



The Construction of Halley VI Station in Antarctica

David M Blake



**British
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL



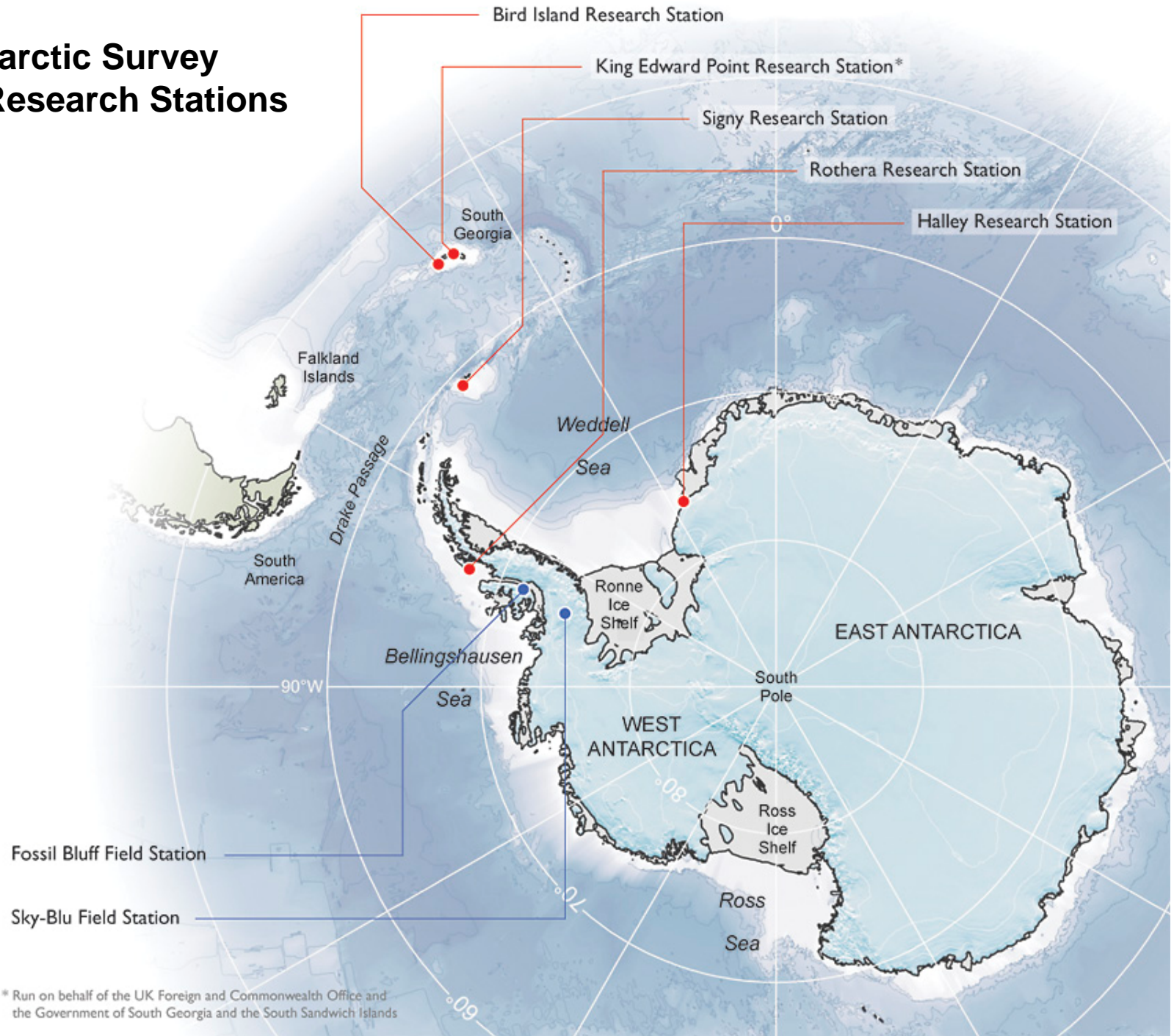
**NATURAL
ENVIRONMENT
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The Construction of Halley VI Station

