

# GMDSS Radio Testing Report

**Survey Date and Place:** May 27, 2018, 3:19:00 PM, Rotterdam

It is hereby certified that representative of the company: Musson Marine Ltd, Alex Semyoshin, Radioengineer, performed testing of **VHF Radio** and defined the following:

## Vessel Data

Name of Ship	Port of Registry	Gross Tonnage	Date Keel Laid	IMO Number
Kordoba		0		

## Station Data

Type	Manufacturer	Model	Serial Number	Issue Date
VHF Radio				

## Transmitter parameters

Channel	Frequency, Hz	Power, dBm	Reflected power, dBm	VSWR
DSC	156525086	46.19	17.9	1.08
6	156300070	32.02	3.87	1.08
16	156800073	31.92	4.02	1.08

## DSC survey Content

Category	Routine
Format	Individual stations
Called MMSI	123456789
MMSI	273373250
First Telecommand	F3E/G3E All modes telephony
Second Telecommand	No information
Frequency or pos. FS1	VHF CH - 8
Frequency or pos. FS2	89 kHz

Alex Semyoshin, Musson Marine Ltd

Mar 15, 2019, 3:18:48 PM

# GMDSS Radio Testing Report

**Survey Date and Place:** Jul 25, 2018, 2:47:00 PM, Rotterdam

It is hereby certified that representative of the company: Musson Marine Ltd, Alex Semyoshin, Radioengineer, performed testing of **MF/HF Radio** and defined the following:

## Vessel Data

Name of Ship	Port of Registry	Gross Tonnage	Date Keel Laid	IMO Number
Kordoba		0		

## Station Data

Type	Manufacturer	Model	Serial Number	Issue Date
MF/HF Radio				

## Transmitter parameters

Channel	Frequency, Hz	Power, dBm	Reflected power, dBm	VSWR
DSC	2187519	10.55	0	0
9	156449754	28.81	0	0
13	156649755	21.23	0	0

## DSC survey Content

Category	Safety
Format	Individual stations
Called MMSI	888888888
MMSI	273376830
First Telecommand	J3E telephony
Second Telecommand	No information
Frequency or pos. FS1	2177 kHz
Frequency or pos. FS2	17700.2 kHz

Alex Semyoshin, Musson Marine Ltd

Mar 15, 2019, 3:19:22 PM

# CERTIFICATE of Automatic Identification System testing

**Survey Date and Place:** Oct 19, 2018, 3:18:00 PM,

It is hereby certified that representative of the company: Musson Marine Ltd, Alex Semyoshin, Radioengineer, performed testing of **AIS Class A** and defined the following:

## Station Data

Type	Manufacturer	Model	Serial Number	Issue Date
AIS Class A				

## Transmitter parameters

Channel	Frequency, Hz	Power, dBm	Reflected power, dBm	VSWR
DSC	156560732	41.73	13.67	1.08
Channel A	161975188	42.15	14.05	1.08
Channel B	162025197	42.18	14.1	1.08

## Positional, Static and Voyage data extracted from AIS

MMSI User ID	273354170
IMO number	0
Call sign	
Ship Name	MARIA
Destination	123
Ship dimensions	A=0; B=0; C=0; D=0
Navigational status	Not defined
Longitude	181° 0.0' E
Latitude	91° 0.0' N
Speed over ground (SOG), knots	No data
Course over ground (COG)	No data
True heading, deg	No data
Rate of turn ROT AIS	Default meaning
Position accuracy	Low (> 10 m)
RAIM-flag	Not in use
Type of ship and cargo type	Not available
Max. static draught, m	0
AIS version indicator	Station compliant with Recommendation ITU-R M.1371-1
Special manoeuvre indicator	Not available
Repeat indicator	No repeat
EPFD Type	Undefined
ETA, UTC	0/0 0:0 (M/d h:m)
DTE (availability)	0
Time stamp	Not available

Alex Semyoshin, Musson Marine Ltd

Mar 15, 2019, 3:21:54 PM

# BEACON Testing Report

**Survey Date and Place:** Oct 30, 2018, 1:59:00 PM, Rotterdam

It is hereby certified that representative of the company: Musson Marine Ltd, Alex Semyoshin, Radioengineer, performed testing of **EPIRB** and defined the following:

## Vessel Data

Name of Ship	Port of Registry	Gross Tonnage	Date Keel Laid	IMO Number
Kordoba		0		

## EPIRB Data

Type	Manufacturer	Model	Serial Number	Issue Date
EPIRB	Jotron			

## Transmitter parameters

Parameter	Value
Channel	406 MHz
Frequency, Hz	406028068
Power, dBm	44.79
TTT, s	439.8
UNC, s	159.9
Phase(+), Deg	65
Phase(-), Deg	198

Channel	Frequency, Hz	Power, dBm	Mod. Freq, min Hz	Mod. Freq, max Hz	Mod. Depth, %
121.5 MHz	121504603	22.66	384	1104	99

## Cospas-Sarsat survey Content

Full Hex	FF FED0511483881881A68B8EB3D000009FD1
15 Hex ID	A229071031034D1
MMSI/ID	273373830
Message format	short format
Protocol	User
Country code	Russian Federation (273)
User type	Maritime User
Maritime MMSI (6 digits)	373830
Specific bcn	0
Spare	00

Aux radio device	121.5 MHz
Encoded BCH 1	0E3ACF
Calculated BCH 1	0E3ACF
Emerg Code	Emergency Code Data Not Entered
Activation Type	Automatic and Manual Activation
Emergency Code	No information entered or Nationally assigned
Assigned by LUT	Non Standard

Alex Semyoshin, Musson Marine Ltd

Mar 15, 2019, 3:23:11 PM

The equipment has been tested according to IMO Circular MSC.1/Circ.1039, 1040. circular letters.  
Test tool: GMDSS Tester MRTS-7M. <https://gmdsstesters.com>

# CERTIFICATE of 406 MHz BEACON annual testing

**Survey Date and Place:** Oct 30, 2018, 1:59:00 PM, Rotterdam

It is hereby certified that representative of the company: Musson Marine Ltd, Alex Semyoshin, Radioengineer, performed testing of **EPIRB** and defined the following:

## Vessel Data

Name of Ship	Port of Registry	Gross Tonnage	Date Keel Laid	IMO Number
Kordoba		0		

Parameters	Condition	
	Good	NG
1. EPIRB model, manufacturer name	Jotron	
2. Availability of registration		
3. Protocol type	Maritime User	
4. Country code	Russian Federation (273)	
5. Beacon 15 Hex ID (survey contents from 26 to 85 bits)	A229071031034D1	
6. survey contents from 1 to 112 bits	FFFED0511483881881A68B8EB3D000009FD1	
7. Availability of 406 MHz carrier	V	
8. Availability of 121.5 MHz carrier	V	
9. Strobe light condition	X	
10. Availability and expiry date of automatic release mechanism		
11. Availability and quality of markings	X	
12. Battery replacement date		
13. Date of next testing		

It is hereby certified that all mechanical, electrical and information parameters, as well as the documentation on the 406 MHz EPIRB comply with specification and the requirements of the Maritime Administration and Maritime Register of Shipping.

The identification number of the tested BEACON complies with the BEACON registration number in Mission Control Center (MCC).

Alex Semyoshin, Musson Marine Ltd

Mar 15, 2019, 3:23:20 PM

# CERTIFICATE of EPIRB Shore-based Maintenance

**Survey Date and Place:** Oct 30, 2018, 1:59:00 PM, Rotterdam

It is hereby certified that representative of the company: Musson Marine Ltd, Alex Semyoshin, Radioengineer, performed testing of **EPIRB** and defined the following:

## Vessel Data

Name of Ship	Port of Registry	Gross Tonnage	Data Keel Laid	IMO Number
Kordoba		0		

Parameters	Condition	
	Good	NG
1. EPIRB model, manufacturer name	Jotron	
2. Country code	Russian Federation (273)	
3. Beacon 15 Hex ID (survey contents from 26 to 85 bits)	A229071031034D1	
4. survey contents from 1 to 112 bits	FFFED0511483881881A68B8EB3D000009FD1	
5. Measured value and vary of 406 MHz transmitter frequency, Hz	406028068	
6. Availability of transmitted 121.5 MHz signal with a swept tone modulation	V	
7. Output power of the transmitter, dBm	44.79	
8. Waterproof Integrity	V	
9. Strobe light condition	X	
10. Availability and expiry date of automatic release mechanism		
11. Availability and quality of markings	X	
12. Battery replacement date		
13. Date of next testing		

It is hereby certified that all mechanical, electrical and information parameters, as well as the documentation on the 406 MHz EPIRB comply with specification and the requirements of the Maritime Administration and Maritime Register of Shipping.

