

ELECTRONIC SPACE SYSTEMS CORPORATION
OLD POWDER MILL ROAD

CONCORD, MASSACHUSETTS 01742



IN REPLY REFER TO: J-1946

TELEPHONE 617-369-7200
TELEX 92-3480

12 METER MILLIMETER WAVE TELESCOPE

MEMO No. 82

September 29, 1981

Dr. John W. Findlay
National Radio Astronomy Observatory
Edgemond Road
Charlottesville, VA 22901

Dear Dr. Findlay:

Enclosed is Revision 'A' of a report that I sent you on July 1, 1981 defining coordinates of the mounting hole locations for the 12-meter panels. All of the coordinates have been independently checked and corrected, and some of the dimensions have changed significantly.

Also enclosed is a one-page report defining coordinates of the corners of the inner and outer reflector panels. The tolerance on the dimensions given in the latter one-page report is ± 0.020 inch. If more accuracy is required, the coordinates of inner tooling holes of the panels (holes A & C) should be used, as they are the most accurate references available.

If you have questions, please call me.

Very truly yours,

ELECTRONIC SPACE SYSTEMS CORPORATION

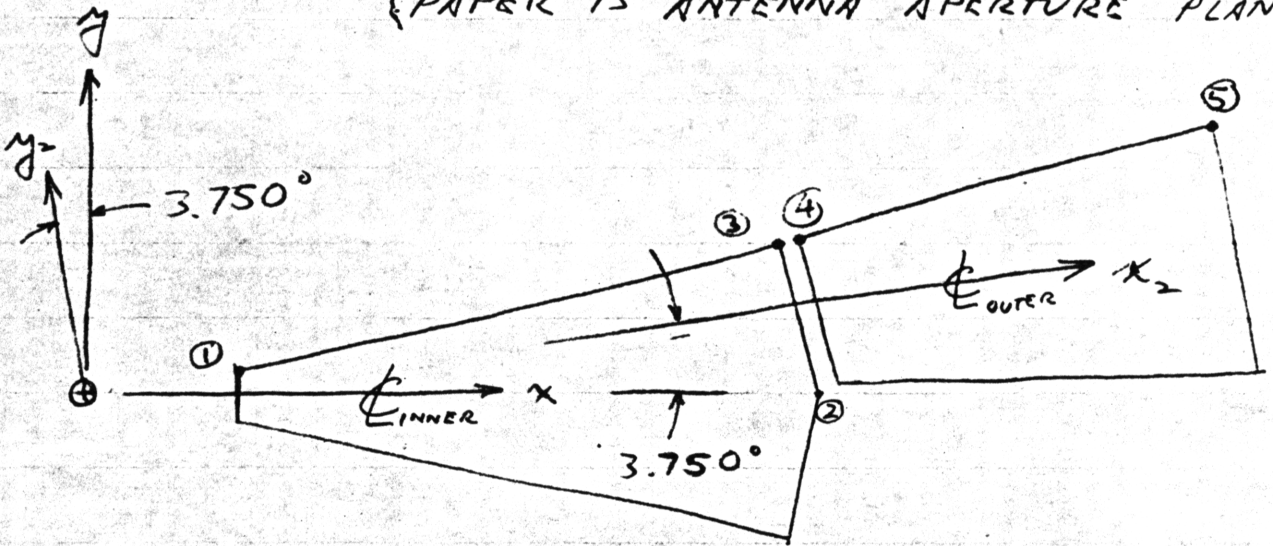
Michael J. Brenner
Mechanical Engineer

mac

encs

NRAO PANEL CORNER COORDS IN ANTENNA
COORD. SYSTEM

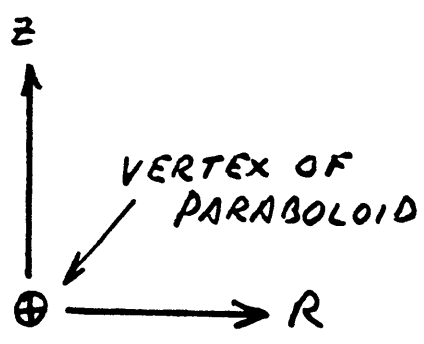
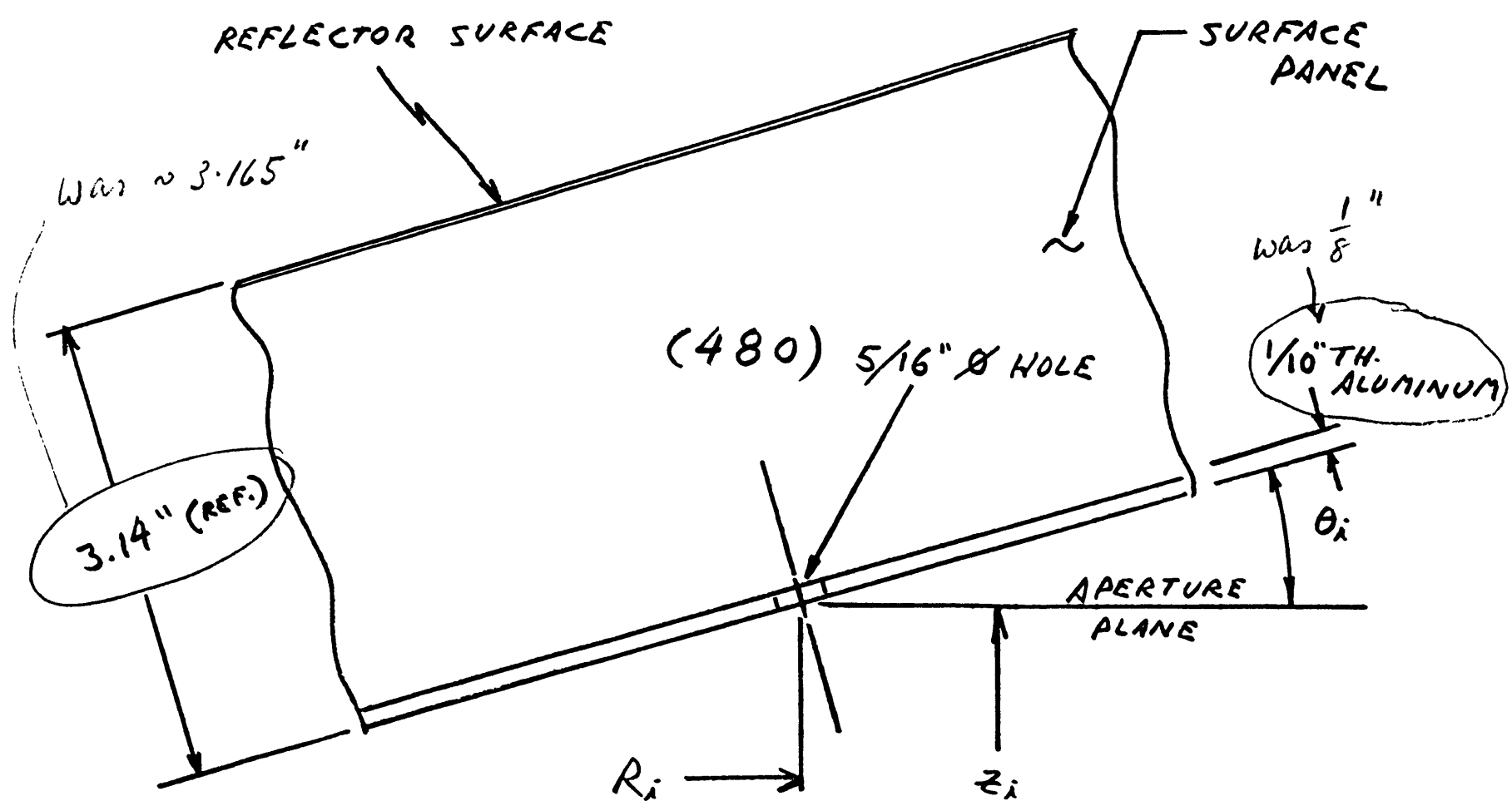
(PAPER IS ANTENNA APERTURE PLANE)



$(x''^2 + y''^2)^{\frac{1}{2}} = R$

	POINT	x''	y''	x ₂ ''	y ₂ ''
23.982 ✓	1	23.783	3.082	-	-
153.099 ✓	2	153.099	0	-	-
153.112 ✓	3	151.796	20.033	-	-
153.239 ✓	4	-	-	152.914	9.972
236.221 ✓	5	-	-	235.718	15.400

