British Antarctic Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

AIR OPERATIONS PLANNING MAP SERIES

MAP 01: Graham Land

Edition 4, August 2022

Scale 1: 1 000 000, Projection: Polar Stereographic

Spheroid: WGS84 Latitude of true scale: 71°S

- Contours (interval 1000 ft)
- 2610 Surveyed heights (feet)
- 2610 Estimated spot heights (feet)
- 10444 Highest point on map (feet) NOT A SAFETY ALTITUDE
- All year scientific stations
- Summer only stations
- Camp/refuge
- External operations feature
- Airfield
- Coastline
- Lake
- Rock outcrop
- Ice shelf
- ASMA
- 129 ASPA (with number) or bird colony
- Bird colony

Guidelines for the Operation of Aircraft near Concentrations of Birds

The map shows the location of the main breeding concentrations of penguins and petrels in Palmer Land, Southern Graham Land and Alexander Island.

Low flying and unnecessary landings increase the risk of disturbance to wildlife, and in some areas will put your aircraft and crew at risk from bird strike. To minimize the risk to both wildlife and aircraft, follow the guidelines below as closely as your operational requirements allow:

Penguin, giant petrel and other bird colonies are not to be overflown below 2000 ft (~610 m) above ground level, except when operationally necessary.

Landings within ½ nautical mile (~930 m) of penguin, giant petrel or other bird colonies should be avoided wherever possible.

Never hover or make repeated passes over wildlife concentrations or fly lower than necessary.

Maintain a vertical separation distance of 2000 ft (~610 m) AGL and a horizontal seperation of ¼ nautical mile (~460 m) from the coastline wherever possible.

Cross coasts at right angles and above 2000 ft (~610 m) AGL where possible.

For further information regarding aircraft operations near concentrations of birds see the Antarctic Flight Information Manual (COMNAP 2014) www.comnap.aq/miscpages/SitePages/AFIM.aspx

Warnings:

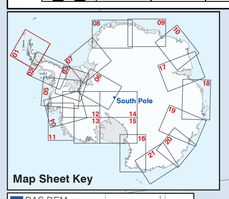
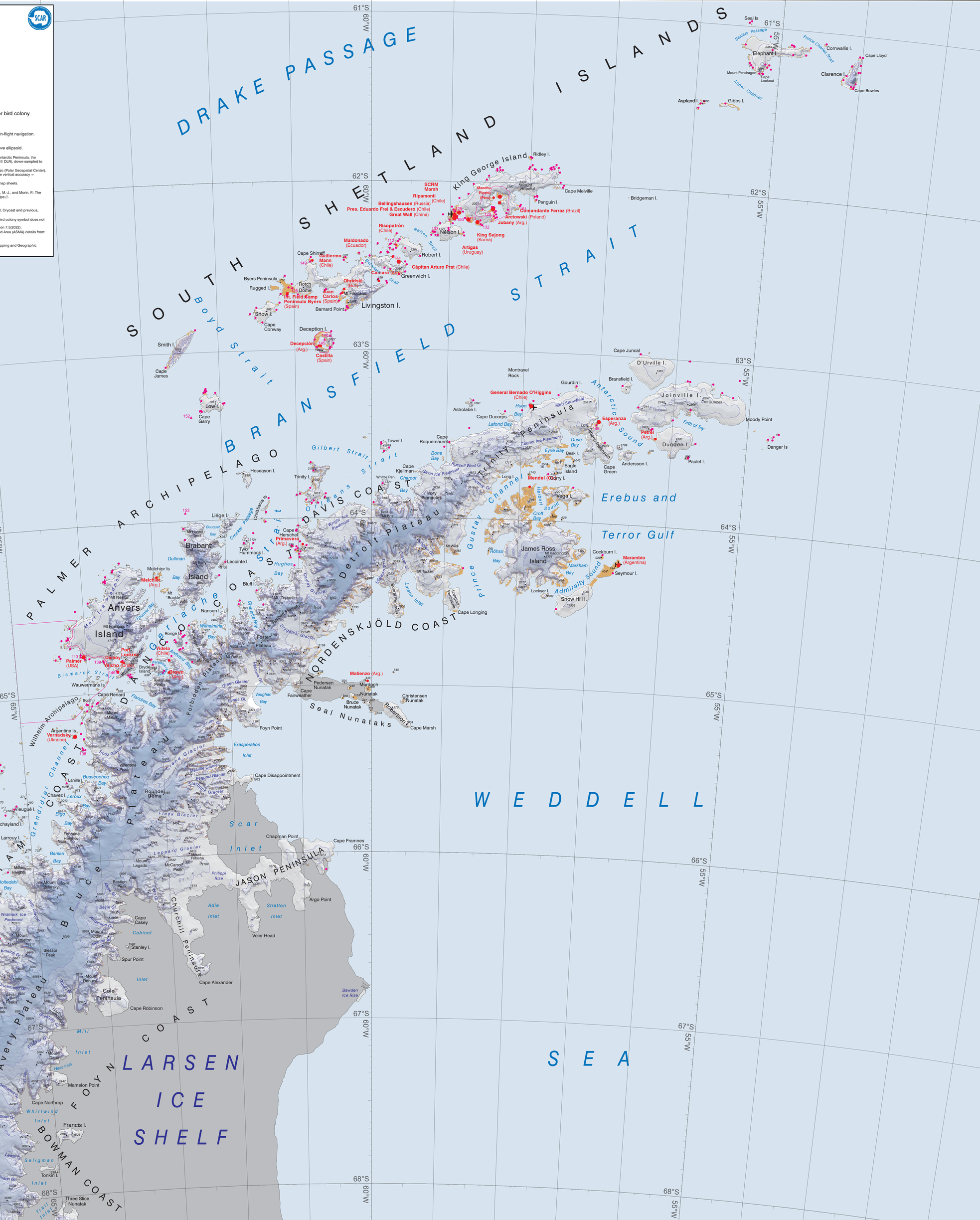
This map is not an air navigation chart and it is not intended for in-flight navigation.

