

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of PAPPAS TELECASTING OF OPELIKA, A CALIFORNIA LIMITED PARTNERSHIP, permittee of WSWS-DT, Channel 31 in Opelika, Alabama, in support of its Application for Modification of Construction Permit BPCDT-19991101AGV, to specify a change in transmitter site.

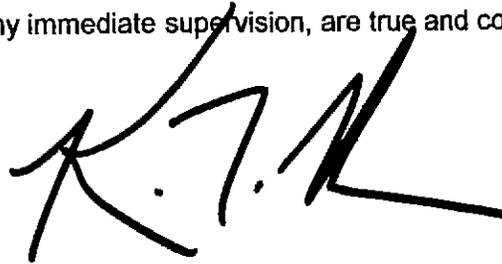
Exhibit B provides directional pattern data for the authorized antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. Since the proposed site is not within 5 kilometers of the allotment site, an interference study is included in Exhibit D. A power density calculation is provided in Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the new WSWS-DT site. However, if such should occur, the owner of WSWS-DT recognizes its obligation to take whatever corrective actions are necessary.

Since no change in the overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. A copy of the FAA's Determination of No Hazard for the tower is provided in Exhibit F. The tower owner is in the process of registering the tower with the FCC. Once an Antenna Structure Registration Number has been issued, it will be provided to the Media Bureau as a supplement to this application.

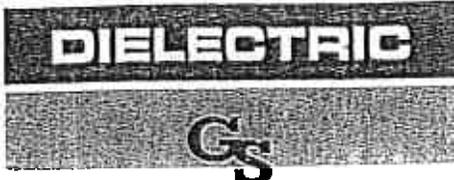
EXHIBIT A

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in black ink, appearing to read 'K.T. Fisher', with a stylized flourish at the end.

