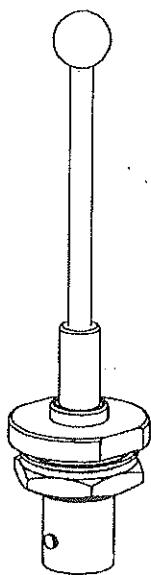


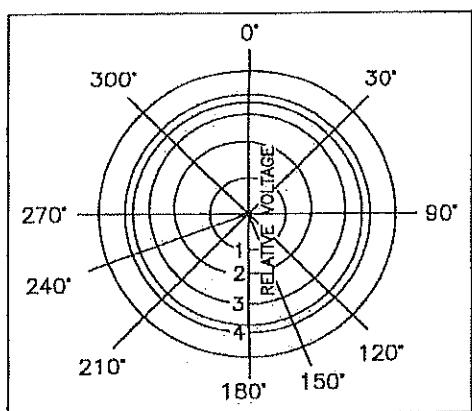
TED 104-12 monopole (post)  
miniature transponder antenna

### TRANSPOUNDER ANTENNA

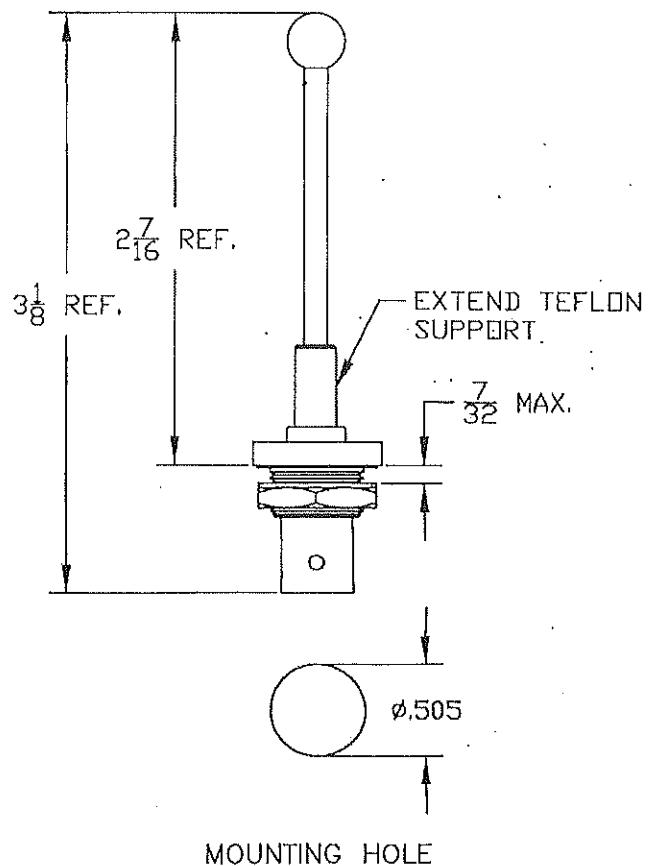
This monopole antenna is top loaded with a sphere to give an effectively shorter antenna and to create a factor of safety. When fed by a 50 ohm coaxial transmission line, the antenna offer a voltage standing wave ratio of 1.2:1 at 1090 MHz and less than 2:1 at 1030 MHz. The antenna presents an omnidirectional vertically-polarized radiation pattern when mounted to the underside of the aircraft fuselage. It weighs a slight .7 ounces and is readily mounted by means of "O" ring sealed single hole bulkhead feed through with type BNC female connector.



SPECIFICATIONS	
FREQUENCY	1030 TO 1090 MHz
VSWR	1.3:1 1030 MHz 1.2:1 1090 MHz
POLARIZATION	VERTICAL
RESISTANCE DC	OPEN CIRCUIT
IMPEDANCE	50 OHMS
POWER RF	1.0 KW PEAK @ 55,000 ft.
FINISH	NICKEL PLATE
ALTITUDE	30,000 FT.
AIR SPEED	300 KNOTS TAS
WEIGHT	0.05 Lb. MAX.



