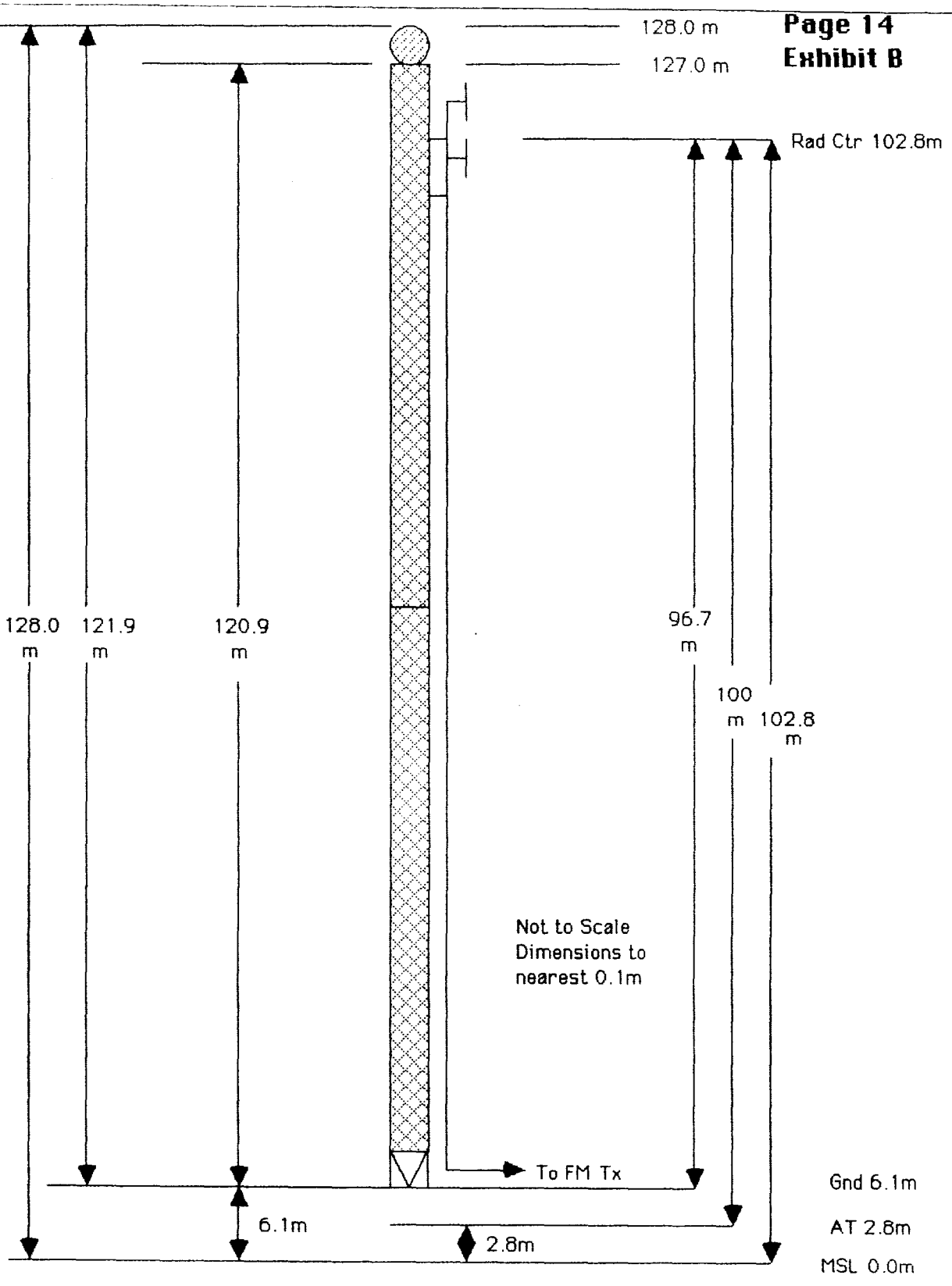
Client : Wind n' Sea FM
Limited Partnership
NEW Ocean City MD.

(11) Special Considerations - Community Tower.

It is proposed to side-mount the proposed FM antenna on a communications tower at the prescribed location. The site will be shared with other services operating on an assortment of VHF and UHF frequencies. Intermodulation studies have been performed on the known combinations with no obvious problems evident. The applicant agrees to co-operate with other users to allow the site to be used by all licensed operators without co-interference.

Repectfully submitted,

D.B. Williamson P.E.
Consulting Engineer.
May 10, 1992.



NEW-FM Tower Elevation Sketch showing location of antenna.
FM Antenna ERI Low Pwr. Cont. 65CPM-2AE-DA-HW 5/92

U.S Department of Transportation
Federal Aviation Administration

SYSTEM MANAGEMENT BRANCH, AEA-530
AIR TRAFFIC DIVISION/EASTERN REGION
FEDERAL AVIATION ADMINISTRATION
FITZGERALD FEDERAL BUILDING
JFK INTERNATIONAL AIRPORT
JAMAICA, NEW YORK 11430

IN REPLY REFER TO
AERONAUTICAL STUDY
NO. 90-AEA-1294-OE

DETERMINATION OF NO HAZARD TO AIR NAVIGATION

SPONSOR	Town of Ocean City P.O. Box 158 Ocean City, MD 21842	CONSTRUCTION LOCATION PLACE NAME Ocean City, MD	
		LATITUDE 38-22-52	LONGITUDE 75-10-32
CONSTRUCTION PROPOSED	DESCRIPTION Antenna Tower EMS Frequencies	HEIGHT (IN FEET) ABOVE GROUND '400	ABOVE MSL 420

An aeronautical study of the proposed construction described above has been completed under the provisions of Part 77 of the Federal Aviation Regulations. Based on the study it is found that the construction would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the construction would not be a hazard to air navigation provided the following conditions are met:

Conditions:

This structure shall be obstruction marked and lighted in accordance with Advisory Circular AC 70/7460-1G, Chapters 3, 4, 5 and 9.

