

Headquarters
Joint Task Force – Support Forces Antarctica
Joint Base Pearl Harbor-Hickam, HI 96853



OPERATIONS ORDER
OPERATION DEEP FREEZE
2011-2012 ANTARCTIC SEASON

15 August 2011

OPR: DCJTF-SFA



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS THIRTEENTH AIR FORCE

17 March 2011

MEMORANDUM FOR DCJTF-SFA
FROM: CJTF-SFA

SUBJECT: Operations Order Review Authority – Operation DEEP FREEZE

1. Deputy Commander, Joint Task Force – Support Forces Antarctica (DCJTF-SFA) is tasked to review and coordinate updates to the Operations Order (OPORD) for Operation DEEP FREEZE (ODF). As Commander, JTF-SFA, I will publish the OPORD to permit execution for the 2011-2012 Antarctic operations season. Distribute this letter and OPORD coordination as required to meet the timeline.

2. **AUTHORITY:** Presidential memorandum 6646 of 5 Feb 82 establishes National Science Foundation (NSF) as the lead agency responsible for executing the United States Antarctic Program (USAP). DOD is tasked to support this program as requested by NSF within the provisions of the Antarctic Treaty of 1959. Deputy SECDEF, in a 3 Mar 05 memo, designated SECDEF the Executive Agent for this Defense Support of Civilian Authorities (DSCA) operation known as ODF.

3. **INTER-AGENCY RELATIONSHIP:** Memorandum of Agreement (MOA) between NSF and DOD, updated 1 Apr 07, and CJCS EXORD dated 31 Mar 05, establishes Commander, USPACOM as the supported commander for ODF. CDRUSPACOM established Joint Task Force – Support Forces Antarctica as a standing Joint Task Force with authority to execute DOD's USAP support mission.

4. **OPORD PURPOSE:** The ODF OPORD is required by the NSF-DOD MOA and provides the situation, mission, activities, and procedures required to achieve the national objectives. DCJTF-SFA shall coordinate with force providers, supporting commands, and other stakeholders on tasks and procedures. Supplement this OPORD as required.

5. The 2011-12 OPORD review timeline and battle rhythm are as follows:

2010-11 JTF Season Exec Summary	1 Mar 11
AO level pre-coordination of OPORD	8 Mar 11
Coordinate OPORD internally with JTF	NLT 15 Apr 11
Coordinate OPORD with external users	NLT 6 Jun 11
CJTF-SFA OPORD Final Review	30 Jun 11
Publish JTF WARNORD and EXORD	A/R
OPORD Publication and Distribution	15 Jul 11
C-17 ADVON (WINFLY)	First week, Aug 11

6. OPR is DCJTF-SFA. Please address questions to interim JTF-SFA/J3, 808-448-1633, edward.vaughan@hickam.af.mil. Forward recommendations for review or changes via email to jtf.sfa@hickam.af.mil, or commercial phone: 808-449-4029.

// signed stk 17 Mar 11 //
STANLEY T. KRESGE
Lieutenant General, USAF
Commander, 13th Air Force / JTF-SFA

OPORD DEEP FREEZE
SECURITY INSTRUCTIONS

1. The title of this OPORD is OPERATIONS ORDER, OPERATION DEEP FREEZE, 2011-2012 ANTARCTIC SEASON. The short title is OPORD DEEP FREEZE.
2. This document is UNCLASSIFIED.

RECORD OF CHANGES

CHANGE #	AUTHORITY	DATE ENTERED	POSTED BY

JTF-SFA OPORD DEEP FREEZE OPORD SUMMARY

OPR: DCJTF-SFA

1. Purpose. Per CJCS EXORD, dated 31 Mar 05, Commander, US Pacific Command (CDRUSPACOM) assumed responsibility from Commander, US Transportation Command (CDRUSTRANSCOM) for Operation DEEP FREEZE (ODF). ODF is the DOD's logistics support to the National Science Foundation (NSF) Office of Polar Programs (OPP) scientific exploration of Antarctica. Tasked 'supporting' commands including USTRANSCOM, AMC, PACAF, ANGRC, USCG PACAREA, Military Sealift Command, SDDC, and others, will provide the 'supported' command, USPACOM, with sealift, bulk fuel supply, airlift, seaport access, intelligence, and cargo handling. CDRUSPACOM established Joint Task Force - Support Forces Antarctica (JTF-SFA) to execute ODF, the operational and logistical support to the United States Antarctica Program (USAP), during the austral summer season from August to February. *As a standing year-round USPACOM joint task force, JTF-SFA also provides off-season support such as Casualty Evacuations (CASEVACs), communications, doctrinal review, inter-agency and joint effects coordination, protocol, and operations planning.*

2. Conditions for Implementation. This OPORD is effective upon receipt and will continue in effect until superseded. This OPORD will be reviewed annually to reflect mission changes. By Memorandum of Agreement between the Department of Defense and the National Science Foundation, an OPORD (vice OPLAN or other document) is the mission planning and execution instrument to be used for this purpose.

a. Politico-Military Situation. The Antarctic Treaty, which entered into force 23 June 1961, allows employment of military personnel and equipment for support of scientific investigation. All DoD operations will comply with all conditions contained in the Antarctic Treaty System, including all modifications and changes to which the United States is a party.

b. Legal Considerations. Article I, states:

(1) Antarctica shall be used for peaceful purposes only. There shall be prohibited, *inter alia*, any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military maneuvers, as well as the testing of any type of weapons.

