

FAAM Tool Control

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1. Why a Policy is Required

The primary objective of a tool control policy is to substantially reduce or eliminate aircraft accidents or incidents, including possible loss of life or damage to equipment, caused by the improper accountability of tools.

With this in mind, the use of tools and support equipment on the aircraft must be controlled to minimise the possibility of tools or support equipment being left in an aircraft and ensuring that only approved and authorised tools are used for all aviation maintenance.

2. What Does this Policy Cover

- Individual tools
- Tool kits
- Test equipment and diagnostic tools such as multi-meters, oscilloscopes, pressure meters, calibration kits, calibration gas cylinders.

Items must be included in the tool control procedures if the item is used in the breakdown of any instrument or system.

Therefore a calibration kit need not be included in the tool control system if the instrument remains intact throughout the whole of the calibration procedure, but if the calibration includes dismantling part of the instrument it does need to be included.

3. Responsibilities

It is the responsibility of all tool users to be both aware of and use the tool control policy. This includes following the etiquette of using the tools, ensuring any missing tools are reported immediately and reporting any tools found on the aircraft or in the hangar which cannot be identified.

Individuals bringing tools to FAAM are responsible for those tools and ensuring the tool control policy is followed.

It is the responsibility of visitors to FAAM to only bring extra tools if these tools cannot be gained from the aircraft tool kits, therefore visitors should make themselves aware of the tools available at FAAM.

FAAM are responsible for the upkeep of the hangar and pre-flight toolkits, including periodic checks and making available inventories of the kits.

4. Tool Kits

4.1 Introduction

FAAM provides tool kits for use on the aircraft. Use of these kits is controlled via a tool control procedure. In general, no other tools are permitted on the aircraft. The tools are for maintenance of the science instruments only, and are not to be removed from their normal locations unless permitted by FAAM.

4.2 Hangar Tool Kit

The hangar tool kit is essentially for maintenance of the aircraft science instruments while the aircraft is in the hangar.

The tools are for use on the ARA only.

It is stored in a red cabinet kept on the hangar floor at Cranfield. The individual drawers are foam lined with the tools inset into the foam, missing tools are thus immediately obvious.

These tools are for ARA scientific equipment use only and are not to be used for ARA aircraft maintenance, on other aircraft or on non-aircraft jobs.

The tools in the hangar tool kit are not to be removed from the boundary of the hangar with the exception of any maintenance activities which are undergone on the ramp immediately outside the hangar doors. They are not to be used in the FAAM Laboratory.

4.3 Detachment/Pre-Flight Tool Kit

The detachment/pre-flight tool kit is a comprehensive tool kit kept in a black Peli case. This is stored in the aircraft hold for pre-flight duties and travels with the aircraft for detachments. The drawers are foam lined with the tool inset into the foam. This is the only source of tools to be used when preparing the aircraft instruments prior to flight.

These tools are for ARA scientific equipment use only and are not to be used for ARA aircraft maintenance, on other aircraft or on non-aircraft jobs.

The tools in the detachment/pre-flight tool kit are not to be removed from the operating area of the aircraft.

4.4 In-Flight Tool Kit

This tool kit is kept locked on board the aircraft and is populated and controlled by the Airtask Cabin Crew, who will issue tools as required. This tool kit becomes available for use after take-off. See Airtask Cabin Safety Manual Section 5.12.

4.5 Other Tool Kits Including Visitor's Kits

FAAM has other tool kits in its premises, e.g. in the FAAM Laboratories. These tool kits and their individual tools must not be taken into the hangar or on board the aircraft.

Visitors may bring tool kits to FAAM, but tools must not be taken into the hangar, the ramp or the aircraft itself.

It is recognised that the FAAM toolkits cannot cover every tool requirement. It is permissible therefore to take some additional tools to the aircraft. This must be done in a controlled manner – see the tool control procedure in section 5.

5. Tool Control Procedures

There is a system for the hangar tool kit and the detachment/pre-flight tool kit. The two systems are identical.

There will be access to only one toolkit at any one time.

The tool tag system for one tool kit applies only to that tool kit.

5.1 Procedure for the Hangar Tool Kit

The hangar tool kit is controlled by a system where a tool tag is left in place of the tool.

There is a tool tag board positioned near to the hangar tool box, by the aircraft stairs.



5.2 Procedure for the Detachment/Pre-Flight Tool Kit

The detachment/pre-flight tool kit is controlled by a system where a tool tag is left in place of the tool. The tool tag system is in the lid of the tool kit on detachments.



5.3 Tool Tag System

This system applies to either tool-kit, each toolkit has its own tool tag board. Only one toolkit (and therefore only one tag system) will be available at any one time, depending on the aircraft location.

- Users must mark their name in chinagraph alongside a set of tags.
- They may then remove the required number of tags, one for each tool (e.g. a socket, extension and a ratchet handle will be 3 tags not just one).
- Tools can then be removed from the box, but must be replaced with tags.
- On completion of tool use, they must be swapped back, and the tag returned to the board.
- Tags may only be removed from the tool box to replace tools.
- Names can be removed from the board once all tags are replaced.
- Anybody needing more than 10 tool tags can enter their name twice.
- Do not borrow tools from someone else on the aircraft.
- Any missing tools must be reported to both Avalon and FAAM immediately.
- Any unserviceable tools are to be reported immediately to FAAM.



5.4 Tool-kit Checks

The hangar and pre-flight/detachment tool kit is checked regularly by a member of FAAM staff.

The pre-flight/detachment tool kit is checked before each flight by the duty “pre flighter,” to confirm all tools have been returned prior to departure. Any discrepancies will potentially delay or cancel the flight.

5.5 Managing Irregulars: Procedures for Additional Tools

For any tools not included in the hangar or detachment/pre-flight tool kit, including specialist tools used by visitors to FAAM, the process of identifying ownership will be treated as for any other tools but with the following changes.

- A list of the tools must be provided to a member of FAAM prior to use
- An extra row of tags must be used marked with the users name and “EXTRA TOOLS”
- Tags must be removed to match the number of tools being taken onto the aircraft.
- Tags must only be returned once all the extra tools have been confirmed OFF the aircraft.
The name may then be removed.

5.6 Tool Inventory

Each tool kit has an inventory held by FAAM. The relevant inventory is attached to each tool kit and is available on the FAAM website.