



# Nose wheel steering test set

## 1<sup>st</sup> & 2<sup>nd</sup> line ground support equipment

### Features

- Automated testing of nose-wheel steering system
- Windows-based, menu driven operating system
- Rugged laptop based system
- Simple, clear on-screen instructions and results.
- Tests mechanical and electrical elements
- Built-in self test
- Powered from aircraft 115V supply

The nose wheel steering test set provides complete on-aircraft testing the Tornado nose wheel steering system. Compatible with all marks of current and legacy Tornado aircraft the test set presents the user with a selection during pre-test set up.

The test set kit measures all nose wheel steering control unit static output voltages, command potentiometer output, the command and follow-up potentiometer tracking error outputs, the centring switch operation and the steer to centre accuracy.

Using data acquisition circuitry and windows based test software all of the above measurements are collated and compared against comprehensive test criteria to determine the serviceability of the nose-wheel steering system.

### Benefits

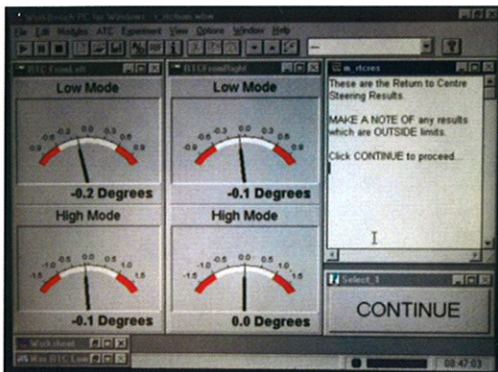
- Summary display of relative positions of the return to centre of the nose wheel steering system.
- Ease of setting up of potentiometers within the nose wheel steering system.
- Ease of setting centring switches
- On-screen control of yaw input stimulation
- Controls signals to stimulate on-aircraft components
- Provides record of test results stored on removable media
- Compatible with pre-simplified and simplified nose leg variants
- Repeatable angle measurements to an accuracy of 0.1°
- Supplied in 2-off man transportable transit cases (1 for test set, 1 for mechanical and harnessing elements)

# Full suite of on-aircraft operational sequences tested

The nose wheel steering test set provides full test capability throughout all operational sequences including power-up, steering selection, take-off, retraction, approach to land, in-flight and ground BITE.

## Intuitive test interface

The platform specific test application is hosted on a Windows based rugged laptop providing a colour screen and standard laptop mouse and keyboard. The user is guided through the test procedure by clear on-screen instructions which ensures that the testing is completed correctly.



The screen shot shown above is an example of the intuitive test interface provided for use with the nose wheel steering test set.



**Ultra Electronics**  
ELECTRICS – Test Solutions  
Kingsditch Lane  
Cheltenham  
Gloucestershire GL51 9PG  
UK  
Tel: +44 (0)1242 221166  
Email: testsolutions@ultra-electrics.com  
www.ultra-electrics.com  
www.ultra-electronics.com



## Faults detected

- Asymmetry faults including tracking errors
- Power supply faults in either regulated supply or potentiometer supplies
- Selector solenoid drive faults

## Test set kit elements

The test set kit is comprised of the test set, wheel angle measurement equipment, a signal interface unit and appropriate harnessing to supply power and connect all required aircraft signals.

## Ordering Information

- Ultra Part no.: 683010000
- MAGERD 5363  
(On-aircraft replacement for  
MAGERD 2859)
- NSN 4920-99-9910557

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