



POINTER AVIONICS



pointerTM SENTRY
AIRCRAFT EMERGENCY LOCATOR

TRANSMITTER

OPERATION AND INSTALLATION

INSTRUCTIONS FOR:

MODEL C-4000 (F)

TYPE-APPROVED TO CANADIAN DEPARTMENT OF COMMUNICATIONS RADIO STANDARDS SPECIFICATION 147, ISSUE 3. DOC TYPE-APPROVAL NO. 273473002F ELT TYPE (F) EMERGENCY LOCATOR TRANSMITTER FOR HORIZONTAL MOUNTING IN FIXED WING AIRCRAFT OR ANGULAR MOUNTING IN ROTARY WING AIRCRAFT.

WARNING!

**FOR AVIATION EMERGENCY USE ONLY.
UNAUTHORIZED OPERATION PROHIBITED.**

POINTER AVIONICS

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SECTION 1

DESCRIPTION

- 1-1 POINTER SENTRY is a self contained emergency locator transmitter capable of manual or automatic operation.
- 1-2 POINTER SENTRY is designed to withstand forced landing and crash environmental conditions and survive in an operable condition. The highest quality materials and components have been selected for manufacturing to insure rugged, reliable emergency equipment.
- 1-3 Automatic activation is accomplished via a rolamite type inertia switch. This type of switch is not affected by electrostatics, magnetic disturbances or radio frequency emissions. The inertia switch is designed to activate when the unit senses longitudinal inertia forces as required in R.S.S. 147 Issue 3.

NOTE: When properly installed, parallel to the line of flight, POINTER SENTRY will not activate due to turbulence, normal operations, or aerobatics.

1-4 POINTER SENTRY ELT (See Figure 1) consists of:

- A. A high impact, fire retardant, waterproof case with carrying handle.
- B. A solid state transmitter operating at the assigned emergency frequency of 121.5 MHz. Normal transmission is modulated by a distinctive downswept tone.
- C. A battery pack consisting of three Lithium "D" cells and interconnecting cable and plug assembly. The battery pack is available from your local POINTER dealer or direct from the distributor.
- D. An antenna connector outlet for fixed or telescopic antenna.
- E. A remote "ON-AUTO-OFF" control jack.
- F. A master "ON-OFF-AUTO" switch.
- G. An inertia switch with finger tip reset button.
- H. A storable telescopic antenna.
- I. An external whip antenna with coax cable.
- J. Remote cabin switch kit. (Optional)
- K. A preformed anodized quick-detach mounting bracket.
- L. An operation and installation manual.
- M. A warranty registration card.



SECTION 2

PRE-INSTALLATION

- 2-1 POINTER SENTRY is designed to be installed in the aft section or cabin of the aircraft. Submission of application for M.O.T. approval is required. The installation and testing should be made by qualified personnel. Appropriate weight and balance computations shall be completed and entered in the Aircraft Logbook for each installation.
- 2-2 a. Remove POINTER SENTRY from carton and affirm master switch is in the "OFF" position (See Figure 1).

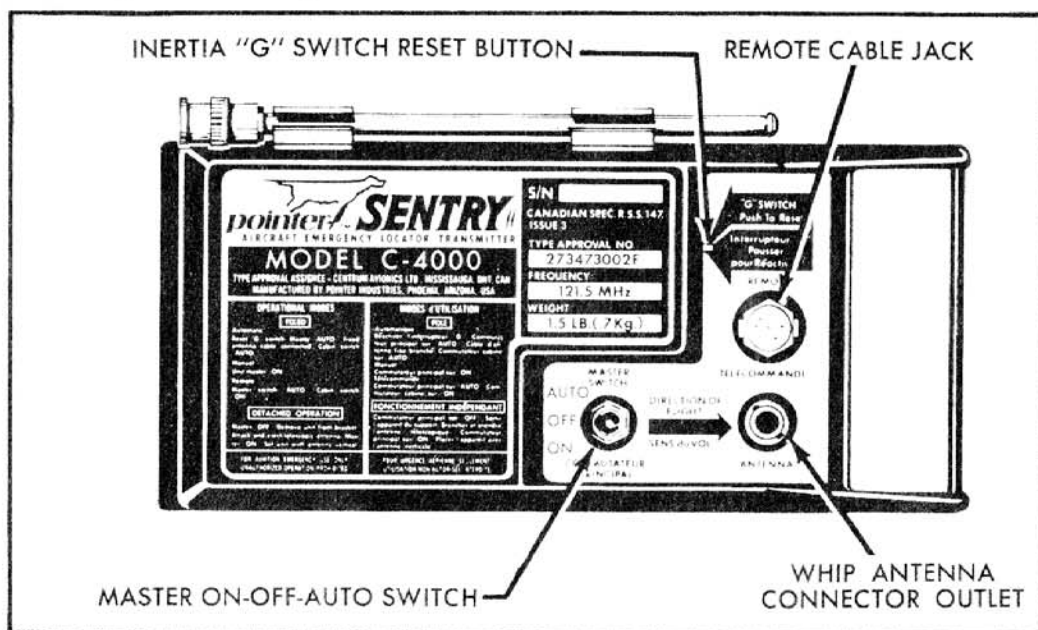


FIGURE 1. POINTER SENTRY OPERATING DETAILS

- b. Press "G" switch reset button in firmly.
- c. Place master switch to "AUTO" position.
- d. Shake POINTER SENTRY unit firmly parallel to the "DIRECTION OF FLIGHT" arrow on the unit face. A tone will be heard on the monitoring radio at 121.5 MHz. During test a decreasing tone will be heard before the typical "WARBLING" tone begins. Reset "G" switch to turn unit off.
- e. Place the master switch in the "ON" position. Unit should again operate.
- f. Place master switch in the "OFF" position. POINTER SENTRY UNIT IS NOW READY FOR INSTALLATION.