Contours and spot heights are in feet.
Vertical Datum – WGS84 ellipsoid. Heights are measured as above ellipsoid.
Contours - derived from a merged Digital Elevation Model (DEM).
Primary dataset used is REMA (200m). Areas of the continent (primarily Antarctic Peninsula, the Ellsworth Mountains, and the region S of 85°) were filled in by TanDEM-X (© DLR), down-sampled to 200m resolution. If applicable, see inset map for source data coverage.
Spot Heights – derived from TanDEM-X 90m (© DLR) and REMA 8m mosaic (Polar Geospatial Center). TanDEM-X (90m) absolute vertical accuracy = <10m. REMA (8m) absolute vertical accuracy = average of 0.6m
Accuracies are assessed across the entire DEM, so may vary across the map sheets.
Data Sources:
REMA. Polar Geospatial Center. Howat, I. M., Porter, C., Smith, B. E., Noh, M.-J., and Morin, P.: The Reference Elevation Model of Antarctica, The Cryosphere, 13, 665-674, https://-doi.org/10.5194/tc-13-665-2019, 2019.
TanDEM-X © DLR https://geoservice.dlr.de/web/dataguide/tdm90/
BAS DEM. Internal BAS elevation model, constructed using ASTER GDEM, Cryosat and previous, ground-based BAS topographic survey data.
Bird colony information is based on limited available data - absence of a bird colony symbol does not indicate absence of birds.
Topographic details from the SCAR Antarctic Digital Database (ADD) Version 7.5(2022).
Antarctic Specially Protected Area (ASPA) and Antarctic Specially Managed Area (ASMA) details from: www.ats.aq
Place names selected from UK Gazetteer: www.apc.antarctica.ac.uk
Compiled by P. T. Fretwell, K. Bazeley, C. Day, A. Fox, E. Carr, E.Field. Mapping and Geographic Information Centre, British Antarctic Survey 2004-2022.

Scale 1: 1 000 000

20 km 0 20 40 60 80 km

10 nm 0 10 20 30 40 nm



Map Sheet Key