

**Advance Exchange of Operational Information on
Antarctic Activities
for the 2005–2006 season**



United States Antarctic Program

**Office of Polar Programs
National Science Foundation**

Advance Exchange of Operational Information on Antarctic Activities for 2005/2006 Season

Country: UNITED STATES

Date Submitted: October 2005

SECTION 1	SHIP OPERATIONS
	<p data-bbox="501 632 870 663">Commercial charter <i>KRASIN</i></p> <p data-bbox="501 667 1000 699">Nov. 21, 2005 Depart Vladivostok, Russia</p> <p data-bbox="501 703 992 735">Dec. 12-14, 2005 Port Call Lyttleton N.Z.</p> <p data-bbox="501 739 732 770">Dec. 17 Arrive 60S</p> <p data-bbox="501 774 1016 806">Break channel and escort <i>TERN</i> and Tanker</p> <p data-bbox="501 810 1068 842">Feb. 5, 2006 Depart 60S in route to Vladivostok</p> <p data-bbox="501 869 1008 900">U.S. Coast Guard Breaker <i>POLAR STAR</i></p> <p data-bbox="501 928 1341 989">The <i>POLAR STAR</i> will be in back-up support for icebreaking services if needed.</p> <p data-bbox="501 1052 781 1083"><i>M/V AMERICAN TERN</i></p> <p data-bbox="501 1113 971 1144">Jan. 15-17, 2006 Port Call Lyttleton, NZ</p> <p data-bbox="501 1148 1060 1180">Jan. 24, 2006 Arrive Ice edge, McMurdo Sound</p> <p data-bbox="501 1184 1068 1215">Jan 25-Feb 1, 2006 At ice pier, McMurdo Sound</p> <p data-bbox="501 1220 850 1251">Feb 2, 2006 Depart McMurdo</p> <p data-bbox="501 1255 967 1287">Feb 13-15, 2006 Port Call Lyttleton, NZ</p> <p data-bbox="501 1314 1401 1375">T-5 Tanker, (One of five possible vessels. Specific name of vessel to be determined)</p> <p data-bbox="501 1402 1062 1434">Jan. 14, 2006 Arrive Ice Edge, McMurdo Sound</p> <p data-bbox="501 1438 1154 1470">Jan. 15-19, 2006 At Ice Pier, McMurdo. Re-fuel Station</p> <p data-bbox="501 1474 870 1505">Jan. 19, 2006 Depart McMurdo</p> <p data-bbox="501 1554 846 1585"><i>R/V LAURENCE M. GOULD</i></p> <p data-bbox="501 1612 1317 1673">For detailed and updated schedule, log on to: http://www.polar.org/science/marine/sched_history/lmg/lmgsched.pdf</p> <p data-bbox="501 1701 865 1732"><i>R/V NATHANIEL B. PALMER</i></p> <p data-bbox="501 1759 1317 1820">For detailed and updated schedule, log on to: http://www.polar.org/science/marine/sched_history/nbp/nbpsched.pdf</p>

SECTION 2	AIR OPERATIONS Information on planned air operations (see attached sheets)
SECTION 3	STATIONS a) New stations or refuges not previously notified: NONE b) Stations closed or refuges abandoned and not previously notified: NONE
SECTION 4	LOGISTICS ACTIVITIES AFFECTING OTHER NATIONS a) McMurdo airstrip will be used by Italian and New Zealand C-130s and Italian Twin Otters b) McMurdo Heliport will be used by New Zealand and Italian helicopters c) Extensive air, sea and land logistic cooperative support with New Zealand d) Twin Otters to pass through Rothera (UK) upon arrival and departure from Antarctica e) Italian Twin Otter will likely pass through South Pole and McMurdo. f) The USAP and Antarctica New Zealand (ANZ) will construct a road and drill pad in support of the ANDRILL program. g) McMurdo will support STRATEOLE/VORCORE, a joint project supported by NSF and the French agencies CNES and CNRS. h) South Pole will support IceCube, an international collaboration including the US, Germany, and Sweden.
SECTION 5	MAJOR FIELD ACTIVITIES <ul style="list-style-type: none"> • Field camps: Dry Valleys (Multiple Locations) Sea Ice (Multiple Locations) Ross Island (Multiple locations) Siple Dome (81° 30'S, 146°00'W) Odell Glacier (76° 63'S, 159° 95'E) Western Antarctic Ice Sheet (WAIS) Divide Camp (-79° 28'S, -112° 52'W) • Traverse South Pole Proof of Concept, Heavy traverse. (Traverse expected to extend from Leverett Glacier to South Pole and return to McMurdo)