NOTICE

IF FOR ANY REASON POINTER SENTRY DOES NOT TRANSMIT DURING ANY OF THE ABOVE TESTS, REPEAT THE PROCEDURES. IF UNIT STILL FAILS TO OPERATE, RE-PACKAGE THE ENTIRE UNIT AS SHIPPED, COMPLETE THE REGISTRATION CARD, PLACE A NOTE OF EXPLANATION AND THE REGISTRATION CARD INSIDE THE BOX AND RETURN UNIT TO DEALER OR DISTRIBUTOR FOR REPLACEMENT.



SECTION 3

INSTALLATION INSTRUCTIONS

3.0 GENERAL

The following instructions are a general guide for the installation of the POINTER SENTRY Aircraft Emergency Locator Transmitter. Installation shall be made in accordance with the requirements of Ministry of Transport ENGINEERING & INSPECTION MANUAL. It is recommended that installers be guided by FAA document AC 43-13-2, ACCEPTABLE METHODS, TECHNIQUES, & PRACTICES — AIRCRAFT ALTERATIONS. Each installation must satisfy airworthiness requirements pertinent to type.

CAUTION!

INSTALLATION IN THE PRESSURIZED AREA OF AN AIRCRAFT CONSTITUTES A MAJOR MODIFICATION. CONSULT MINISTRY OF TRANSPORT REGIONAL OFFICE BEFORE PROCEEDING.

3.1 MOUNTING LOCATION — FIXED-WING AIRCRAFT

- a. The POINTER SENTRY ELT should be mounted as far aft as possible. Location should be chosen to afford easy and repeated access to the ELT for testing, servicing, and manual activation/deactivation when the aircraft is on the ground. Airborne access to the ELT is not needed.

NOTE:

Mounting location should afford easy removal of the ELT from the aircraft for detached operation.

- b. Select an area in the cabin such as between the seats in the luggage area, cabin floor, or any flat surface parallel to the longitudinal axis of the aircraft. Assure that the mounting area is solid.
- c. It is important that the unit be mounted PARALLEL TO or SLIGHTLY ABOVE the line of flight. The POINTER SENTRY ELT must be solidly mounted. DO NOT install in an area subject to flexing or drumming vibrations. See Section 4.3 for installation details.



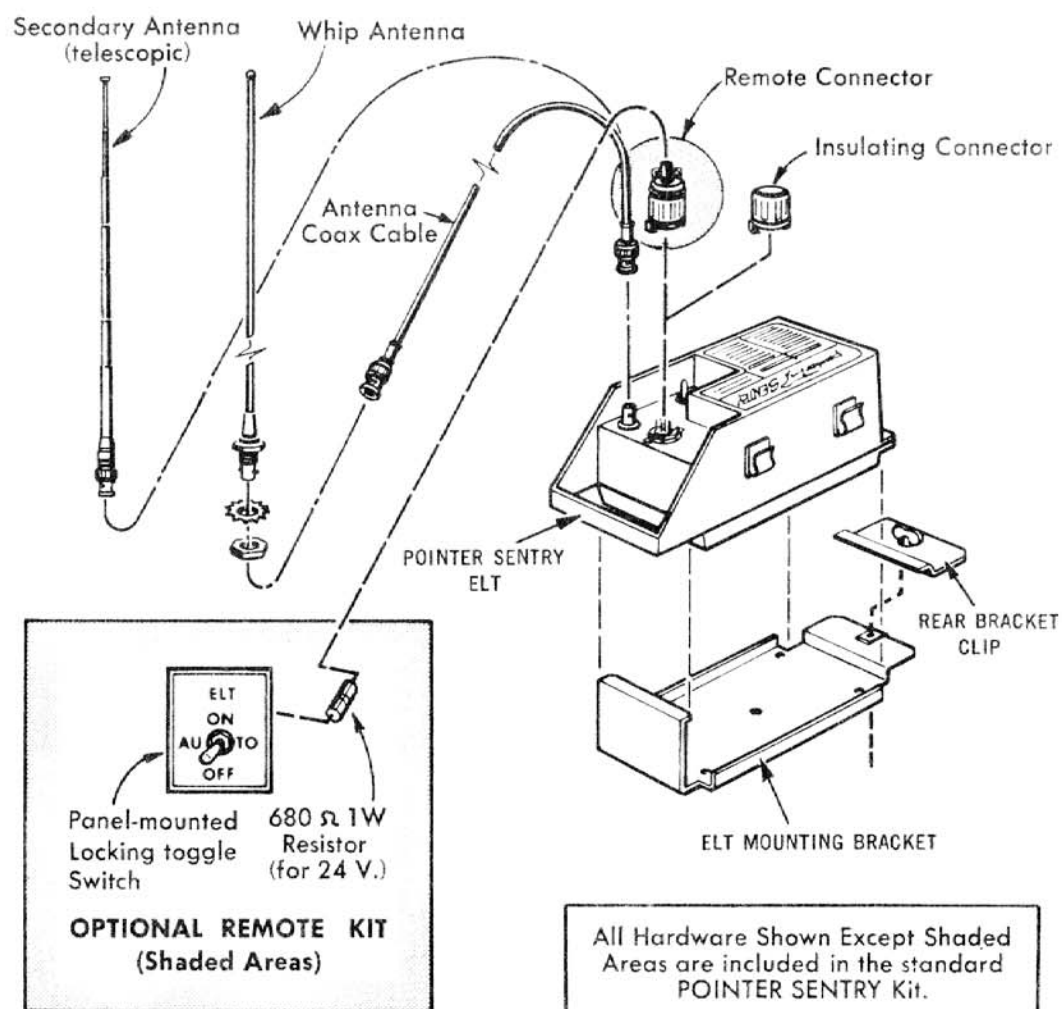
3.2 MOUNTING LOCATION — ROTARY-WING AIRCRAFT (HELICOPTER)

