

TECHNICAL EXHIBIT
COMPANION CHANNEL APPLICATION
LPTV STATION WMTO-LP (FACILITY ID 168648)
MANTEO, NORTH CAROLINA
CH 11 0.3 KW

Technical Narrative

This Technical Exhibit supports a “long-form” application for LPTV station WMTO-LP. Station WMTO-LP is authorized by a modification of construction permit to operate on analog channel 6 with a directional antenna maximum (visual) effective radiated power (ERP) of 0.6 kW and an antenna height above mean sea level (RCAMSL) of 15.5 meters (BMPTVL-20040914AAW).

WMTO-LP filed a companion channel application for channel 11 (BSFDTL-20060630CUK), which is noted on the Commission’s Auction no. 85 non-mutually exclusive proposal list (DA 06-1748). The FCC requires that “long-form” applications be filed by October 30, 2006. Therefore, this application is being filed to cover that “short-form” proposal.

Proposed Facilities

This application proposes digital operation on channel (11), at the following site coordinates, 35-54-38 N, 75-40-13 W (NAD 27). A Scala TVO-2 non-directional antenna, with a maximum ERP of 0.3 kW and antenna RCAMSL of 15.5 meters is proposed.

Figure 1 is a map showing the licensed 62 dBu (analog) and proposed dBu (digital) coverage contours. As can be seen on the map, the licensed 74 dBu contour is nearly encompassed by the proposed 51 dBu contour.

Antenna Registration

The antenna will be mounted at the 15.5 meter level on an existing tower having an overall height above ground level of 16 meters. Tower registration is not required based on the TOWAIR program. Figure 2 provides the TOWAIR program results.

Allocation Considerations

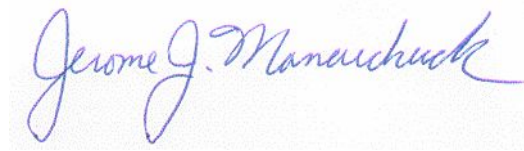
A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending analog or digital TV, LPTV/translator and Class A TV stations. Using the procedures outlined in the FCC's OET-69 Bulletin, a 1-kilometer cell size resolution and 1990 U.S. Census, the proposal complies with the current FCC policy (i.e., less than 0.5% new interference caused to other pertinent assignments). If necessary, a waiver of the FCC rules is respectfully requested based on use of the procedures outlined in the FCC's OET-69 Bulletin.

The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation.

Radiofrequency Electromagnetic Field Exposure

The proposed WMTO-LP digital facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed digital antenna is located 15.5 meters above ground level. Figure 3 is the antenna vertical relative field pattern for the proposed antenna. Based on a vertical relative field factor of 0.3 (for angles below 60 degrees downward), a maximum effective radiated power of 0.3 kilowatts, the calculated power density at 2 meters above ground level be 0.0049 mW/cm^2 , which is 2.47% of the FCC's recommended limit of 0.2 mW/cm^2 for channel 11, applicable to general population/uncontrolled exposure areas.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure.