SECTION 6**OTHER ANTARCTIC ACTIVITIES**

(a) Governmental: (grantees, ICDS, RPSC) Persons will work with other contracting parties as follows:

Helen Fricker (+1)	Amery Ice Shelf with Australian Antarctic Division
Tony Travouillone (+0)	Dome C with Italian Antarctic Program
Robert Blanchette (+2)	Ross Sea Region with Antarctica New Zealand C
C. Stearns/G. Widener (+4)	French IPEV, British BAS Multiple AWS Sites
Joseph Warren (+2)	NOAA on R/V Yuzmorgeologiya
Daniel Costa (+0)	NOAA at Cape Shirreff, Livingston Island
Ted Scambos (+3)	Argentine Antarctic Institute near Marambio Station
Wayne Trivelpiece (+3)	NOAA on R/V Yuzmorgeologiya
Craig Mitchell (+3)	NOAA on R/V Yuzmorgeologiya
Matt Charette (+1)	NOAA on R/V Yuzmorgeologiya
Stan Jacobs (+tba)	German Antarctic Division on R/V Polarstern
Terry Wilson (+2)	Franklin Island on M/S Klebnikov (proposed)
Ian Dalziel (+4)	Patriot Hills with Antarctic Logistics & Expeditions
Ron Naveen (+5)	Petermann Island transits via M/S Orlova & M/S Endeavour

(b) Non-governmental:

- *MV Rotterdam*
Holland America Line
2 cruises with approx. 1,000 passengers each
December 2005 to January 2006
Total number: max. 2,000 passengers
(Cruising only, no landings)
<http://www.hollandamerica.com>
- *MV Andrea*
Elegant Cruises and Tours
9 cruises with approx. 80 passengers each
December 2005 to February 2006
Total number: max. 720 passengers
<http://www.elegantcruises.com>
- *MV Clipper Adventurer*
Clipper Cruise Line
6 cruises with approx. 110 passengers each
November 2005 to February 2006
Total number: max. 660 passengers
<http://www.clippercruise.com>
- *MV Crystal Symphony*
Crystal Cruises
1 cruise with approx. 975 passengers
January 2006 to February 2006
Total number: max. 975 passengers
<http://www.crystalcruises.com>
- *MV National Geographic Endeavor*
Lindblad Expeditions
8 cruises with approx. 138 passengers each
November 2005 to March 2006
Total number: max. 1104 passengers
<http://www.expeditions.com>

