FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

GRANT OF EQUIPMENT AUTHORIZATION

Type Acceptance

Furuno USA Inc

4400 NW Pacific Rim Blvd.

Camas WA 98607

Date of Grant: 9/9/98

Application Dated: 6/15/98

Attention: Charles Zanardi, Service Manager

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER

Name of Grantee



Equipment Class: Non-Broadcast Transmitter

Notes:

MF Transmitter; Not GMDSS Capable.

Cront Notes	FCC Rule Parts	Frequency Range (MHZ)	Output <u>Watts</u>	Frequency Tolerance	Emission Designator
Grant Notes					
	80.1101,90	1.6 <i>-</i> 27.5	150	10 Hz	2K80J3E
The state of the s	80:1101,90	1.6 27.5	ູ 150 🍦	10 Hz	2K80H3E
This application was originally granted or	80.1101,90 in 08/28/1998.	16-27.5	150	10 Hz	300HF1B
	No.		STR ONCES		

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EA# 90027

EDERAL COMMUN	NICATIONS COMMIS	SSION For 917	124
proved by OMB FCC F	FORM 731	FCC use	a
3000-0031	QUIPMENT AUTHORI	ZATION	
Applicant's complete, legal	THIS SECTION MUST BE COM business name	Chec	k here if this is a change in
• •		FRANK COMMUNICATIONS COMMUNICATIONS	and/or address not previously ted (See 47 CFR §2.934)
Furuno U. Applicant's mailing address	(Line 1)	A PARTICIONAL PROPERTY.	Bureau Ose Only
4400 N.W	Parkic Rim (Line 2) (if required)	B 1 NOUN 2 2 1998	Equipment Code:
Applicant's mailing address	(Line 2) (if required)		Engineer:
		COLUMBIA.MD	- P.C.
City		•	Examiner • •
State or Country (if foreign a	address) ZIP/Postal Code	3. FCC ID: (b) Equipment	
	78607		maximum, show zeros as Ø)
Li A		ADB 9ZWA	
		's address to receive grant, or for co	1
harles Faho	City code No and Ext	(b) FAX No. (Area/Country/City code	and No.)
_		1 _	
<u>(</u>	30	(360) 833-5195	
<u> </u>	for Fee Type Codes and Fees. Fee	Type Codes are listed in Paragraph C of the	attached instructions.
		or which you are applying. Enter in C	
m multiplying the Fee amount	for the Fee Type Code in Colum	nn (A) by the number entered in Colu	mn (B). If requesting more
n ONE service, enter addition (A)	hal Fee Type Code(s) in Section (B)	III below. (C)	
		FEE DUE FOR FEE TYPE	FOR FCC USE ONLY
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CTION III - Use when requesting	ng more than one service. If only one	e service is requested, complete only Secti	on II and Section III, Item (5).
(A)	(B)	(C)	FOR FCC USE ONLY
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	0 0 0 1	\$	
		•	
	0 0 0 1	\$	
Add all amounts shown	in column C, lines (1)	TOTAL AMOUNT REMITTED	
through (4), and enter th	e total here.	WITH THIS APPLICATION OR FILING	FOR FCC USE ONLY
This amount should equ remittance.	al your enclosed		
		\$ 150.00	

e October 1992 edition of this form may be used until September 1, 1997.