- Halley Station
- Project Schedule
- Logistics
- Building on an Ice Shelf
- Sea Ice
- Environment
- Construction
- Towing
- Manoeuvring Modules

British Antarctic Survey Antarctic Research Stations







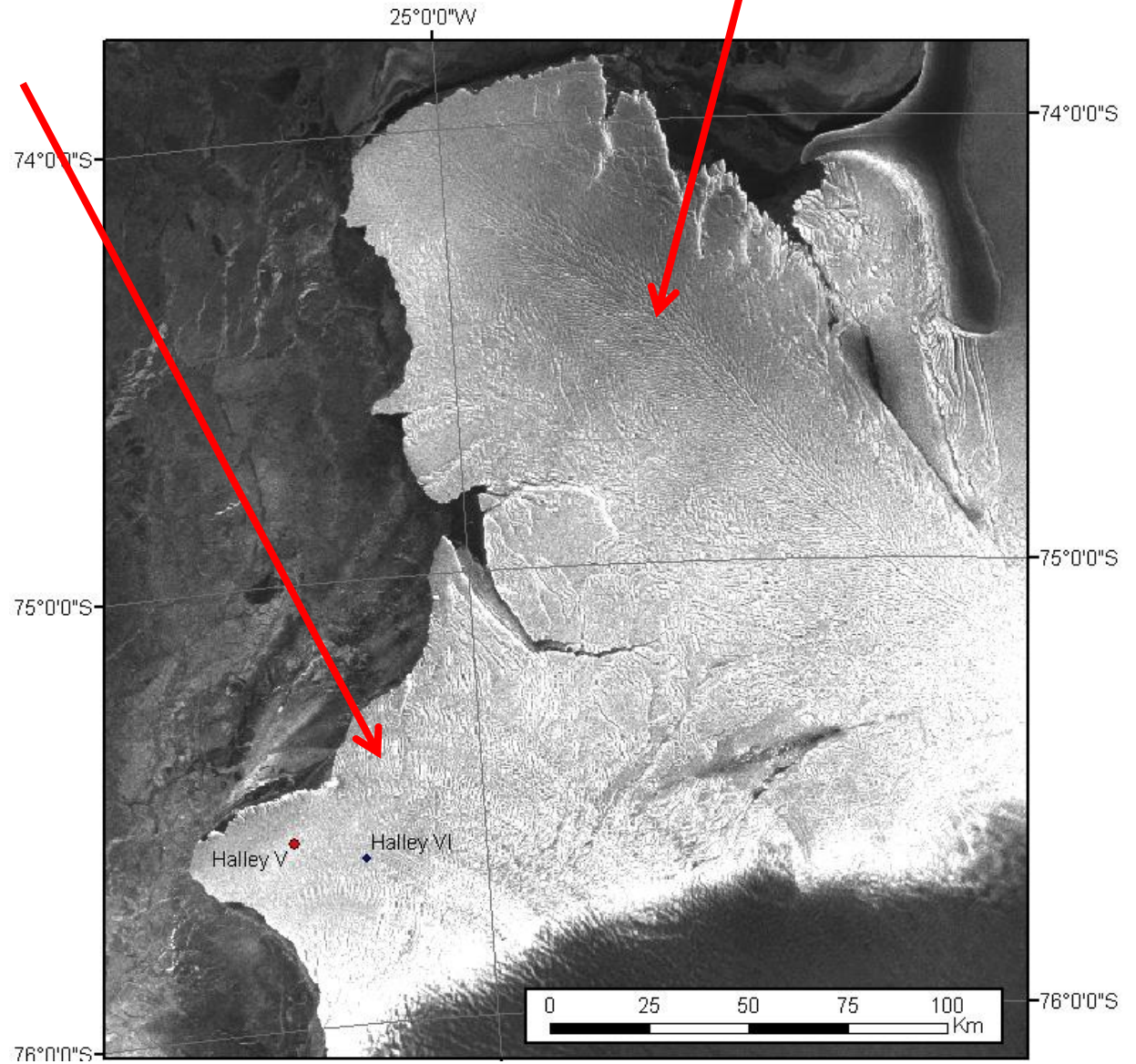
Brunt Ice Shelf

150-200m thick
floating ice

Annual accumulation
1-1.5m

Velocity approx
400m/year at Z5,
mainly westward.