Supplemental notice of construction is required any time the project is abandoned (use the enclosed FAA form), or

- ☒ At least 48 hours before the start of construction (use the enclosed FAA form).
- ☒ Within five days after the construction reaches its greatest height (use the enclosed FAA form).

This determination expires on January 13, 1992 unless:

(a) extended, revised or terminated by the issuing office;
(b) the construction is subject to the licensing authority of the Federal Communications Commission and an application for a construction permit is made to the FCC on or before the above expiration date. In such case the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

This determination is subject to review if an interested party files a petition on or before July 3, 1991. In the event a petition for review is filed, it should be submitted in triplicate to the Manager, Flight Information and Obstructions Branch, AAT-210, Federal Aviation Administration, Washington, D.C. 20591, and contain a full statement of the basis upon which it is made.

This determination becomes final on July 13, 1991 unless a petition for review is timely filed, in which case the determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

An account of the study findings, aeronautical objections, if any, registered with the FAA during the study, and the basis for the FAA's decision in this matter will be found on the following page(s).

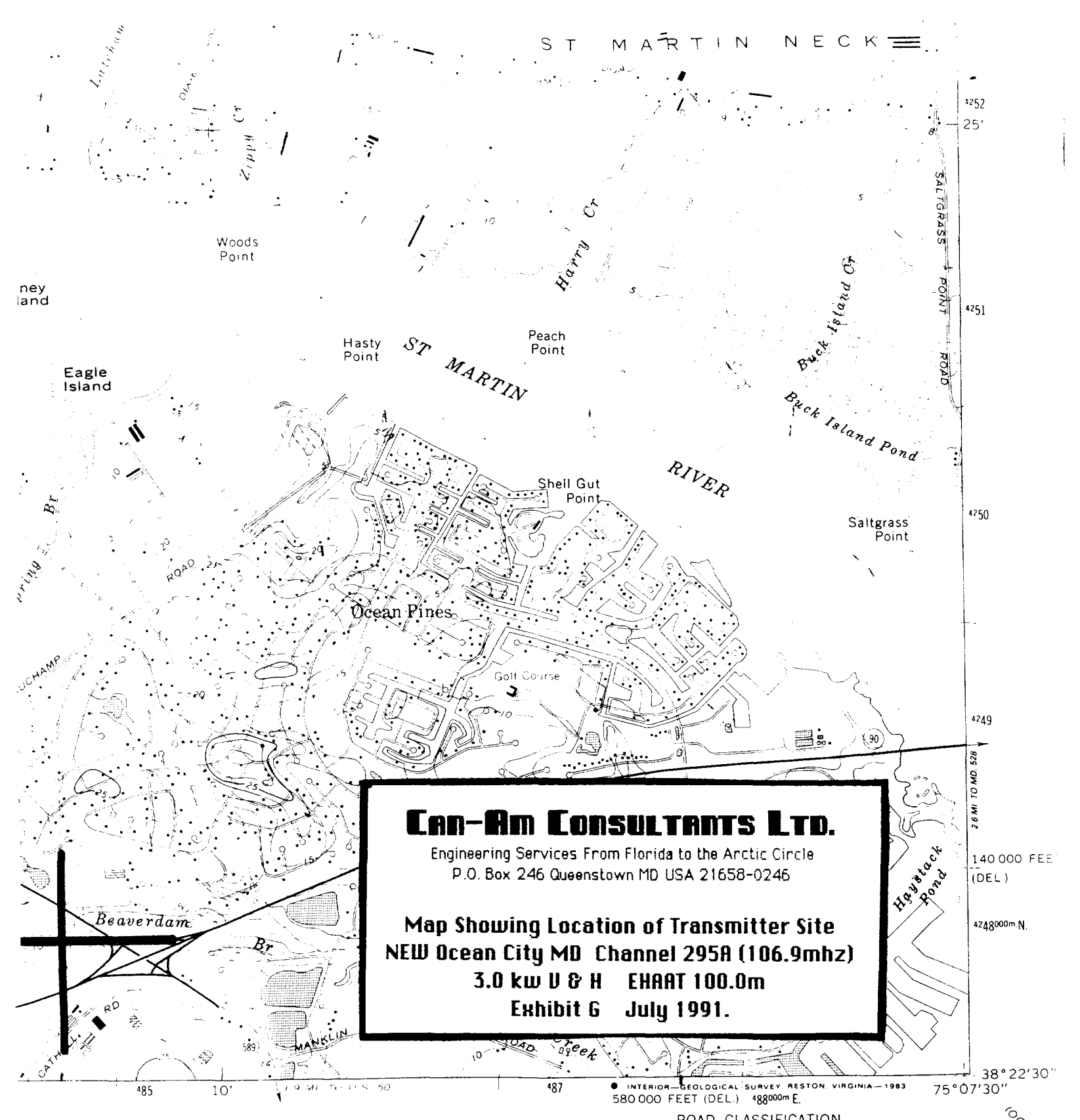
If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that Agency.

This determination, issued in accordance with FAA Part 77, concerns the effect of this proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This proposal is to construct an antenna tower in the vicinity of Ocean City, Maryland, approximately 4.5 nautical miles (NM), northwest of Ocean City Airport, Maryland.

SIGNED Francis T. Jordan, Jr. TITLE Airspace Specialist, System Management Br

ISSUED IN Jamaica, NY ON June 3, 1991



CAN-AM CONSULTANTS LTD.

Engineering Services From Florida to the Arctic Circle
P.O. Box 246 Queenstown MD USA 21658-0246

Map Showing Location of Transmitter Site
NEW Ocean City MD Channel 295A (106.9mhz)
3.0 kw U & H EHAAT 100.0m
Exhibit G July 1991.