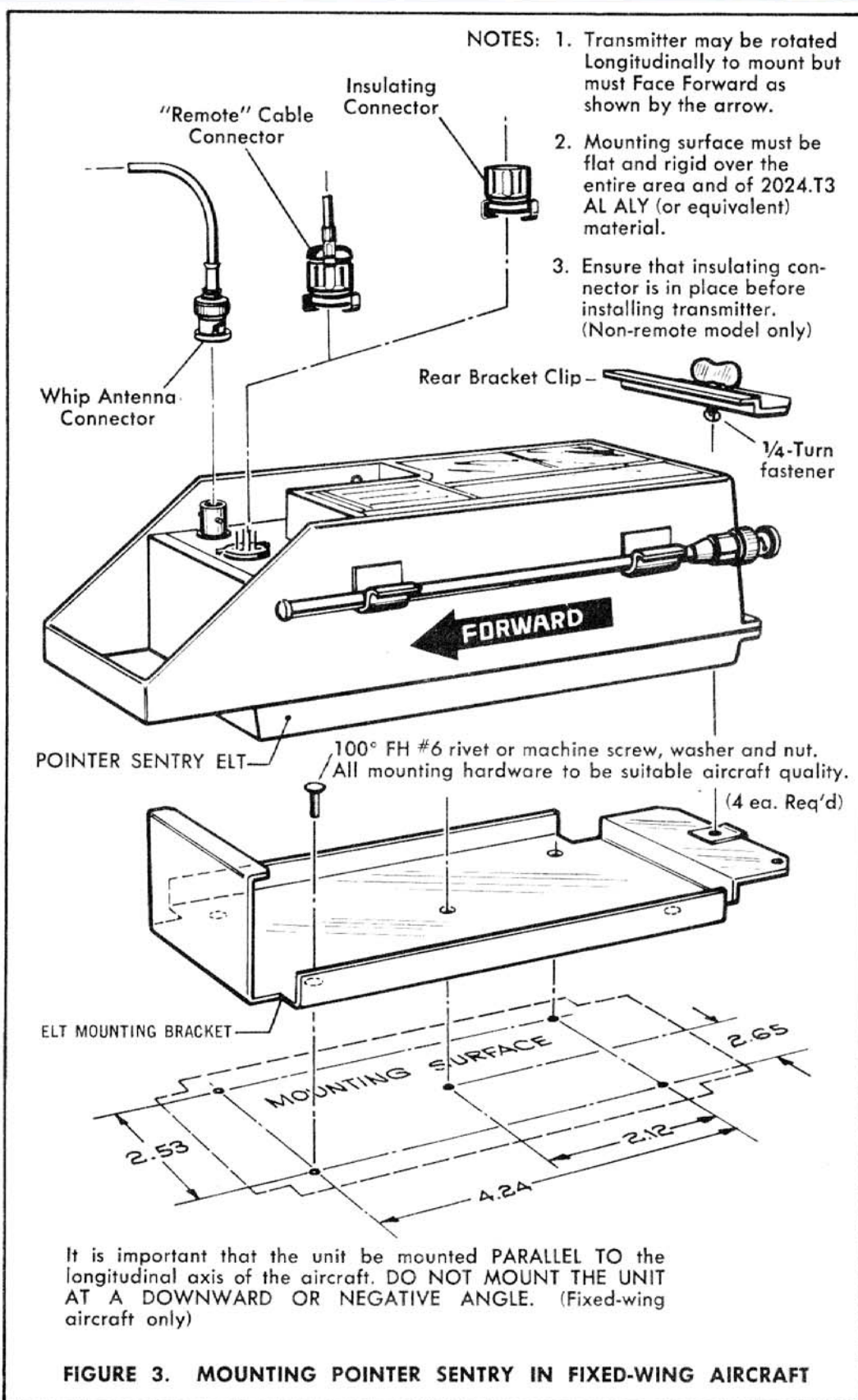
- a. The POINTER SENTRY ELT must be located on or as close as possible to the primary structure supporting the rotor shaft and transmission. This location must be accessible for manual activation/deactivation, testing, and servicing when the helicopter is on the ground. Airborne access to the ELT is not needed. See Section 1.4 for installation details.

NOTE:

Mounting location should afford easy removal of the ELT from the helicopter for detached operation.

FIGURE 2. POINTER SENTRY ELT MAJOR SYSTEM COMPONENTS:







3.3 ELT INSTALLATION DETAILS — FIXED-WING AIRCRAFT

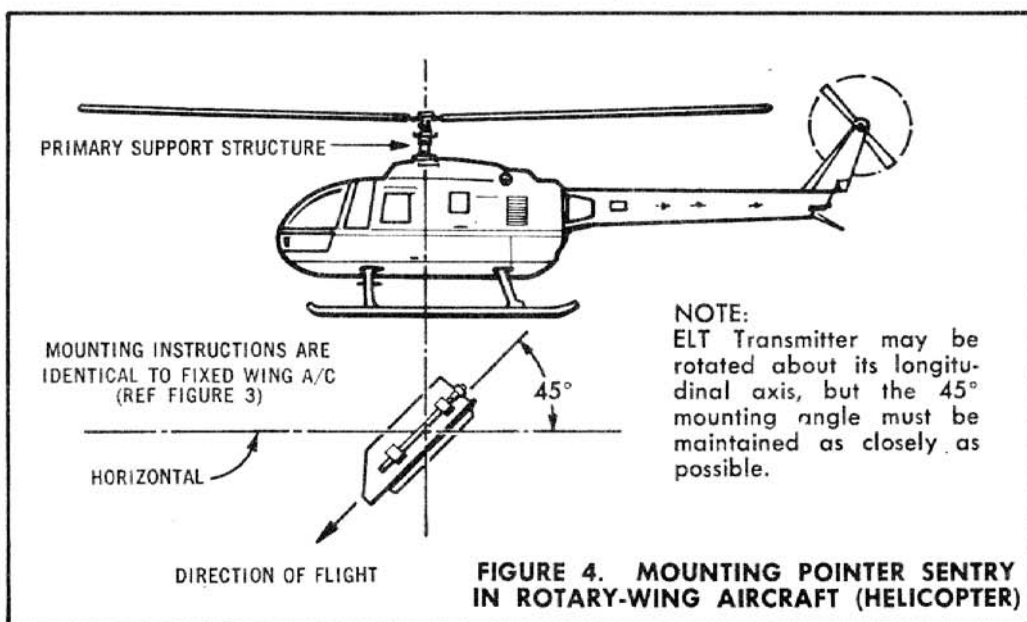
NOTE:

Prior to installing the ELT transmitter, check that battery replacement date is marked in the space on the label at the end of the unit.

