

3387-EX-ST-1998

To: Frank Wright, FCC

From: Don Nellis, FAA

Date: 7/29/99

Subject: Special Temporary Authorization (STA) for Advanced Navigation and Positioning Corporation's (ANPC) Transponder Landing System (TLS) at Watertown, Wisconsin.

The FAA approves extending for another 180 days, a STA to support continued TLS testing on runway 5 at Watertown, Wisconsin with the following transmit characteristics:

Location: Watertown, WI; NL ⁴³(34) 09 54, WL 088 43 39

Frequency (MHz)	Authorized Power (watts)	Emission Designator	Signal Name
122.8	10.00 (Transmitter)	6K00E ^{A3E} 3E	UNICOM
108.35	1.600 (ERP)	6K00A9W	Localizer
333.95	10.00 (ERP)	300H00A1N	Glide Slope
1030.000	500.0 (ERP)	6M00M1D	Interrogator
1030.000	500.0 (ERP)	6M00M1D	Suppression
1090.000	0.100 (ERP)	6M00M1D	Calibration/System Test

Please include the following special conditions on the STA:

- 1) The TLS at Watertown, Wisconsin shall use the identifier "XYM" for TLS operations.
- 2) TLS operations are limited to the demonstration of Category I ILS like precision approaches to runway 5 at the Watertown Municipal airport (RYV), Wisconsin. The mainbeam of the Localizer, Glide Slope, and Interrogation transmit antennas shall be on an azimuth of 230 degrees (+/- 5 degrees). Back Course guidance or interrogations are not authorized.
- 3) TLS operational procedures shall be approved by local/regional FAA Air Traffic Control personnel.

- 4) TLS Transponder codes shall be assigned by FAA Air Traffic Control personnel or from a list of codes pre-approved by FAA Air Traffic Control authorities.
- 5) Communications between aircraft and the TLS ground operator that are necessary to enter the aircraft transponder code into the TLS and establish TLS service to the aircraft shall be conducted on the UNICOM frequency assigned to the Watertown Municipal airport (RYV), Wisconsin.
- 6) The TLS shall transmit on 1030 MHz only to track the aircraft engaged in a precision approach using the designated transponder code or to perform periodic TLS calibrations and system tests. Transmissions on 1030 MHz at other times are not authorized.
- 7) A temporary increase in the maximum TLS interrogation/suppression rate on 1030 MHz from 5 Hz to 10 Hz is authorized until the FAA determines the appropriate interrogation rate for a TLS system.
- 8) The pulse rate and test duration of the calibration and system test transmissions on 1090 MHz shall be in accordance with FAA direction.
- 9) During FAA testing of the Watertown TLS in August 1999, temporary changes in the transmit powers, interrogation rates, and procedures are authorized as directed by FAA test personnel.
- 10) Future changes in the TLS operating parameters may be required as a result the FAA TLS test program.