

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

EXPERIMENTAL

(Nature of Service)

FX

(Class of Station)

WB9XVG

(Call Sign)

0028-EX-ST-2004

(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 System under contract with the U.S. Marine Corps.

Station Locations

(1) Madras, OR - NL 44-40-36; WL 121-09-06

Frequency Information

Madras, OR - NL 44-40-36; WL 121-09-06

Frequency	Station Class	Emission Designator	Authorized Power	Frequency Tolerance (+/-)
108.35 MHz	FX	6K00A9W	1 W (ERP)	
333.95 MHz	FX	300HA1N	10 W (ERP)	
1030 MHz	FX	6M00M1D	1035.5 W (ERP)	
1090 MHz	FX	6M00M1D	25 W (ERP)	

Special Conditions:

- (1) In lieu of frequency tolerance, the occupied bandwidth of the emission shall not extend beyond the band limits set forth above.
- (2) The Transportable Transponder Landing System (TLS) may only be used for experimental purposes.
- (3) Transportable TLS operations are limited to runway 16 and 34 at the Madras Airport (S33) in Madras, Oregon.

This authorization effective February 26, 2004 and
will expire 3:00 A.M. EST August 03, 2004

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Special Conditions:

- (4) The mainbeam of the TLS localizer (108.35 MHz) antenna, glide slope (333.95 MHz) antenna, and interrogator antenna (1030 MHz) shall be on an azimuth of 179 and 359 degrees (+/- 5 degrees) and back course guidance and interrogations are authorized.
- (5) The side lobe suppression (1030 MHz) antenna shall be on an azimuth of 179 and 359 degrees (+/- 5 degrees) and may only be used to transmit the side lobe suppression pulse.
- (6) The maximum omnidirectional interrogation rate (1030 MHz) shall not exceed 2 interrogations per second with an additional 10 interrogations per second directed along either runway 16 or 34. The additional 10 interrogations must employ side lobe suppression transmissions and are only to be used when an aircraft is being provided approach guidance.
- (7) Communications between aircraft and the TLS ground operator shall be conducted on the UNICOM frequency assigned to the Madras Airport (S33) in Madras, Oregon or on Military band frequencies obtained to support the test activities.
- (8) Changes in the Transportable TLS operating interrogator system will be required before this system proceeds to a production system. Other operating parameter changes may be required as a result of ongoing civil TLS Certification activities.
- (9) The Transportable TLS shall transmit the Morris Code identifier "XOM" in conjunction with the standard Localizer and Glide Slope signals.