1 MILE
6000 7000 FEET
KILOMETER

ROAD CLASSIFICATION

Primary highway, all weather, hard surface
Light-duty road, all weather, improved surface
Secondary highway, all weather, hard surface
Unimproved road, fair or dry weather
U. S. Route
State Route

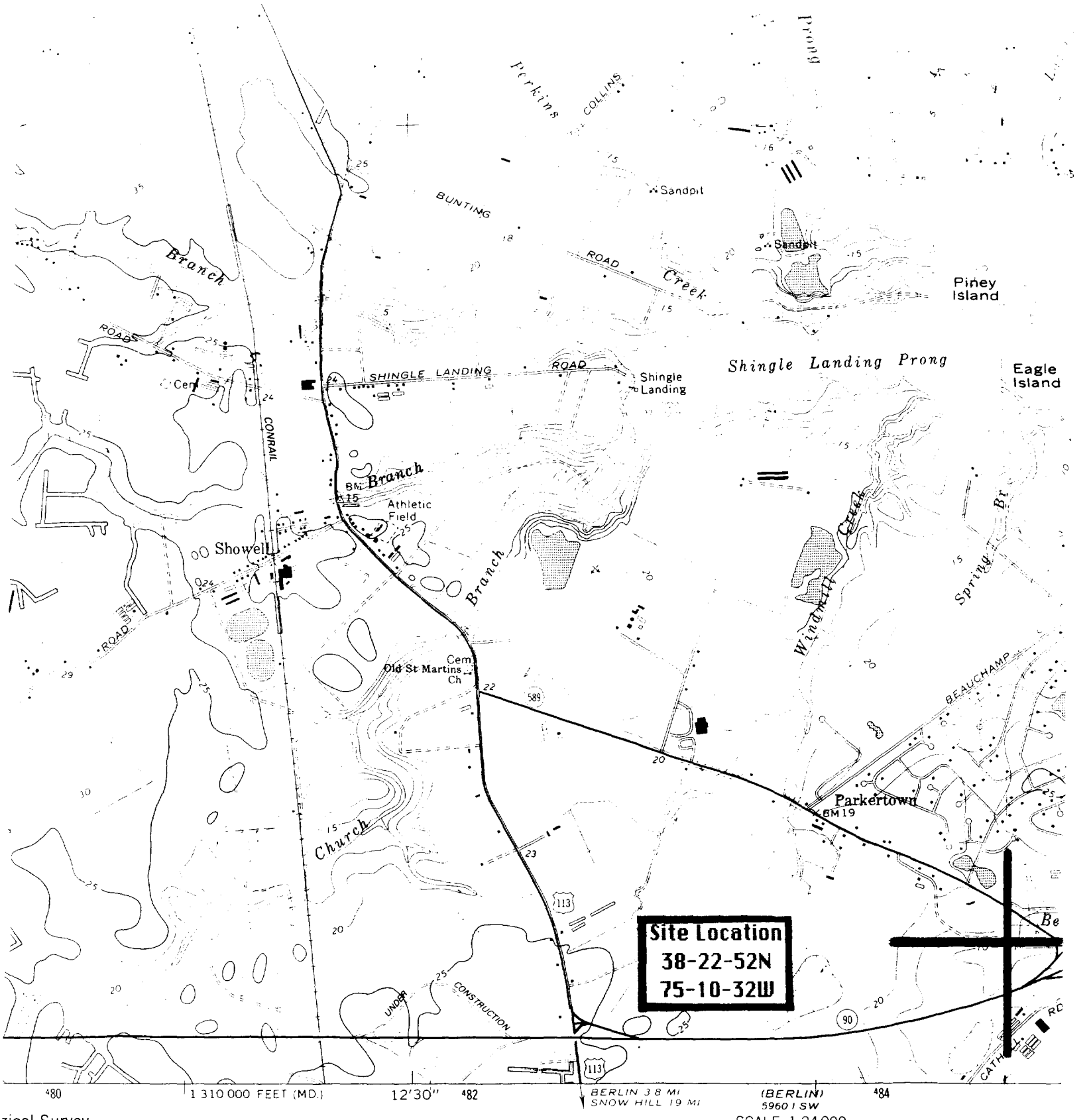
OW WATER
GH WATER
DARDS
22092
ABLE ON REQUEST

DEL
QUADRANGLE LOCATION

Revisions shown in purple and woodland compiled from aerial photographs taken 1981 and other sources. This information not

SELBYVILLE, DEL. – MD.
38075-D2-TF-024

1967
PHOTOREVISED 1983



gical Survey

Control Surveys

220 (1966)
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Maryland
1000-meter
vn in
predicted

