



ANNOUNCMENT OF OPPORTUNITY FOR AIRBORNE DATA COLLECTED in 2018 by the NERC AIRBORNE RESEARCH FACILITY (NERC ARF)

CLOSING DATE FOR RECEIPT OF PROPOSALS: FRIDAY 6 OCTOBER 2017

The NERC Airborne Research Facility (NERC ARF) invites applications for NERC National Capability funded collection of airborne remote sensing in the UK and atmospheric science in the UK at the start or end of the season (probably May or August). There are also possibilities (subject to the strength of projects as determined by peer review) for airborne remote sensing projects based near Calgary (Canada) around May and airborne atmospheric projects based in Iceland in March. Additional opportunities may also be possible for work from Cambridge Bay at the Canadian High Arctic Research Station; however, this may be possible for a restricted instrument suite or guest instruments.

NERC ARF will provide flying time and airborne data pre-processing for approved projects, at no cost to the applicant.

Applicants will need to resource their own fieldwork and post-delivery data analysis. All support is subject to aircraft availability.

Eligible persons wishing to use the facility in the 2018 season (March to October) are invited to submit detailed proposals, including a supporting scientific case, by Friday 6th October 2017. Only the latest application form and guidance notes should be used and the science case and pathway to impact must be included on the application form (section 20 and 21, respectively). The NERC ARF Steering Committee will review the applications using standard NERC criteria: successful applicants will be notified by January 2018 of their inclusion in the flying campaign.

Eligibility information is available via http://www.nerc.ac.uk/funding/application/eligibility.

Applicants <u>MUST</u> contact the Airborne Science Operations Coordinator (contact details below) to discuss requirements and scheduling and issue of an Application Form before and submitting their application.

The NERC ARF will assist as much as possible with advice prior to submission (an informal pre-submission may also be considered). Additionally, an opportunity (~ 1 week) for applicants to respond to reviewer's comments prior to the moderation of grades by the steering committee (November/December 2017) will be offered.

The research aircraft (two Twin-Otters and a Dash 7) are capable of carrying core instruments to support environmental research, training, survey and monitoring in many areas including:

- Airborne remote sensing for Terrestrial, Freshwater, Earth, Marine and Polar sciences, through provision of hyperspectral high-resolution digital imagery (in VNIR, SWIR and LWIR/TIR), LiDAR (*capital bid for new/ replacement instrument in place*) and by the use of the aircraft for geophysical surveys; marine applications are possible over coastal and oceanic waters and
- Airborne atmospheric science, through the provision of an airborne platform for atmospheric measurements thus complementing the capabilities of larger atmospheric science platforms, and by means of support for development of new and novel instruments.

Opportunistic Applications: Although normal project applications for flying year must be submitted by the 6th October 2017, the NERC ARF is able to consider applications based on occurrences outside the applicant's control, e.g. floods, landslips etc. These must be accompanied by a viable submission to NERC for an Urgency grant. An absolute minimum of 48 hours notice is required for such opportunistic flights and such notice must be supported by a short scientific justification and provision of flight parameters and maps.

Potential users must contact:	
Dr Gary Llewellyn Airborne Science Operations Coordinator (NERC ARF)	
British Antarctic Survey High Cross, Madingley Road, Cambridge. CB3 0ET. UK Tel +44 (0)1223 221660 / Mob +44 (0) 7919 697851 Email: gaew@bas.ac.uk	www.bas.ac.uk/nerc-arf