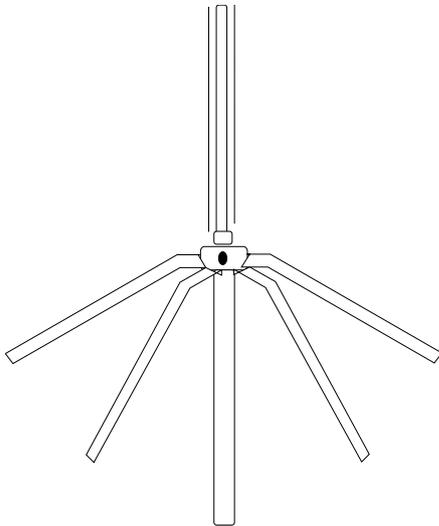




## TYPE GP

### AIRCRAFT AND MARINE BAND VHF COMMUNICATIONS

A rugged long life quarter wave ground plane antenna providing a wide bandwidth for base station, ground to air and marine band shipboard communications.



The GP is designed to meet both civil aviation and military specifications including use in shipboard and harsh industrial environments. The antenna is suitable for operation in cyclonic areas to wind speeds of 230 km/h (144 mph).

Constructed from marine grade, low corrosion, tempered aluminium tubing with an overall finish of a high durability epoxy based coating resistant to chemical attack, abrasion and the effects of ozone and ultra violet radiation. Standard colour is black (other colours optional). The standard coating insulates against precipitation static. A PVC coating to further reduce the effects of precipitation static is available as an option. The antenna elements are DC grounded. Special frequency bands are available to order.

The RF connection is via an "N" type receptacle (female) in the base of the antenna mounting tube. Mounting may be by way of clamps (optional) fitted to the mounting tube.

### Specifications

<b>Colour</b>		Standard is Black	Others Optional
<b>VHF Band</b>		<b>Aircraft Band</b>	<b>High Band*</b>
<b>Overall Height</b>		1285mm (50.6 in)	1155mm (45.5 in)
<b>Radiator</b>	Height	600mm (23.6 in)	470mm (18.5 in)
	Diameter	22.23mm (0.875 in)	22.23mm (0.875 in)
<b>Mounting Tube</b>	Length	660mm (26 in)	660mm (26 in)
	Diameter	32mm (1.26 in)	32mm (1.26 in)
<b>Radials</b>	Diameter	19.08mm (0.75 in)	19.08mm (0.75 in)
<b>Pattern</b>		Omnidirectional	Omnidirectional
<b>Polarisation</b>		Vertical	Vertical
<b>Frequency Band</b>		118-137 MHz	150-168 MHz
<b>Bandwidth</b>		19 MHz	18 MHz
<b>VSWR</b>		1.2:1 at centre frequency	1.2:1 at centre frequency
<b>Impedance</b>		50 Ohms (nominal)	50 Ohms (nominal)
<b>Wind Loading at 230 km/h</b>		21.6kg (47.6 lb)	15.04kg (33.2 lb)
<b>Temperature (Operating)</b>		-42° to +60°C	-42° to +60°C
<b>Power Capability</b>		300 watts	300 watts
<b>Connection</b>		N type receptacle (SO239 option)	N type receptacle (SO239 option)
<b>Mounting</b>		By way of clamps around mounting tube (option)	By way of clamps around mounting tube (option)
<b>Packed Weight</b>		2kg (4.4 lb)	2kg (4.4 lb)

Specifications subject to change – Issued 07/13



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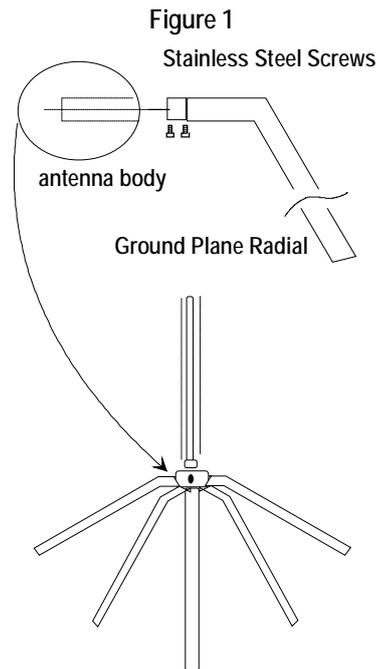
## TYPE GP AIRCRAFT & MARINE BAND VHF ANTENNA Assembly and Installation Instructions

### Assembling Antenna

- 1) When received, the antenna is assembled except for the four ground plane radials which are packed with the antenna.
- 2) Each radial has 2 (two) stainless steel screws fitted at one end. Remove the screws from each radial.
- 3) Smear a little grease on the bare aluminium ends of each radial before inserting them into the holes of the antenna body at the centre of the antenna as per Fig. 1.

Note that the grease will make it easier to disassemble the antenna later if required.

- 4) Fix each radial into the boss using the stainless steel screws removed at step 2 above. Do not over tighten the screws.



### Mounting

- 1) The antenna should be mounted as high as possible and kept clear of nearby metal objects which may affect antenna tuning and, for best results, the radiating element should be vertical and not sloping.
- 2) The 32mm (1¼ in) diameter mounting pole is designed to allow clamping to another support pole, mast, etc., via clamps (not supplied/option).
- 3) The RF connection is by way of an N type receptacle on the side of the antenna body. When making connection, ensure the coaxial cable is tied off and supported, so that no strain is placed upon the connectors.
- 4) Seal up the coaxial connectors with self amalgamating tape or similar, so as to keep water out of the joint.
- 5) No tuning of the antenna is possible or necessary as it is pre-tuned at the factory for the frequencies ordered.



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