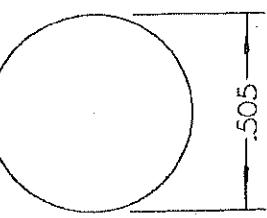
POLAR RADIATION PATTERN



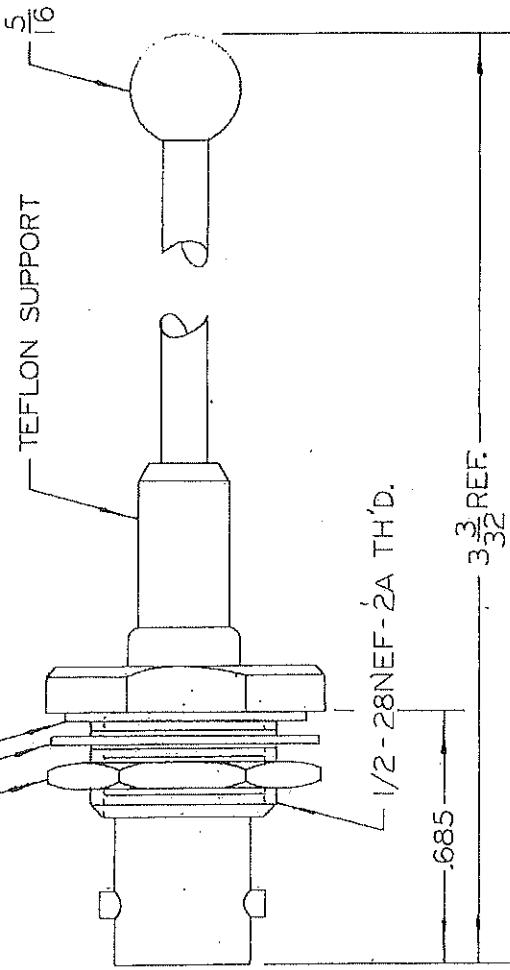
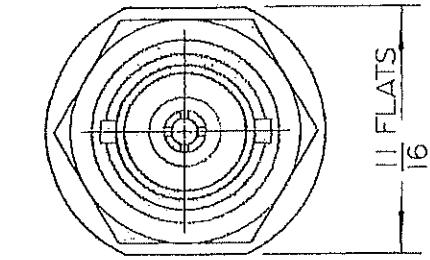
## IMPORTANT

ANY INFORMATION SUPPLIED IN ANY WAY WHICH PERTAINS  
TO THIS PART SHALL BE TREATED AS PROPRIETARY AND ITS  
USE OR DISCLOSURE IN WHOLE OR PART FOR PURPOSES OTHER  
THAN DIRECT FULFILLMENT OF CONTRACTS WITH THIS  
COMPANY, WITHOUT ITS WRITTEN CONSENT IS PROHIBITED.

MOUNTING HOLE



HEX NUT  
LOCKWASHER  
GASKET



## NOTES:

1. FREQUENCY; RESONANT 1090 MC,  
VSWR NO GREATER THAN 1.2 TO 1.
2. 7/32 MAX. PANEL THICKNESS.

## REVISIONS

Sym.	Description	Date	Approval
B	REVISED OVERALL LENGTH.	2-9-73	SEARS
C	REVISED FREQUENCY TO CUSTOMER SPEC.	10-4-77	SEARS
D	REVISED LENGTH FOR CORRECT FREQUENCY	3-29-78	SEARS

UNLESS OTHERWISE SPECIFIED	ITEM	REQD.	PART NO.	DESCRIPTION	MAT'L	MAT'L SPEC.	UNIT WT.
<b>TITLE</b>							
<b>TRANSPOUNDER ANTENNA</b>							
DIMENSIONS ARE IN INCHES	DR. SEARS	DATE 1-13-73					
TOLERANCES ON FRACTIONS	DECIMALS	ANGLES					
±1/64	.005	±1°					
REMOVE ALL BURRS & SHARP EDGES							
PLATE: NICKEL _____	APPR.	DATE /4-3-73					
SILVER _____	APPR.	DATE					
GOLD _____	APPR.	DATE					
NON-TARNISH FS32			SCALE	PLATING AREA			



TED MANUFACTURING CORP.  
11415 JOHNSON DRIVE  
SHAWNEE, KANSAS

**DWG. NO.** REV.  
**D**

104-12

