

ANNOUNCEMENT OF OPPORTUNITY  
2013 GREENLAND CAMPAIGN (DIRECT ACCESS)  
CLOSING DATE FOR RECEIPT OF PROPOSALS: **FRIDAY 5 OCTOBER 2012**

The Airborne Research & Survey Facility (ARSF) invites direct access applications for projects in Greenland or Iceland in 2013: the specific dates are TBA depending on the applications but they will be centred around a core funded research grant project to be supported in **July / August**.

The Natural Environment Research Council will provide flying time and data processing for approved projects, at no cost to the applicant (*applicants will need to provide their own resourcing for fieldwork and data analysis*).

Eligible persons wishing to use the facility in the 2013 Season are invited to submit detailed proposals, including a supporting scientific case, by Friday 5 October 2012. 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 ARSF Steering Committee will review the applications using standard NERC criteria: successful applicants will be notified by January 2012 of their inclusion in the flying campaign. Eligibility information is available via <http://arsf.nerc.ac.uk/howtoapply/eligibility.asp>.

The ARSF 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 2012) will be offered.

Applicants **MUST** contact the Head of the ARSF (01452 859945/ [cjios@nerc.ac.uk](mailto:cjos@nerc.ac.uk)) or Science/Operations Coordinator (01452 859945/ [gaew@nerc.ac.uk](mailto:gaew@nerc.ac.uk)) to discuss requirements and scheduling and issue of an Application Form before and submitting their application.

The ARSF Dornier 228-101 research aircraft and core instruments support environmental research, training, survey and monitoring in many areas:

- **Polar, Terrestrial, Freshwater, Earth and Marine sciences and science-based Archaeology**, through provision of multispectral high-resolution digital and analogue imagery and by the use of the aircraft for geophysical surveys; marine applications are possible over coastal and oceanic waters due to a ~5 hour endurance/~1000 nautical miles range; and
- **Atmospheric science**, through the provision of atmospheric measurements over urban and regional areas thus complementing the capabilities of larger atmospheric science platforms, and by means of support for development of new and novel instruments.

**Instrumentation** (further information at <http://arsf.nerc.ac.uk/instruments/>)

The core remote sensing instrument suite includes the following:

**Specim AISA Eagle/Hawk Hyperspectral Imaging System** - full data cube with ~500 spectral bands over wavelengths 400-2400nm, and ~1000 spatial pixels VIS/NIR and ~300 spatial pixels NIR/SWIR; a dedicated processing line provides radiometrically and geometrically corrected digital multispectral data.

**Leica ALS50-II lidar system** (1064nm; hit rate > 1/m<sup>2</sup>; ~15cm in Z) available simultaneously with the hyperspectral system.

**RCD105 39Mpx medium format digital frame camera**, integrated with the lidar navigation system.

In addition, the following remote sensing instruments can be made available for special applications:

*Large-format RC-10 aerial survey camera* with images being supplied in scanned digital form.

**Atmospheric instrumentation:**

The Dornier 228 offers a versatile platform for user-provided instruments that can be accommodated internally in the cabin (subject to crew or certification acceptance). It should be noted that A **GRIMM optical particle counter** is permanently fitted to the aircraft.

**Potential users are encouraged to contact:**

**Capt Carl Joseph**  
Head of the ARSF and Chief Pilot  
ARSF-Firfax Building  
Meteor Business Park  
Cheltenham Rd East  
Gloucester UK  
GL2 9QL  
Tel +44 (0)1452 859945  
Email: [cjios@nerc.ac.uk](mailto:cjos@nerc.ac.uk)

**Dr Gary Llewellyn**  
Science/Operations Coordinator  
ARSF-Firfax Building  
Meteor Business Park  
Cheltenham Rd East  
Gloucester UK  
GL2 9QL  
Tel +44 (0)1452 859945 / Mob +44 (0)7919 697851  
Email: [gaew@nerc.ac.uk](mailto:gaew@nerc.ac.uk)