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MN
GN

10½°
187 MILS

0°07'
2 MILS

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

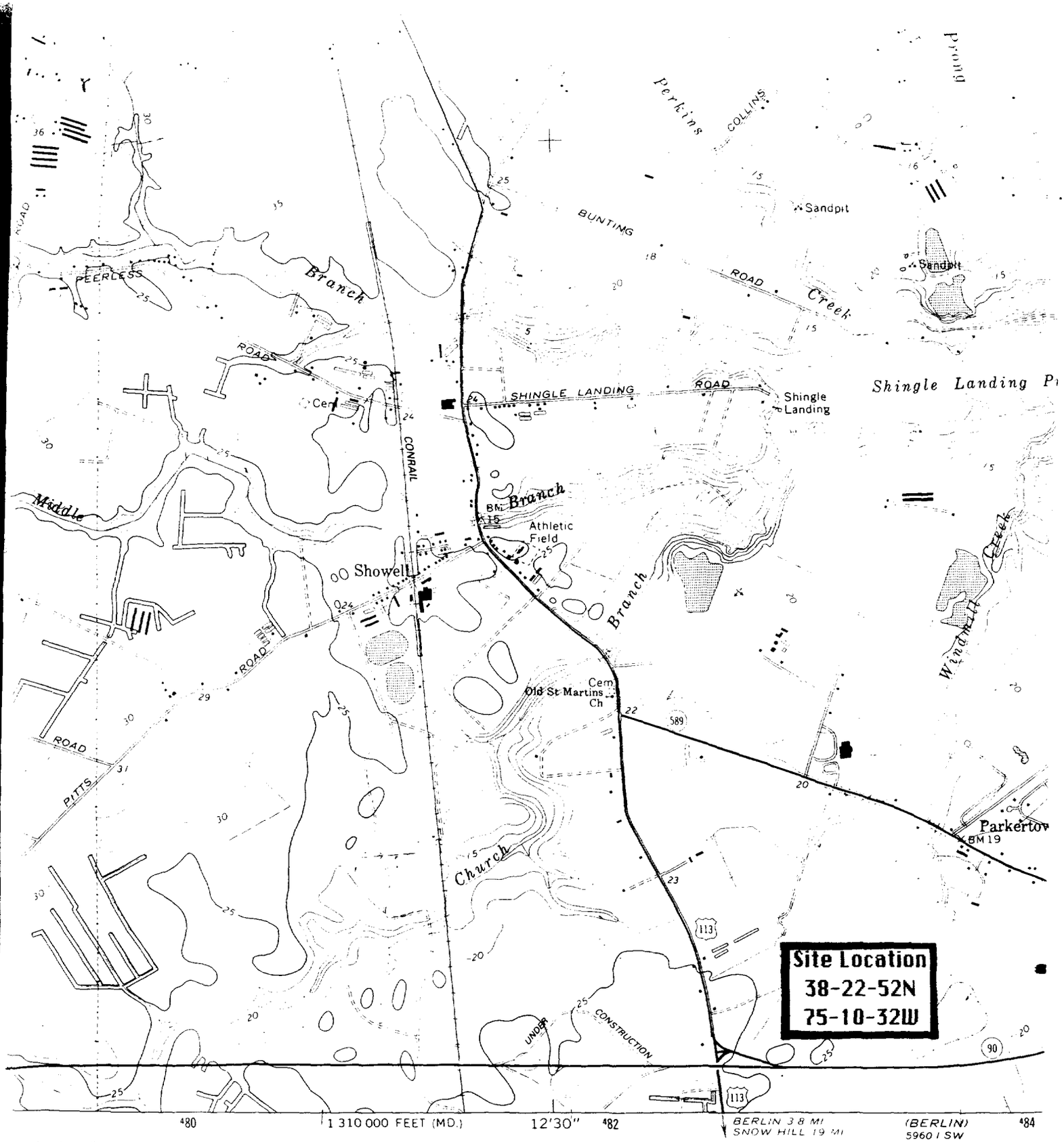
1 ½ 0

1000 0 1000 2000 3000 4000 5000 6000 7000

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS LESS THAN 1 FOOT

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUE



ned by the Geological Survey

Maryland Bureau of Control Surveys

ethods from aerial
necked 1967

ed from NOS chart 1220 (1966)
navigational purposes

t grid ticks based on Maryland
oordinate system. 1000-meter
ticks, zone 18, shown in
m. To place on the predicted
the projection lines
t as shown by dashed

