

TECHNICAL SUMMARY  
STA REQUEST  
DIGITAL CLASS A STATION WVUP-CD  
TALLAHASSEE, FLORIDA  
CHANNEL 30 13 KW (DA)

1. The instant application is for an STA to operate WVUP-CD on channel 30 at Tallahassee, Florida from its authorized site ("CP", LMS File No. 0000093112). Specifically, it is proposed to side-mount a Kathrein model 75010402, horizontally polarized, directional antenna (DA) at the 152.4 meter level on the existing tower which will result in an RCAMSL of 196.4 meters. The Kathrein DA will have a main lobe orientation of 290 degrees true and will be operated with a maximum ERP of 13 kW. There will be no change in the overall structure height of the existing structure (ASRN 1031203).

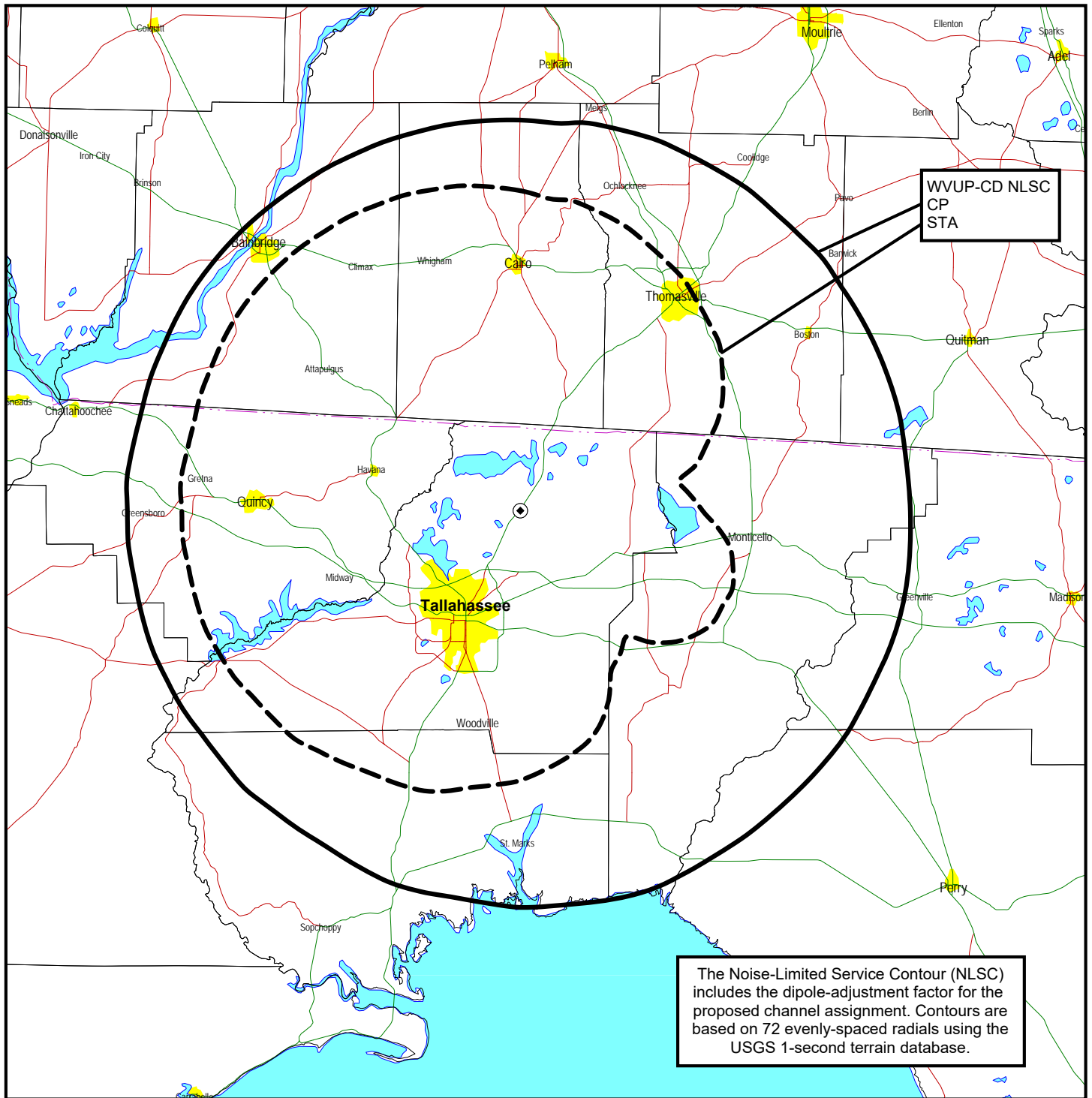
2. The basis for the STA request is addressed elsewhere in this application.

