DATA TO MY SHEET?
MANY THANKS.

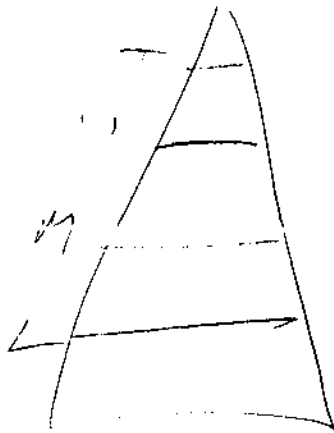
RICHARD -
PS I DONT THINK MY FREEBOARD HULL
MEASUREMENT STATIONS AGREE TO IOR LINES.
IS THIS OK OR DO I NOW NEED TO DO
NEW INCLINATIONS?

7 Denis Drive, Riverside, Launceston, Tasmania 7250
Telephone (003) 273 840 Facsimile (003) 271 783

Beauf Guy.

4/10/95

HB	0.210
BL1	1.700
BL2	2.970
BL3	3.89
BL4	1.37
BL5	—
BLP	3.100
MGT	1.09
MEV	1.96
MGM	3.41
MGL	4.51



YACHT: NAIAAD
 DATE: 30/9/95

MEASUREMENT DIAGRAM FOR FOLDING PROPELLER INSTALLATION

PRD : 0.520 PRD x 3 =
 PBW : 0.133
 PSD : 0.025
 ESL : 0.910

ST1 : 0.024
 ST2 : 0.115
 ST3 : 0.115

ST4 : 0.061
 ST5 : 0.300

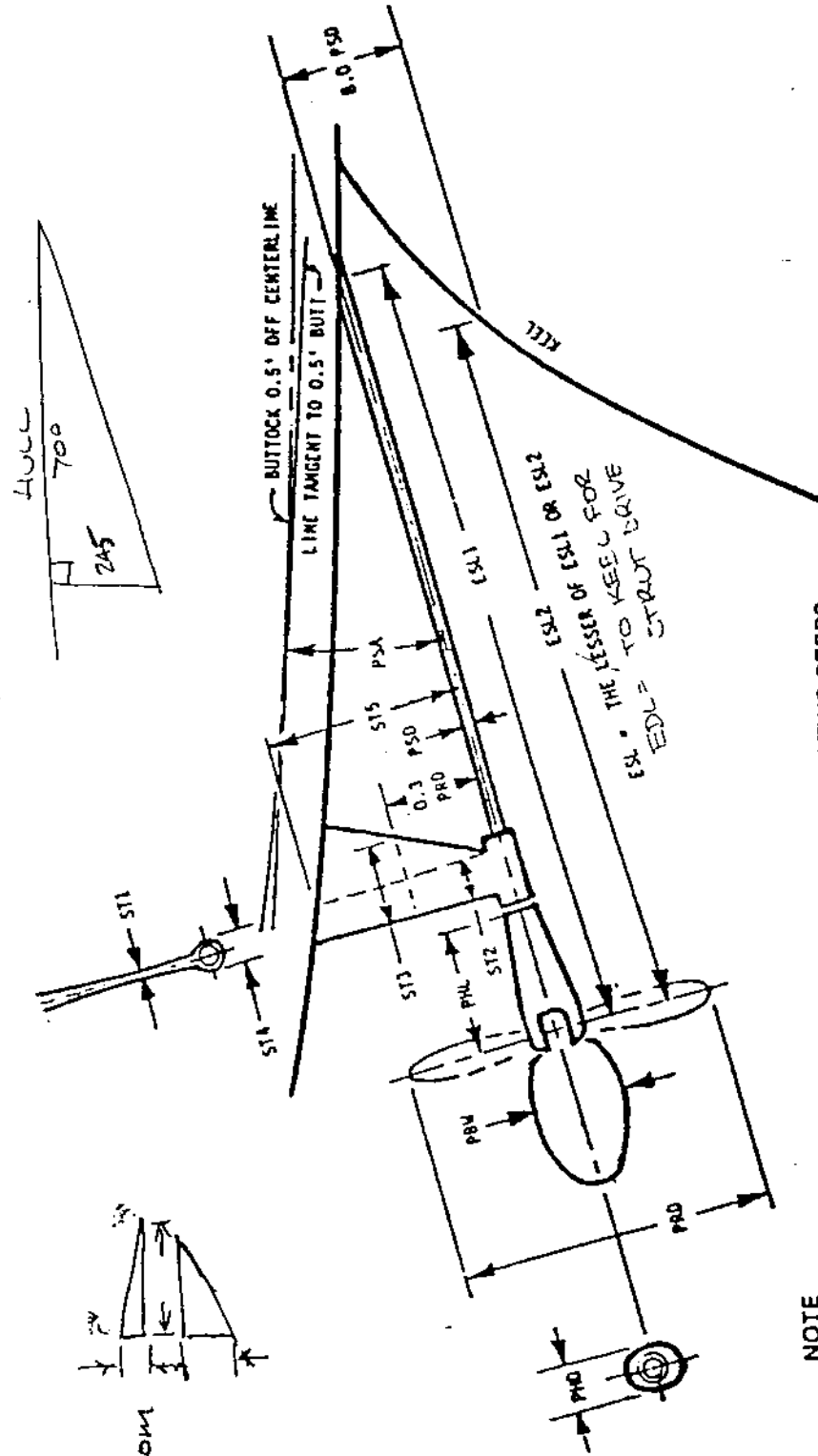
PSA : 19.3°
 PHD : 0.063

PHL : 0.125
 EDL :

OP TYPE = PT ?

SOLID = 1
 BATH = 2
 FOLDING = 3

STRUT DRIVE
 PSA = -1



NOTE
 PSA (PROP. SHAFT ANGLE) MAY BE MEASURED IN TWO STEPS.
 1. ANGLE BETWEEN SHAFT & A LEVEL LINE
 2. ANGLE BETWEEN BUTTOCK TANGENT & A LEVEL LINE
 ADD THESE ANGLES TO GET PSA

YACHT NAME: -

HMI LOG SHEET

CERTIFICATE No: -

MEASUREMENT REF: HFB	MEAS NO 7000	CLASS FAO	DATE 30/9/95	COMPUTER FILE NAIAD.DD
PROP TYPE	PROP INSTALL.	LOA 11.985	S/F J	J
F' BOARDS				

PORT