	<ul style="list-style-type: none"> ○ <i>MV Explore II</i> Abercrombie & Kent ○ <i>MS Insignia</i> Oceania Cruises, Inc. ○ <i>MV Kapitan Khlebnikov</i> Quark Expeditions ○ <i>MV Professor Molchanov</i> Quark Expeditions ○ <i>MV Professor Multanovskiy</i> Quark Expeditions ○ <i>MV Lyubov Orlova</i> Quark Expeditions ○ <i>MV Akademik Shokalskiy</i> Quark Expeditions ○ <i>MV Marco Polo</i> Orient Lines ○ <i>MV Corinthian II</i> Travel Dynamics ○ <i>MV Regal Princess</i> Princess Cruises ○ <i>MV Discovery</i> Discovery World Cruises, Ltd. 	<p>10 cruises with approx. 175 passengers each November 2005 to March 2006 Total number: max. 1,750 passengers http://www.abercrombiekent.com</p> <p>1 cruise with approx. 777 passengers December 2005 Total number: max. 777 passengers http://www.oceaniacruises.com</p> <p>4 cruises with approx. 100 passengers each November 2005 to February 2006 Total number: max. 400 passengers</p> <p>10 cruises with approx. 40 passengers each November 2005 to March 2006 Total number: max. 400 passengers</p> <p>11 cruises with approx. 45 passengers each November 2005 to March 2006 Total number: max. 495 passengers</p> <p>12 cruises with approx. 80 passengers each November 2005 to March 2006 Total number: max. 960 passengers http://www.Quarkexpeditions.com</p> <p>10 cruises with approx. 35 passengers each November 2005 to February 2006 Total number: max. 350 passengers http://www.Quarkexpeditions.com</p> <p>7 cruises with approx. 550 passengers each December 2005 to February 2006 Total number: max. 3,850 passengers http://www.orientlines.com</p> <p>6 cruises with approx. 100 passengers each December 2005 to February 2006 Total number: max. 600 passengers http://www.TravelDynamicsInternational.com</p> <p>1 cruise with approx. 1,500 passengers January 2006 Total number: max. 1,500 http://www.princess.com</p> <p>4 cruises with approx. 550 passengers December 2005 to February 2006 Total number: max. 2,200 http://www.discoveryworldcruises.com/wb2/</p>
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SECTION 7	<p>EMERGENCY CONTACTS</p> <p>National Operator: National Science Foundation United States Antarctic Program (USAP) 4201 Wilson Boulevard Arlington, Virginia 22230 USA</p> <p style="text-align: right;">Telephone +01-703-292-8030 Facsimile +01-703-292-9081</p>																																				
	<p>Emergency Contacts</p> <p><i>Karl Erb</i> Office Telephone +01-703-292-8030 E-mail Address kerb@nsf.gov</p> <p><i>Erick Chiang</i> Office Telephone +01-703-292-8032 E-mail Address echiang@nsf.gov</p> <p>Operations duty officer (24 hr) Telephone +01-703-819-0283</p>																																				
	<p>STATIONS</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Commercial Telephone</th> <th style="text-align: left;">Facsimile</th> <th style="text-align: left;">E-mail</th> </tr> </thead> <tbody> <tr> <td>McMurdo</td> <td></td> <td></td> <td></td> </tr> <tr> <td>(summer)</td> <td>+01-720-568-1010</td> <td>+01-720-568-1092</td> <td>mcm.nsfrep@usap.gov</td> </tr> <tr> <td>(winter)</td> <td>+01-720-568-1012</td> <td>+01-720-568-1092</td> <td>mcm.nsfstmgr@usap.gov</td> </tr> <tr> <td>(24hr/365)</td> <td>+01-720-568-1000</td> <td></td> <td></td> </tr> <tr> <td>Palmer</td> <td>+01-720-568-2775/6</td> <td>+01-720-568-7868</td> <td>pal.manager@usap.gov</td> </tr> <tr> <td>Amundson-Scott</td> <td></td> <td></td> <td></td> </tr> <tr> <td>South Pole</td> <td>+01-720-568-2803</td> <td></td> <td>pol.nsfrep@usap.gov</td> </tr> <tr> <td></td> <td>+881 676 312 608 (Iridium)</td> <td></td> <td></td> </tr> </tbody> </table>	Name	Commercial Telephone	Facsimile	E-mail	McMurdo				(summer)	+01-720-568-1010	+01-720-568-1092	mcm.nsfrep@usap.gov	(winter)	+01-720-568-1012	+01-720-568-1092	mcm.nsfstmgr@usap.gov	(24hr/365)	+01-720-568-1000			Palmer	+01-720-568-2775/6	+01-720-568-7868	pal.manager@usap.gov	Amundson-Scott				South Pole	+01-720-568-2803		pol.nsfrep@usap.gov		+881 676 312 608 (Iridium)		
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South Pole	+01-720-568-2803		pol.nsfrep@usap.gov																																		
	+881 676 312 608 (Iridium)																																				

SECTION 7 <i>(continued)</i>	SHIPS			
	Name	Inmarsat Telephone	Facsimile	E-mail
	<i>Nathaniel B. Palmer</i>	xxx-336-661-012	xxx-336-661-014	mpc@nbp.usap.gov
	<i>Laurence M. Gould</i>	xxx-336-862-421	xxx-336-862-424	mpc@lmg.usap.gov
	<i>Polar Star</i>	xxx-763-709851/3 808-659-3801/3802 (Iridium)		postmasterpolarstar@polarstar.uscg.mil

NOTES:

1. INMARSAT Area Codes xxx: Atlantic Ocean - 871 (East)/874 (West)
Pacific Ocean – 872; Indian Ocean – 873
Single Number Access Code (SNAC) - 800

Information on Air Operations (Section 2)