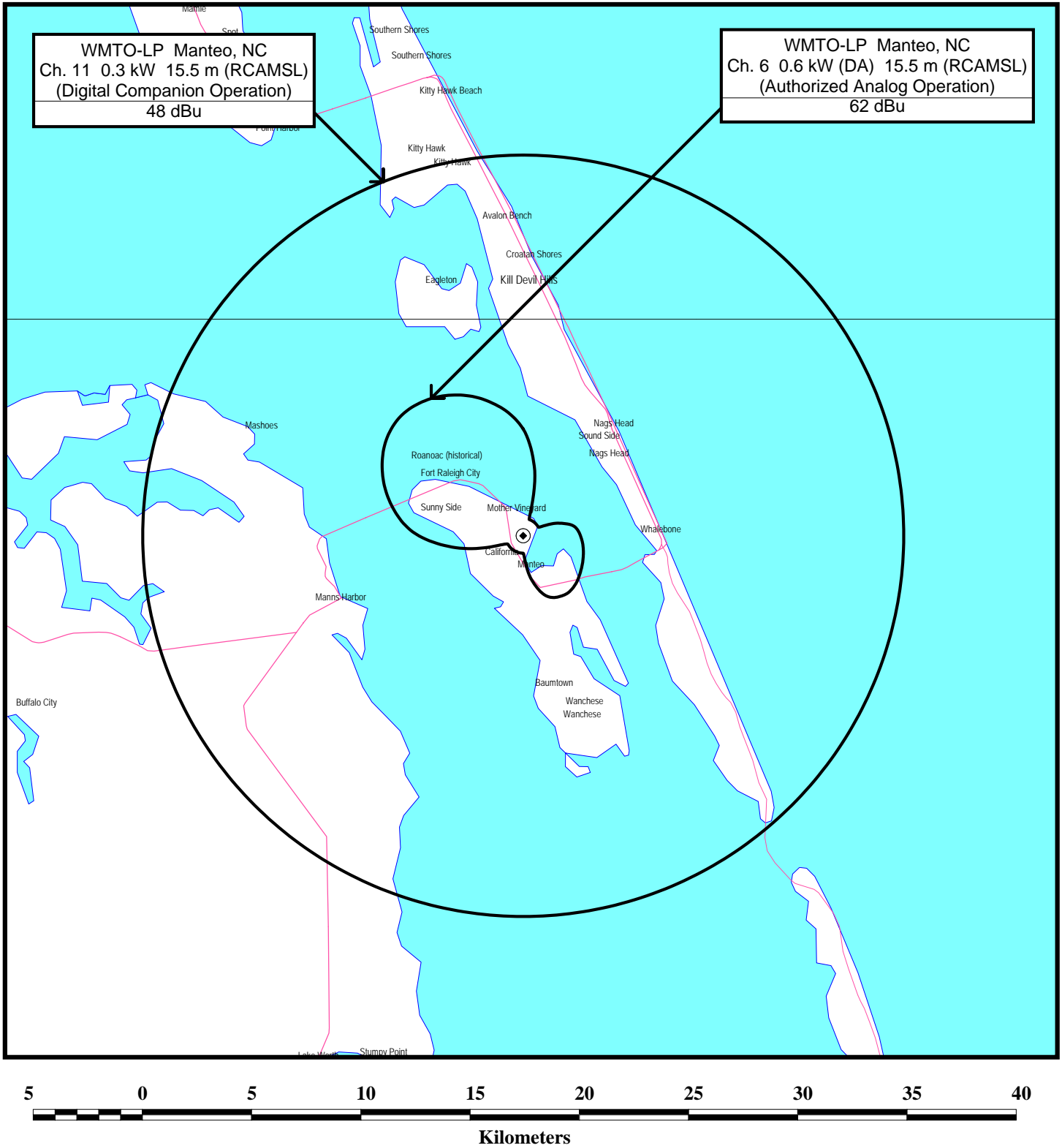


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October 27 2006

Figure 1



FCC PREDICTED COVERAGE CONTOURS

DIGITAL COMPANION OPERATION FOR LPTV STATION WMTO-LP
MANTEO, NORTH CAROLINA
CH 11 0.3 kW

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



Antenna Structure Registration

[FCC](#) > [WTB](#) > [ASR](#) > [Online Systems](#) > TOWAIR

[FCC Site Map](#)

TOWAIR Determination Results

[? HELP](#)

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*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

Structure does not require registration. The structure meets the 6.10-meter (20-foot) Rule criteria.

Your Specifications

NAD83 Coordinates

Latitude	35-54-39.0 north
Longitude	075-40-12.0 west

Measurements (Meters)

Overall Structure Height (AGL)	16
Support Structure Height (AGL)	16
Site Elevation (AMSL)	0

Structure Type

BPIPE - Building with Pipe

[Tower Construction Notification](#)

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

Note: Notification does NOT replace [Section 106 Consultation](#).

ASR Help

[ASR License Glossary](#) - [FAQ](#) - [Online Help](#) - [Documentation](#) - [Technical Support](#)

ASR Online Systems

[TOWAIR](#) - [CORES](#) - [ASR Online Filing](#) - [Application Search](#) - [Registration Search](#)

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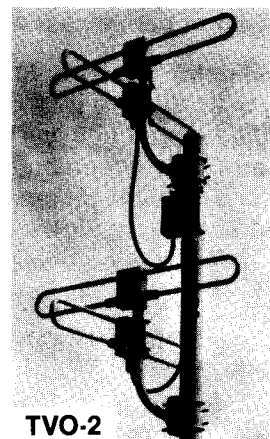
(503) 779-6500

TVO VHF-TV OMNI ANTENNA

APPLICATIONS:

- VHF-TV TRANSLATORS
- LOW POWER VHF-TV BROADCAST

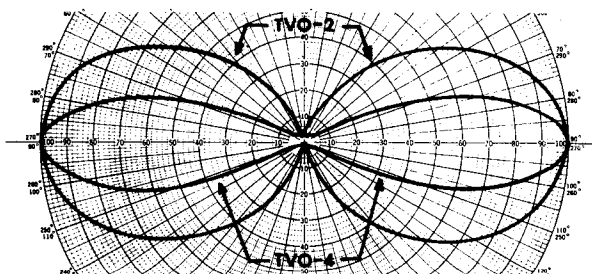
TVO (One-bay)
TVO-2 (Two-bay)
TVO-4 (Four-bay)
(50 or 75 ohms)



TVO-2

ELECTRICAL SPECIFICATIONS

Frequency Range:	Any specified VHF-TV Channel (54-216 MHz)
Impedance:	50 or 75 ohms
Gain (over dipole):	TVO: - 3.0 db (one-bay) TVO-2: 0.0 db (two-bay) TVO-4: + 3.0 db (four-bay)
VSWR:	1.3:1 maximum across specified channel
Polarization:	Horizontal
Power Input Rating:	100 watts (1,000 watts available)
Termination:	50-ohm models: Female type N (mates with UG-21/U) 75-ohm models: Female F, UHF, or N (mates with UG-94/U)
Horizontal Pattern:	Omni-directional within 1.5 db
Options available:	1,000 watt rating (TVO-4) Electrical beamtilt (TVO-2) and TVO-4) Six-bay (TVO-6) and Eight-bay (TVO-8) arrays



VERTICAL PATTERN — RELATIVE VOLTAGE