STARBOARD

STRING LENGTH 0.611				TEMPERATURE 15°C				STRING LENGTH 0.611				TEMPERATURE 15°C			
STN NO	INSTR HEIGHT	DIST FROM STEM	COMMENT	STN NO	INSTR HEIGHT	DIST FROM STEM	COMMENT	STN NO	INSTR HEIGHT	DIST FROM STEM	COMMENT	STN NO	INSTR HEIGHT	DIST FROM STEM	COMMENT
1.	0.227	0.545	FFB # 4	1.	0.467	0.545	FFB # 4								
2.	0.231	0.785	@ Cur Bow (lower)	2.	0.467	1.700									
3.	0.231	2.300		3.	0.470	2.900									
4.	0.222	3.600		4.	0.468	4.210									
5.	0.214 0.246	4.925	4" front keel	5.	0.471	4.925	4" front keel								
6.	0.213	5.300	Mid front edge keel	6.	0.471	5.725	(Also mid keel chumby) Bottom front keel								
7.	0.211	6.400	AFT EDGE KEEL # 1 SDS	7.	0.470	7.265	PRD Prop Center								
8.	0.211	6.905	Take Through	8.	0.467	8.400									
9.	0.210	7.700		9.	0.459	9.604									
10.	0.212	9.000		10.	0.456	10.545	AFT FB # 4 (Rudder Mkt Side)								
11.	0.210	10.200		11.	0.458	11.225	Lower Aft tip Rudder								
12.	0.210	10.545	AFT FB # 4	12.	0.556 0.560	11.810	+0.175 TO LOA								
13.	0.210	10.855	Lower front Rudder	13.											
14.	0.210	10.975	Aft top Rudder (Gate bottom)	14.											
15.				15.											
16.				16.											
17.				17.											