INFORMATION ON PLANNED AIR OPERATIONS IN ANTARCTICA FOR 2005/6 SEASON

CONTACT INFORMATION - AIR OPERATIONS

Part A

Country	Operations/Logistics Contact Officers	Position	Office Telephone/Fax E-mail
Address for correspondence National Science Foundation Office of Polar Programs Room 755 4201 Wilson Boulevard Arlington, Virginia 22230 USA	Karl Erb	Director, Office of Polar Programs	Tel: +01-703-292-8030 Fax: +01-703-292-9081
	Erick Chiang	Head, Polar Research Support Section	Tel: +01-703-292-8032 Fax: +01-703-292-9080

Part B

•	Please tick [4] appropriate box	
<input type="checkbox"/>	No, it is not intended to conduct air operations in Antarctica during the forthcoming summer season.	
<input checked="" type="checkbox"/>	Yes, it is intended to conduct air operations in Antarctica during the forthcoming summer season for which the following information sheets are attached:	
		(*delete as appropriate)
Sheet 1	Intercontinental Operations	Yes
Sheet 2	Continental Operations	Yes
Sheet 3	Ship Based Operations	Yes
Sheet 4	Other Airborne Operations (Balloons)	Yes
Sheet 5	Aircraft Description	Yes

Part C

	Station	Lat/Long	INMARSAT Nos
Primary Air Information Stations 2005/6 SEASON	McMurdo Station	77-52S 166-11E	None. Station is accessible via regular telephone at 01-720-568-1000.
	Siple Dome Camp	81.6747S 149.0568 W	Accessed via McMurdo Station telephone patch
	WAIS Divide Camp	79.468S 112.086W	Accessed via McMurdo Station telephone patch
	South Pole Station	90.0 S 0.0W	Accessed via McMurdo Station telephone patch
Secondary Air Information Stations	Siple Dome	81-30S 146W	Accessed via McMurdo Station telephone patch
	Odell Glacier	76-66S 159-95E	Accessed via McMurdo Station telephone patch

2005/06 SEASON

PART 1 INTER-CONTINENTAL FLIGHTS

Route	No. of Flights	Flight Level or Altitude (ft/m)	Approximate Date or Period of Flight(s)	No. and Type of Aircraft per Flight
Christchurch-McMurdo-Christchurch	19	Up to 45,000/13720	4 Oct - 11 Nov '05	One C-17
Christchurch-McMurdo-Christchurch	21	Up to 45,000/13720	31Dec'05 – 25 Feb'06	One C-17
Christchurch-McMurdo-Christchurch	60*	Up to 29,000/8841	21 Oct'05 – 24 Feb 06**	Seven to Eight LC-130s
Christchurch-McMurdo-Christchurch	13	Up to 29,000/8841	14 Nov – 18 Dec 05	C-130H (wheeled) RNZAF

*Approximately 3 flights per week

**Exclusive of 23-28 Dec 05

Note: Intercontinental flights are shared with the Italian and New Zealand Antarctic programs. See their submissions for flight data pertaining to their aircraft.

PART 2 INTRA-CONTINENTAL FLIGHTS

2005/2006 Season

Route	No. of Flights	Flight Level or Altitude (ft/m)	Approximate Date or Period of Flight(s)	No. and Type of Aircraft per Flight
McMurdo Station TO WAIS Divide LOCATION: 79.468S/112.086W Elevation 5,230ft Fm. McM: 885 nmi	49	20,000-25,000 / 7622	27 Oct – 07 Feb06	any of 8 LC-130 aircraft; any of 3 Twin Otter aircraft
McMurdo Station TO Beardmore Glacier LOCATION: 84S/164-30E Elevation 5,900ft Fm. McM: 369mi	5	20,000-25,000ft / 7622	01 Dec – 28 Jan06	any of 8 LC-130 aircraft; any of 3 Twin Otter aircraft
McMurdo station TO AGO sites (6 sites in/around polar plateau) Elevation: 6,100 – 11,700ft Fm. McM: 500-1,100mi	3	Up to 15,000f t/ 4573	29 Dec – 07 Feb06	any of 3 Twin Otter aircraft
McMurdo station TO Siple Dome LOCATION: 81-40S/149-03W Elevation: 2,415FT Fm. McM: 540mi	10	20,000 – 25,000ft / 7622	25 Oct – 29 Jan06	any of 8 LC-130 aircraft; any of 3 Twin Otter aircraft
McMurdo station TO South Pole LOCATION: 90S	333	20,000 – 25,000ft / 7622	23 Oct – 19 Feb06	any of 8 LC-130 aircraft; any of 3 Twin Otter aircraft