3. Figure 1 demonstrates that there is no extension of the NLSC of the STA beyond that of the CP.

4. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 152.4 meters above ground level. The total DTV ERP is 13 kW (horizontal polarization). A greater than expected vertical plane relative field value of 0.25 (-12 dB) is presumed for the antenna's downward radiation (see attached vertical plane relative field pattern). The calculated power density at a point 2 meters above ground level is  $1.2 \text{ uW/cm}^2$  which is 0.32% of the FCC's recommended limit of  $379.3 \text{ uW/cm}^2$  for channel 30 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Also, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.

Figure 1



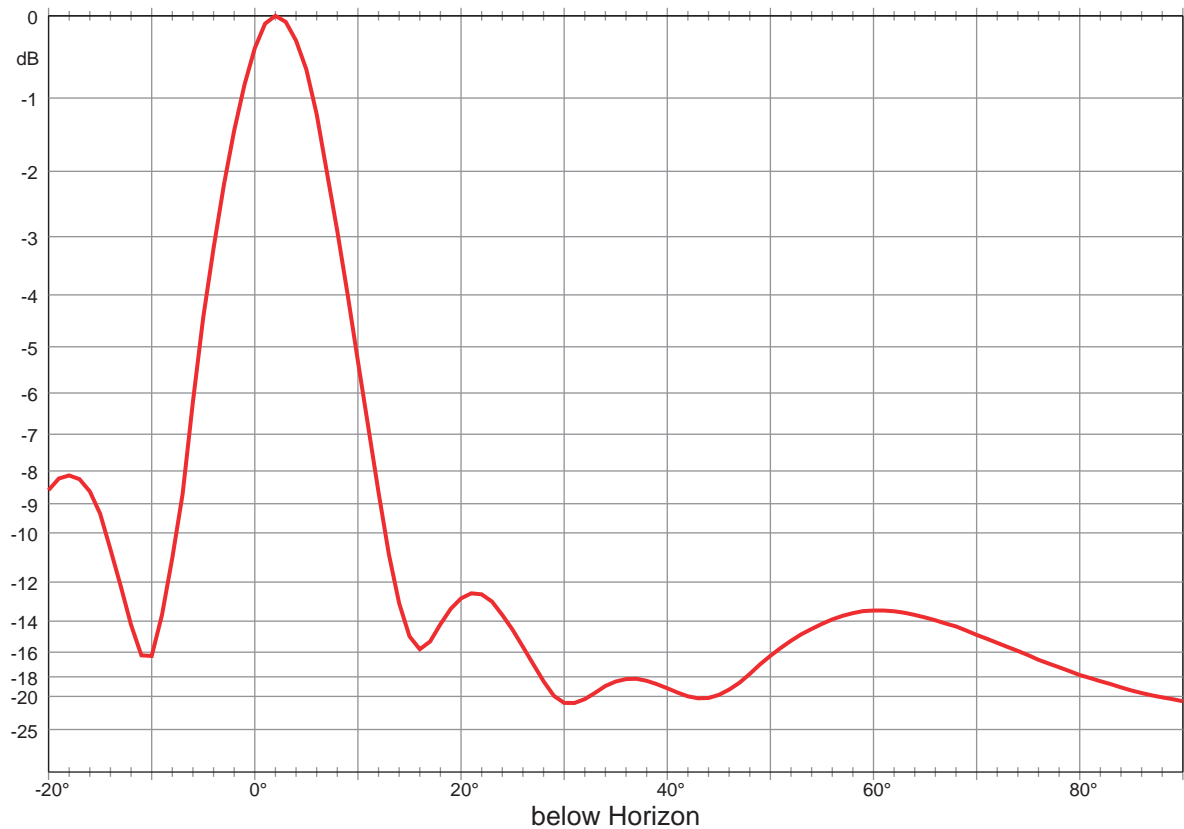
25 0 25 50 Kilometers

## FCC PREDICTED COVERAGE CONTOURS

STA OPERATION  
CLASS A STATION WVUP-CD  
TALLAHASSEE, FLORIDA  
CH 30 13 KW (DA-MAX)

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

## Elevation Pattern (cartesian-linear)



Antenna, Order No. 75010402

Number of Bays: 1

Frequency: 569 MHz

Elevation Directivity: 6.37 dBd

Directivity: 10.07 dBd

Downtilt: 2°

Compensation: 0 %

No.	Vert. Distance [mm]	Power	Phase [°]
1	0	1	0