KEVIN T. FISHER

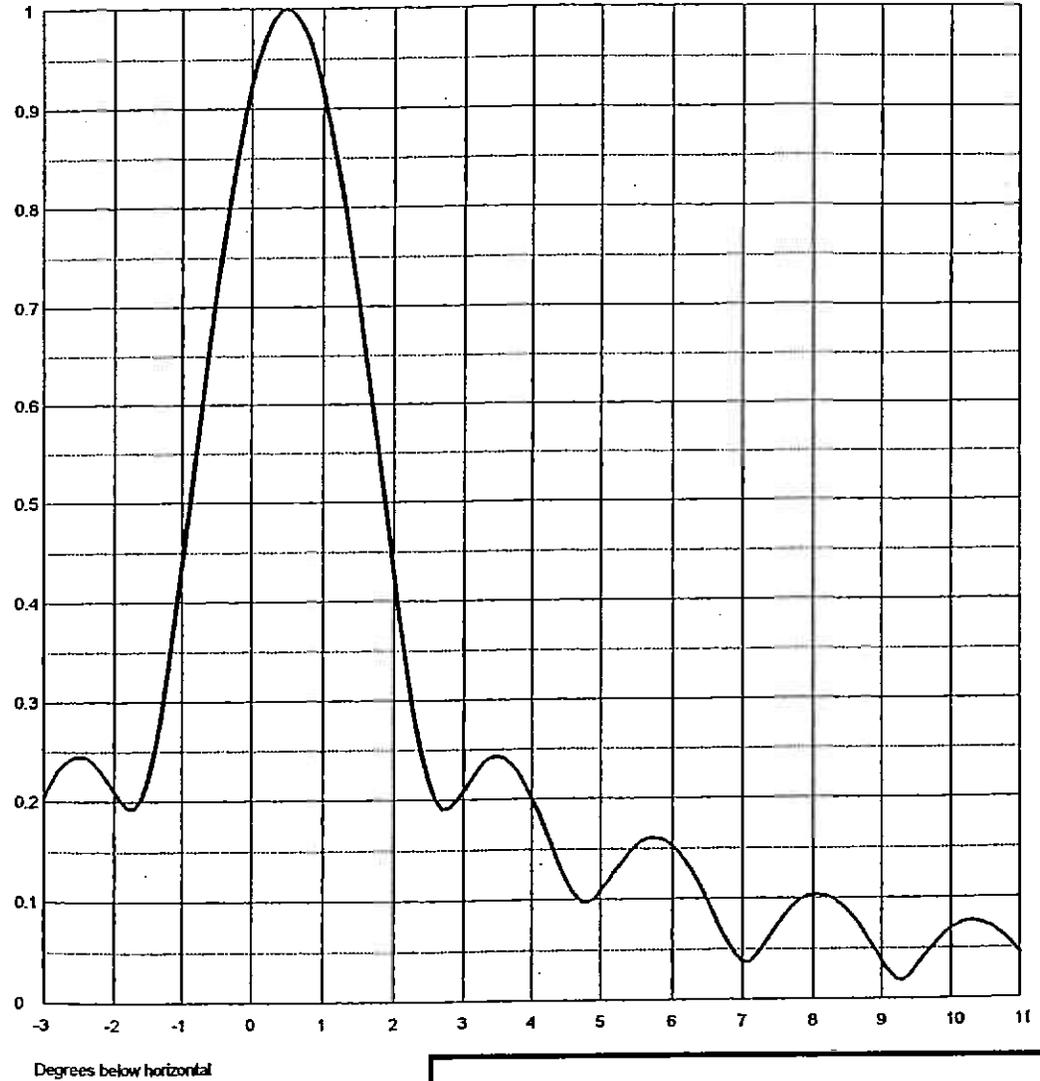
May 10, 2004



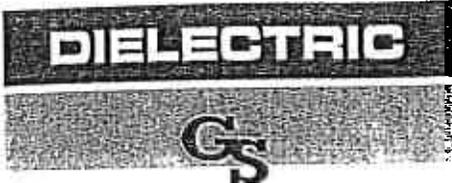
Date 28 Mar 1997  
Call Letters Channel 30  
Location  
Customer  
Antenna Type TUP-12

**ELEVATION PATTERN**

RMS Gain at Main Lobe	26.1 (14.17 dB)	Beam Tilt	0.50 Degrees
RMS Gain at Horizontal	22.2 (13.46 dB)	Frequency	569.00 MHz
Calculated / Measured	Calculated	Drawing #	12U261050



**EXHIBIT B-1**  
**ANTENNA ELEVATION PATTERN**  
**PROPOSED WSWs-DT**  
**CHANNEL 31 - OPELIKA, ALABAMA**  
**[MODIFICATION OF BPCDT-19991101AGV]**  
**SMITH AND FISHER**