PROP INSTALLATION

ST1 10.855
ST2 170
ST3 12.975
ST4 7.765
ST5 53
PSA 1100
64

PHD 10.545
PHL 150
PRB 11.225
PBW 39
PSD 350
ESL 27

MAST 11.810
0.175
11.985
MBT1
MDL1
MBT2
MDL2
TL

BRUCE GUY

IOR AMENDED TO JANUARY 1990

* BUBBLE VI *
* 5466 *
* RATING 30.06 FEET *

I CERTIFY THAT I UNDERSTAND
MY RESPONSIBILITIES AS
COVERED IN THE IOR
SIGNED:-

CERTIFICATE NO. KA2685D PAGE 1
MEASUREMENTS METRES & KILOGRAMS
CLASS : STD. 0
DESIGNER IFARR
BUILDER INATECH 6Y6TH
RIG IFRACTIONAL
KEEL IFIXED
PROPELLER/FEATHERING
INSTALLED/EXP SHAFT

REVAL AUTHORITY:-
NOT VALID AFTER: 30 JUNE 1991
ISSUED: 2/ 1/90
BY:-

C. BOYLE
14 BRUCE STREET
KOBARAH BAY 2217

J. Bees
AUSTRALIAN YACHTING
FEDERATION
33 PEEL STREET,
MILSONS POINT,
N.S.W. 2061

MEASUREMENT INVENTORY TO FORM PAGE THREE
FLOTATION DATE: 12/ 3/87
SPECIFIC GRAVITY 1.027

--COMMENTS--
HULL INCLINED BY TWO MEASURERS
DETAILS TAKEN FROM CERTIFICATE NZ 70380
FOR AUSTRALIAN YCF
--HULL & APPENDAGES-- --SFGI --.008--
MDD HULL 0/ 0
SERIES 0/ 0
RIG 1984
AGE 12/1984

LOA	11.992	BMAX	4.046	FF	1.151	AW	25.000	APD	70.000
FBD	.534	B	3.706	FFI	1.140	KW	50.000	RPD	137.000
AGO	1.468	BWL	3.044	FFD	1.116	CW	25.000	CPD	68.000
LEO	9.970	BF	.530	PHD	1.113	DW	50.000	DPD	138.000
DBDA	.468	BFI	.862	FBM	1.121	AWD	6.042	PL	3830.000
DLAI	.000	RAI	3.080	FAI	1.124	RWD	6.042	SBMAX	6.970
QADF	.416	BA	2.867	FA	1.125	CWD	6.042	SPD	7.269
FD	1.519	GD	.968	VHAI	1.033	DWD	6.042	SDM	6.970
CMD	1.616	Y	1.468	VHA	.886	MAW1	.000	MAW2	.000
HD	1.490	GDFI	.000	BHAI	1.027	NACB1	.000	NACB2	.000
QMD	1.135	DM	2.236	BHA	.880	MACL	.000	NACU	.000
WLH1	1.010	DMT	3.872	PDT	1.919	PD	.799	EBD	.529
TWL1	3.234	TWL2	3.159	TWL3	3.079	TWL4	2.986	TWL5	2.846
EW	265.000	END	.650	ESL	.830	ESC	.353	PRD	.515
PBD	.000	ST1	.025	ST2	.115	ST3	.115	PBW	.140
CD	.000	WCBA	.000	CBDA	.000	CBLDA	.000	PHD	.000
DNC	.000	WCBB	.000	CRBB	.000	CBLDB	.000	HTA	.000

