

EXHIBIT #1 - Line-4 Particulars of Operation.

FREQUENCY	POWER	POWER	POWER	EMISSION	MODULATION	BANDWIDTH
A - IN KHZ.	B	C	D	E	F	G (NOTE-3)
2,187.5 KHZ	150	150	MEAN	300HJ2B	50 BAUD (1)	0.3 KHZ.
2,174.5	150	150	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
4,207.5	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
4,177.5	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
6,312.0	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
6,268.0	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
8,414.5	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
8,376.5	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
12,577.0	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
12,520.0	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
16,804.5	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
16,695.0	300	300	MEAN	300HJ2B	50 BAUD	0.3 KHZ.
2,182.0	150	150	PEAK	2K80J3E	2.4 KHZ. (2)	3.0 KHZ.
4,125.0	300	300	PEAK	2K80J3E	2.4 KHZ.	3.0 KHZ.
6,215.0	300	300	PEAK	2K80J3E	2.4 KHZ.	3.0 KHZ.
8,291.0	300	300	PEAK	2K80J3E	2.4 KHZ.	3.0 KHZ.
12,290.0	300	300	PEAK	2K80J3E	2.4 KHZ.	3.0 KHZ.
16,420.0	300	300	PEAK	2K80J3E	2.4 KHZ.	3.0 KHZ.
MEGAHERZ						
4-27 -NOTE-1	300	300	MEAN	300HJ2B	50 BAUD (1)	0.3 KHZ
4-27 -NOTE-1	300	300	PEAK	2K80J3E	2.4 KHZ (2)	3.0 KHZ.
156-157.5	25	25	MEAN	16K0G3E	5 KHZ. (3)	20 KHZ.
INMARSAT-C						
1626.5-1646.5	NOTE-2	NOTE-2	NOTE-2	NOTE-2	NOTE-2	NOTE-2

NOTE-1: ANY FREQUENCY LISTED IN 47 CFR PART-80 FOR USE BY SHIP STATIONS.
PLEASE SEE OUR EXHIBIT NR. **3**

NOTE-2: PER 47 CFR 80.207 (d) THIS DATA IS DETERMINED BY INMARSAT.

NOTE-3: BANDWIDTH PER 47 CFR 80.205 (a) . ALL EQUIPMENT IS FCC TYPE ACCEPTED FOR SHIPBOARD GMDSS OPERATION.

FCC FORM 442

MARITIME INSTITUTE OF TECHNOLOGY AND GRADUATE STUDIES

EXHIBIT #2 – Line-3. Particulars of Modification:

The purpose of this modification to our existing experimental license WA2XCS, file 5236-EX-PL-96 is to add additional frequencies and emission modes as set forth in exhibit #1 and additional equipment as set forth in exhibit #4.

We also wish to transfer authority for an existing Inmarsat-C terminal which is presently operated under a second experimental license WA2XDC, file 5237-EX-PL-96 to this modified license so the second license can be cancelled.

FCC FORM 442

MARITIME INSTITUTE OF TECHNOLOGY AND GRADUATE STUDIES

EXHIBIT #3 – Line-10. Description of Program:

We are a non-profit maritime training institute. One of our courses is a 70 hour class in GMDSS Radio Operating. As part of this course we operate an equipment lab with actual live shipboard GMDSS equipment. As part of this class we have operated transmitting equipment live on-the-air under an FCC Experimental Radio Station License, WA2XCS, File: 5236-EX-PL-96, issued 7-09-96 and expired 7-01-98. We have applied for renewal of this license. We are also operating an Inmarsat-C terminal under a separate FCC Experimental Radio Station License, WA2XDC, File: 5237-EX-PL-96, issued 8-15-96 and expiring 9-01-98.

Under our current station license for WA2XCS we are only authorized for the specific MF/HF DSC alerting frequencies and their associated SSB-Voice and Telex frequencies. We are applying for additional frequencies in the maritime mobile service to enable us to conduct live on-the-air operations with actual coast stations which would include other maritime training centers, commercial and coast guard stations. This would occupy a very small portion of our training time but would be a very valuable adjunct to our other equipment lab programs.

The purpose of this modification to our existing experimental license WA2XCS, file 5236-EX-PL-96 is to add additional frequencies and emission modes as set forth in exhibit #1 and additional equipment as set forth in exhibit #4.

We also wish to transfer authority for an existing Inmarsat-C terminal which is presently operated under a second experimental license WA2XDC, file 5237-EX-PL-96 to this modified license so the second license can be cancelled.

The students will be operating under the constant supervision of the GMDSS Instructor who will be the authorized licensed operator of this station.

FCC FORM 442

MARITIME INSTITUTE OF TECHNOLOGY AND GRADUATE STUDIES

EXHIBIT #4 – Line-13. List of Transmitting Equipment to be installed:

<u>MANUFACTURER</u>	<u>MODEL NUMBER</u>	<u>NO. OF UNITS</u>	
ROSS	VHF-DSC DSC-500	2	
SAILOR	VHF T/R RT2048	2	
SAILOR	MF/HF SSB T/R RE2100	1	
SEA	MF/HF-DSC SEA-330	2	(Existing)
TRIMBLE	TNL7001 (Inmarsat-C)	1	(Existing)
SAILOR (THRANE & THRANE)	H2095 (Inmarsat-C)	1	

ALL EQUIPMENT LISTED IS FCC TYPE ACCEPTED FOR SHIPBOARD GMDSS OPERATION
PER 47 CFR 80.1103