

TECHNICAL EXHIBIT
IN SUPPORT OF
SPECIAL TEMPORARY AUTHORITY (STA)
STATION K40GC (FACILITY ID 48557)
DORA, NEW MEXICO
CH 40 5.98 KW (MAX-DA)

Technical Narrative

This Technical Exhibit supports a Special Temporary Authority (STA) request for TV translator station K40GC on channel 40 (626-632 MHz) at Dora, New Mexico. Station K40GC is currently licensed (BLTT-20031107AET) to operate on channel 40 with a directional antenna maximum effective radiated power (ERP) of 3.129 kilowatts (kW) and an antenna radiation center height above mean sea level (RCAMSL) of 1391 meters. TV translator station K40GC rebroadcasts full power TV station KBIM on 10 at Roswell, New Mexico.

Response to Paragraph 8

TV translator station K49BY on channel 49 at Clovis, New Mexico picks up the K40GC signal "off-air" for rebroadcast. Apparently the activation of K41JI on channel 41 at Clovis (BLTTL-20051222AEY) prevents reception of the K40GC signal by K49BY. Thus, K40GC proposes to operate under an STA on channel 69, which was its formerly licensed operation at Dora (BLTT-19800509IB), in order to permit reception of its signal by K49BY at Clovis. It is noted that the formerly licensed K40GC channel 69 facilities will also be used for the K40GC STA operation. It is believed that the proposed STA is in the public interest as it will permit K40GC to continue to provide an off-air signal to K49BY for retransmission of the KBIM signal.

Proposed STA Facilities

This STA request proposes operation on channel 69 (800-806 MHz) from the licensed K40GC site (NAD27 coordinates: 33-54-15 N, 103-30-41 W) with no carrier frequency offset, a directional antenna maximum ERP of 5.98 kW and an RCAMSL of 1395 meters. A Scala composite directional antenna will be utilized and will consist of a Scala

PR-450U antenna oriented at 26 degrees true and fed with 90% power and a Mark P-9120 GR antenna oriented at 80 degrees true and fed with 10% power (90/10 power split). Figure 1 is a map depicting the 74 dBu coverage for the proposed K40GC STA operation. Figure 2 is a vertical plane relative field pattern for the Scala PR-450U directional antenna.

Antenna Structure Registration Number

The Scala composite directional antenna will be side-mounted at the 23 meter level on the existing K40GC tower. Based on the FCC's TOWAIR program, the existing supporting structure does not require tower registration. Figure 3 depicts the TOWAIR determination results.

TV Broadcast Analog, DTV, LPTV, TV Translator and Class A Station Protection

Studies indicate that the proposed STA complies with all pertinent interference criteria with respect to TV broadcast analog, DTV, LPTV, TV translator and Class A TV stations.

Environmental Considerations

The proposed K40GC STA facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The antenna radiation center for the proposed K40GC antenna will be located 23 meters above ground level. The maximum visual ERP is 5.98 kW and 10% aural power has been presumed. A conservative vertical plane relative field value of 0.2 was also presumed (see Figure 2). Therefore, the "worst-case" calculated power density at a point 2 meters above ground level will be 0.0091 mW/cm^2 . This is less than 2% of the FCC's recommended limit of 0.54 mW/cm^2 for channel 40 for an "uncontrolled" environment. Thus, as the power density for K40GC's STA facilities does not exceed the 5% threshold, it is believed that full compliance with the FCC's requirements with regard to radio frequency radiation exposure obtains.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, procedures will be in effect in the event that workers or other

authorized personnel enter the restricted area or climb the tower to ensure that 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.