Route	No. of Flights	Flight Level or Altitude (ft/m)	Approximate Date or Period of Flight(s)	No. and Type of Aircraft per Flight
Elevation: 9,342Ft Fm. McM: 725mi				
McMurdo station TO Fosdick Mountains LOCATION: 76.33S 145.13W Elevation: 4,921FT Fm. McM: 633 nmi	5	20,000 – 25,000ft / 7622	01- Nov – 29 Jan06	any of 7 LC-130 aircraft; any of 3 Twin Otter aircraft
McMurdo Station TO Patriot Hills LOCATION: 80.27S 81.37W Elevation: 6,070Ft Fm. McM: 1089 nmi	3	20,000 – 25,000ft	17- Dec – 05 Jan06	any of 8 LC-130 aircraft; any of 3 Twin Otter aircraft
McMurdo station TO Long Duration Balloon payload drop point LOCATION: Unknown at this time Elevation: Unknown this time Fm. McM: 300 – 700mi (est.)	2	20,000 – 25,000ft / 7622	03 Jan – 15 Ja06	any of 8 LC-130 aircraft; any of 3 Twin Otter aircraft
In/Around McMurdo station (Local helicopter operations) Fm. McM: 1 – 150mi radius	350- 400	500 – 10,000ft / 3048	6 Oct – 12 Feb06	two AS-350B Helicopters two Bell 212 Helicopters

HELICOPTER OPERATIONS

Sites in/around McMurdo Station
2005/06 SEASON {4 Oct'05 – 15 Feb'06}

Site	Latitude	Longitude
Allan Hills	S 76.68	E 159.91
Ant Hill	S 78.78	E 161.45
Arena Valley	S 77.86	E 160.94
Battleship Promontory	S 76.92	E 161.03
Beacon Valley	S 77.80	E 160.71
Beaufort Is (ASPA 105)	S 76.93	E 166.94
Black Is	S 78.13	E 166.15
Blood Falls	S 77.72	E 162.27
Blue Glacier	S 78.08	E 163.28
Bratina Is	S 78.01	E 165.55
Brimstone Pk	S 75.80	E 158.47
Brosnahan Is	S 79.47	E 161.02
Bull Pass	S 77.52	E 161.85
Butcher Ridge	S 79.18	E 156.38

Site	Latitude	Longitude
Clark Gl	S 77.41	E 162.21
Commonwealth Gl	S 77.58	E 163.01
Cp Bird (ASPA 116)	S 77.22	E 166.43
Cp Chocolate	S 77.90	E 164.50
Cp Crozier (ASPA 124)	S 77.46	E 169.19
Cp Evans (ASPA 155)	S 77.64	E 166.42
Cp Kerr	S 80.05	E 160.43
Cp Lankester	S 79.25	E 160.35
Cp Reynolds	S 75.47	E 162.45
Cp Roberts	S 77.03	E 163.17
Cp Royds (ASPA 121)	S 77.53	E 166.24
Cp Royds (ASPA 157)	S 77.55	E 166.17
Cp Selborne	S 80.43	E 160.62
DAIS	S 77.55	E 161.31
Darwin Gl Camp	S 79.79	E 157.88
Delbridge Islands	S 77.68	E 166.50
Don Juan Pond	S 77.56	E 161.18
Drygalski Ice Tongue	S 75.40	E 163.50
Explorers Cove	S 77.58	E 163.52
F6	S 77.61	E 163.25
Fishtail Pt	S 78.93	E 162.56
Franklin Is	S 76.08	E 168.32
Garwood Valley	S 78.03	E 164.29
Granite Harbor	S 77.01	E 162.86
Hidden Valley	S 78.17	E 163.78
Hjorth Hill	S 77.52	E 163.62
Howard Gl	S 77.67	E 163.08
Hughes Gl	S 77.74	E 162.46
Hutton Cliffs	S 77.73	E 166.86
Iceberg B-15J	S 77.21	E 168.92
Iceberg B-15K	S 77.32	E 167.20
Iceberg C-16	S 77.00	E 168.00
Icebreaker	S 77.50	E 165.00
IceRunway	S 77.85	E 166.41
Kennar Valley	S 77.77	E 160.36
Kukri Hills	S 77.83	E 162.25
Lk Bonney	S 77.72	E 162.32
Lk Brownworth	S 77.43	E 162.71
Lk Fryxell	S 77.61	E 163.12
Lk Hoare	S 77.62	E 162.91
Lk Joyce	S 77.72	E 161.61
Lk Vanda	S 77.53	E 161.68
Lk Vida	S 77.38	E 161.79
Marble Pt	S 77.41	E 163.68
Mason Spur	S 78.55	E 164.42
McMurdo Sound	S 77.50	E 165.00
Minna Bluff	S 78.55	E 166.69
Mt Crean	S 77.87	E 159.53
Mt DeWitt	S 77.22	E 159.85
Mt Doorly	S 77.38	E 162.89