MN
GN

10½°
187 MILS

0°07'
2 MILS

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

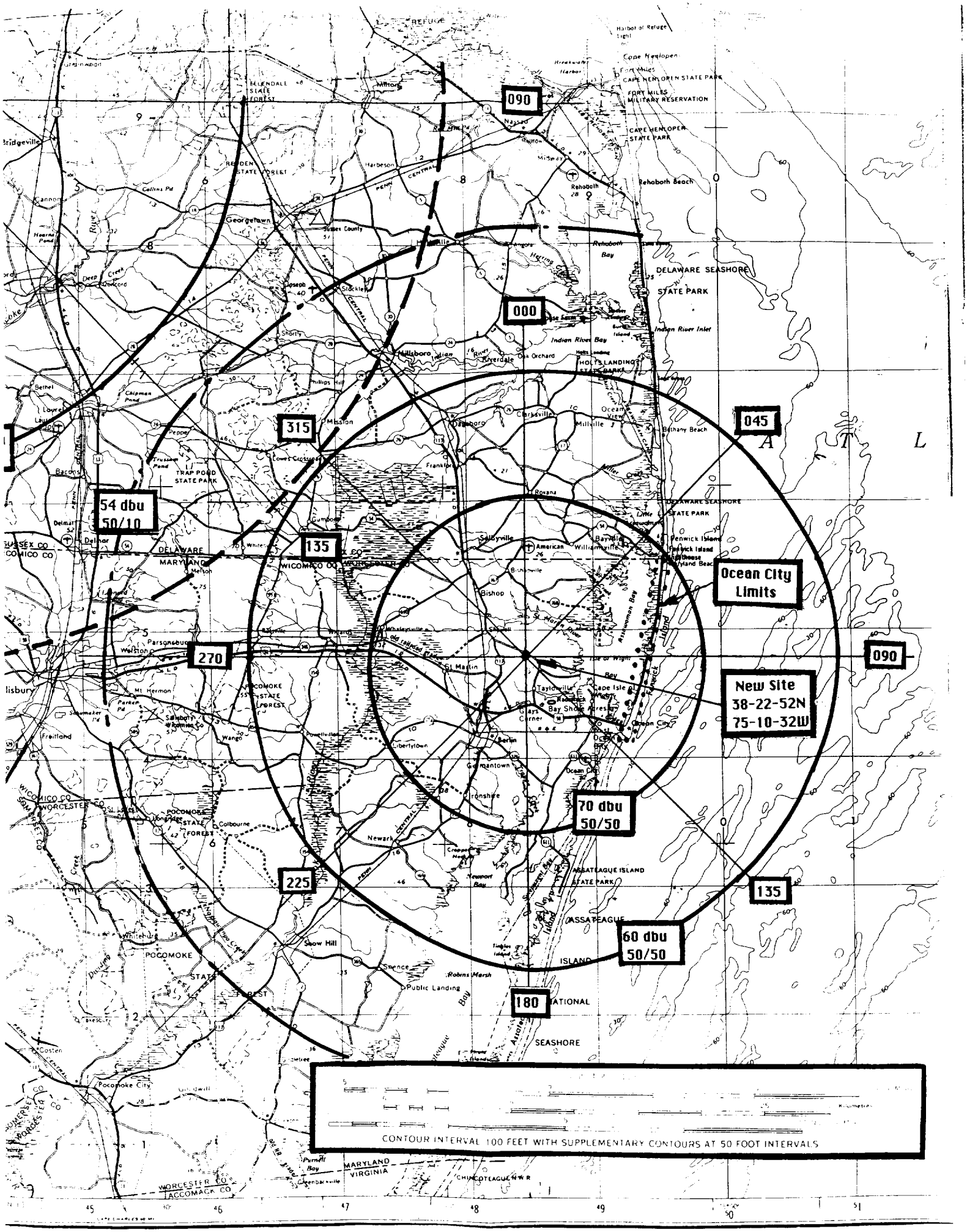
1 ½ 0

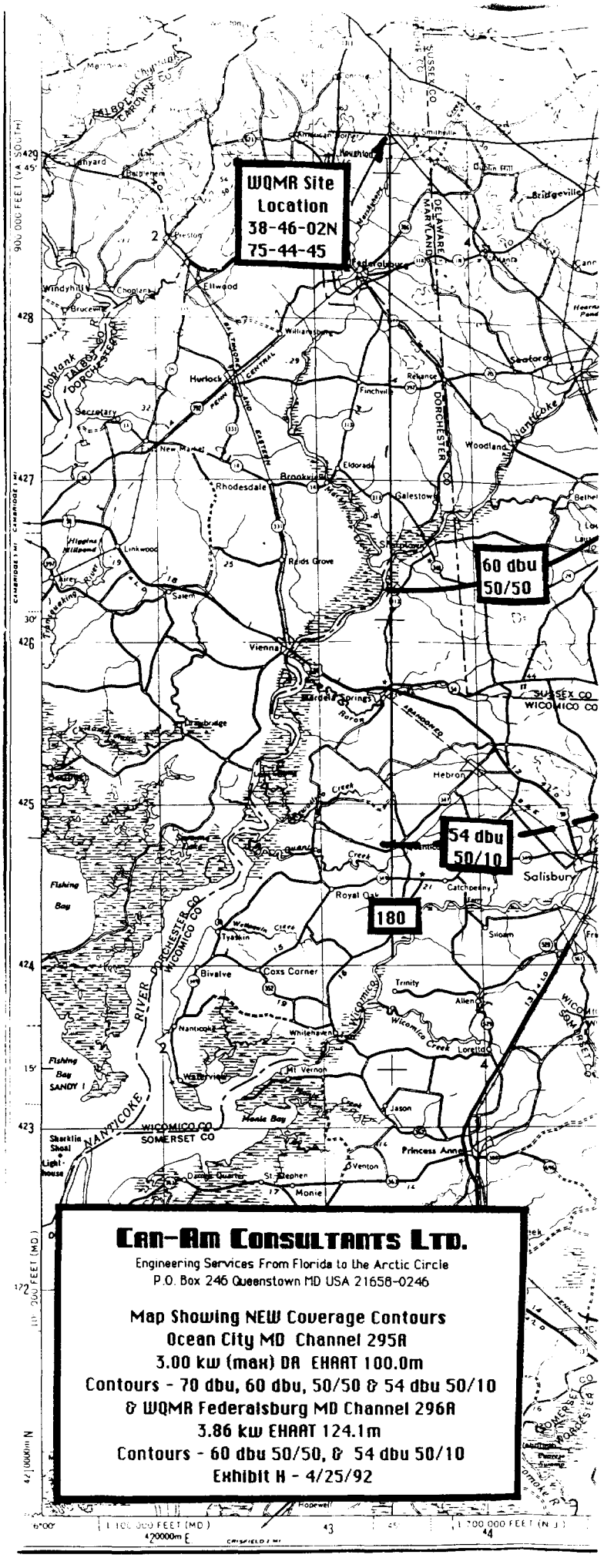
1000 0 1000 2000 3000 4000

1 .5 0

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM O
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS
THE RELATIONSHIP BETWEEN THE TWO DATUMS
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE C
THE MEAN RANGE OF TIDE IS LESS THAN 1

THIS MAP COMPLIES WITH NATIONAL MAP ACCUR
FOR SALE BY U. S. GEOLOGICAL S
DENVER, COLORADO 80225, OR RESTON, V
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS


090
000
045
315
135
270
225
180
54 dbu
50/10
Ocean City
Limits
New Site
38-22-52N
75-10-32W
70 dbu
50/50
60 dbu
50/50
CONTOUR INTERVAL 100 FEET WITH SUPPLEMENTARY CONTOURS AT 50 FOOT INTERVALS



CAN-AM CONSULTANTS LTD.

Engineering Services From Florida to the Arctic Circle
P.O. Box 246 Queenstown MD USA 21658-0246

Map Showing NEW Coverage Contours
Ocean City MD Channel 295A
3.00 kw (max) DA EHAAT 100.0m
Contours - 70 dbu, 60 dbu, 50/50 & 54 dbu 50/10
& WQMR Federalsburg MD Channel 296A
3.86 kw EHAAT 124.1m
Contours - 60 dbu 50/50, & 54 dbu 50/10
Exhibit H - 4/25/92

Qualifications of Engineer.

State of)
Maryland) ss:
)

Donald B. Williamson, deposes and says that he is a Registered Professional Engineer, and President of Can-Am Consultants Limited. This company operates in the State of Maryland and the Provinces of Ontario, Quebec, and Alberta, Canada. Mr. Williamson's Engineering qualifications are well known to Communications Canada in Ottawa, Canada and to the Federal Communications Commission in Washington D.C. He has been in continuous private practice as a Qualified Consulting Engineer since 1956.

Affiant states that the calculations and measurements contained in the accompanying report were made by him personally or under his direct supervision and that he believes them to be correct in all respects. All statements made in this report are true of his own knowledge except where stated to be on information from other sources, information or belief, and these statements he believes to be true.

