

AIR OPERATIONS PLANNING MAP SERIES
MAP 04: Pine Island Bay
 Edition 4, August 2022
 Scale 1: 1 000 000, Projection: Polar Stereographic
 Spheroid: WGS84 Latitude of true scale: 71°S

Contours (interval 1000 ft)
 • 200 Surveyed heights (feet)
 • 200 Estimated spot heights (feet)
 • 2044 Highest point on map (feet)
NOT A SAFETY ALTITUDE

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 of 60°E) were filled in by TanDEM-X (E-DLR, down-sampled to 200m resolution. If applicable, see inset map for source data coverage).
 Spot Heights - derived from TanDEM-X (E-DLR) and REMA (Bris) re-mosaic (Polar Geospatial Center). TanDEM-X (90m) absolute vertical accuracy ~ ±10m. REMA (9m) absolute vertical accuracy ~ average of 5m.
 Accuracies are 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., Noh, M.-J., and Mark, P. The Ellsworth Mountains, Antarctica. The Cryosphere, 13, 669-674, 2019. doi.org/10.5194/tc-13-669-2019.
 TanDEM-X © DLR (https://www.dlr.de/geo/geo-projects/geo-projects.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 7.6 (2020).
 Antarctic Specially Protected Area (ASPA) and Antarctic Specially Managed Area (ASMA) details from: www.aac.gov.au
 Place names selected from UK Gazetteer: www.aac.gov.uk
 For further information regarding aerial operations near concentrations of birds see the Antarctic Flight Information Manual (CCFMAP 2014) www.ccfmap.org.uk

Legend:
 • All year scientific stations
 • Summer only stations
 • Camp/refuge
 • External operations feature
 • Airfield
 • Coastline
 • Lake
 • Rock outcrop
 • Ice shelf
 • ASMA
 • 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 year aircraft and crew at risk from bird strikes. To minimise the risk to both wildlife and aircraft, follow the guidelines below as closely as your operational requirements allow:
 Penguin, gull 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 (~900 m) of penguin, gull and 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 (~400 m) from the coastline wherever possible.
 Cross coasts at right angles and above 2000 ft (~610 m) AGL where possible.
 For further information regarding aerial operations near concentrations of birds see the Antarctic Flight Information Manual (CCFMAP 2014) www.ccfmap.org.uk

Scale 1: 1 000 000
 20 km 0 20 40 60 80 km
 10 nm 0 10 20 30 40 nm

Map Sheet Key

