

General Information about FAAM

1. Introduction

1.1.1. FAAM, the Facility for Airborne Atmospheric Measurements, is established as a joint facility of the Met Office and the Natural Environment Research Council. It is accountable to the Head of Observation Based Research (OBR) at Met Office Headquarters in Exeter, and to the Director of the National Centre for Atmospheric Sciences, who is based at Leeds University. FAAM's primary facility is a BAe-146-301 Large Atmospheric Research Aircraft (ARA), registration G-LUXE; this aircraft is owned by BAe Systems Regional Aircraft based at Prestwick Airport in Ayrshire, but FAAM and the ARA are based at Cranfield Airport in Bedfordshire. FAAM staff are a mixture of Met Office and NERC employees.

1.1.2. All visiting users of FAAM are to have read and signed for parts 1 and 2 of this handbook before they either work at Cranfield or fly on board the ARA in respect of FAAM work, and thereafter annually. All FAAM staff are to have read and signed for this whole handbook within their first month of starting employment, and thereafter annually.

2. Insurance

- 2.1.1. Details of the insurance cover that is in place for visitors to FAAM. This may be obtained from FAAM, or from NERC's Head of Airborne Research Facilities at Swindon.
- 2.1.2. Attention is drawn to the following points:
 - 2.1.2.1. The Facility's scientific equipment is not insured. Visitors are expected to take all reasonable steps to protect the assets of the Facility and all borrowers are required to sign a form on which their institution acknowledges receipt of the equipment in good condition and agrees to exercise due care and attention while the equipment is in their possession.
 - 2.1.2.2. Third party equipment brought to the Facility is at the owner's own risk. It is recommended that visitors ensure that their equipment is covered by their institution's insurance arrangements whilst at the Facility, especially if the equipment is to be used on detachment overseas. The Facility will not be held responsible for the replacement or repair of 3rd party equipment brought to the Facility.
 - 2.1.2.3. Any life, personal accident, critical illness or private health insurance policies (including those associated with mortgage protection) should automatically provide cover for flights as a fare-paying passenger on a commercial aircraft. However, it is possible that some insurer(s) will view the ARA differently because of the unusual nature of the flying involved. It is recommended that all prospective science crew contact their insurer(s) in advance.

