TECHNICAL SUMMARY
REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)
TV STATION WFGC
PALM BEACH, FLORIDA
CHANNEL 7 1.2 KW (MAX-DA) 62 m

1. The instant request is for Special Temporary Authority (STA) for WFGC, Palm Beach, Florida, which is authorized (CP, LMS File No. 0000034361) for post-transition operation on channel 7. The WFGC STA facility will operate on post-transition channel 7 at reduced ERP with a temporary directional antenna side-mounted at a height of 61 meters above ground level on the existing/authorized tower. There will be no change in the overall structure height of the existing tower (ASRN 1018586).

2. The proposed STA antenna system has been designed such that there will be no extension of the predicted noise-limited service contour of the STA facility beyond that of the main facility (see Figure 1 attached).

3. 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 61 meters above ground level. The total DTV ERP is 1.2 kW (horizontal polarization). A conservative vertical plane relative field value of 0.3 is presumed for the antenna's downward radiation in both the horizontal and vertical planes of polarization (for angles below 60 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is 1.04 uW/cm^2 which is 0.52% of the FCC's recommended limit of 200 uW/cm^2 for channel 7 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. Furthermore, 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.

DRV
VHF-TV Panel Antenna
174—230 MHz (Channels 7—13*)

KATHREIN

General Specifications	
Frequency	174—230 MHz (broadband)*
Impedance	50 ohms
VSWR	<1.2:1
Polarization	Horizontal or vertical
Maximum input power	500 watts per panel (at 50° C)
Connector	N female
Wind load at 100 mph (161 kph)	
Front	93 lbf (414 N)
Wind survival rating**	120 mph (193 kph)
Mounting	Hardware is included for attachment to masts of 2.375 inch (60 mm) OD. Contact KUSA Customer service for additional mounting options

*The DRV covers channel 7 through 13 in system M as well as all other international band III channels.

**Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

Elevation patterns