FCC Form 731 - Page 1 of 3 March, 1997

CTION IV - Enter F	CC ID from Page 1, Sectio	n I 🕨					
 a) Instead of Application Firm name, 	nt, FCC is authorized to mail or	iginal Grant to:	(See instru	rctions)			
number, street, City, State/Country ZIP/Postal Code	<i>'</i> .						
b) Name, Title and M	ail Stop, if any, of person at abo	ove address to	receive Grant:	(If 1.(a) is co	ompleted, this Item	n must be com	pleted)
· · · · · · · · · · · · · · · · ·				(h) Tolonh	one No. (Area/Cou	ntry/City code. No	and Ext)
 Technical contact: Firm name, contact person, 	Furuno U.S. Charles Zan.	3011			P) 834-		
number, street, City, State/Country ZIP/Postal Code	1400 Paritio	, Kim 98607	13 14 d 	1, ,	o. (Area/Country/ の)		No.)
t) Internet e-mail add							
Firm name, contact person, number, street, City, State/Countr	ntact: Furuno la Charles Za, 4400 Paca,	ific Ri	n Blue	(g) FAX N	one No. (Area/Cou 3) 834 — No. (Area/Country	9330 5 /City code and	×7 05-6 No.)
ZIP/Postal Code				(360	0) 8 33-	5/95	
n) Internet e-mail ad	dress: ion include a request for confid	entiality for any	portion(s) of th	e data contair	ned in this		[] No
application pursua	ant to 47 CFR §0.459 of the Co	mmission's Rul	es? If "Yes" se	e instructions	· · · · · · · · · · · · · · · · · · ·	∐ Yes	No
47 CFR §0.457(d)	t request that the Commission (1)(ii)? (See instructions)	deter grant of the	nis application	pursuant to		Yes	No No
Type of equipment requested: (check	t authorization Co	ertification		Type Accepta		Notificat	ion
	and description: (See instruc		(b) Equipme	^	rated under FCC	Rule Part(s):	
Application in for:	SSB Radiotélay. (Check one box only)	7 1/ 6/1/4	<u> </u>	<i>y</i> -	300 70		
7. Original	2. Change in identification	ation of present	ly authorized e	quipment	3. Class	II permissive c	
equipment (See instructions)			}			ized equipmer	
(000 "/00000000)	ORIGINAL	FCC ID	Grant o	late	(S	See instructions)	
EQUIPMENT SPI	CIFICATIONS: (See instruct			/ / /- ·- /- ·	on denianate -	(e) Microproce	essor model
(a) Frequency range in MHz	(b) Rated RF power output in watts		ncy tolerance z, ppm	See 47 CFR §	on designator 2.201 and §2.202)	numi	
6 to 27.5 mH	150 usts	t 10	H.2.	2K80	53E 0143E 4F1B	NIA	
cosm. H	PEP		<i>,,</i> •	2 KFC	7/35		
to 29.9 mm	PEP			300 1	tr 13		
oceive							
Is the equipment	in this application:	<u> </u>				<u> </u>	<u> </u>
• -	ite device subject to more than	one type of equ	uipment authori	zation?		Yes	☑ No
(b) part of a s requires a	system that operates with, or is an equipment authorization?	marketed with,	another device	that		Yes	☐ No
If either of the	above questions is answered	"Yes" complete	items 10.(a) an	d (b). (See	e instructions)	C Form 731 -	Page 2 of 3

ction 📂	
Certification	Type Acceptance Notification
box only)	
	orocess of being is pending with the FCC er the FCC ID under the FCC ID listed below
FCC ID	
	n:
	I/o) Tologhood No. 10
ty	(c) Telephone No. (Area/Country/City code, No. and Ext.) (d) FAX No. (Area/Country/City code and No.)
3	:
swering and signi	ing this application
PUNISHABLE BY FIN	IE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, UCTION PERMIT (U.S. CODE, TITLE 47,
Drug Abuse Act of 198 7 CFR 1.2002(b) for th	n is subject to a denial of Federal benefits, that i8, 21 U.S.C. §862 because of a conviction for se definition of a "party" for these purposes.
1 100 [] 110	
ant of Equipment Authorsponsible for (1) labeling to the applicable rules manufacturer of the equipment will continuation.	and the exhibits attached hereto, are true and correct orization issued by the FCC as a result of the ng the equipment with the exact FCC ID specified in s, and (3) compliance of the equipment with the juipment, appropriate arrangements have been made ue to comply with the FCC's technical requirements.
at the applicant's discr	etion; however, the applicant remains responsible for
Abuse) Certification st	f authorization which includes information to enable atement has been provided by the applicant. It is uest, and that the FCC reserves the right to contact
<i></i>	/ / 0
	(Month, Day, Year)
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ري ري A Title	of authorized signer
- nue	or additionable digital
	(c) Telephone No. (Area/Country/City code, No. and Ext.)
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	Certification box only) I is in the plied under listed below the property of the application or contact person or conta

FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

GRANT OF EQUIPMENT AUTHORIZATION

Type Acceptance

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4400 NW Pacific Rim Blvd.

Camas WA 98607

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Application Dated: 6/15/98

Attention: Charles Zanardi, Service Manager

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FCC IDENTIFIER

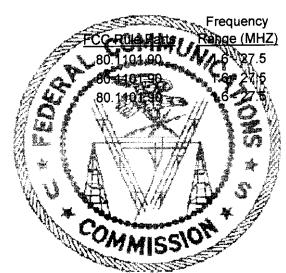
Name of Grantee

Equipment Class: MF Transmitter for GMDSS

Note:

Transmitter; NOT GMDSS, CAPABLE Tolerance Designator

Grant Notes



Output Frequency Emission Watts 10 Hz 2K80J3E 150 2K80H3E 10 Hz 150 300HF1B 150 10 Hz