- 3.3-1 Attach mounting bracket to the aircraft structure so that, when unit is installed, the "DIRECTION OF FLIGHT" arrow on the ELT control face points forward in the direction of flight. Drill four holes and attach the mounting bracket with 100° Flat head #6 rivets or screws. All attaching hardware must be of material and type suitable for Aircraft application. Heads must be flush with bracket surface.
- 3.3-2 Figure 3 shows a typical fixed-wing aircraft installation. Insert POINTER SENTRY into the mounting bracket and position rear bracket clip over the end flange of the unit case. Turn the winged fastener a quarter turn to lock into place.
- 3.3-3 Reset the "G" Switch by pushing the protruding reset button on the ELT control face.
- 3.3-4 Place the Master Switch in the "Auto" position.
- 3.3-5 Record the installation in Aircraft Logbooks.
- 3.3-6 A remote whip antenna and coaxial cable are provided for external mounting. See Section 3.5 for antenna mounting details.
- 3.3-7 EXTERNAL MARKING. The external surface of the aircraft (or Helicopter) shall be marked to indicate transmitter location.

3.4 INSTALLATION DETAILS — ROTARY WING (HELICOPTER)

- 3.4-1 All mounting instructions are identical to Fixed-Wing with the exception of the mounting angle as shown in Figure 4.





3.5 WHIP ANTENNA LOCATION AND MOUNTING

3.5-1 The POINTER SENTRY Whip Antenna and coaxial cable are provided to permit external antenna radiation. Use ONLY the cable furnished with the unit.

Whip antenna should be mounted as far aft as possible on the surface of the aircraft (or helicopter) as this area is normally less susceptible to impact damage.

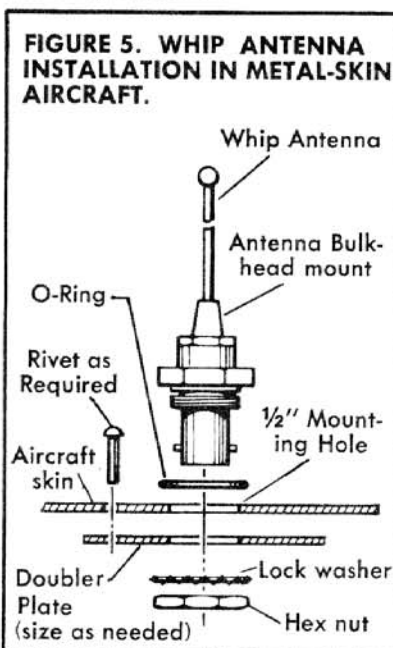
Pay particular attention to the following:

- Mount Whip Vertically on the upper surface of aircraft (or helicopter).
- Locate so as to minimize RF coupling from adjacent communications antennae. Maintain maximum practical distance from all other antennae.
- Must not foul other antennae when whipped in flight.
- Mount Whip antenna as close as possible to transmitter. Neatly coil and tie any excess in the 5 foot coax cable.

NOTE: COAXIAL CABLE MUST NOT BE CUT OR ALTERED.

3.5-2 WHIP ANTENNA INSTALLATION

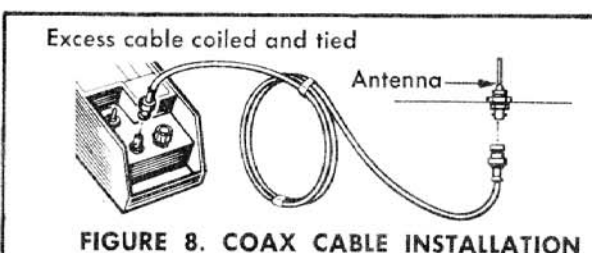
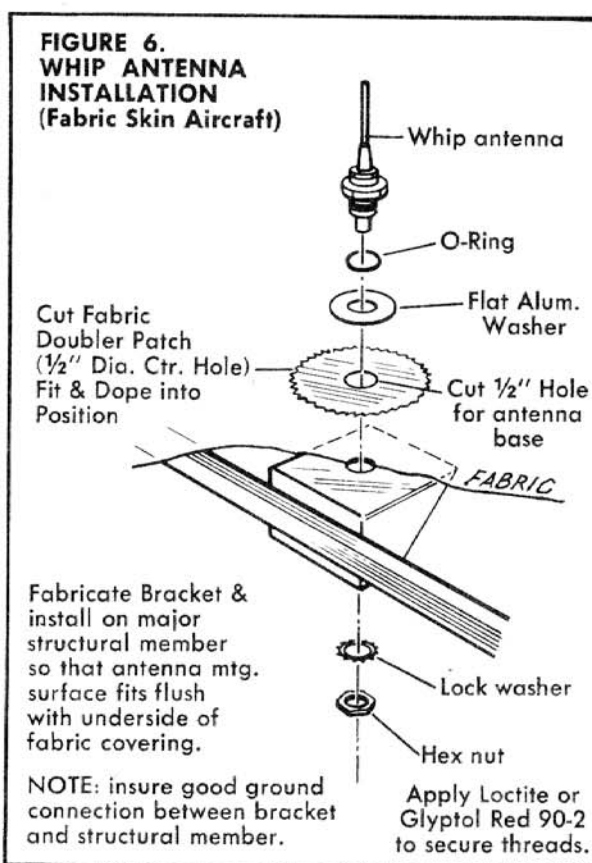
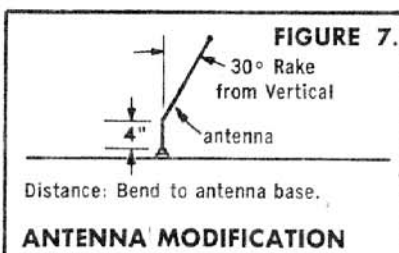
Figures 5 and 6 illustrate details of Metal and Fabric-skin aircraft antenna installations.