Affiant.

May 10/92
Date

Directional FM Antenna Design
Channel 295A Ocean City MD

Prepared for
Wind 'n Sea FM Partnership

by

CAN-AM CONSULTANTS LTD.
Engineering Services From Florida to the Arctic Circle
P.O. Box 246 Queenstown MD USA 21658-0246

April 25, 1992

Circularly Polarized Directional Antenna System Proposed for NEW Ocean City MD. Channel 295A (106.9 mhz).

1. General.

Electronic Research Inc. will provide a custom fabricated directional antenna system specially designed to meet all requirements of FCC 73.215 and 73.316. The antenna system has been designed by D.B. Williamson P.E. a Registered Professional Engineer whose qualifications are well known to the FCC.

2. Description.

The antenna proposed by ERI is to be a G5CPM-2AE-DA-HW model consisting of 2 half- wavelength spaced radiators using one circularly polarized radiating element per bay. Horizontal and vertical parasitic elements will be interleaved between the pair. The proposed antenna will be mounted on a 10" diameter pole extending above the supporting tower with antenna oriented 131.4 degrees true.

3. Pattern Testing.

It is proposed to pattern test the antenna with a full size model on the ERI Test Range at Newburgh, IN. The range is located on a 50 acre site owned by the Company. All tests are to be under the supervision of T.B. Silliman P.E., a Registered Professional Engineer, well known to the FCC.

All tests are to be performed at the assigned carrier frequency using mechanical configurations exactly as expected in the field. The test assembly will be vertically mounted on a turntable above a non-metallic building approximately 25' over ground level. The antenna is to be fed with a Wavetek Model 3000 signal generator and rotated through 360 degrees of azimuth. Radiated energy is to be detected approximately 628 feet from the test antenna with a broad-band dipole located at the same height as the test antenna. The receiver signal is to be fed to the test building by means of two buried heliax cables and fed to an Anritsu Model ML521B receiver coupled to a Hewlett Packard 9872C Plotter. Relative field is to be auto-plotted as a function of azimuth. The design envelope will be dupicated with the production model of the antenna.

4. Description of Antenna Array.

City of License : Ocean City MD.

Channel : 295A (106.9 mhz)

Mounting : 10" diameter uniform pole mount.

Antenna Type : ERI G5CPM-2AE-DA-HW

Envelope Maximum Relative Field : 1.000 @ azimuth 110^0, 150^0

Envelope Minimum Relative Field : 0.8186 @ azimuth 310^0

Envelope RMS : 0.9174

Maximum ERP : 3.00 kw.

Antenna Orientation : 131.4 degrees true.

Antenna Gain : 1.000 V & H

Patterns : Figures 1 & 2.

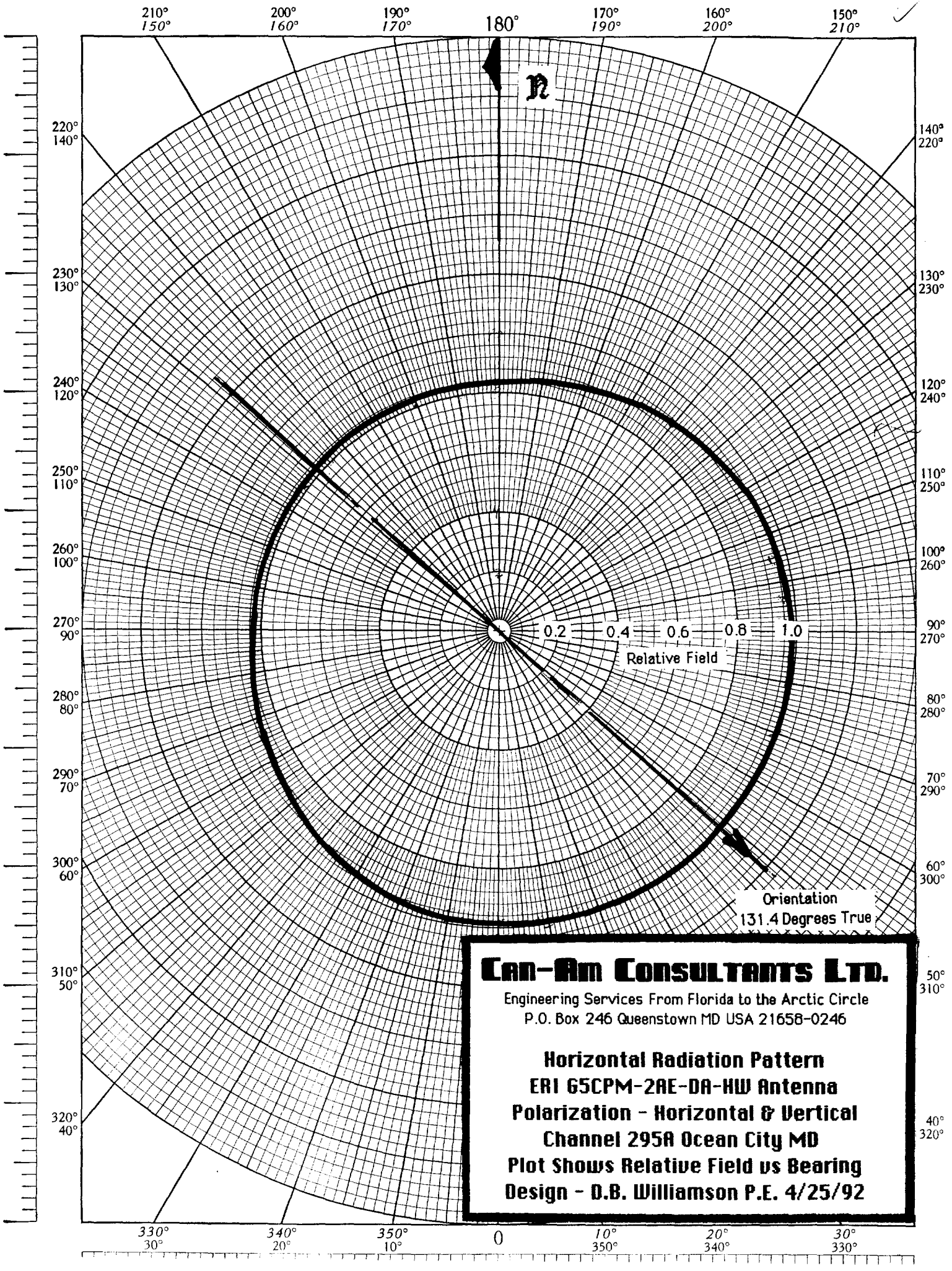
Envelope Values for Figure (1). Directional Antenna for NEW Ocean City MD.
Channel 295A (106.9 mhz.) Horizontal Plane Relative Field & DBK List.