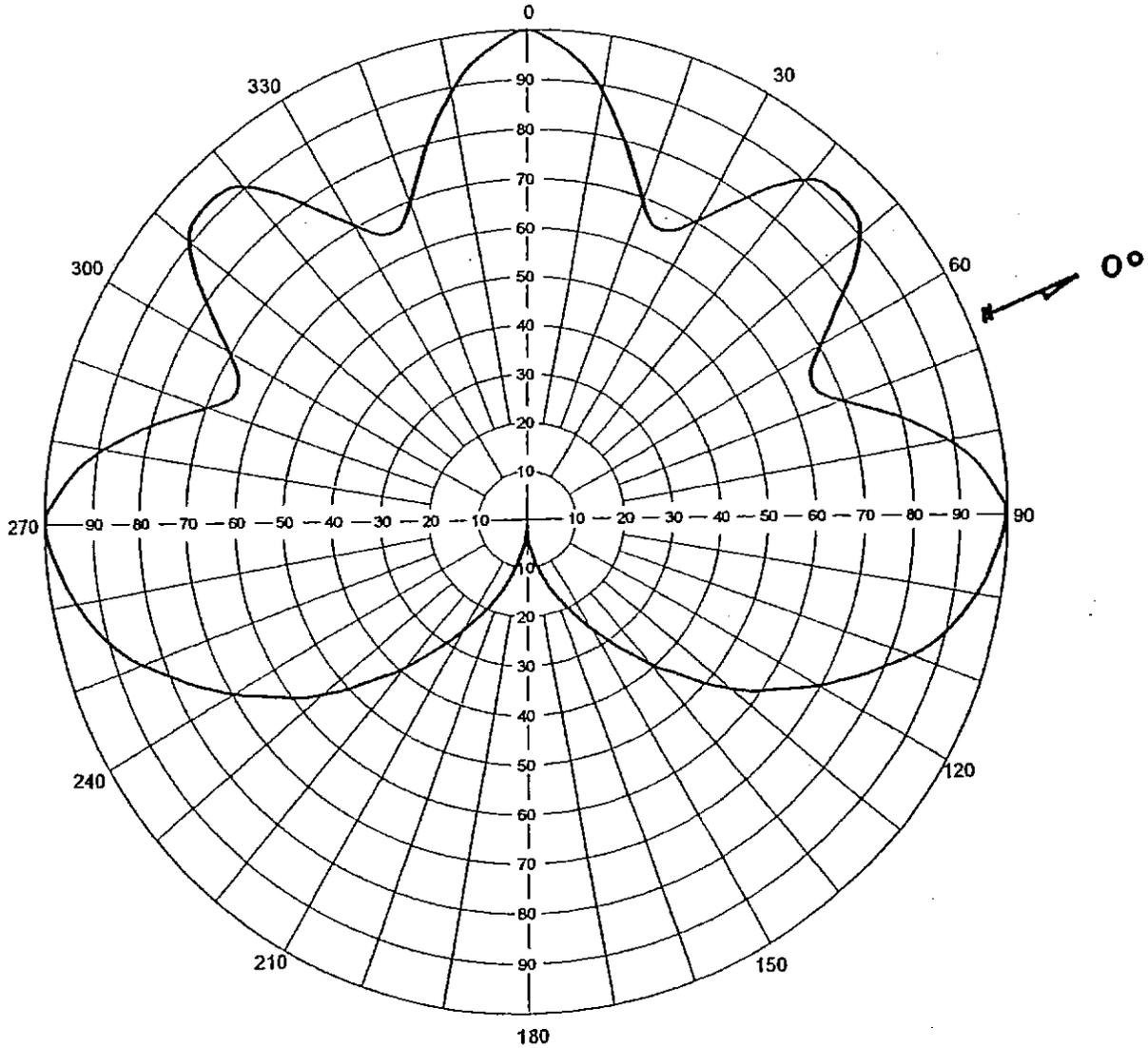
Date 28 Mar 1997  
Call Letters Channel 30  
Location  
Customer  
Antenna Type TUP-C3

**AZIMUTH PATTERN**

RMS Gain at Main Lobe  
Calculated / Measured

1.90 (2.79 dB)  
Calculated

Frequency 569.00 MHz  
Drawing # TUP-C3-30



**EXHIBIT B-2**  
**ANTENNA AZIMUTH PATTERN**  
**PROPOSED WSWS-DT**  
**CHANNEL 31 - OPELIKA, ALABAMA**  
**[MODIFICATION OF BPCDT-19991101AGV]**  
**SMITH AND FISHER**

## HORIZONTAL RELATIVE FIELD PATTERN

PROPOSED WSW5-DT  
CHANNEL 31 - OPELIKA, ALABAMA

[MODIFICATION OF BPCDT-19991101AGV]

<u>Azimuth</u> (° T)	<u>Relative</u> <u>Field</u>	<u>ERP</u> (dbk)	<u>Azimuth</u> (° T)	<u>Relative</u> <u>Field</u>	<u>ERP</u> (dbk)
0	0.658	18.2	180	0.798	19.8
10	0.831	20.2	190	0.926	21.1
20	0.980	21.6	200	0.989	21.7
30	0.969	21.5	210	0.937	21.2
40	0.885	20.7	220	0.751	19.3
50	0.741	19.2	230	0.663	18.2
60	0.595	17.3	240	0.850	20.4
70	0.433	14.5	250	0.926	21.1
80	0.297	11.3	260	0.761	19.4
90	0.186	7.2	270	0.658	18.2
100	0.104	2.1	280	0.831	20.2
110	0.040	-6.2	290	0.980	21.6
120	0.059	-2.8	300	0.937	21.2
130	0.134	4.3	310	0.751	19.3
140	0.228	9.0	320	0.683	18.5
150	0.348	12.6	330	0.850	20.4
160	0.499	15.8	340	0.926	21.1
170	0.649	18.0	350	0.761	19.4