3.5-3 ANTENNA MODIFICATION

For high performance aircraft.

The POINTER SENTRY Whip antenna may be modified to reduce wind-loading at higher speeds as shown below in Figure 7. (See Section 7 for max. speed.)





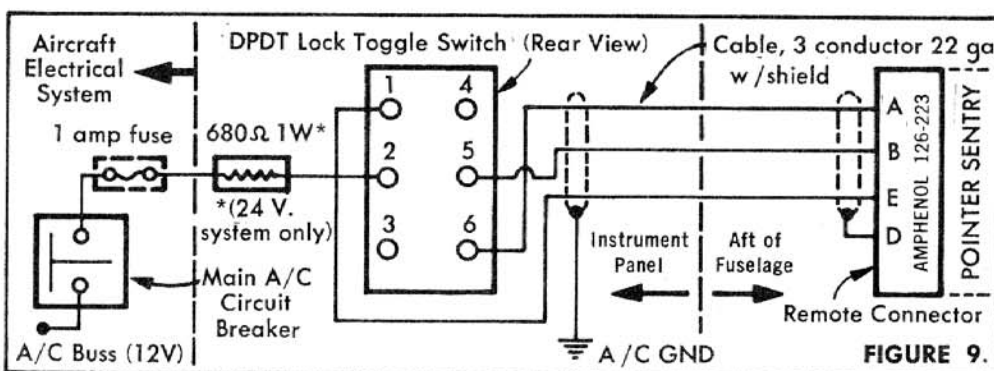
3.6 REMOTE SWITCH OPTION

The Optional Remote Switch feature is recommended for all installations where the transmitter is inaccessible to the pilot in flight. This option enables the pilot to remotely control the transmitter in flight. This is also useful for ground testing without gaining access to the transmitter.

3.6-1 Items included in the Remote Switch kit are listed below:

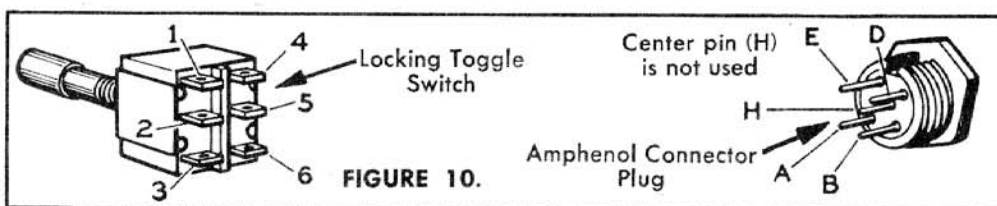
DESCRIPTION	QTY.
Toggle switch, Locking, DPDT	1
Connector (Locking)	1
Warning Label	1
Resistor (680 Ω , 1W) (24 V. USE ONLY)	1
Washer, Locking	1
Nut, Hex Head	1
Face Plate, ON/OFF/AUTO	1

3.6-2 The Remote Switch wiring diagram is shown in Figure 9.



3.6-3 Select a location on the instrument panel for the Remote Switch / Face Plate assembly and the warning label. Drill a $\frac{1}{4}$ " hole for switch installation.

3.6-4 Figure 10 shows wiring details for the connector and remote switch. Connect the wires as shown in Figure 9 using ONLY the connector and switch supplied in the kit.



- 3.6-5 At pilot's end of cable, remove outer cable covering, form shielding into pigtail. Connect pigtail to aircraft ground.
- 3.6-6 At transmitter end of cable, remove cable covering and form shielding pigtail. Connect with pin D of the remote connector.
- 3.6-7 An in-line fuse or circuit breaker (1 amp max.) must be installed in the aircraft power circuit to the Remote Switch.
- 3.6-8 24V/28V aircraft. The 680 ohm, 1W resistor included in the remote switch kit must be wired in series with the 24V/28V Buss as shown in Figure 9. DO NOT USE resistor in 12V installations.
- 3.6-9 Mating the remote connector to the transmitter. Before mating the connector to the transmitter, apply sufficient silicone grease compound (DC-4) to mating surfaces that the surplus is forced out during connection for a moisture seal.
- 3.6-10 Install the locking toggle switch in the instrument panel with the face plate and secure with the locking washer and hex nut.
- 3.6-11 Affix the warning label to the instrument panel above, below, or adjacent to the Remote Switch/Face Plate to comply with Canadian Department of Communications Requirements. This completes Remote Switch installation.



SECTION 4 FUNCTIONAL TESTING

4.0 GENERAL

The POINTER SENTRY ELT System must undergo a functional test for the following reasons:

- (a) After initial installation
- (b) After system maintenance, such as battery pack replacement
- (c) Thereafter at owners or operators discretion.

4.1 TEST PREPARATION

- 4.1-1 As the test transmission will radiate at full power on 121.5 MHz, the Air Traffic Service Authority shall be notified prior to testing, and the timing of these test transmissions shall be observed strictly as prescribed by the Ministry of Transport.
- 4.1-2 Test Transmission Receiver. Three options are available for receiving the test transmissions from the installed transmitter:
 - (a) Have assistant listen out using comm. receiver of another aircraft.
 - (b) Where another aircraft is not available, listen out on own aircraft comm. receiver.
 - (c) Request local tower to listen out.

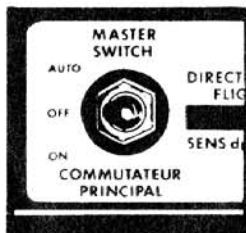
NOTE: Where aircraft comm. receiver is used:

- (a) Switch receiver ON
- (b) Tune to 121.5 MHz
- (c) Deactivate squelch
- (d) Turn up receiver volume until slight background noise is heard.

4.2 POINTER SENTRY FUNCTIONAL DETAILS

NOTE: Insulating connector must be in place on transmitter when installing Pointer Sentry without remote switch option. See figures 2 and 3.

