FCC FORM 442
EXPERIMENTAL APPLICATION

FROM:
KFS World Communications Date: 1994-Aug. 15

EXHIBIT (A)

Frequency:

All licensed NBDP channels and facsimile frequencies {CFR47, 80.363 (2)}

Power:

Palo alto Radio/KFS & Slidell Radio/WNU
NBDP frequencies : 5 Kw
Facsimile frequencies: 1 Kw

All Mobiles
All frequencies & modes: 150 Watts

Emission & bandwidth:

	Emission	Bandwidth
NBDP Frequencies	F1B	300 Hz
	J2DEN (Clover)	400 Hz
Facsimile Freqs.	J2DEN	2.5 Khz

NOTE: This application and it's purpose has been discussed with George Dillon of the Special Services Branch, FCC.

EXHIBIT (B)

The following mobile locations are required:

(1) Within 100 miles of Palo Alto, CA
(2) Within 100 miles of Pearl River, LA
(3) Within 100 miles of Melbourne, FL.
(4) Within 100 miles of Urbana, Il.
(5) On or within 100 miles of the Island of Molokai, Hi.
(6) A selected number of vessels in the Pacific and Atlantic ocean areas.

EXHIBIT (C)

(a) Mobile stations at the sites listed will use FCC type approved 150W transceivers to communicate with Palo Alto Radio/KFS and Slidell Radio/WNU. Modems manufactured by Hal Communications of Urbana, Il., will be used by the mobiles and the fixed stations to communicate using:

F1B (TOR) on NBDP channels
400HJ2DEN on NBDP channels
2K5HJ2DEN On facsimile frequencies.

The hardware and software involved is designed in such a way that it's use will not in any way interfere with the ability of mobiles using traditional F1B technology and modems to access the communications system. KFS World Communications developed software will be used in conjunction with Hal modems to automatically determine and select the optimum working frequency under varying conditions.

(b) Test objectives are: to confirm the above (equal access), measure the actual throughput under various propagation and link conditions, determine the effectiveness of all of the software routines under practical conditions and to confirm that all FCC requirements are being met under practical operating conditions.

(c) We are confident that these tests will confirm that the use of this new technology and software can very greatly contribute to improved spectrum efficiency on HF frequencies and will also greatly improve the attractiveness, competitiveness and efficiency of HF marine communications.