**CONTOUR POPULATION**

48 DBU : 592,739

41 DBU : 689,703

**Smith and Fisher**

**41 DBU**

**48 DBU**

**AMERICUS**

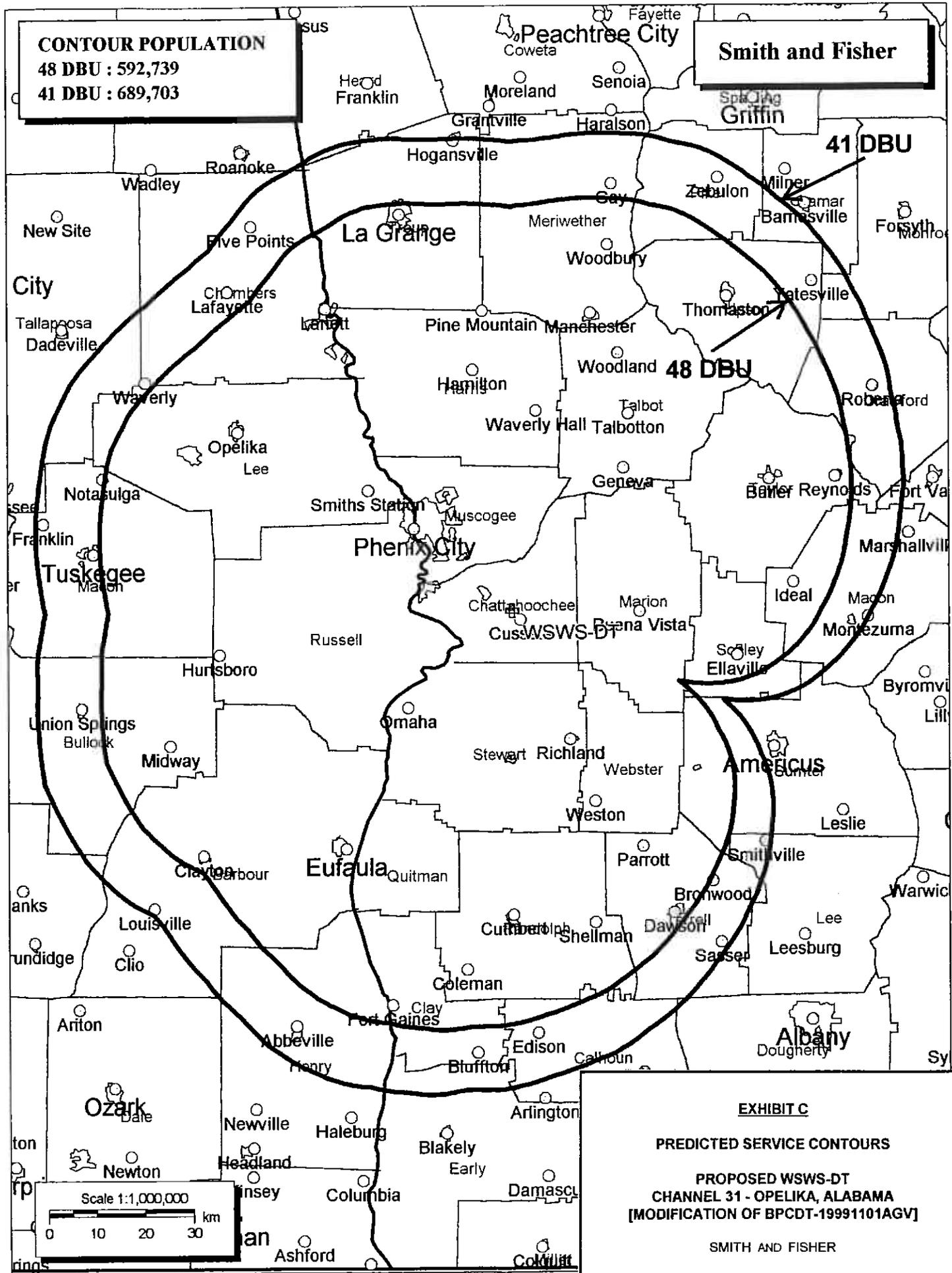
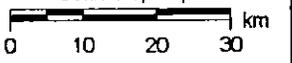
**EXHIBIT C**

