

**British Antarctic Survey** **AIR OPERATIONS PLANNING MAP SERIES**  
**MAP 05: Sky Blu to Pine Island**  
 Edition 2, August 2019  
 Scale 1: 1 000 000, Projection: Polar Stereographic  
 Spheroid: WGS84 Latitude of true scale: 71°S

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

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

**Guidelines for the Operation of Aircraft near Concentrations of Birds**  
 The map shows the location of the main breeding concentrations of penguins and peters 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 strikes. 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 1/2 nautical mile (~93 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 separation of 1/2 nautical mile (~93 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 (COMANAP 2014) www.comanap.org/images/2014/04/AFIM.pdf

**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 (2008). Areas of the continent (primarily Antarctic Peninsula, the Ellsworth Mountains, and the region of 80°W) were filled in by TanDEM-X (D-DLR) down sampled to 300m resolution. If applicable, see inset map for source data coverage.  
 Spot Heights - derived from TanDEM-X (D-DLR) and REMA 2m resolution (Polar Geospatial Center). TanDEM-X (300m) absolute vertical accuracy = ±10m; REMA (2m) absolute vertical accuracy = ±3m range of 0.6m.  
 Accuracy is assessed across the entire DEM, so may vary across the map sheets.  
 Data Sources:  
 REMA, Polar Geospatial Center, Howard, I. M., Porter, C., Smith, B. E., Nish, 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://www.dlr.de/geo/www/tdx/tdx.html  
 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 7.1 (2019).  
 Antarctic Specially Protected Area (ASPA) and Antarctic Specially Managed Area (ASMA) details from: www.atsc.ac.uk  
 Place names selected from UK Gazetteer: www.anc.antarctica.ac.uk  
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Scale 1: 1 000 000  
 20 km 0 20 40 60 80 km  
 10 nm 0 10 20 30 40 nm

**Map Sheet Key**

REMA (PGC)  
 TanDEM-X  
 D-DLR

