

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL

(Nature of Service)

WC9XKE

(Call Sign)

XC FX

(Class of Station)

0743-EX-ST-2005

(File Number)

NAME Advanced Navigation & Positioning Corp.

This Special Temporary Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This Special Temporary Authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control the Government of the United States conferred by Section 706 of the Communications Act of 1934.

Special Temporary Authority is hereby granted to operate the apparatus described below:

Purpose Of Operation:

Augmentation and testing of the prototype Transportable Transponder Landing and Surveillance System under contract with the U.S. Marine Corps.

Station Locations

(1) Klamath City (KLAMATH), OR - NL 42-09-22; WL 121-43-59

Frequency Information

Klamath City (KLAMATH), OR - NL 42-09-22; WL 121-43-59

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
111.75 MHz	FX	2K04A1A	1 W (ERP)	
333.35 MHz	FX	300HA1N	10 W (ERP)	
1030 MHz	FX	6M00M1D	1035.5 W (ERP)	

This authorization effective January 16, 2006 and
will expire 3:00 A.M. EST July 01, 2006

**FEDERAL
COMMUNICATIONS
COMMISSION**

Frequency Information

Klamath City (KLAMATH), OR - NL 42-09-22; WL 121-43-59

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
1090 MHz	FX	6M00M1D	25 W (ERP)	

Special Conditions:

- (1) The Transportable Transponder Landing System (TLS) shall only be used for prototype testing under contract with the US Marine Corps.
- (2) Transportable TLS operations shall be limited to Klamath Falls Airport (LMT) Oregon.
- (3) The mainbeam of the Transportable TLS localizer (111.75 MHz) antenna, glide slope (333.35 MHz) antenna, and interrogator directional antenna (1030 MHz) may be oriented along either runway 32 or along runway 14.
- (4) The side lobe suppression (1030 MHz) shall be employed for all interrogations.
- (5) Communications between aircraft and the Transportable TLS ground operator shall be conducted on military tactical frequencies. The Transportable TLS testing may not use any VHF or UHF frequency assigned to the Klamath Falls for air traffic control purposes. This includes 123.675, 239.025, and 270.800 MHz assigned to the Air Force radar approach control facility at Klamath Falls, Oregon.
- (6) Changes in the Transportable TLS operating interrogator system will be required before this system proceeds to a production system and may be required prior to testing at other locations. Other operating parameter changes may be required as a result of ongoing civil TLS Certification activities.
- (7) The Transportable TLS shall transmit the Morris Code identifier "XGW" in conjunction with the standard Localizer and Glide Slope signals.
- (8) The Transportable TLS shall utilize a six sector antenna with sectors of 60 degrees each.
- (9) The interrogator shall transmit:
 - a) a maximum of one full power Mode A and one full power Mode C interrogation in each sector every 2.5 seconds,
 - b) a maximum of 6 Mode A and 6 Mode C whisper shout interrogations in each sector every 2.5 seconds,
 - c) a maximum of 10 Mode A guidance interrogations per second within only one of the 6 antenna sectors.
- (10) The Transportable TLS at Klamath Falls shall be deployed within the area shown in Figure 2 in the file (LMT Rhino Proposal.pdf). The exact deployment depicted in Figure 3 is not required.