



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Labview Developer, FAAM Airborne Laboratory,
National Centre for Atmospheric Science



Salary: Grade 7 (£34,304 – £40,927 p.a.)

Reference: ENVEE1548

This post is based at the FAAM Airborne Laboratory, Cranfield University, Bedfordshire

Fixed term for 3 years – due to external funding

We will consider job share / flexible working arrangements

Labview Developer FAAM Airborne Laboratory (FAAM), National Centre for Atmospheric Science

Do you want to work as a Labview Developer supporting a cutting edge airborne scientific observatory? Would you like to design, develop and maintain the Labview code on the FAAM aircraft, maintaining the networked systems, including National Instruments CompactRIO? Are you interested in being trained to operate instrument packages in flight, both in the UK and globally? If so, we want to hear from you!

The FAAM Airborne Laboratory is a unique, highly modified BAE-146 4-engine jet aircraft adapted to carry a highly specialised science payload dedicated to supporting UK atmospheric science researchers and users of atmospheric science data. FAAM provides a specially adapted research aircraft, managed by a unique team of scientists, engineers, flight technicians and project managers forming a complete package of support for the scientific community. The capabilities are extensively reliant on state-of-the-art scientific instrumentation, often uniquely customised for use on the FAAM aircraft, which is deployed throughout the world.

You will have experience using Labview in the control of and data acquisition from complex systems using both FPGA and Real Time modules. You will have a bachelor's degree or equivalent experience in an engineering, physical science or related field and will work in the laboratory and on the atmospheric research aircraft from a base at Cranfield* as well as internationally.

There is the opportunity for those with more experience to direct future facility development and help shape FAAM's technology strategy. This will involve active participation in the collaborative research programme in atmospheric technology.

****Although this post will be employed by University of Leeds, it will be entirely based at FAAM's headquarters on the campus at Cranfield University.***



What does the role entail?

As a Labview Developer, your main duties will include:

- Developing, maintaining and archiving FAAM's Labview code repository in conjunction with FAAM colleagues, as well as maintaining FAAM's data acquisition systems (CompactRIO) and networked aircraft systems;
- Operating instruments on board the BAe-146-301 atmospheric research aircraft both inflight and on the ground;
- Maintaining a body of published information on selected systems and code, particularly via the FAAM website, the Centre for Atmospheric Data Analysis (CEDA), GIT and other repositories;
- Liaising with external users of instruments, including working groups, to help ensure that FAAM continues to provide and enhance the facilities required by the science community;
- Supporting colleagues as required as part of the FAAM team, and in particular FAAM's instrument science team;
- Supporting instrument science from our UK base at Cranfield University as well as other locations in the UK and overseas, typically 2-3 such trips, of 3-4 weeks each, will be a normal annual load;
- Contributing to future planned development of the facility, including helping to shape new data and control systems on the aircraft;
- Reporting to the FAAM Instrument Manager and FAAM's Data Scientist on a day-to-day basis, working closely with research groups nationally, learning where necessary the practical and scientific skills to support the research of these groups;
- Contributing to general NCAS activities, such as participating in workshops, seminars, training, public engagement, knowledge transfer activities, etc., as agreed with line manager;
- Providing input for NCAS/stakeholder reports, e.g., output performance measures, annual reporting, etc.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.



What will you bring to the role?

As a Labview Developer you will have:

- An NI Labview Certification up to Developer level, with experience of Real Time, FPGA and CompactRIO;
- A degree or equivalent experience in an engineering, physical science, or closely related field;
- Ability to work within a large multi-disciplinary team;
- Self-motivated and flexible, capable of directing your own work, in appropriate consultation with colleagues;
- Good communication skills, with the demonstrable ability to communicate effectively, particularly through authoring clear technical documentation;
- Willingness to work on board the FAAM research aircraft (essential requirement of this post). Candidates must be able to move through a typical aircraft cabin, be able to use a headset to communicate and use a computer to interpret data on board the aircraft;
- A valid passport, or the ability to quickly obtain one;
- An active commitment to your own continuous professional development.

You may also have:

- Experience of working with and maintaining IT/networked measurement systems with a good understanding of the fundamental principles of making high quality measurements;
- A working understanding of digital transmission protocols such as RS232, RS485 and TCP/IP;
- Experience with Linux operating systems and python programming;
- Experience of working in aviation or another safety critical environment;
- Knowledge of atmospheric science, meteorology, and/or meteorological instrumentation;
- Experience in the development of instruments or measurement techniques including leading associated projects.



How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Contact information

To explore the post further or for any queries you may have, please contact:

Dr Jamie Trembath, FAAM Instrument Team Manager

Email: jamie.trembath@faam.ac.uk

Additional information

Find out more about the [National Centre for Atmospheric Science](#) and [its relationship with the School of Earth and Environment](#)

Find out more about the NCAS [Facility for Airborne Atmospheric Measurements](#)

Find out more about the NCAS [Atmospheric Measurement and Observation Facility](#)

Find out more about the [School of Earth and Environment](#)

Find out more about the [Faculty of Environment](#)

Find out more about our [Research and associated facilities](#).

Find out more about [equality](#) in the Faculty.



A diverse workforce

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Environment we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Environment has received a prestigious Athena SWAN silver award from [Advance HE](#), the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position, however, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