9806178315233002

ÁD INSTRUCTIONS CAREFULLY BEFORE PROCEEDING

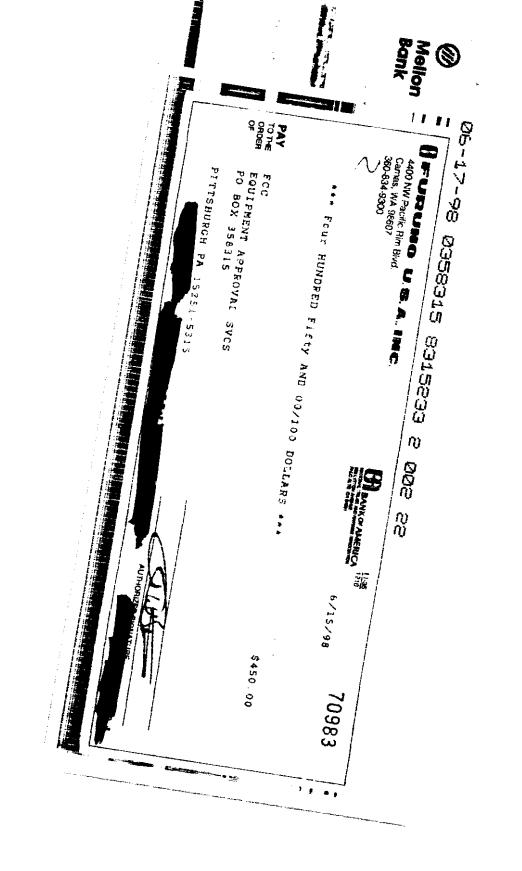
FEDERAL COMMUNICATIONS COMMISSION REMITTANCE ADVICE

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APPROVED BY OMB

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FEDERAL COMMUNICATIONS COMMISSION Equipment Authorization Division, Applications Processing Branch 7435 Oakland Mills Road, Columbia, MD 21046 Telephone: (301) 725-1585, Facsimile: (301) 344-2050

Date: August 19, 1998 08:05 pm

From: Bill Inglis Extension: 225

To: Charles Zanardi

Organization: Furuno USA Inc.

Telephone: 888-834-9330 Facsimile: 360-833-5195

This cover sheet is page 1 of ____. Please direct inquiries to the sender at the above extension.

Reference FCC ID: ADB9ZWFS1503

Applicant: Puruno USA Inc

The items indicated below must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days may result in application dismissal pursuant to Section 2.917(c) and forfeiture of the filing fee pursuant to Section 1.1108

You have submitted an application for type acceptance of an MF transmitter under Part 80 of the Commission's Rules with a classification GMF indicating the transmitter meets the requirements for GMDSS use as specified in Subpart W.

If you intend to license the transmitter for that purpose please address, individually, each Section of 80.1101 which pertains to your transmitter with respect to compliance and include measurement data, as appropriate to demonstrate DCS and NBDP capability. I believe that emission 160HA1A is required for some of the referenced operation.

Replies to this letter MUST contain the Reference Number. 2836

st st COMMUNICATION RESULT REPORT (AUG.19.1998 8:22PM) st st st

TTI CONG MAIL/OLIA FCC

E MODE OPTION ADDRESS (GROUP) RESULT PAGE
MEMORY TX 81-913608335195 OK P. 1/1

REASON FOR ERROR E-1) HANG UP OR LINE FAIL E-3) NO ANSWER

E-2) BUSY E-4) NO FACSIMILE CONNECTION

FEDERAL COMMUNICATIONS COMMISSION
Equipment Authorization Division, Applications Processing Branch
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FURUNO U.S.A., INC. 4400 PACIFIC RIM BLVD. CAMAS WA., 98607

PHONE (888) 834-9400 FAX (360) 833-5195

facsimile transmittal

Го:	BILL INGLIS			Fax:	(301) 344-2	2050		
From:	CHARLES ZAN	Date:	08/26/98					
Re:	REF NO. 2836 ((ADB9ZWI	S1503)	Pages	2			
cc:						***		
□ Urger	nt □ For Re	view)	(Please C	comment	☐ Plea	se Reply	☐ Please F	Recycle
•	•	•	•		•	•	•	
n ansv	wer to your far	x regardin	g the Fu	iruno si	ngle sidet	and radio	otelephone	mode
FS-15()3.							
This r	adio does no	t meet th	e GMD	SS rec	quirement.	When	I submitte	d the

This radio does not meet the GMDSS requirement. When I submitted the application for FCC Type Approval, on the form it requests a code be filled in. Since there is no code for a marine single side band radiotelephone I used the code which closely identifies the type of equipment being submitting.

Please advise which code should be used for marine single sideband radiotelephones and VHF marine radiotephones.

Regards

Charles Zanardi

LIST OF ENCLOSURES

DRAWING SHOWING LOCATION OF FCC IDENTIFIER

OPRERATORS MANUAL

TECHNICAL INFORMATION