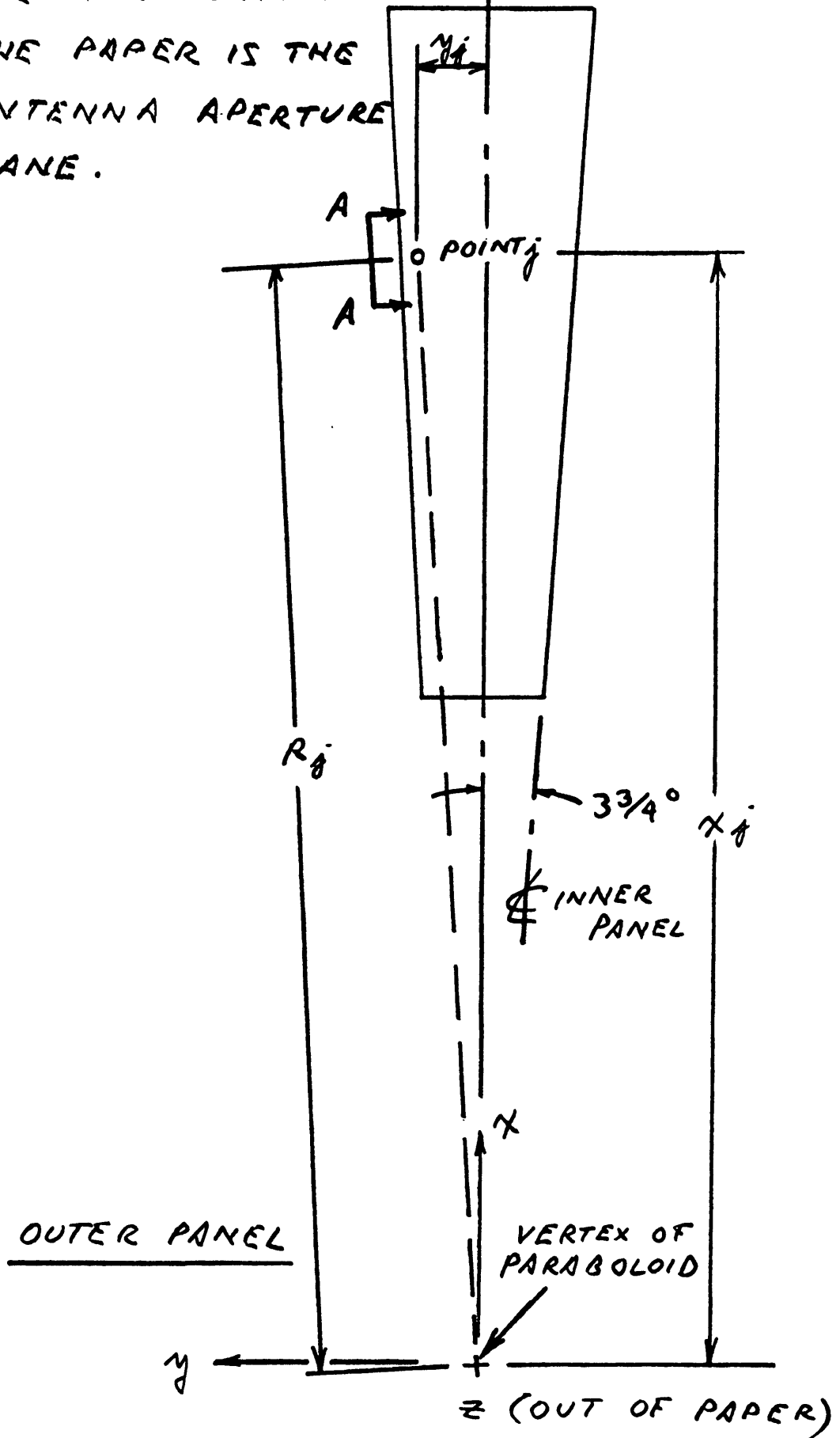
↑
Computed by
JWF



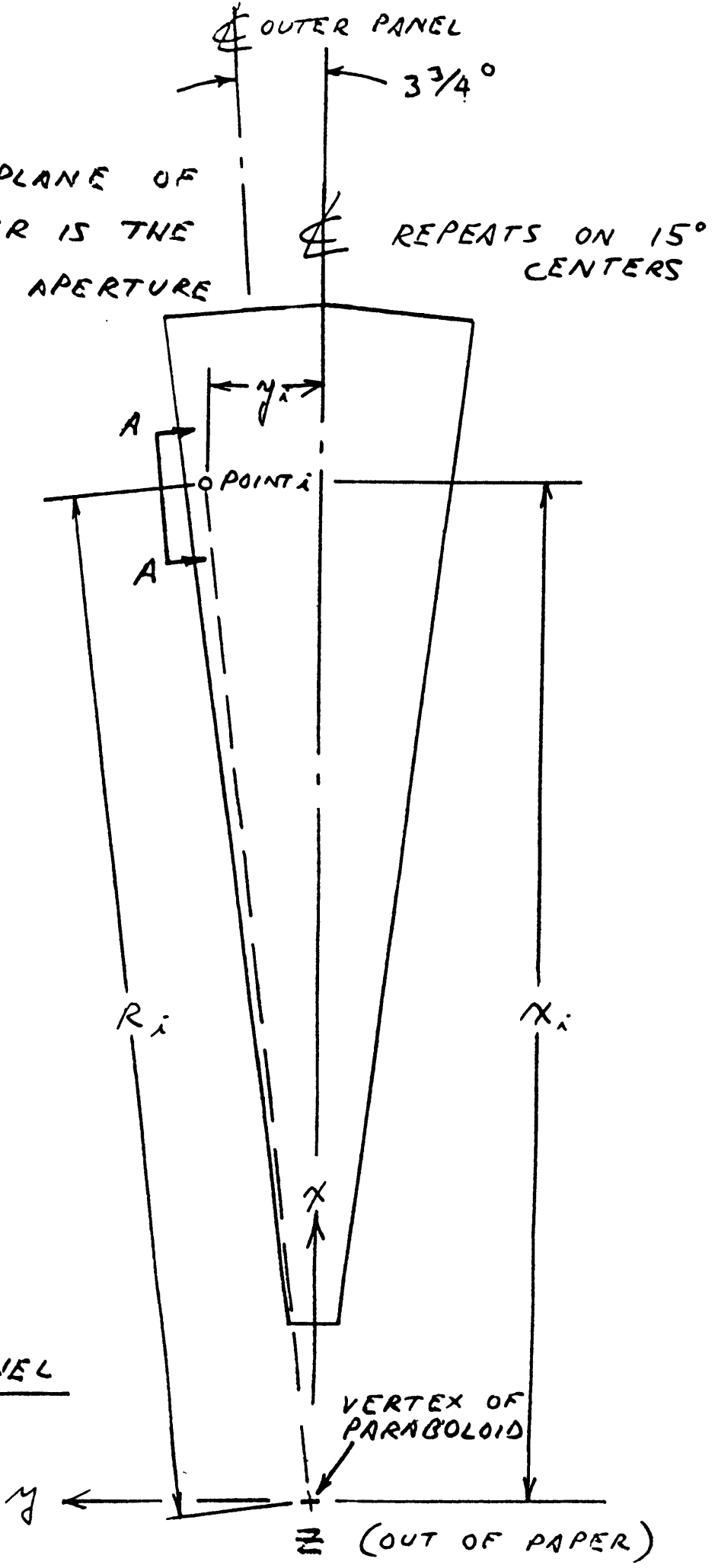
SECTION A-A

NOTE: THE PLANE OF THE PAPER IS THE ANTENNA APERTURE PLANE.

REPEATS ON $7\frac{1}{2}^\circ$ CENTERS



NOTE: THE PLANE OF THE PAPER IS THE ANTENNA APERTURE PLANE.



INNER PANEL

VERTEX OF PARABOLOID

z (OUT OF PAPER)

HOLE
NO. θ°

X (IN.)

 $\pm y$ (IN.)

R (IN.)

Z (IN.)

1	3.472	24.422	1.400	24.462	-2.398
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2	10.014	70.781	7.504	71.178	3.144
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3	15.624	111.962	12.926	112.706	12.617
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4	20.717	151.311	18.107	152.391	25.670
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5	21.154	155.688	8.401	155.914	27.018
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6	26.951	204.476	11.599	204.805	48.906
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7	30.392	235.794	13.651	236.189	66.088
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