**PREDICTED SERVICE CONTOURS**

**PROPOSED WSWs-DT  
CHANNEL 31 - OPELIKA, ALABAMA  
[MODIFICATION OF BPCDT-19991101AGV]**

**SMITH AND FISHER**

Scale 1:1,000,000



INTERFERENCE STUDY  
PROPOSED WSWS-DT  
CHANNEL 31 – OPELIKA, ALABAMA  
[MODIFICATION OF BPCDT-19991101AGV]

The instant application specifies an ERP of 150 kw (directional) at 539 meters, which we have determined to be allowable under the FCC's *de minimis* standards with respect to various NTSC and DTV facilities.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe II" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a signal resolution of 2 kilometers and an increment spacing of 1.0 kilometer along each radial, unless otherwise noted. In addition, we utilized the 1990 U.S. Census. Changes in interference caused by WSWS-DT to other pertinent stations are tabulated in Exhibit D-2.

As shown, the proposed WSWS-DT facility would not contribute more than two percent DTV interference to the service population of any affected NTSC or DTV station. In addition, this proposal does not result in any NTSC or DTV station receiving more than ten percent total DTV interference to viewers living within its authorized service area.

A Longley-Rice interference study also reveals that the proposed WSWS-DT facility does not cause interference within the protected 74 dBu contour of any potentially affected Class A low power television station, including WDMC-CA, Channel 31 in Macon, Georgia.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

INTERFERENCE STUDY SUMMARY  
 PROPOSED WWSW-DT  
 CHANNEL 31 – OPELIKA, ALABAMA  
 [MODIFICATION OF BPCDT-19991101AGV]

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WWSW-DT</u>	<u>%</u>	<u>Total DTV Interference</u>	<u>%</u>
WXFL(TV)	Albany, GA	31	404,483	7,798	1.9	7,798	1.9
WAAY-TV (Lic.)	Huntsville, AL	31	819,481	0	0	11,610	1.4
WAAY-TV (CP)	Huntsville, AL	31	755,598	506	<0.1	8,646	1.1
WRDW-DT (CP)	Augusta, GA	31	1,222,168	79	<0.1	174,058	14.2
WRDW-DT (Allot.)	Augusta, GA	31	1,223,881	79	<0.1	192,664	15.7
WSRE-DT (CP)	Pensacola, FL	31	1,082,560	0	0	149	<0.1

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED WSWs-DT  
CHANNEL 31 – OPELIKA, ALABAMA

[MODIFICATION OF BPCDT-19991101AGV]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Opelika facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 150 kw, an effective antenna height of 513 meters above ground, and the assuming a vertical relative field value of 20 percent at the steeper elevation angles for the proposed Dielectric antenna, maximum power density two meters above ground of  $0.00077 \text{ mw/cm}^2$  is calculated to occur near the base of the tower. Since this is only 0.2 percent of the  $0.38 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 31 (572-578 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.

SMITH AND FISHER

EXHIBIT F



Federal Aviation Administration  
Southern Regional Office  
1701 Columbia Avenue-ASO-520  
College Park, GA 30337

Aeronautical Study No.  
2001-ASO-3028-OE

Issued Date: 6/26/2003

ANTHONY FLORES  
RICHLAND TOWERS/SITE:COLUMBUS,GA  
4890 WEST KENNEDY BLVD, SUITE 850  
TAMPA, FL 33609-1863

**\*\* EXTENSION \*\***

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure Type: ANTENNA TOWER-STRUCTURE ONLY  
Location: CUSSETA, GA  
Latitude: 32-19-16.45 NAD 83  
Longitude: 84-47-28.21  
Heights: 1766 feet above ground level (AGL)  
2249 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

Accordingly, pursuant to the authority delegated me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 12/26/2004 unless otherwise extended, revised, or terminated by this office.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this extension will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (404)305-5614. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2001-ASO-3028-OE.

*for Dale Arrington*  
Richard E. Biscoomb  
Specialist

(EXT) 189280