Site	Latitude	Longitude
Mt Erebus	S 77.53	E 167.14
Mt Feather	S 77.93	E 160.44
Mt Fleming	S 77.53	E 160.27
Mt Newall	S 77.50	E 162.62
New Harbor	S 77.58	E 163.52
North Conway Range	S 79.21	E 159.97
North Fork Basin	S 77.53	E 161.25
Odell Gl	S 76.66	E 159.96
Odell Gl	S 76.63	E 160.05
Olympus Range	S 77.48	E 161.24
Pony Lk	S 77.55	E 166.15
Ross Ice Shelf	S 78.00	E 170.00
Round Mt	S 77.67	E 160.92
Saddle between Mt Bird and Mt Erebus	S 77.37	E 166.85
Scott Base	S 77.85	E 166.77
Suess Gl	S 77.65	E 162.70
Taylor Gl	S 77.74	E 162.13
Taylor Valley	S 77.67	E 163.08
Terra Nova Bay	S 74.69	E 164.11
The Pyramid	S 78.33	E 163.45
Turtle Rock	S 77.75	E 166.77
Victoria Upper Glacier	S 77.33	E 162.53
Victoria Valley	S 77.33	E 162.53
Warren Range	S 78.42	E 158.30
Westhaven Nun	S 79.85	E 154.23
White Is	S 78.19	E 167.50
Windless Bight Infrasond	S 77.74	E 167.59
Wohlschlag Bay	S 77.37	E 166.42
Wright Valley	S 77.55	E 161.31

TWIN OTTER OPERATIONS
Sites in/around McMurdo Station
2005/06 SEASON

Site	Latitude	Longitude
AE1	78.3S	118.00W
AE2	77.5S	98.00W
AFLT	83.96S	167.69W
AGO1 (cache)	83.83S	129.56E
AGO1	83.85S	129.59E
AGO2 (cache)	85.66S	46.43W
AGO2	85.67S	45.62W
AGO3	82.75S	28.58E
AGO4	81.99S	96.78E
AGO5	77.25S	123.50E

Site	Latitude	Longitude
AGO6	69.51S	129.99E
Allan Hills (cache)	76.66S	159.60E
Allan Hills	76.68S	159.91E
ANITA/TIGER	71.75S	58.75E
B	80.02S	119.53W
Back of Endurance cliffs/Mt. Summerson	82.75S	155.00E
Bates Nunatak	80.25S	153.58E
Beardmore GI (cache)	84.00S	171.29E
Beardmore GI	84.00S	164.50E
Beaufort Is	76.93S	166.94E
BFLT	82.53S	166.00W
BFLT010	83.59S	164.40W
BFLT090	84.07S	158.98W
BFLT140	84.19S	152.04W
BFLT190	83.91S	147.92W
BFLT320	83.45S	138.09W
Brianna	83.89S	134.15W
Byrd Camp (cache)	80.08S	119.53W
Byrd Camp	80.03S	119.61W
Byrd Glacier (lower)	80.13S	162.00E
Byrd Glacier (upper)	80.42S	157.50E
Cambrian Bluff	82.38S	160.91E
Casey	66.28S	110.53E
CIR1	83.03S	172.22W
Clark Mtns	77.34S	141.87W
Cp Archer	76.85S	162.82E
Cp Hallett (cache)	72.44S	169.94E
Cp Hallett	72.32S	170.21E
Cp Lankester	79.25S	160.36E
Cp Reynolds	75.47S	162.45E
Cp Selbourne (cache)	80.43S	160.62E
Cp Selbourne	80.40S	160.75E
Cp Washington	74.65S	165.42E
Cp Wilson	82.25S	163.50E
D090	80.96S	144.50W
Darwin GI Camp	79.79S	157.88E
Davis	68.58S	77.98E
Davis Knoll	82.17S	155.00E
Davis Nuns	85.30S	166.60E
Deverall Is	81.47S	161.90E
DF05	80.50S	151.03W
Dome C	75.10S	123.39E
Doug	82.32S	113.24W
Drygalski Ice Tongue	75.40S	163.50E
E010	80.13S	147.19W