Stancomb Wills Glacier





Schedule

- Ice Shelf predicted to break away in 2001
- Design competition in 2004
- Design review 2005
- Single module overwintered 2008
- Construction on site commences 2009/10 season
- Fit out completed 2011/12 season
- Snagging 2012 to 2013 Season
- Formal opening February 2013

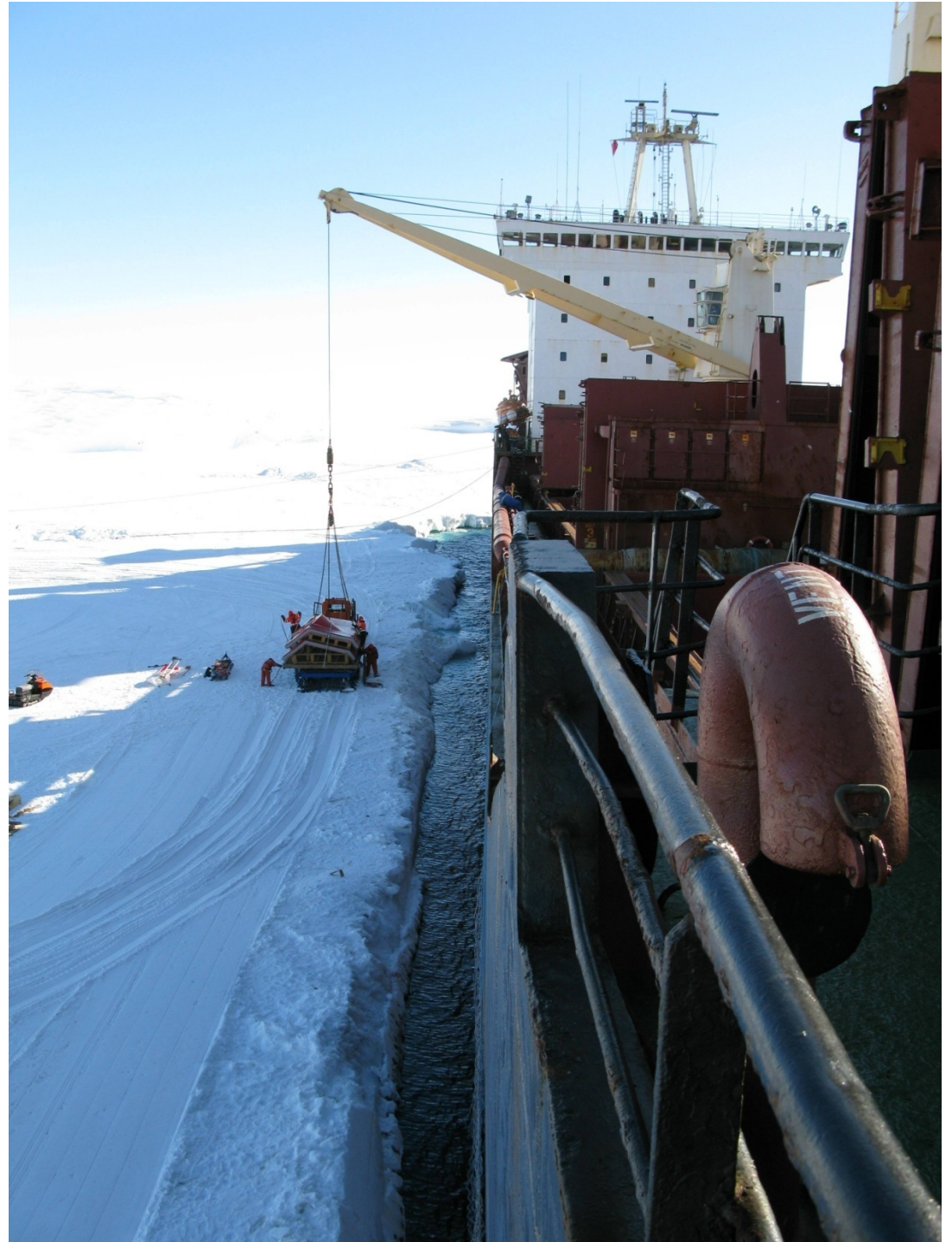
Logistics Challenges

- Supply Chain
- Programme / Risk





Sea Ice Challenges



Environmental Challenges

- Snow / Ice Deposition
- Wind



Environmental Challenges

- Wind



Aerial View of MFL Construction Line



