Ground-Based Aircraft Testing

Airside Operational Instruction (AOI) 42

BournemouthAirport

Part of Regional & City Airports

DOCUMENT REVIEW HISTORY		
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❖ AMENDMENTS

This document will be subject to a routine review, over a period not exceeding 36 months. The latest version will be included in the annual reissue of the Aerodrome Manual; interim reviews are carried out as deemed necessary.

Only operational related amendments will prompt the issue of a new Version; pertinent amendments being highlighted in green text & indicated by a green bar in the right margin. Indication of any amendment of an administrative nature will be listed below.

❖ REVIEW / AMENDMENT HISTORY

REVIEW SUMMARY			
VERSION / REVIEW REF:-	1.1	**REVIEW COMPLETED BY:-**	CATHY WILLOUGHBY-CRISP
DATE:-	FEB 21	**ROLE:-**	AIR TRAFFIC & OPERATIONS MANAGER

PARAGRAPH	AMENDMENT
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4.1	SATCO now Manager Air Traffic Services

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DATE:-	MAY 24	**ROLE:-**	AIRFIELD SERVICES MANAGER

PARAGRAPH	AMENDMENT

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1. INTRODUCTION

1.1 PURPOSE

This AOI is issued to provide guidance to based operators, of the correct and acceptable processes to be employed when engaged in any ground testing of aircraft, which requires the application of electrical power to the aircraft.

In particular, this AOI refers to the ground testing of aircraft Transponders.

Operators are to comply with the requirements of this AOI at all times.

2. TRANSPONDER TESTING

2.1 IMPACT

Transponder testing has the potential to generate false SSR returns; this can trigger conflict alerts and consequently, cause an adverse safety impact and possible disruption to operations.

2.2 PRECAUTIONS

Individuals and organisations, intending to conduct ground-based Transponder testing or maintenance, must take the necessary precautions to ensure that Transponder transmissions cannot be erroneously identified as a valid response by airborne or ground interrogator systems.

2.3 NOTIFICATION

Operators are required to advise the Tower before commencing any Transponder testing and provide the following information:-

- Location of the test
- Contact Name & Telephone Number
- Expected Duration of the test

The Tower should again be advised when the activity is completed.

2.4 PROCESS

Whenever possible, tests should be conducted inside a closed hangar; this may provide additional shielding and thereby, reduce the likelihood of stray transmissions.

Additionally, the following measures should be applied for the testing period:-

- The UK-specific ground Transponder testing code; Mode A 0002 to be set
- Effective screening or absorption devices to be placed over the antennas; alternatively, the ramp test to be physically connected to the antenna system
- The Mode C pressure altitude to be set manually to a high level, e.g. above 60,000ft; or to an unrealistically low level, e.g. 2000ft below ground level

On completion of the testing, Transponders should be selected to "Off" or "Standby".

Ref:- UK AIP: ENR 1.6-5

3. OTHER TESTING

3.1 PRECAUTIONS

With the exception of an aircraft's Transponder testing, prior to conducting any ground testing, which requires electrical power to be applied to the aircraft, the operator must confirm that the aircraft's Transponder is set to the "Off" position, before applying the electrical power.

Particular note should be taken that, if a Transponder is set to "Ground Mode" and the weight is lifted from the wheels, the Transponder can become active. Therefore, for any testing involving this function, the Transponder must be set to the "Off" position; if necessary, by the removal of the fuse or by isolating the relevant circuit breaker.

4. ENQUIRIES

4.1 CONTACT

Any enquiries regarding the content of this AOI should be addressed to the Manager Air Traffic Services (MATS); via telephone number 01202 364150.