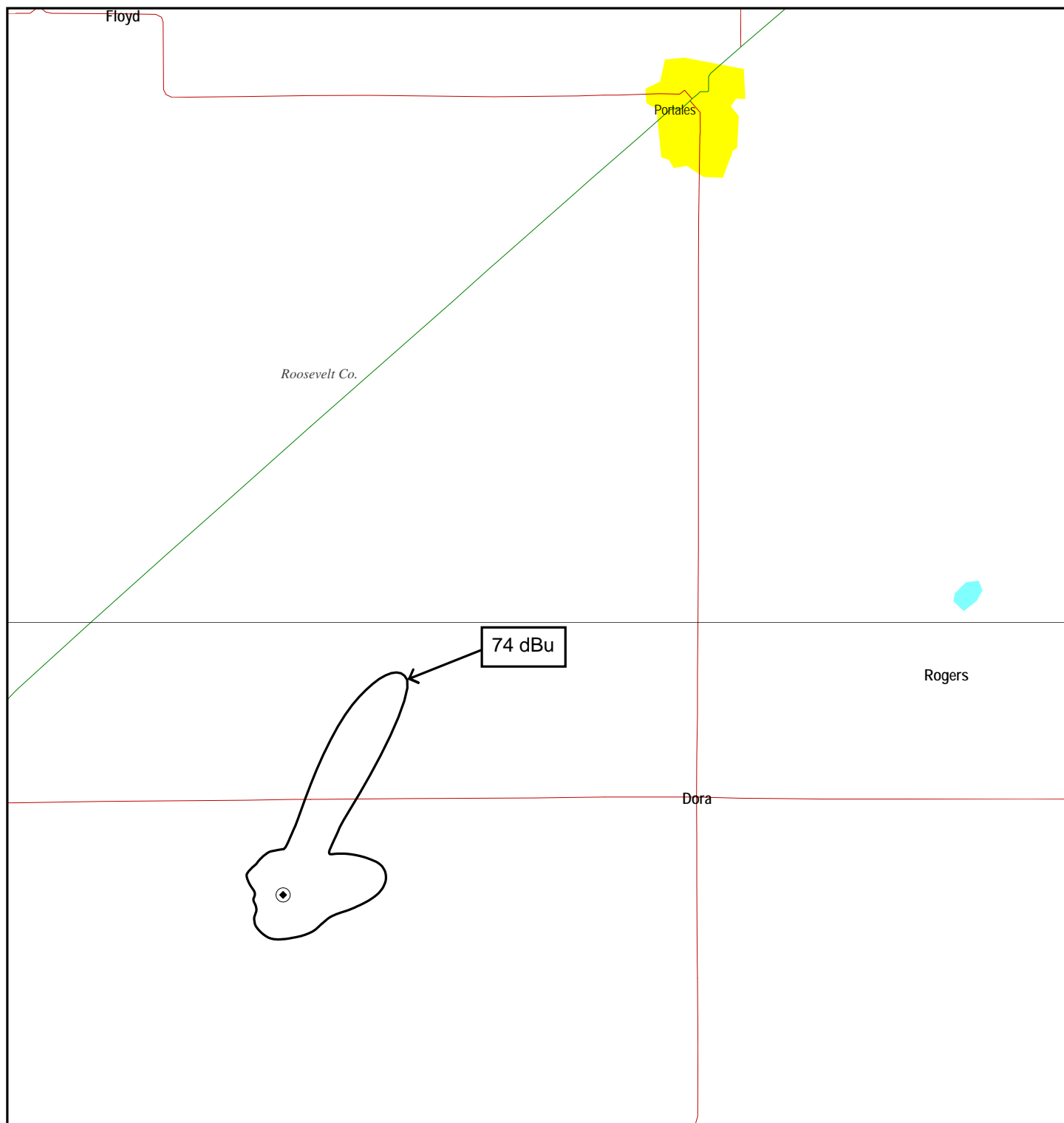
If there are questions concerning the technical portion of this STA, please contact the office of the undersigned.

A handwritten signature in black ink, appearing to read "W. Jeffrey Reynolds". The signature is fluid and cursive, with the first name "W." followed by a full name.