3. Who's who?

3.1.1. Below is shown the reporting structure of FAAM, who does what, and how to contact them

Structure and Contacts

Facility for Airborne Atmospheric Measurement

Building 125, Cranfield University

Cranfield University, Cranfield, Beds, MK43 0AL

Fax: 01234-754434

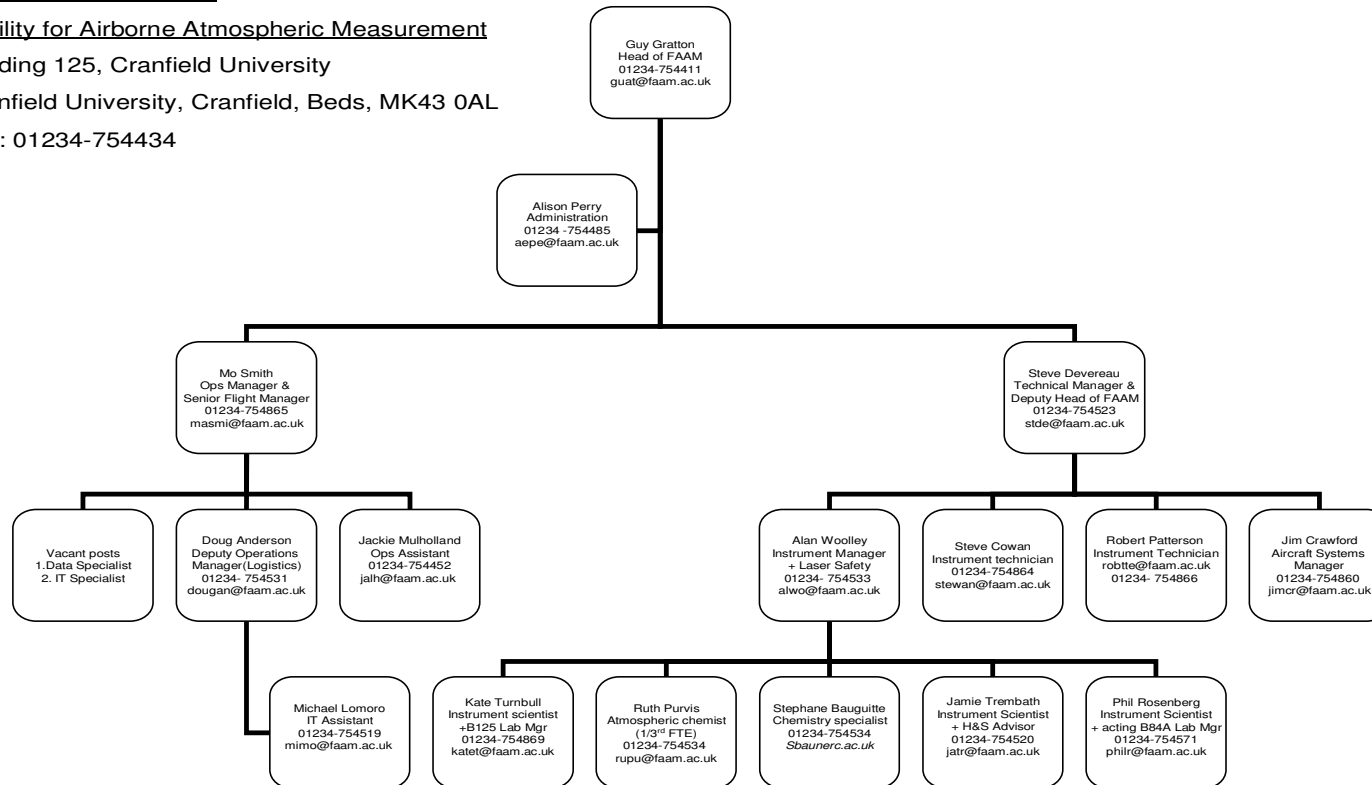


Figure 1, FAAM Management Structure

3.1.2. All FAAM users will also come in contact with staff from Directflight Ltd, who operate the aircraft under their AOC (Air Operators Certificate) procedures. A similar diagram is shown below for DFL's staff who work on this aircraft.

(Diagram to be inserted)

3.1.3. During research flying activities, or their planning, the following are key personnel:

3.1.3.1. FAAM Technical Manager. The FAAM Technical Manager has responsibility for ensuring that Core scientific equipment operates correctly and that the instruments fitted to the aircraft are as agreed with the science campaign Principal Investigator (PI).

3.1.3.2. FAAM Operations Manager. The FAAM Operations Manager has responsibility for ensuring that the use of the aircraft is optimised to meet the combined requirements of the scientific campaigns and to provide the point of contact with Directflight.

3.1.3.3. Campaign Specialist. A Campaign Specialist is appointed from FAAM staff for each campaign to provide a point of contact for liaison with the entire campaign group and to support the Operations Manager (deputising when necessary).

3.1.3.4. Detachment Manager. When detached from Cranfield, a Detachment Manager is appointed from FAAM staff to take overall responsibility for the local day-to-day operations of the campaign. This person will normally be a manager as shown in the diagram on page 3 above.

3.1.3.5. Flight Manager. A Flight Manager is appointed for each flight; their role is to operate the Core Console and to ensure that the flight data is fully and properly recorded. The Flight Manager also ensures that the Core data (except Cloud Physics) is processed and delivered to the British Atmospheric Data Centre (BADC) for distribution in a timely fashion. The responsibility for processing Core Cloud Physics data and delivering it to BADC falls to the Cloud Physics operator for each flight.

3.1.3.6. Mission Scientist. A Mission Scientist is appointed for each flight; their role is to liaise with the pilots and flight manager in order to ensure that the conduct of the flight produces the scientific data sought. The mission scientist will most normally sit in the jump seat behind the cockpit.

3.1.4. Other useful contacts:

- 3.1.4.1. National Centre for Atmospheric Sciences (NCAS).
Contact details for key staff are available at
<http://www.ncas.ac.uk/contacts/index.html>.
- 3.1.4.2. NERC: Head of Airborne Research Facilities. Mr Peter Purcell, Tel 01793-411649, Fax 01793-411610, Email ppu@nerc.ac.uk
- 3.1.4.3. Met Office: Head of Observation Based Research. Mr Roy Kershaw, Tel. 01392 886136, Fax: 01392 885681, Email roy.kershaw@metoffice.gov.uk

4. FAMILs

FAMILs, FAAM Management Information Leaflets, are produced by the management team at and around FAAM, to provide staff and users with information required to work and, and use, the facility efficiently and safely.