Site	Latitude	Longitude
EF05	80.19S	150.91W
Elaine	83.13S	174.16E
EWM4	77.53S	86.15W
Ford Range	77.22S	142.74W
Fosdick Mtns	76.33S	145.13W
G001	80.92S	144.38W
G002	80.87S	144.24W
G003	80.83S	144.09W
G004	80.78S	143.91W
G005	80.74S	143.75W
G006	80.68S	143.50W
G009	80.98S	144.16W
G010	80.91S	144.72W
G011	80.85S	143.79W
G018	80.13S	147.52W
G019	80.14S	147.83W
G037	80.53S	144.11W
Gargoyle Ridge	82.42S	159.83E
Gerard Bluffs	83.58S	157.00E
Gill	79.99S	178.61W
Graphite Pk	85.05S	172.76E
GS20	80.19S	146.38W
GS21	80.13S	146.99W
GS22	80.12S	146.78W
GS23	80.12S	146.58W
GS24	80.16S	146.58W
GS25	80.09S	146.58W
GS26	80.17S	146.99W
GS27	80.09S	146.99W
GS36	80.58S	148.54W
H	77.00S	78.30W
Harry	83.00S	121.39W
Henry	89.01S	1.02W
Hercules Dome	86.50S	107.92W
Horlick Mountains	85.38S	121.00W
Horney Bluff 1	80.20S	159.16E
Horney Bluff 2	80.12S	160.17E
Inland Kamb Ice Stream	81.95S	135.00W
Kamb Ice Stream	82.37S	136.40W
LaPaz Icefields	86.33S	70.00W
Larkman Nun	85.77S	179.38E
Lettau	82.52S	174.45W
Leverett Gl	85.49S	149.72W
Lewis Ice Cliff Tongue	84.25S	163.50E
Lonewolf Nun	81.33S	152.83E
Lonewolf Nunataks	81.42S	153.00E

Site	Latitude	Longitude
MacAlpine Hills	84.27S	159.92E
Marilyn	79.95S	165.13E
Mario Zucchelli Station	74.69S	164.12E
Mawson	67.60S	62.88E
McMurdo Station	77.85S	166.67E
Megadunes	80.78S	124.50E
Midpoint C	75.54S	145.82E
Miller Range	83.30S	155.70E
Mt Ester	82.30S	155.00E
Mt Madison	80.42S	159.83E
Mt Moulton	76.05S	134.69W
Mt Rainbow	80.75S	156.00E
Mt Takahe	76.15S	112.37W
Mt Tuatara	80.53S	158.25E
Nascent Gl	78.12S	178.72W
Nico	89.00S	90.04E
No Name 1	80.42S	156.75E
No Name 2	80.33S	157.83E
No Name 3	82.38S	157.08E
No Name 4	83.13S	155.83E
Noel	79.33S	111.07W
North MacKay Icefield	76.60S	157.75E
Odell Gl (cache)	76.63S	160.05E
Odell Gl	76.66S	159.95E
Patriot Hills	80.27S	81.27W
Pensacola Mtns	83.75S	55.00W
PH	80.33S	81.41W
Pine Is	77.57S	95.93W
Ramsever Gl	80.50S	156.25E
RBC1	83.69S	150.58W
RCD1	81.82S	135.75W
Reedy Gl	85.63S	132.02W
Rockefeller Mtns	78.29S	155.21W
Roosevelt Is	79.35S	160.32W
Rothera	67.57S	68.13W
Round Mt	77.67S	160.92E
Rundle Peaks	80.68S	157.16E
S015	80.91S	144.06W
S017	80.78S	143.61W
SB	75.85S	71.56W
Schwerdtfeger	79.90S	169.97E
Scott Gl (SOAR)	85.82S	151.13W
SD	81.65S	149.06W
SDM1	81.62S	148.87W
Seismic Center	80.25S	140.63E
Shackelton Range	80.80S	25.40W