Azimuth	Relative Field	DBK	Power (kw)	Polarization.
000	0.8368	3.2237	2.100	H & V
005	0.8433	3.2914	2.134	H & V
010	0.8512	3.3717	2.174	H & V
015	0.8603	3.4639	2.220	H & V
020	0.8705	3.5664	2.273	H & V
025	0.8816	3.6771	2.332	H & V
030	0.8935	3.7932	2.395	H & V
035	0.9058	3.9118	2.461	H & V
040	0.9182	4.0297	2.529	H & V
045	0.9309	4.1440	2.597	H & V
050	0.9420	4.2519	2.662	H & V
055	0.9528	4.3512	2.723	H & V
060	0.9626	4.4404	2.780	H & V
065	0.9713	4.5182	2.830	H & V
070	0.9787	4.5843	2.874	H & V
075	0.9848	4.6386	2.910	H & V
080	0.9897	4.6817	2.939	H & V
085	0.9935	4.7145	2.961	H & V
090	0.9961	4.7382	2.977	H & V
095	0.9981	4.7543	2.988	H & V
100	0.9992	4.7641	2.995	H & V
105	0.9998	4.7693	2.999	H & V
110	1.0000	4.7712	3.000	H & V
115	0.9999	4.7711	2.999	H & V
120	0.9998	4.7702	2.999	H & V
125	0.9997	4.7692	2.999	H & V
130	0.9997	4.7687	2.998	H & V
135	0.9997	4.7688	2.998	H & V
140	0.9998	4.7696	2.999	H & V
145	0.9999	4.7707	3.000	H & V
150	1.0000	4.7714	3.000	H & V
155	0.9999	4.7706	2.999	H & V
160	0.9996	4.7674	2.997	H & V
165	0.9987	4.7603	2.992	H & V
170	0.9973	4.7478	2.984	H & V
175	0.9951	4.7284	2.971	H & V
180	0.9919	4.7006	2.952	H & V

CAN-AM CONSULTANTS LTD.
Engineering Services From Florida to the Arctic Circle

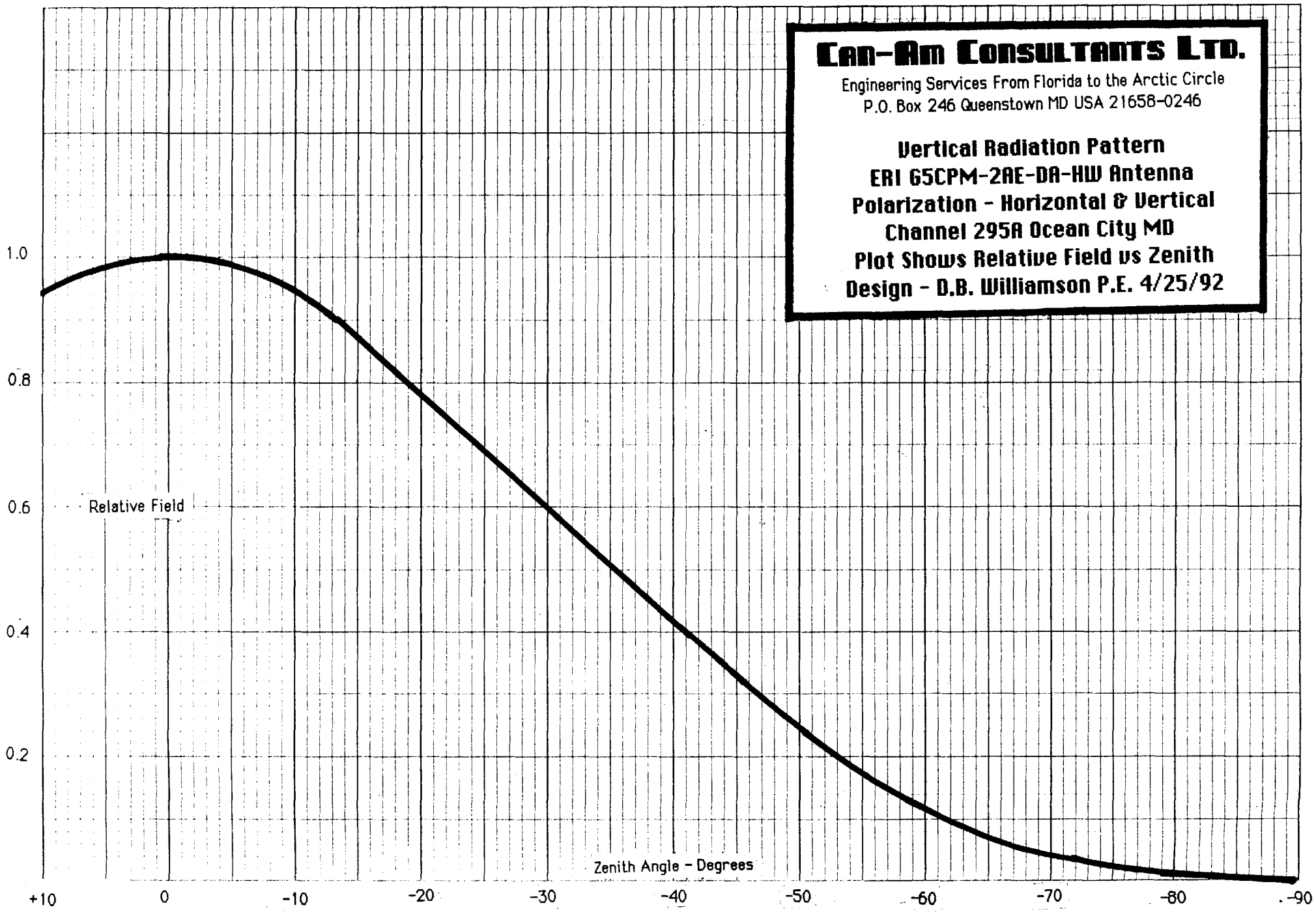
Envelope Values for Figure (1). Directional Antenna for NEW Ocean City MD.
Channel 295A (106.9 mhz.) Horizontal Plane Relative Field & DBK List.