- 4.2-1 MANUAL MODE (POINTER SENTRY unit installed without the remote switch option)
The unit Master Switch functions are as follows:



- AUTO:** Used to arm the POINTER SENTRY for automatic activation by the "G" switch only.
- ON:** Used to activate the transmitter for test or emergency situations. The ON switch bypasses the Rolamite "G" switch.
- OFF:** Used to de-activate transmitter or to insure non-activation by handling.

- 4.2-2 "G" Switch: Used to activate the POINTER SENTRY in emergency situation. The "G" switch can be operated by impact only. The "G" switch may be reset after intentional or emergency activation by depressing the small "Push to Reset" button on the unit face.



4.2-3 REMOTE MODE (POINTER SENTRY unit installed WITH the remote switch option) The Remote Switch functions are as follows:

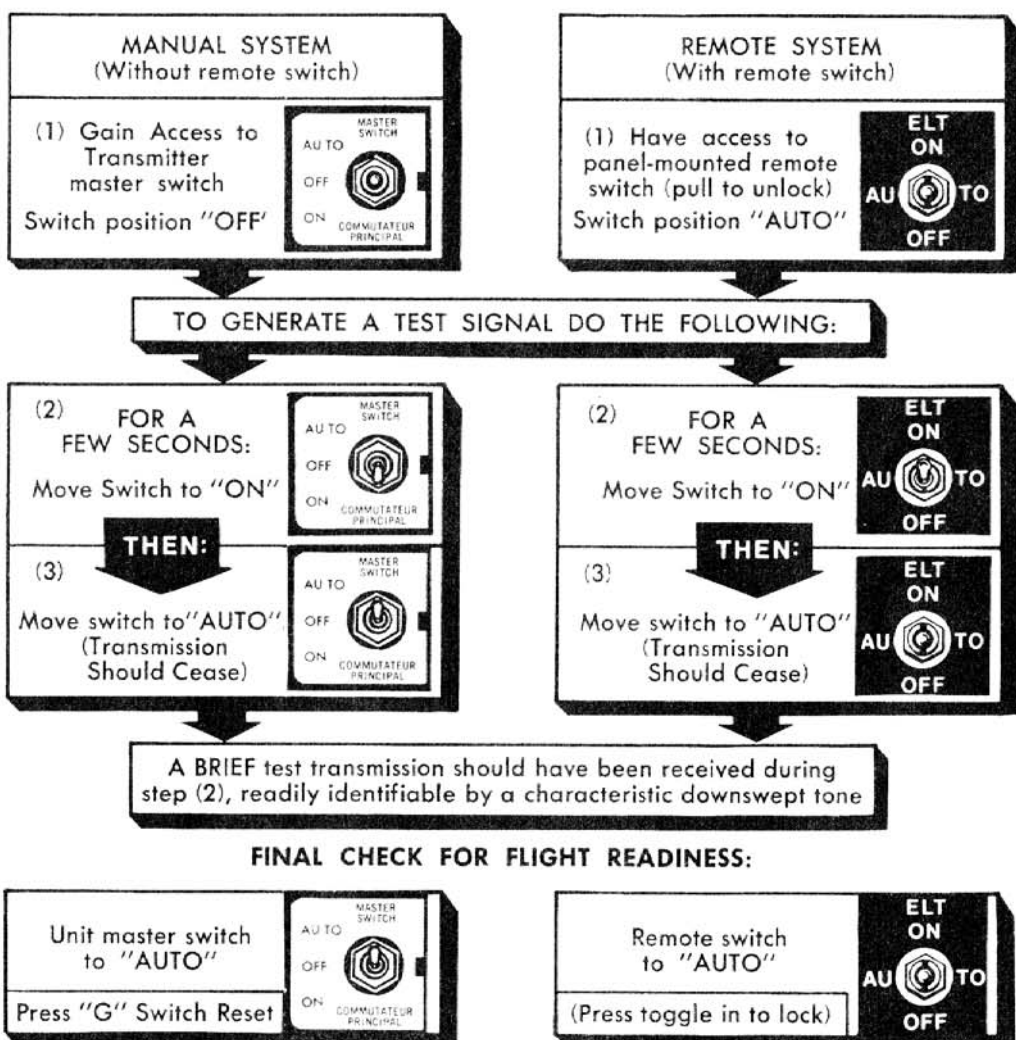


ON: Used to remotely activate the transmitter for a test or emergency situation. An example of such an emergency situation would be a forced landing with an impact insufficient to activate the Rolamite "G" switch.

AUTO: Used to arm the POINTER SENTRY for automatic activation by the "G" switch only.

OFF: Used to de-activate the transmitter after automatic activation by the Rolamite "G" switch.

4.3 FUNCTIONAL TEST OF AIRCRAFT-MOUNTED POINTER SENTRY



4.4 MAINTENANCE TESTING

4.4-1 MOT requirements call for partial bench testing of transmitter for power output, frequency and modulation duty cycle at between 40% and 60% of established battery service life.

4.4-2 A full bench test including current drain shall be performed each time battery pack is replaced. Performance requirements as given in Section 7.

NOTE: IT IS RECOMMENDED THAT BENCH TESTING BE PERFORMED BY A QUALIFIED AVIONICS FACILITY.



SECTION 5

OPERATING INSTRUCTIONS

- 5.0 GENERAL. Your POINTER SENTRY ELT has been engineered to provide the most reliable operation possible. Every contingency has been considered in the design and construction of the SENTRY system. The following section will acquaint you with the simple operational procedures of POINTER SENTRY. It is recommended that you familiarize yourself thoroughly with these procedures and have them firmly in your mind to add to your flying confidence. Remember, with POINTER SENTRY "We're there when you need us!"
- 5.1 It is recommended that the following steps be taken to insure the best possible operation in an emergency:
- Become thoroughly familiar with the POINTER SENTRY instructions
 - Keep them on hand in the aircraft at all times
 - Have the necessary tools (e.g. screw driver or Dzus fastener driver) to insure speedy access to the transmitter in an emergency
 - Visually inspect the unit at regular intervals for cleanliness and secureness. Check Whip antenna mounting and cable connections for tightness.

