

IMS RATING CERTIFICATE No. 00644E
Based on: FULL MEASUREMENT (Metric)

IMS AMENDED TO JANUARY 2006
Offshore Racing Congress
Chelmsford, England
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IMS AMENDED TO JANUARY 2006 VPP: 19/MAY/06 01:04:18
Cert No 00644E 11 L-0644E.DAT 19/MAY/06 00:57:26
OFF Meas'd: 32/OCT/39 L0016.BOF 22/MAY/95 03:00:00

NOT VALID AFTER 12/2006

GPH
738.8

YACHT DESCRIPTION
Name: LURIFAX
Sail No: FIN-644
Class: ALBIN EXPRESS
LOA: 7.798m Beam(MB) 2.506m
Designer: PETER NORLIN
Builder: ALBIN MARIN
Rig: FRACTIONAL SLOOP 104% Jib
Keel/CB: FIXED KEEL
PropInst: OUTBOARD/NO PROP
FwdAccom: YES Spin: SYMMETRIC
HullCnst: SOLID RudCnst: STNDRD
Forestay: FIXED BoomMtl: HEAVY
Spreadrs: 1 Set InrFsty: NONE
Runners: NONE Jumpers: NONE
Dates: AGE:1/1979 SERIES : 5/1978
COMMENTS

RATING OFFICE:
Issued: FSF RATING OFFICE
19/MAY/06 TIMO SARAINMAA
Measured: PUIMALANKUJA 4 C 15
11/MAY/94 FIN-20720 TURKU FINLAND

Revalidation Authority: FINNISH S.F.
Measurer: LOPMERI

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

OWNER:.....
JUHA HÄNNINEN
TUOMAANKUJA 11 B
FIN-00730 HELSINKI
KOPU

EXPRESS CLASS DATA

LIMITS AND REGULATIONS

Limit of Positive Stability: MEETS REQ Measurement Inventory: 22/APR/90
Minimum Displacement 1416kg: MEETS REQ Accom Lgth: RACE= 7.8 C/R= 7.8
Maximum Crew Weight: 350 kg. Accom Certificate: C/R DA= 0.89%
Stability Index: 114.7 Plan Approval: NONE FILED
C/R HeavyItems Pitch Adjustm't 0.00000 Anchor(s) Weight: 0 Dist: 0.00
Applied Age Allowance: 1.61%

NOTE TO OWNER: The range available to revise crew weight is 252- 465 kg.
TIME ALLOWANCES IN SEC/MI BY TRUE WIND VELOCITY & ANGLE
(NOT WIND-AVERAGED)

Wind Velocity:	6kt	8kt	10kt	12kt	14kt	16kt	20kt	CHECKSUM
BEAT ANGLES:	45.0°	43.7°	41.6°	40.3°	39.4°	39.1°	39.4°	(288.5)
BEAT VMG:	1277.5	1040.0	945.3	906.0	882.9	869.9	866.3	(6787.9)
52°:	813.0	682.0	639.1	617.9	604.1	596.3	591.5	(4543.9)
R 60°:	752.6	652.1	610.7	588.0	579.4	574.4	570.3	(4327.5)
E 75°:	707.0	615.0	579.9	566.6	556.3	550.0	542.2	(4117.0)
A 90°:	664.2	591.9	565.0	552.8	544.4	535.9	514.7	(3968.9)
C 110°:	680.8	606.0	566.8	544.6	521.4	505.4	486.1	(3911.1)
H 120°:	718.6	625.7	575.3	551.3	523.0	499.7	466.0	(3959.6)
135°:	829.5	670.8	606.8	568.7	545.7	516.6	463.8	(4201.9)
150°:	991.9	773.4	659.3	602.5	568.0	545.7	492.3	(4633.1)
RUN VMG:	1145.4	893.0	750.8	666.2	612.4	575.3	528.6	(5171.7)
GYBE ANGLES:	143.8°	147.5°	158.4°	169.3°	170.3°	176.2°	174.0°	(1139.5)

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

TIME ALLOWANCES FOR SELECTED COURSES (AFTER WIND-AVERAGING)

Wnd/Lwd VMG	1233.3	985.8	862.2	796.1	756.4	730.6	704.7	(6069.1)
CircularRandom	1002.7	815.0	717.2	662.5	629.9	608.8	581.7	(5017.8)
Ocean for PCS	1140.4	899.4	764.8	682.3	627.8	589.0	533.8	(5237.5)
Non-Spinnaker	1094.8	877.5	761.2	694.6	654.8	630.0	601.6	(5314.5)

SIMPLIFIED SCORING OPTIONS

	Time-on-Distance (sec/mi)		Time-on-Time TMF		Performance Line PLT PLD		
	Low	High	Low	High	Low	Medium	High
OFFSHORE	738.8 (=GPH)	0.8121 (=600/GPH)	0.677	98.5 (Ocean)			
INSHORE	833.7 (=ILC)	0.8096 (=675/ILC)	1.017	443.4 (Olympic)			
Performance Line Corrected Time = (PLT x Elapsed Time) - (PLD x Distance)							
TRI-NUMBER TMFS BY WIND RANGE							
WINDWARD /LEEWARD	Low	Medium	High	CIRCULAR RANDOM	Low	Medium	High
	0.6199	0.8311	0.9382		0.8145	1.0253	1.1264

