

## Heavyweight Pneumatic Aluminium Mast Series Overview

Type - See Table

Racal Antennas heavyweight (Intermediate duty) series of pneumatically operated telescopic masts are designed for military applications where rapid deployment is required in either ground or vehicle mounted roles. Each of the telescopic mast sections can be locked in position either fully extended, or at any intermediate height, by means of a quick and effective single lever operated friction clamp. Lowering the mast is carried out by releasing the lower clamp and allowing the mast to retract under its own weight. Each clamp is then released in turn to completely lower the mast. The rate of descent is controlled by a pneumatic damping system, which ensures the safety of the operator and masthead equipment. The erection time using two personnel to field deploy a Racal telescopic mast is approximately 15-20 minutes.

The standard accessory kit as illustrated opposite contains all items needed for ground mounting a mast. A three lane three level guying system, base plate and pins, ground anchors, hammer, line radius, ladder assembly and tool kit. Other kits are available including special mounting brackets when the mast is to be vehicle mounted. In addition to the standard ground mounting accessory kit various optional items are available such as vehicle mounting brackets, winch assembly for roof mounting, falling derrick kit for ground systems, mast turning handle, electric compressor 12/24VDC or 240VAC, foot pump and hand pump. The intermediate duty masts are available in a range of sizes from 6.8m up to 18.0m. All are capable of supporting a 25kg headload. Models using fewer mast sections such as types 459 and 463 are capable of supporting a head load up to 50kg. All tube sections are manufactured from high tensile aluminium alloy and fitted with precision piston and seal assemblies to permit pneumatic erection of the mast. Hand operated over centre clamping (see opposite) enables each section to be locked in position effectively and quickly. A double thumb wheel clamp is fitted to the top of the mast for securing a head load fitted with a standard NATO 40mm spigot assembly.



Typical Heavyweight Mast



Typical Mast and Ground Mounting Kit

MAST TYPE	459 *1487	1440	456	463	1447	457	1448	458	1449
Height Extended	6.8m	10.0m	12.0m	12.8m	14.5m	15.0m	15.0m	17.0m	18.0m
Height Closed	2.2m	2.2m	2.45m	2.8m	3.1m	2.9m	3.7m	3.2m	3.3m
No. of sections	4	7	7	6	6	7	5	7	7
Guy Radius	5.5m	7.0m	8.5m	10.5m	12.0m	10.5m	12.0m	12.0m	12.5m
Weight of Mast	30kg	35kg	40kg	44kg	48kg	46kg	50kg	50kg	52kg
Weight of Kit	30kg	30kg	30kg	30kg	30kg	32kg	32kg	32kg	35kg
Weight of Ladder	8kg	8kg	8kg	10kg	13kg	10kg	13kg	13kg	13kg
Head Load	50kg	25kg	25kg	35kg	35kg	25kg	45kg	25kg	25kg

\* GRP top section

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