HEADBAIL				MAINBAIL					
I	14.433	BPL	4.108	P	15.230	BL1	.898	FC	15.230
J	4.108	BL	14.200	E	5.595	BL2	.895	IC	14.433
LPG	6.090	BHW	7.390	BAL	.150	BL3	1.007	JC	4.108
LP1B	.000	HBB	.000	BD	.265	BL4	1.007	EC	5.295
FSP	.068	BPB	3.660	BAS	1.821	BL5	.000	MXBL	14.200
FJ	1.164	SFJ	.055	HB	.190	BLP	3.170	MXBW	7.394
FBI	1.114	IBP	14.456	MW	.124	HGU	1.990	HXLPB	6.094
IG	14.381	TCI	.098	GD	.153	HGM	3.420	HXJL	14.956

MEASURED ON:- 11/12/87 BY:- BRTHNCK/MUREA/ANDSON 2015

FREEBOARDS				RM	PROP & CR		
FJR	1.776	QMB	1.638	ARM	144.630	PF	.950
FFB	1.760	PDB	.180	BRM	147.797	PB	.515
FFIB	1.750	ESDB	-.089	CRM	148.884	DF	.029
FFDB	1.729	MUIAS	.000	DRM	146.726	ENF	.002
FBIS	1.728	HRB	.674	RM	147.010	PRDC	.500
PMBB	1.739	BEC	.000	RMC	147.010	PDC	.799
FHDB	1.729	CFFI	.000	TR	29.892	RD	2.256
FAIS	1.747	FFM	1.160	BV	-1.163		
FAB	1.748	FAH	1.132	W	183.383		

L/FC	D			DC			
FQC	.116	AOSL	2.472	FDI	.403	DB	2.074
AQC	-.172	APBL	3.177	FDIC	.393	DR	.183
AQCC	-.172	BAPBL	3.303	ICMDI	.000	DBPL	5462.
AQCP	.137	APSLC	3.303	CHDI	.803		
AQCO	-.481	AC01	-.434	IHDI	.000		
YCOR	.000	ACG2	-.481	HDI	.377		
FB	.937	HOLA	1.874	IOHDI	.000	ICHD	.000
PM	1.140	HOLI	2.105	OHDI	.022	IMD	.000
CCAI	.000	BDR	1.025	MDIA	.287	ICMD	.000

HEAD/HAIN	PENALTY	HIZZEN & PEN	SCH & PEN				
LP	6.16	BL	.000	RSAY	.00	RSAR	.00
RBAF	43.71	SPS	.000	RBAK	.00	RBAD	.00
BAN	34.34	HDB	.000	YSAD	.00		
MBAN	19.58	HB	.000	RSAC	.00	HBF	.000
RBAN	33.15	BD	.000			BDF	.000
RBF	.9652	BAB	.000	HBY	.000	BADS	.000
BATC	-.37	I/P	.000	BDY	.000	I/PSF	.000
RBAT	76.49	RLP	.000	BADY	.000	BLPS	.000
RBAL	43.10	BTNS	.000	I/PY	.000	RTNSF	.000
SPIN	59.15	MO	.000	BLPY	.000		
SHR	15.7119			BTNY	.000		
8	8.7459	BCF	1.0000				

LIMITS					
BL1	1.176	BL3	1.902	BLP	3.046
BL2	1.399	BL4	1.902	HB	.224

RATING VALUE		III A					
L	10.0254	BC	8.7459	MAF	1.0000	SCA	9.1957
B	3.7060	DC	.0618	DLF	1.0000	DLFA	1.0282
D	1.1906	FC	-.0807	LRP	1.0000	CBFA	1.0000
CBF	.9680	CRF	1.0000	HR	9.7770	COFA	.9680
EPF	.9681	BHF	1.0000	R	9.1622	HRA2	10.2101
TPF	1.0000	CBF	1.0000			RA	9.1622

SAIL LIMITS R=30.1 FT. JIBS OVER 1.1J; 3 SPINNAKERS; 4
 MAXIMUM CREW WEIGHT LIMIT= 841 NUMBER=10

AGE ALLOWANCE BASE DATE 1984.
 T.C.F. FROM 1/7/90 .7937 AUSTRALIAN T.C.F. .7928