Site	Latitude	Longitude
Shackleton Icefalls	85.13S	164.00E
Siple Dome	81.67S	149.01W
Site 3 (ITASE)	78.12S	95.65W
Site 5 (ITASE)	76.98S	88.82W
Site H (S-176)	81.95S	138.23W
Site J (S-176)	81.93S	131.66W
Site K (S-178)	81.90S	128.45W
Site L (S-178)	81.77S	125.43W
Skaar Ridge	84.83S	162.90E
Sky Blu	74.85S	71.56W
SOAR Site 1	79.32S	132.93W
SOAR Site 1 (OLD)	82.33S	163.72E
South Lashly	78.25S	158.85E
South Pole	90.00S	139.27E
Storm Pk	84.57S	163.85E
SW Pecora Icefields	85.85S	71.40W
Swithinbank	81.20S	126.17W
TAMSEIS Camp	81.65S	122.58E
Taylor Dome	77.79S	158.79E
The Landing	78.33S	161.46E
The Pyramid	78.33S	163.45E
Theresa	84.60S	115.81W
Theron Mtns	79.08S	28.25W
TI1	74.08S	105.28W
TI2	71.87S	100.91W
TI3	72.53S	93.03W
Turret Nunatak	82.42S	158.00E
Up-Kamb Ice Stream	82.43S	135.80W
Upper Marsh Icefield	84.97S	157.35E
Vostok	78.47S	106.82E
W1	87.37S	149.50W
W2	85.63S	68.70W
W3	81.55S	28.50W
W4	82.60S	52.50W
W5	80.33S	81.41W
W7	79.62S	91.23W
W8	75.33S	72.50W
W9	82.58S	104.50W
WAIS Divide	79.47S	112.08W
Westhaven Nun	79.85S	154.23E
WGN	77.13S	115.21W
Yancey Glacier	80.25S	158.50E

PART 3 SHIP-BASED OPERATIONS (USCG POLAR STAR)

2006/06 SEASON

Route	No. of Flights	Flight Level or Altitude (ft/m)	Approximate Date or Period of Flight(s)	No. and Type of Aircraft per Flight
There will be no ship-based air operations during the 2005-06 season.				

PART 4 OTHER AIRBORNE OPERATIONS (e.g. balloons, rockets, etc.)

2005/06 SEASON

Route	No. of Flights	Flight Level or Altitude (ft/m)	Approximate Date or Period of Flight(s)	No. and Type of Aircraft per Flight
Possible balloon circumnavigation of the South Pole	7 flights total [5 pathfinders + 2 Data flights]. Two large Data balloon flights (28 million cubic ft.); 5 small pathfinder balloons (181,000 cubic ft.)	130,000 ft.	December 5 through January 25. Large balloons launched ~ mid-Dec; aloft 10-30 days.	1 balloon each flight, polyethylene, zero-pressure balloons

PART 5 AIRCRAFT DESCRIPTION 2005/06 SEASON

Full Name of Aircraft	Short Name	F/R [a]	W/S [b]	No. of Aircraft	Flight Level or Altitude (ft/m) [c]	Pax Capacity	Radio Equipment	Navigation Equipment	Max Range Miles/km	Type of Fuel Used	SAR Equipment
LC-130 Hercules	Herc or LC	F	S	8	Up to 29,000/8841	60	S/U/V/H	INS/GPS/Doppler	2,500/4025	JP-8	Yes
AS350B2	A-Star or Squirrel	R	skids	2	14,000/4,268	5	S/U/V/H	GPS	325/523	JP-5/8	Yes
Bell 212	Huey	R	skids	2	12,000/3,658	9	S/U/V/H	GPS	200[350*]/ 322[564]	JP-5/8	Yes
DHC-6	Twin Otter	F	S	3	18,000/5,488	18	S/V/H	INS/GPS/Doppler	700/1127	JP-8	Yes
C-17	Globemaster III	F	W	1	45,000/13,720	102	S/U/V/H	INS/GPS/Doppler	5000/8050	JP-8	Yes

[a] Fixed (F) or rotary (R)

[b] Wheeled (W) or ski (S) Equipped

[c] Refer to Notes under Section 2

[d] For helicopters, also indicate maximum range over water (in brackets)

S=Satellite; U=UHF; V=VHF; H=HF;

- Aux Fuel Tanks