

UK Activities

Airborne Research and Survey Facility (ARSF) (Dornier 228)



ARSF provides

- a) radiometrically corrected hyperspectral data
- b) ground height information and
- c) digital photography

This Arctic summer working in Iceland and Greenland on ice sheet studies during July /August.

Thinning of Greenland outlet glaciers



£15m programme with nine major projects studying Arctic climate, biogeochemical cycling and marine landslide threats.

Six additional projects have been affiliated bringing a further £3m

Field activities

July 2012 – greenhouse gas studies on the ground in Finland and in the atmosphere between Finland and Svalbard using the BAe 146 FAAM jet (Facility for Airborne Atmospheric measurements)

September 2012 – repeated the work.



March 2013 - MV Lance working off Svalbard supported by BAS Twin Otter and FAAM Jet

July 2013 – James Clark Ross cruise off Svalbard supported by the Twin Otter and FAAM jet. Further GHG measurements between Finland and Svalbard by the FAAM jet.

September 2013 – GHG measurements by FAAM jet

Use of Twin Otter on Svalbard to support further projects.

Preparation to mount an EM-Bird sea-ice instrument on Twin Otter

James Clark Ross



Supporting the ACCACIA project on
cloud and aerosol sources/dynamics

Supporting Danish activities at Station
Nord.



Dash 7 Aircraft

Long range, significant cargo capability, pressurised cabin.

Possibility to deploy in the Arctic from 2014

Modified cargo door – so can accommodate large field equipment

Field tested flying a towed array to measure ice thickness

New instrument hatch in 2014 – to mount hyperspectral and LIDAR instruments