

## ANNOUNCEMENT OF OPPORTUNITY

### 2008 FLYING SEASON: UNITED KINGDOM

**CLOSING DATE FOR RECEIPT OF PROPOSALS: Monday 22 OCTOBER 2007**

The Airborne Research & Survey Facility (ARSF) invites applications for UK flying in the 2008 (March - October) season. The Natural Environment Research Council will provide flying time and data processing for approved projects, at no cost to the applicant.

Eligible persons wishing to use the Facility in the 2008 Season are invited to submit detailed proposals, including a supporting scientific case, by Monday 22 October 2007. Please note that only the latest application form and guidance notes should be used. The ARSF Steering Committee will review the applications using standard NERC criteria: successful applicants will be notified by January 2008 of their inclusion in the flying campaign. Eligibility information and application forms are available via <http://arsf.nerc.ac.uk/howtoapply/>.

The ARSF supports environmental research, training, survey and monitoring in many areas:

- **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/~1000km range; and
- **Atmospheric science**, through the provision of atmospheric measurements over urban and regional areas, thus complementing the capabilities of larger atmospheric science platforms.

**Opportunistic Applications:** Although normal project applications for flying year 2008 must be submitted by 22 October 2007, the ARSF is able to consider opportunistic applications based on occurrences outside the applicant's control, e.g. floods, landslips etc. 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.

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

**The core remote sensing instrument suite** comprises a Specim AISA Eagle/Hawk Hyperspectral Imaging System providing a full data cube with ~500 spectral bands over wavelengths 400-2400nm, and ~1000 spatial pixels VIS/NIR and ~300 spatial pixels NIR/SWIR. An Airborne Thematic Mapper (ATM) and Compact Airborne Spectrographic Imager (CASI-2) can be made available if required. A dedicated processing line provides radiometrically and geometrically corrected digital multispectral data. A large-format RC-10 aerial survey camera is normally deployed, images being supplied in scanned digital form. A medium-format digital camera.

**Lidar:** in collaboration with Cambridge University's Unit for Landscape Modelling (ULM), a Lidar is deployed for part of the season simultaneously with the core instrument suite; there is potential for separate acquisitions by ULM in the balance of the season. Data processing is undertaken by ULM. Potential users are advised to contact the ARSF Science & Operations Coordinator to discuss requirements prior to making an application.

**Atmospheric instrumentation** can be accommodated via cabin air inlets and wing-mounted pods (designed to accommodate standard particle measurement systems). A standard Rosemount probe, an isokinetic air/aerosol intake, and an AIMMS-20 probe measuring basic atmospheric parameters (temperature, humidity, wind speed) and turbulence data are available. PMS equipment can be made available by arrangement with the Facility for Airborne Atmospheric Measurements. At present the AIMMS probe and PMS deployment depend on loan of underwing pylons and pods from the Deutsches Zentrum für Luft- und- Raumfahrt (DLR). Potential users are advised to contact the ARSF Science & Operations Coordinator to discuss requirements prior to making an application.

**Potential users are encouraged to contact:**

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**For additional information, contact:**

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