Daily Stores Depot Line

Module H1

Module H2

Module B2

Module B1

Module A

Module E2

Module E1

Module C

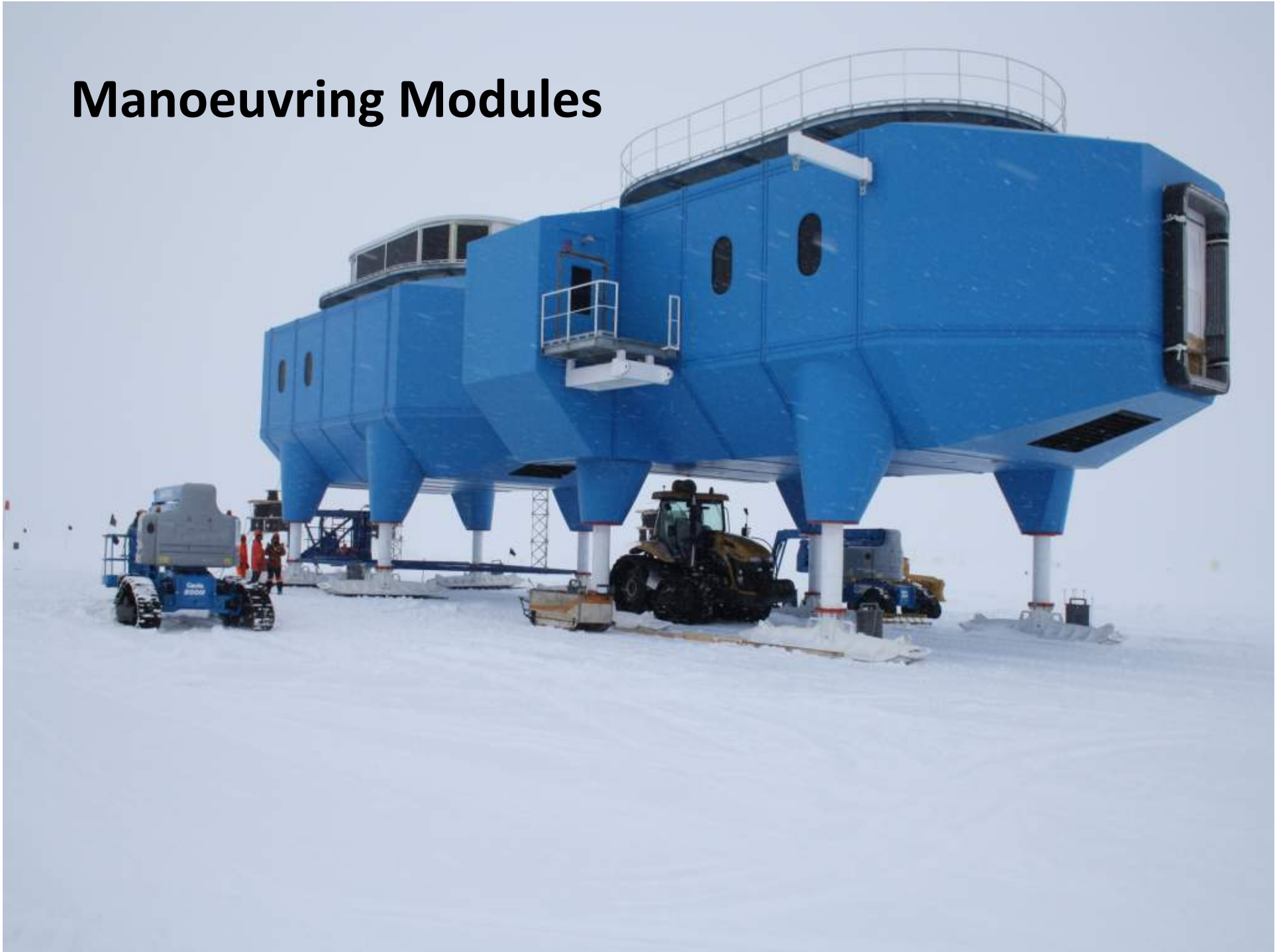
MFL Logs Tent

Towing Challenges





Manoeuvring Modules





03/02/2011

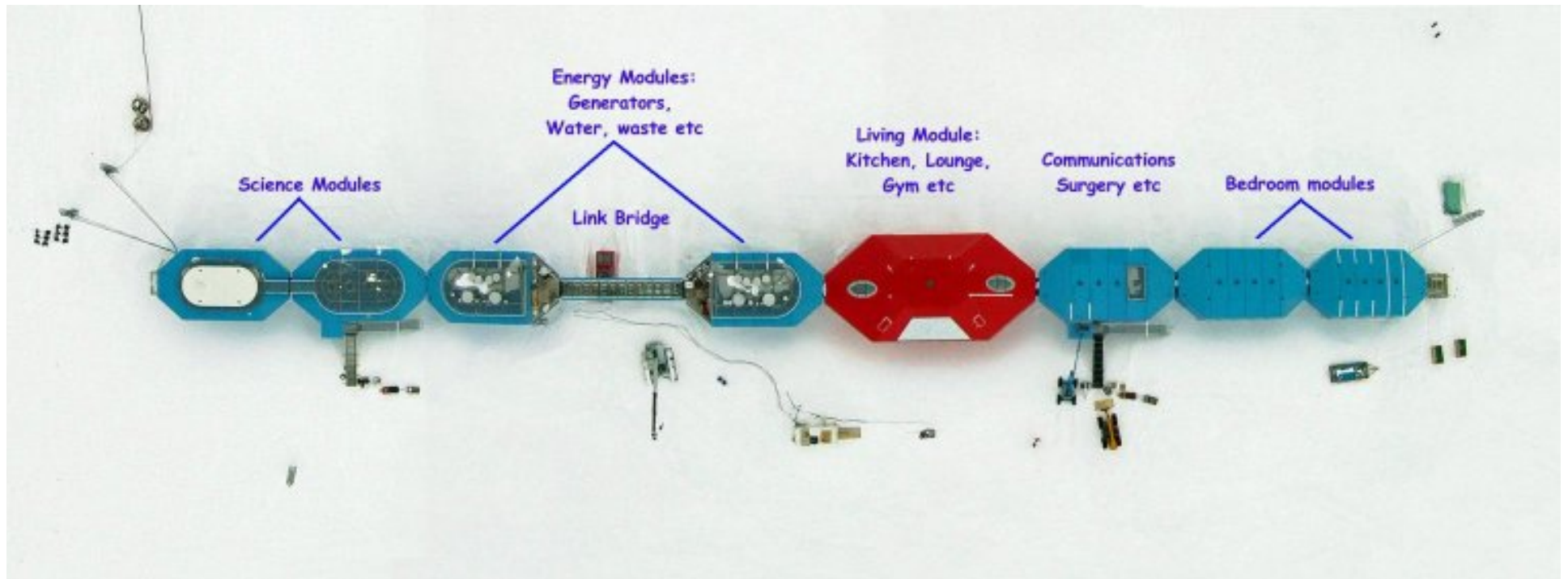