W. Jeffrey Reynolds
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000

February 3, 2006

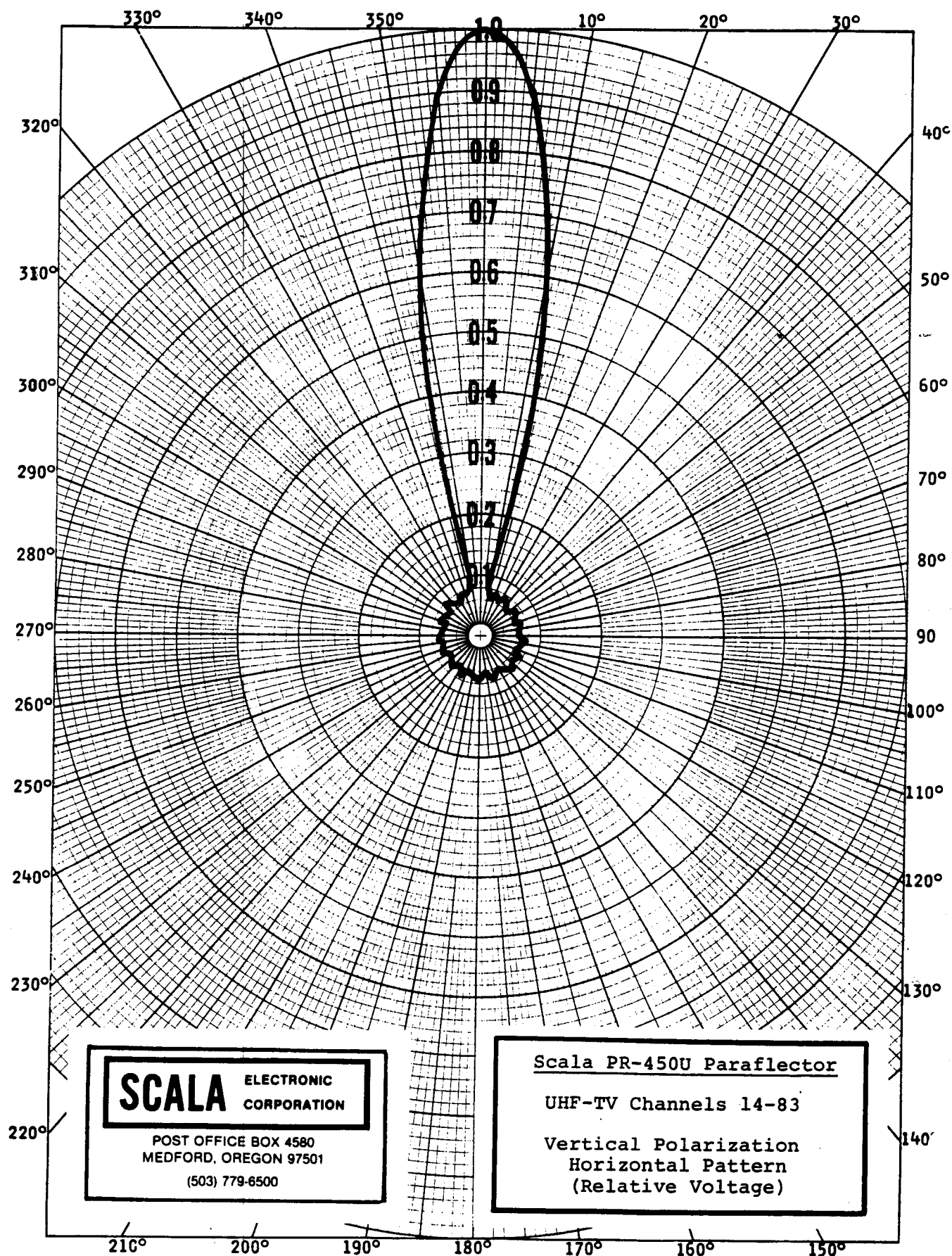
Figure 1



**PREDICTED STA COVERAGE
TV TRANSLATOR STATION K40GC
DORA, NEW MEXICO
CH 69 5.98 KW (MAX-DA)**

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

Figure 2



TOWAIR Determination Results

*** 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. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.

Your Specifications

NAD83 Coordinates

Latitude	33-54-15.3 north
Longitude	103-30-42.8 west

Measurements (Meters)

Overall Structure Height (AGL)	24
Support Structure Height (AGL)	24
Site Elevation (AMSL)	1372

Structure Type

TOWER - Free standing or Guyed Structure used for Communications Purposes

[Tower Construction Notification](#)

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

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

CLOSE WINDOW