

EXHIBIT 1
FCC FORM 442
ITEMS 4a-4g

The AN/SPQ-9B radar is capable of operating on any frequency between 9.20 and 10.0 GHz. The actual center frequencies are within the limits above, but are not disclosed as they are classified SECRET.

The transmitter pulsewidth varies from 0.2 to 8.0 microseconds.

The transmitter pulse repetition frequency can vary from 100 to 20000 Hz.

Combinations of pulsewidths and PRFs are subject to further development but will not exceed the limits above.

The necessary bandwidth for the radar was calculated using the formulas contained in Annex J 3.1.1.a. of the NTIA manual.

Using $t = 0.2 \mu\text{S}$ and $t_r = 0.025 \mu\text{S}$;

$$B_n = 1.79 / (\sqrt{t_r t}) = 56.604 \text{ MHz}$$

or

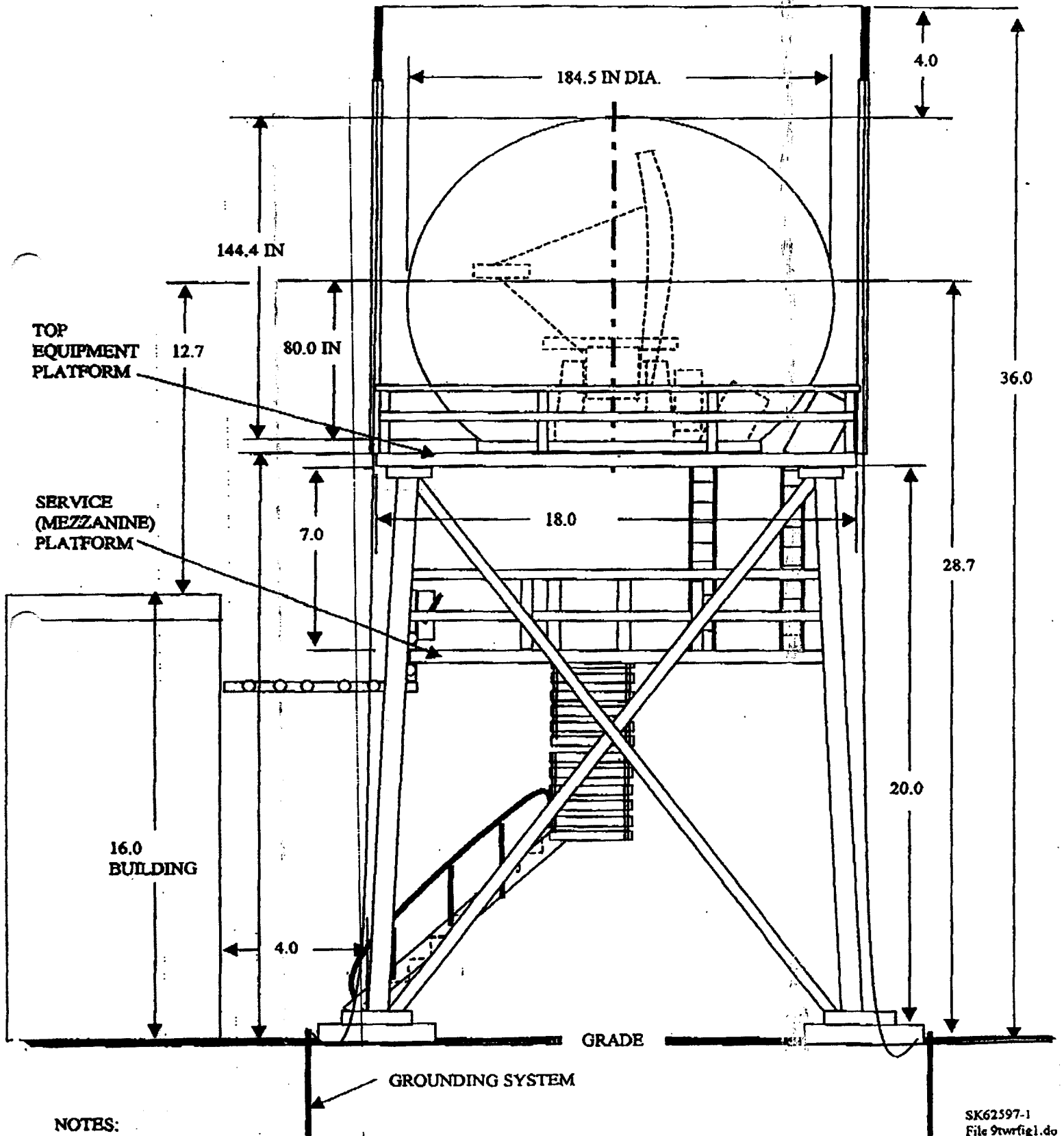
$$6.36 / t = 31.80 \text{ MHz}$$

whichever is less

EXHIBIT 2
FCC FORM 442
ITEM 7

Northrop Grumman Corporation is required, under the U.S. Navy, Naval Sea Systems Command contract # N00024-94-C-5441 to produce and test 2 AN/SPQ-9 radar sets to be delivered. Northrop Grumman Corporation must demonstrate that the radar sets are functional by performing an acceptance test which includes tracking actual aircraft. The Navy contract representative is Mr. John Murray, (703)-602-7903.

EXHIBIT 3
FCC FORM 442
ITEM 15e



NOTES:
1.0 UNLESS OTHERWISE STATED DIMENSIONS SHOWN IN FEET