Photo Mike Rose





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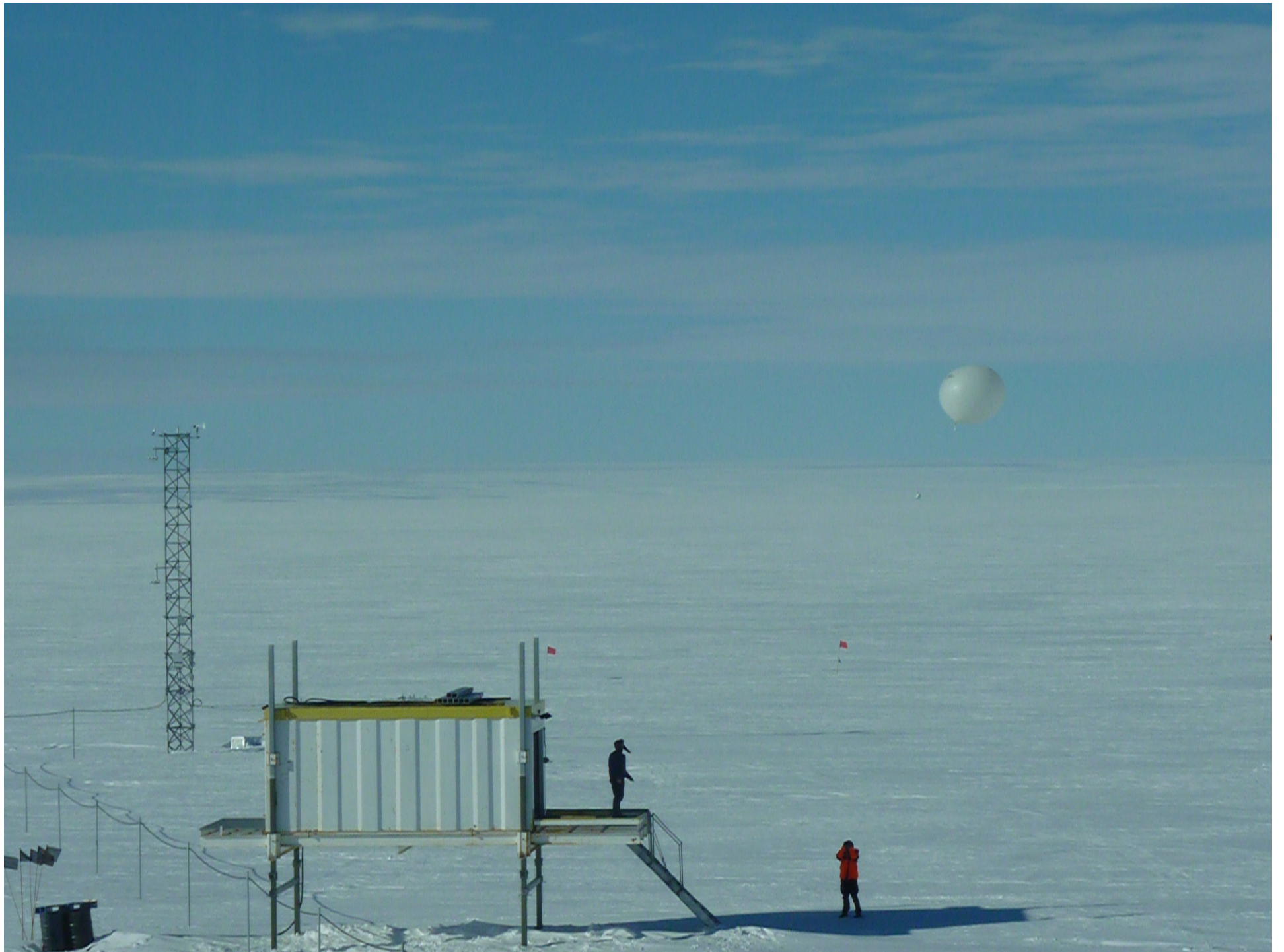




Photo Hugh Broughton



Photo Mark Cilverd







DATE	NAME	ITEM(S) TAKEN	IDENTIFY
13/02	DOWNNEY	Function generator (to MFR/AMR)	TESTS