4.1 Documents replaced

With the issue and replacement of FAMILs, the following documents are being replaced. They may still be used for reference, but in the appearance of any contradiction, FAMILs will take precedence.

- FAAM Handbook, issue 2, 4 January 2007 and all previous issues
- Working within the ground facilities provided by FAAM, issue 1, 5 January 2007
- FAAM Health and Safety Policy Statement, 17 Oct 2006
- Aircraft Laboratory Code of Practice, 4 Dec 2006
- Building 125 Laboratory Code of Conduct, 27 Oct 2006
- Building 84A Laboratory Code of Conduct, 27 Oct 2006
- FAAM Cylinder Regulations (undated)
- FAAM Tool Control Procedures / Tool Control on the Aircraft (undated)
- "Security Passes", formerly at <http://www.faam.ac.uk/public/accessroute.html>
- "Security – departure on detachment", formerly at <http://www.faam.ac.uk/public/accessroute.html>
- "New Instruments", formerly at <http://www.faam.ac.uk/public/accessroute.html>
- FAAM response to an incident involving FAAM, Directflight, Avalon, or visiting personnel or equipment, dated 22 Dec 2006
- Core chemistry operators manual (any version)
- New System for temporary access to FAAM Buildings (B125 and Hangar) (undated)

4.2 List of FAMILs

<u>No.</u>	<u>Title</u>	<u>Issue state</u>
01	General information about FAAM	1 AL0
02	Information for FAAM Users	1 AL0
03	General Health and Safety	1 AL0
04	Health and safety away from base	1 AL0
05	FAAM Staff Handbook (<i>not available to users</i>)	1 AL0
06	Civil Emergency Procedures	Draft A AL0
07	Incident response plans	Draft A
08	Requirements and plans for detachment preparation	In preparation
99	Contact details for FAAM staff and associated persons (<i>Confidential – restricted on “need to know” basis</i>)	Draft A

Note: draft documents, and some others for confidentiality reasons, will not be publicly available. Issue states are as at the issue of this FAMIL, and some documents may have been updated since then.

5. Definitions

5.1.1. The following definitions are useful when dealing with FAAM.

<u>Term</u>	<u>Meaning</u>
ABP	Able Bodied Passenger
APU	Auxilliary Power Unit (a small jet engine located within the aircraft's rear fuselage)
ARA	(Large) Atmospheric Research Aircraft
BADC	British Atmospheric Data Centre
BAeS	British Aerospace Systems Limited
CCM	Cabin Crew Manager
COSHH	Control of Substances Hazardous to Health
DFL	Direct Flight Limited
DFL	Directflight Limited
FAAM	Facility for Airborne Atmospheric Measurements
FDP	Flight Duty Period (The time during which a person operates as a member of the aircraft crew. It starts when the crewmember is required to report for a flight, and finishes at on chocks or engine off at the final landing.)
FDP	Flight Duty Period
Flight Crew	Persons on board the aircraft primarily to ensure its safe operation; this includes the Captain, First

<u>Term</u>	<u>Meaning</u>
	Officer and Cabin Crew Manager.
FTP	FAAM Trained Person
HR	Human Resources
IRT	Incident Response Team
NCAS	National Centre for Atmospheric Sciences
NERC	Natural Environment Research Council
PI	Science Campaign Principle Investigator
PV	Private Venture
SCCM	Senior Cabin Crew Manager (term only normally applies in the rare event of multiple CCM carried, in which case other CCM are termed CCM2).
Science Crew	Persons on board the aircraft primarily to ensure the successful conduct of a flight's scientific objectives; this includes the Flight Manager, Mission Scientist and all instrument operators.
SMS	Safety Management System

Authorised for use



GB Gratton
 Head of FAAM
 Date as header

Amendment Record

<u>Issue</u>	<u>AL</u>	<u>Date</u>	<u>Pages</u>	<u>Notes</u>
1	0	9 July 2009	8	Initial issue