

The MCADTS has been developed typically for the military fast jet marketplace (TORNADO), but the technology is applicable to any fast jet requiring calibration, and checking of its propulsion system. The Calibrator/Control Unit is truck mounted for portability. Its relatively light weight enables manual maneuvering with ease. The truck incorporates a parking brake which operates when the tow bar is latched in its vertical position. Ample storage space is provided for all hoses and leads. A hinged, padlockable lid provides security and protection when the MCADTS is not in use.

The pitot, static and void hoses have flared tube connections which mate with the male -cone fittings at the Pitot, Static and Void ports on the rear panel.

All hoses are colour coded and have different sized fittings, as follows, to ensure that the correct connections are made:

- A. PITOT - Colour BLUE- Size 7/1s \_ 20 UNJF
- B. STATIC - Colour RED - Size 9/1s -18 UNJF
- C. VOID - Colour YELLOW -Size 1/2 - 20 UNJF

Incorporated in the truck are four pitot, five static and two void outlets which can be individually isolated by solenoid valves controlled from the RCDU. The male cone outlet fittings are equipped with protective caps attached to the rear panel by wire lanyards. When the hoses are disconnected, the caps should be fitted to provide protection against damage and contamination.

Power is applied to the MCADTS via the multiway power input connector at the nearside top right corner. The power lead provided is intended for use on a 115V a.c. 400Hz 3-phase supply. Leads are also available to provide the following options:

- A. 240Vac 50Hz single phase
- B. 110Vac 50/60Hz single phase
- C. 28Vdc

The MCADTS has integral vacuum and pressure supplies, generated via a multi-headed dry diaphragm pump. The pump runs intermittently during operation of the MCADTS; only operating when pressure is demanded.

The Remote Control and Display Unit (RCDU) is connected at the socket in the lower dish at the nearside bottom right corner of the CCU. For remote operation, it may be removed from the CCU and connected via its interconnecting lead or, alternatively, the extension lead if required.

Various operational modes may be selected and controlled from the menus presented on the RCDU video screen.



## The Complete Air Data Test System for fast jet application

- more accuracy
- more instrument types
- more aircraft programs
- more flying time

### Quality Approvals

CWCIS are committed to complete customer satisfaction in all products and services. International quality approvals include BS EN ISO9001:2000 and Civil Aviation Authority

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# MCADTS

## MULTI-CHANNEL AIR DATA TEST SET

# M CADTS

## MULTI-CHANNEL AIR DATA TEST SET

### TYPICAL OUTLINE SPECIFICATION

For further information please contact the sales department as listed below

#### KEY FEATURES

- Fully RVSM compliant
- Integral vacuum and pressure supplies
- Rugged, man portable or truck mounted
- Extended range
- Easy to operate
- Single person operation via remote control and display unit
- Pre-programmed test routines
- Programmable safety limits to ensure safe aircraft testing
- Electronic isolation and distribution box available

#### SPECIFICATION

##### Performance - Pitot

|                 |                    |
|-----------------|--------------------|
| Air speed:      | 20 to 1,000kts     |
| Air speed rate: | 50 to 1,000kts/min |
| True air speed: | 20 to 1,250kts     |
| Mach:           | 0.3 to 4.0         |
| EPR:            | 1.0 to 2.5         |

##### Performance - Static

|                |                    |
|----------------|--------------------|
| Altitude:      | -3,000 to 80,000ft |
| Altitude rate: | 0 to 15,000ft/min  |

##### Environmental

|                        |                |
|------------------------|----------------|
| Operating temperature: | -5°C to +45°C  |
| Storage temperature:   | -30°C to +65°C |

#### CONTROLLED PRESSURE OUTPUTS

Individually selectable ports with retained caps

|                |                               |
|----------------|-------------------------------|
| Pitot channel  | 4 ports P1 to P4 to MS33656-4 |
| Static channel | 5 ports S1 to S5 to MS33656-6 |
| Void channel   | 2 ports V1 & V2 to MS33656-4  |

#### ENVIRONMENTAL RATINGS

In accordance with DEF-STAN 66-31/2 for category IV equipment

|                            |   |
|----------------------------|---|
| Test                       | BS2011 category                                     |
| Vibration                  | Fc  |
| Dry heat                   | Bd/Bb   |
| Damp heat (steam state)    | Ca  |
| Cold                       | Ab  |
| Combined cold/Low pressure | Z/AM  |
| Damp heat (Cyclic)         | Db  |
| Drop and topple            | Ec  |
| Bump                       | Eb  |
| EMC                        | DEF STAN 59-41<br>Section 2 table II class A limits |

NSN: 6695-99-9252973

#### ACCESSORIES

|                                 | NSN             | QTY |
|---------------------------------|-----------------|-----|
| Truck assembly                  | 1730-99-8075743 | 1   |
| Remote control & display (RCDU) | 1730-99-6058055 | 1   |
| RCDU interconnect cable         | 5995-99-3176298 | 1   |
| Aircraft power cable (10m)      |                 | 1   |
| Pitot pressure hose             | 4720-99-9154107 | 4   |
| Static pressure hose            | 4720-99-1472161 | 5   |
| Void pressure hose              | 4720-99-0144669 | 2   |

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