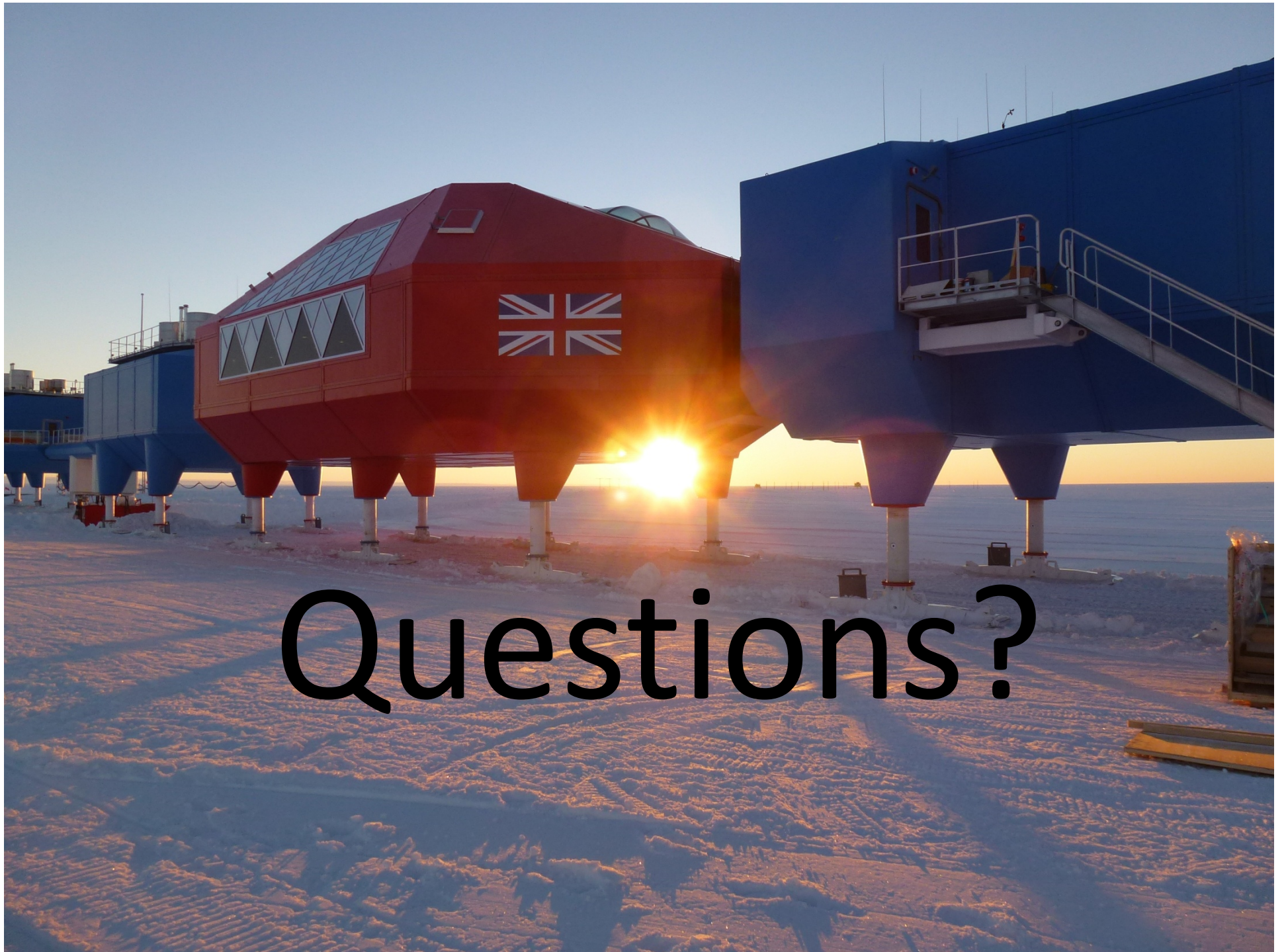






The Construction of Halley VI Station

- Where the Ozone hole was discovered.
- Long and extremely high quality met record in fastest changing part of planet.
- Exploring and understanding atmosphere physics and chemistry from ground to space
- Helps understand space weather – important for a technological world.
- Helps understand the best climate and chemistry historical record we have : Icecores.
- Supports field work in the interior of Antarctica.



Questions?