Azimuth	Relative Field	DBK	Power (kw)	Polarization.
185	0.9876	4.6632	2.926	H & V
190	0.9822	4.6150	2.894	H & V
195	0.9754	4.5554	2.855	H & V
200	0.9675	4.4838	2.808	H & V
205	0.9582	4.4007	2.755	H & V
210	0.9479	4.3067	2.696	H & V
215	0.9367	4.2032	2.632	H & V
220	0.9248	4.0920	2.566	H & V
225	0.9125	3.9758	2.498	H & V
230	0.9001	3.8572	2.431	H & V
235	0.8880	3.7393	2.366	H & V
240	0.8764	3.6253	2.304	H & V
245	0.8657	3.5181	2.248	H & V
250	0.8559	3.4201	2.198	H & V
255	0.8474	3.3332	2.154	H & V
260	0.8402	3.2586	2.118	H & V
265	0.8342	3.1968	2.088	H & V
270	0.8295	3.1473	2.064	H & V
275	0.8259	3.1093	2.046	H & V
280	0.8232	3.0813	2.033	H & V
285	0.8213	3.0617	2.024	H & V
290	0.8201	3.0486	2.018	H & V
295	0.8193	3.0405	2.014	H & V
300	0.8189	3.0358	2.012	H & V
305	0.8187	3.0334	2.011	H & V
310	0.8186	3.0325	2.010	H & V
315	0.8186	3.0327	2.010	H & V
320	0.8188	3.0343	2.011	H & V
325	0.8191	3.0376	2.013	H & V
330	0.8196	3.0437	2.015	H & V
335	0.8206	3.0539	2.020	H & V
340	0.8221	3.0698	2.028	H & V
345	0.8243	3.0931	2.038	H & V
350	0.8274	3.1255	2.054	H & V
355	0.8315	3.1686	2.074	H & V


210° 150°
200° 160°
190° 170°
180°
170° 190°
160° 200°
150° 210°
N
220° 140°
230° 130°
240° 120°
250° 110°
260° 100°
270° 90°
280° 80°
290° 70°
300° 60°
310° 50°
320° 40°
140° 220°
130° 230°
120° 240°
110° 250°
100° 260°
90° 270°
80° 280°
70° 290°
60° 300°
50° 310°
40° 320°
0.2
0.4
0.6
0.8
1.0
Relative Field
Orientation
131.4 Degrees True
330° 30°
340° 20°
350° 10°
0
10° 350°
20° 340°
30° 330°
K+E POLAR CO-ORDINATE 46 4413
MADE IN U.S.A.
KEUFFEL & ESSER CO.
CAN-AM CONSULTANTS LTD.
Engineering Services From Florida to the Arctic Circle
P.O. Box 246 Queenstown MD USA 21658-0246
Horizontal Radiation Pattern
ERI 65CPM-2AE-DA-HW Antenna
Polarization - Horizontal & Vertical
Channel 295A Ocean City MD
Plot Shows Relative Field vs Bearing
Design - D.B. Williamson P.E. 4/25/92

K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

46 0780



Declaration

I, Mrs. Margaret Isley, General Partner of Wind 'n Sea FM Limited Partnership, do hereby declare that the foregoing Amendment was prepared at my request and under my supervision.

I certify that the statements contained in this Amendment are true and correct to the best of my knowledge, and made in good faith.

Dated: May 11, 1992

Mrs. Margaret Isley

/a/0653/isley.dec

Certificate of Service

I, Carla L. Duryea, a secretary in the law firm of Besozzi & Gavin, do hereby certify that copies of the forgoing **"PETITION FOR LEAVE TO AMEND AND AMENDMENT"** were, on this 12th day of May, 1992, sent by first-class U.S. mail, postage prepaid, to the following individuals (except as otherwise noted):

The Honorable Edward Luton *
Administrative Law Judge
Federal Communications Commission
2000 L Street, N.W.
Washington, D.C. 20554

Gary Schonman, Esquire *
Hearing Branch
Enforcement Division
Mass Media Bureau
Federal Communications Commission
2025 M Street, N.W., Suite 7212
Washington, D.C. 20554

Larry D. Eads, Chief *
Audio Services Division
Mass Media Bureau
Federal Communications Commission
1919 M Street, N.W., Suite 302
Washington, D.C. 20554

Chief, Data Management Staff *
Audio Services Division
Mass Media Bureau
Federal Communications Commission
1919 M Street, N.W., Room 350
Washington, D.C. 20554

Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, D.C. 20791

Stephen T. Yelverton, Esquire
Maupin Taylor Ellis & Adams, P.C.
1130 Connecticut Avenue, N.W.
Suite 750
Washington, D.C. 20036
Counsel for J.H. Communications

Michael J. Wilhelm, Esquire
1350 Connecticut Avenue, N.W.
Suite 905
Washington, D.C. 20036
Counsel for Equal Time Broadcasting Corporation

Carla L. Durgea

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* Delivered by hand