5.1-1 OPERATING POINTER SENTRY IN THE "FIXED" MODE (IN AIRCRAFT)

The following table gives the switch positions and functions for various situations:

MANUAL SYSTEM (Pointer Sentry System Without Remote Switch)			REMOTE SYSTEM (Pointer Sentry System With Remote Switch)		
MODE	Master Switch on unit	FUNCTION	Master Switch on unit	Remote Switch on panel	FUNCTION
AUTO	"AUTO" (Normal Flight Setting)	SENTRY automatically activated if "G" switch senses level of $5 \pm 2/0g$ and duration of $11 \pm 5/0$ Milliseconds.	"AUTO" (Normal Flight Setting)	"AUTO" (Normal Flight Setting)	SENTRY automatically activated if "G" switch senses level of $5 \pm 2/0g$ and duration of $11 \pm 5/0$ Milliseconds.
MANUAL	"ON"	Overrides "G" switch, and turns SENTRY on so it can be tested for proper operation on the ground OR: (ONLY IF TRANSMITTER IS ACCESSIBLE WHILE AIRBORNE) Airborne testing . . . or, If emergency situation is imminent and pilot wishes to activate SENTRY prior to emergency.	"AUTO"	"ON"	Overrides "G" switch and turns SENTRY on so it can be tested for proper operation on the ground or while airborne. OR: If emergency situation is imminent and pilot wishes to activate SENTRY prior to emergency.
OFF	"OFF"	Turns POINTER SENTRY off in preparation for removal from aircraft or to discontinue signal after rescue. <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">NOTE:</div> If inadvertent activation occurs in system without the remote switch, the aircraft must be landed at earliest opportunity and the "G" switch reset. OR, If the transmitter is accessible in the air, the "G" switch must be reset immediately.	"AUTO"	"OFF"	Turns POINTER SENTRY off if inadvertent activation of the "G" switch occurs during flight. If a severe impact landing occurs, thus activating the "G" switch, POINTER SENTRY will turn on EVEN if all aircraft power is lost and EVEN if the remote switch was in the "OFF" position! This is a POINTER SENTRY safety feature which ensures operation in any emergency situation! (Loss of electrical power leads, intentional turnoff or any impact situation which would short the whip antenna rod against the airframe — blowing the Remote Switch fuse.) NOTE: In the event of inadvertent activation of the "G" switch during flight, the "G" switch must be reset as soon as possible, regardless of the remote switch being in the "OFF" position. This must be done before turning off aircraft DC power after landing to prevent unauthorized emergency transmission.

- 5.1-2 After a forced landing, if aircraft receiver is operable, listen on 121.5 MHz for POINTER SENTRY transmissions. Ensure that Whip antenna is clear of obstructions.

- 5.1-3 The range of POINTER SENTRY varies according to weather and topography. In general, the swept tone signal can be heard up to 150 miles, depending on search aircraft altitude. Stay close to the downed aircraft to permit easier spotting by airborne searchers.



5.2 OPERATING POINTER SENTRY IN THE DETACHED MODE

5.2-1 After forced landing or aircraft accident it may be desirable to use POINTER SENTRY in the detached mode. Various reasons may necessitate this, such as:

- (a) Broken or disabled whip antenna
- (b) Severed whip antenna cable
- (c) Danger of fire or explosion in aircraft
- (d) Temperature extremes in aircraft
- (e) Poor transmitting location

5.2-2 REMOVAL OF TRANSMITTER FROM AIRCRAFT

NOTE: ACCOMPLISH AS QUICKLY AS POSSIBLE TO RESUME OR START EMERGENCY SIGNAL

- (a) turn the unit master switch to "OFF" position
- (b) disconnect whip antenna cable
- (c) disconnect Remote switch cable (if applicable)
- (d) turn winged nut on rear bracket clip to release transmitter (Remove)
- (e) Remove the telescopic antenna from the stowage clips and insert into the ANT receptacle. Extend antenna fully.
- (f) Turn Unit master switch to "ON" position. DO NOT USE "AUTO" POSITION!

5.2-3 Consider such factors as Terrain, Temperature and Precipitation when choosing a location for the transmitter to radiate from.

BEST TRANSMISSION MAY BE OBTAINED BY:

- (a) Keeping antenna vertical
- (b) Standing transmitter upright on a metallic surface, such as an aircraft wing or stabilizer.
- (c) If terrain prohibits good transmission (such as a deep valley or canyon) place the transmitter on high ground or hold in hand on high place.



IN FREEZING WEATHER
PLACE TRANSMITTER
INSIDE JACKET TO
KEEP BATTERY
WARM.

FIG. 11

5.3 BATTERY LIFE VS. TEMPERATURE

5.3-1 Temperature extremes and precipitation. Cold has a direct effect on battery life. Figure 12 illustrates the relationship.

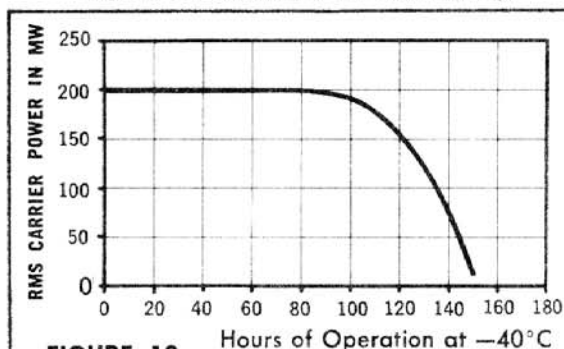


FIGURE 12.
POINTER SENTRY BATTERY LIFE
VS. TEMPERATURE GRAPH

YOUR POINTER SENTRY ELT is supplied with the finest batteries (Lithium) to withstand the environmental extremes found in the north. However, even the life of Lithium batteries can be extended by the following steps:

- (a) In freezing weather, place transmitter inside jacket or coat to keep the battery warm. Let antenna extend outside jacket.
- (b) Keep all moisture and ice away from the antenna connection and the remote connector pins.

CAUTION: DO NOT TURN POINTER SENTRY OFF — EVEN AT NIGHT as search aircraft may be enroute around the clock. Even when you have been sighted or think you have, the spotting aircraft may not be able to relay an accurate or timely "fix" on your position without a continued signal.

