

THE RADIO TRIALS CENTRE AT A&AEE BOSCOMBE DOWN A DESCRIPTION

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ABSTRACT

The Radio Trials Centre at the Aircraft and Armament Evaluation Establishment (A&AEE) is the UK Ministry of Defence designated radio frequency measurements centre, and as such provides RF measurement facilities for the airborne testing of aircraft communications, radio navigation, radar, electronic warfare and other RF link based systems. It is part of the Mission Systems Division of A&AEE, who are its major user in support of their avionics test programmes. The Centre also supports other users, both in Government and Industry.

The main capabilities provided by the Centre are:-

Off-air RF measurements between 2MHz and 18GHz.

Mobile RF measurements facilities.

Network analysis facilities.

An acoustic noise laboratory.

Long range HF communications facilities.

The paper discusses these capabilities, the data acquisition, storage and processing systems in use at the Centre, and the range of tests which they support. The paper also considers the Centres' future development.

ABBREVIATIONS

A&AEE	Aircraft and Armament Evaluation Establishment
AM	Amplitude Modulation
CCP	Central Control Processor
CW	Continuous Wave
dB	Decibels
dB μ V	Decibels relative to 1 μ V (1 μ V = 10 ⁻⁶ Volts)
DCU	Data Capture Unit
EW	Electronic Warfare
FM	Frequency Modulation