The identification number of the tested BEACON complies with the BEACON registration number in Mission Control Center (MCC).

Alex Semyoshin, Musson Marine Ltd

Mar 15, 2019, 3:23:26 PM

# AUTOMATIC IDENTIFICATION SYSTEM (AIS) TEST REPORT

<b>Name of ship/call sign</b>	
<b>MMSI number</b>	273354170
<b>Port of registry</b>	
<b>IMO Number</b>	
<b>Gross tonnage</b>	0
<b>Date keel laid</b>	

<b>1. Installation details</b>		
	<b>Item</b>	<b>Status</b>
1.1	AIS transponder type	AIS Class A
1.2	Type approval certificate	
1.3	Initial installation configuration report on board?	
1.4	Drawings provided? (Antenna-, AIS-arrangement and block diagram)	
1.5	Main source of electrical power	
1.6	Emergency source of electrical power	
1.7	Capacity to be verified if the AIS is connected to a battery	
1.8	Pilot plug near pilots operating position?	
1.9	120VAC provided near pilot plug? (Panama and St. Lawrence requirement)	

<b>2. AIS programming - Static information</b>		
	<b>Item</b>	<b>Status</b>
2.1	MMSI number	273354170
2.2	IMO number	0
2.3	Radio call sign	
2.4	Name of ship	MARIA
2.5	Type of ship	Not available
2.6	Ship length and beam	Ship length (A+B)=0m, Ship width (C+D)=0m
2.7	Location of GPS antenna	A=0; B=0; C=0; D=0

<b>3. AIS programming - Dynamic information</b>		
	<b>Item</b>	<b>Status</b>
3.1	Ships position with accuracy and integrity status (Source: GNSS)	Longitude: 181° 0.0' E Latitude: 91° 0.0' N Accuracy: Low (> 10 m)
3.2	Time in UTC (Source: GNSS)	0/0 0:0 (M/d h:m)
3.3	Course over ground (COG) (will fluctuate at dockside) (Source: GNSS)	No data
3.4	Speed over ground (SOG) (zero at dockside) (Source: GNSS)	No data
3.5	Heading (Source: Gyro)	No data
3.6	Navigational status	Not defined



**3. AIS programming - Dynamic information**

	Item	Status
3.7	Rate of turn, where available (ROT)	Default meaning
3.8	Angle of heel, pitch and roll, where available	N/A

**4. AIS programming - voyage related information**

	Item	Status
4.1	Ships draught	0
4.2	Type of cargo	Not available
4.3	Destination and ETA (at masters discretion)	123 0
4.4	Route plan (optional)	N/A
4.5	Short safety-related surveys	N/A

**5. Performance test using measuring instrument**

	Item	Status
5.1	Frequency measurements AIS ch. 1 and 2, GMDSS ch. 70	Channel A: 161975188 Hz Channel B: 162025197 Hz Ch. 70: 156560732 Hz
5.1	Transmitting output, AIS ch. 1 and 2, GMDSS ch. 70	Channel A: 42.15 dBm Channel B: 42.18 dBm Ch. 70: 41.73 dBm
5.3	Polling information ch. 70	OK
5.4	Read data from AIS	OK
5.5	Send data to AIS	OK
5.6	Check AIS response to "virtual vessels"	OK

**6. "On air" performance test**

	Item	Status
6.1	Check reception performance	
6.2	Confirm reception of own signal from other ship/VTS	
6.3	Polling by VTS/shore installation	

**Electromagnetic interference from AIS observed to other installations?**

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**Remarks**

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**The AIS has been tested according to IMO SN/Circ.227 and resolution MSC.74(69), annex 3**

Name of Radio Inspector:	Date and place:	Name of Radio Inspector Company:
Alex Semyoshin	Oct 19, 2018, 3:18:00 PM,	Musson Marine Ltd