CENTERBOARD AND DRAFT
ECM 0.000 CBRC 0.000 CBMC 0.000 CBTC 0.000
WCBA 0.0 CBDA 0.000 KCDA 0.000 ECE 0.000
WCBB 0.0 CBDB 0.000 ENDPLATE ADJ (KEDA) 0.000
PROPELLER AND INSTALLATION

PIPA 0.0000

FLOTATION DATA
FFPS 0.981 AFPS 0.731 SFFP 0.426 SAFF 7.503
FFM 0.965 FAM 0.780 FFPV 0.000 AFPV 0.000
FF 0.970 FA 0.784 SG 1.005

STABILITY DATA
W1 5.300 PD1 37.000 PLM 1500.000 PL 1495.513
W2 10.000 PD2 72.000 GSA 12.000 RSA 4000.0
W3 14.500 PD3 110.000 SMB 4.683 WD 8.450
W4 20.200 PD4 144.000 RM 31.0 RMC 31.0
RM2 32.6 RM20 29.7 RM40 24.4 RM60 18.0
RM90 7.9 WBV 0.0 CREW ARM (CRA) 1.239
CALCULATED LIMIT OF POSITIVE STABILITY: 117.5 DEGREES
RATIO STABILITY CURVE AREAS, POSITIVE/NEGATIVE 2.641

HYDROSTATICS MEASUREMENT TRIM SAILING TRIM-
KEEL DRAFT (DHK0) 1.444 (DHKA) 1.491
2ND MOMENT LENGTH (LSM0) 6.916 (LSM1) 7.375
DISPLACEMENT (WEIGHT) (DSPM) 1911 (DSPS) 2383
WETTED SURFACE (WSM) 12.88 (WSS) 14.14
VCG FROM OFFSETS DATUM (For CLUB RM) (VCGD) -0.034
VCG FROM MEASUREMENT TRIM WATERLINE (VCGM) -0.011
INTEGRATED BEAM ATTENUATED WITH DEPTH (B) 2.073
MAXIMUM SECTION AREA (AMS1) 0.698
BEAM/DEPTH RATIO (BTR) 4.209
EFFECTIVE DRAFT (D) 1.271
2° HEEL (LSM2) 7.374 25° HEEL (LSM3) 7.079
SUNK (LSM4) 7.792 AVG LENGTH (L) 7.200
TRIM: 1mm/2.995m-kg SINK: 1mm/9.407kg

SAIL AREAS: MAIN+FORE+MIZZEN: 32.41 MAIN: 18.73
GENOA: 15.16 SYM: 48.65 ASYM: 0.00 MIZ'N: 0.00

FORETRIANGLE MAIN & SPARS
IG 8.970 J 3.050 HB 0.137 TH NO
MW 0.130 FSP 0.000 MGT 0.72 TL 0.000
GO 0.130 LPG 3.20 MGU 1.25 MDT1 0.090
ISP 8.970 LP 3.20 MGM 2.08 MDL1 0.130
IM 8.970 JL 0.00 MGL 2.80 MDT2 0.090
HBI 0.826 JR 0.00 MSW 7.5 MDL2 0.130
SFJ 0.000 P 9.500 MWT 39.2
SPL 3.100 TPS 0.000 E 3.350 MCG 4.006
SL 9.00 ASL EC 3.350 BD 0.092
SMW 5.75 AMG BAS 1.170 CPW 0.000
SF ASF SPS 1.520 BAL 0.152

MIZZEN
IY 0.000 PY 0.000 HBY 0.000 TLY 0.000
EB 0.000 EY 0.000 MGTY 0.000 MDTLY 0.000
YSD 0.00 ECY 0.000 MGUY 0.000 MDLY 0.000
YSF 0.00 BASY 0.000 MGY 0.000 MDT2Y 0.000
YSMG 0.00 BAILY 0.000 MGLY 0.000 MDL2Y 0.000
HBIY 0.000 BDIY 0.000

MAX PURJELUKUMÄÄRÄT
IMS-MÄÄRÄYKSET 205

Genoat LPG > 110 % 0
Fokat LPG < 110 % 4
Spinaakkerit 3
+1 staysail+allaolevat

TURVAMÄÄRÄYSTEN MUKAISTEN
PURJEIDEN MAX PINTA-ALAT

Kovantuulen fokka 10.9
Myrskyfokka JL 5.83 4.0
Myrskyisopurje 5.6

ISONPURJEEN (MAX) LEVEYDET

HBL 0.134
MGTL 0.74 MGML 2.18
MGUL 1.27 MGLL 3.01

SPINAAKKERIN (MAX) MITAT

MSL 9.00 MSMW 5.58

OLETUSPAINOT ELLEI MITATTU

Miehistö 388

Masto+Riki 30.23
M+R painopiste 2.80

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