5.3-2 ONLY WHEN THE RESCUE TEAM APPEARS discontinue signaling by using the "OFF" position.



SECTION 6

BATTERY INFORMATION AND REPLACEMENT

6.0 GENERAL

6.1 Power is derived from a single battery pack consisting of 3 - 2.8 Volt Lithium "D" size batteries in series. This assembly has been moisture-sealed and fitted with a battery lead connector.

6.2 WHEN TO REPLACE BATTERY PACK:

6.2-1 In accordance with MOT regulations, batteries must be replaced after 5 years shelf or service life or for any of the following reasons:

- (a) After the transmitter has been used in an emergency situation (including any inadvertent activation of unknown duration).
- (b) After the transmitter has been operated for more than one cumulative hour (e.g. time accumulated in several tests and an inadvertent activation of known duration).
- (c) On or before battery replacement date.
(Battery replacement date is marked on the label at end of transmitter.)

Check with your local dealer or write the distributor
for replacement battery packs.

WARNING: DO NOT ATTEMPT TO RECHARGE BATTERY PACK!

6.3 REMOVING THE TRANSMITTER (See Figure 13)

6.3-1 Transmitter must be removed from aircraft for battery replacement by the following steps:

- (a) Place the Master Switch in the "OFF" position.
- (b) Disconnect the antenna cable, and, where applicable, the remote connector from the panel-mounted toggle.
- (c) Grasping the transmitter firmly, turn winged nut on the rear bracket clip and remove transmitter from mounting bracket.

6.4 REMOVE BATTERY PACK AS FOLLOWS:

- (a) Remove 6 screws from base plate.
(Retain Neoprene washers)
- (b) Remove base plate (save gasket), and disconnect the battery/transmitter connectors.
- (c) Remove and replace battery pack, reversing the above procedure.

**WARNING: ENSURE THAT BATTERY PACK IS NOT
SUBJECT TO SHORT CIRCUIT, FIRE,
OR HIGH TEMPERATURES.**

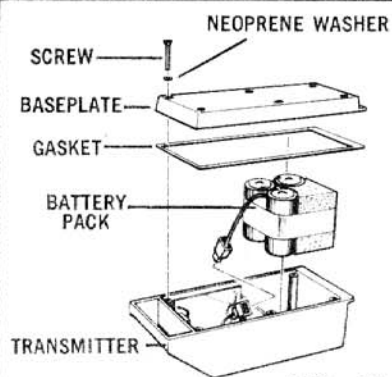


FIG. 13

6.5 Apply new battery replacement date label on transmitter end prior to re-installing transmitter in aircraft, test in accordance with Section 4.3 — Functional testing, Pages 4 and 10.

6.6 Re-installing transmitter in aircraft, test in accordance with Section 4.3 — Functional testing, Pages 9 and 10.



SECTION 7

PERFORMANCE REQUIREMENTS

Operating Life —

100 hours minimum between -20°C and $+55^{\circ}\text{C}$ at 75 milliwatts (Radiated Power)

100 hours minimum -40°C and 37.5 milliwatts (Radiated Power)

**Operating Life quoted at continuous full rated power.*

(Operation will continue for some further time at reduced output)

Operating Frequency and Frequency Stability:

Civil Distress Frequency 121.5 MHz $\pm 0.005\%$

Modulation Characteristics:

Emission Type Amplitude Modulation (A9)

Modulation Type 100% Rectangular Wave Swept Tone

Audio Frequency Sweep —

Downwards over a range of not less than 700 Hz, within the range 1600 to 300 Hz

Sweep Repetition Rate Between 2 and 4 Hz

Modulation Factor Not less than 0.85

Modulation Duty Cycle Not less than 33-1/3%

Transmitter Duty Cycle Continuous

Radiated Power Requirement:

75 milliwatts minimum between -20°C and $+55^{\circ}\text{C}$. Typically 200 milliwatts

37.5 milliwatts minimum between -40°C and -20°C . Typically 100 milliwatts

Spurious Emissions not exceeding -43 dBW

Occupied Bandwidth Less than 25 KHz

Current Drain 50 ma Nom.

Transmitter Activation:

Automatic (all installations)

(a) Inertia switch operates automatically and activates transmitter when a force of $5(+2-0)\text{g}$ is applied for a duration of $11(+5-0)$ milliseconds or more in the direction of the longitudinal axis of the aircraft.

(b) The transmitter will NOT be activated under conditions less severe than those described in (a) above.

(c) After activation as in (a) above, the transmitter will remain activated when subsequently subjected to shock forces, in any direction, of up to 50g and having durations up to 11 milliseconds.

SPECIFICATIONS

Activation: Automatic, (with resettable Rolamite switch) or manual

Operating temperature range: -40°F (-40°C) to 131°F (55°C)

Transmitter output: 200 Mw perp on 121.5 MHz. Duty cycle 40%

Batteries: 3 — 2.8 V "D" cells (Lithium)

Aircraft Antenna System (used when transmitter not removed from aircraft):

Maximum Operating Speed 260 knots (296 m.p.h.) IAS

Type Whip antenna, vertical monopole

Radiation Pattern Omnidirectional, vertically polarized

Connection to Transmitter Coaxial cable terminated in a BNC connector

Impedance Nominal 50 ohms

Telescopic Antenna (for portable use when transmitter removed from aircraft or helicopter)

Type Semi-rigid telescopic antenna, vertical monopole

Radiation pattern Omnidirectional, vertically polarized

Connection to Transmitter Terminated in a BNC connector

Impedance Nominal 50 ohms

System Weights:

TRANSMITTER (including primary battery, telescopic antenna & mtg. brackets) 1.5 lb. (.7 Kg.)

WHIP ANTENNA (including coaxial cable and connector) 0.25 lb.

Dimensions (Transmitter) $7\frac{5}{8}'' \times 3\frac{1}{2}'' \times 2\frac{3}{4}''$ (19.4 Cm x 9 Cm x 7 Cm)