



Airfield Crash Rescue, 4 x 4, Alvis Unipower Rapid Intervention Vehicle (RIV)

PURPOSE:

- The Alvis Unipower, 4x4, Rapid Intervention Vehicle (RIV) Aircraft Crash Rescue and Fire Fighting has been designed to meet current and anticipated requirements of modern aircraft fire fighting duties within the British Armed Forces. The vehicle is designed to be air transportable, within the capabilities of the Lockheed Hercules C-130 aircraft in RAF service

ENGINE:

- Detroit Diesel, 6V92-TA 475 water-cooled, 2 stroke direct injection, 'clean burn' turbocharger 475bhp at 2300rpm (full operational use) 350bhp at 2100rpm (non-emergency use)

CAPACITIES:

- Fuel - 150 litres (Diesel)
- Water - 2275 litres
- Foam tank - 275

ELECTRICAL SYSTEMS:

- Chassis electrics - 4 x 12V DC lead acid type batteries. Series parallel to give 24V DC.
- Mains electrical system - 240V AC external supply via input plug. Battery charger, air compressor and engine coolant heater. Winterisation kit comprising of heater units and tapes. Air conditioning unit for tropical are role.

DIMENSIONS:

- Overall length (including monitor) - 8000mm
- Overall width - 3000mm (mirrors extended)
- Overall height (top of monitor – unladen) - 3280mm
- Maximum laden weight - 15100kg
- Air transport weight - 11050kg
- Wheelbase - 4250mm
- Turning circle - 18m kerb to kerb
- Underbody clearance - 460mm
- Wading depth - 510mm

PERFORMANCE:

- Acceleration - 0-80kph within 23 seconds
- Maximum speed - 120kph
- Cruise speed - 95kph
- Fuel consumption - 1.8 km per litre
- Operational range - 280km+
- Tilt angle - 37 degrees

ROOF MONITOR:

- Output - 1000/lpm
- Operating pressure - 14bar
- Rotation - 230 degrees (115 each side of vehicle)
- Vertical movement - -10 to +45
- Straight stream - Minimum 40m at 14bar
- Diffused spray - Upto 18m x 10.5m wide
- Expansion ratio - 8:1

BUMPER TURRET:

- Output - 500/lpm
- Operating pressure - 14bar
- Rotation - 180 degrees (90 each side of vehicle)
- Vertical movement - -20 to +45
- Straight stream - Minimum 35m at 14bar
- Diffused spray - Upto 22m x 15m wide
- Expansion ratio - 3:1

FRONT SIDELINES:

- Output - Maximum output 450/lpm
- Operating pressure - Restricted to 7bars
- Expansion ratio - 6%

HOSE REEL:

- Output - 130/lpm
- Operating pressure - 40bar

Fact sheets supplied by Chris Spraggins

<http://www.manstonfiremuseum.com>