(2) The present Treaty shall not prevent the use of military personnel or equipment for scientific research or for any other peaceful purposes.

3. Operations to Be Conducted.

a. Force Requirements.

(1) Assigned Forces:

(a) Up to nine LC-130s crews and support personnel. Operating under OPCON command relationship with specified ADCON for mission execution, UCMJ, protection of assigned forces and assets, billeting, dining, force

reporting, morale, welfare and safety. AMC maintains concurrent ADCON of AMC-gained forces with 201st Mission Support Squadron (ANG) while those forces are outside USPACOM AOR. Number of aircraft may be adjusted based on mission requirements. Commander, 201st Mission Support Squadron of the Air National Guard Readiness Center, National Guard Bureau, retains concurrent ADCON of OCONUS Title-10 ANGUS (Air National Guard of the United States) personnel at all times

(b) Navy Cargo Handling Battalion One (NCHB-1). Operating under OPCON with specified ADCON for mission execution, UCMJ, protection of assigned forces and assets, billeting, dining, force reporting, morale, welfare and safety.

(2) Attached Forces:

(a) Military Sealift Command (MSC) contracted sealift bulk fuel and cargo vessels operating under direct support with MSC having contract authority.

(b) US Army Veterinarians for public health requirements.

(c) AFRTS – US Navy Personnel supporting McMurdo communications.

(d) VNDA uniformed military members performing seismic monitoring.

(e) C-17s, crews and support personnel. Operating under a TACON command relationship with specified ADCON for mission execution, UCMJ, protection of assigned forces and assets, billeting, dining, force reporting, morale, welfare and safety. CDRUSTRANSCOM retains OPCON and AMC retains concurrent ADCON of forces. Typically no more than two C-17s and crews attached at any one time.

(f) Space and Naval Warfare System Command (SPAWAR). Operating under TACON with specified ADCON for mission execution, UCMJ, protection of assigned forces and assets, billeting, dining, force reporting, morale, welfare and safety.

(g) United States Coast Guard Polar Class Icebreaker, crews and support personnel. If participating, operating under TACON once south of 60°S latitude.

b. Deployment. C-17 and LC-130 units will deploy to their respective operating locations. NCHB-1 will travel via commercial carrier. SPAWAR will deploy via ODF aircraft and commercial contract carriers. Throughout the season, LC-130 aircraft will deliver fuel, cargo and personnel to the South Pole and other on-continent locations via ski-landings and airdrop. C-17 aircraft will provide inter-continental airlift to and from Antarctica, as well as on-continent airdrop as directed.

c. Employment.

(1) Phase I: Deployment. C-17 deploys in mid August to Christchurch for ADVON Operations (WINFLY). Essential personnel and equipment will stage to McMurdo Station from Christchurch via C-17 in August to prepare for main operations that commence near the end of September and terminate approximately in early March. End-state for this phase is operational McMurdo area airfields, 1 x C-17 in Christchurch ready for operations, and LC-130s deploying into the JOA in late October.

(2) Phase II: Airlift Resupply Operations. C-17 main body operations begin late September and LC-130 main body operations commence late October. CJTF-SFA will determine a start date based on climatic conditions and mission requirements. Operations consist of supply flights between Christchurch, NZ and McMurdo Station (inter-continental), and LC-130 flights (intra-continental) between McMurdo and outlying field camps throughout Antarctica. Up to 3 x C-17ERs (or other contracted airlift) will fly missions as required each week. LC-130s based at McMurdo Station fly multiple sorties every day, with reduced sortie rate on the weekends. End-state for this phase is:

- (a) Deep field put-in, re-supply, and pull-out of all austral summer, inland camps.
- (b) McMurdo and the South Pole to have sufficient supplies for sustainment through the austral winter or until climatic conditions/ORM no longer allow safe aircraft flight operations

(3) Phase III: Vessel Resupply Operations. MSC provides naval and contract vessels to deliver fuel and dry cargo to McMurdo Station. JTF-SFA ensures the channel through the sea ice is adequate for passage to and from the McMurdo ice pier before the ships enter the channel. NCHB-1 offloads and onloads the ship at the ice pier. End-state for this phase is safe entry, loading, and departure of the vessels.

(4) Phase IV: Redeployment. All deployed forces return to home station. Redeployment begins after last LC-130 on-continent mission. C-17 aircraft carry USAP cargo for USAP redeployment. End-state for this phase is all DoD personnel and equipment safely returned to home stations, NSF and contractor personnel in place for winter.

(5) Emergency Winter Airdrop Operations. See Annex C Appendix 20.

Table 1

Phase	Name	Key Assets	Key Activity	Commence	Terminate
I	Deployment	C-17 ER; LC-130	WINFLY / ADVON	August	November
II	Airlift Resupply Ops	C-17 ER; LC-130	MCM/Deep Field Camp Resupply	September	February
III	Vessel Resupply Ops	Icebreaker; Tanker/Contract cargo ship	Sealift Resupply	January	February
IV	Redeploy	C-17 ER; LC-130	Redeployment	February	March

4. Key Assumptions.

- a. Airframes and qualified/certified aircrews for all DoD aircraft are available.
- b. LC-130 aircrews will be “SKI” mission qualified
- c. C-17 crews will be ICE certified.
- d. LC-130 maintenance team will have adequate number of polar-region trained personnel to ensure safe and timely repairs to facilitate mission accomplishment.

5. Operational Constraints and Risk. Logistic support to Antarctica is greatly impacted by weather and environmental conditions. Winds, frozen and freezing precipitation, extreme low temperature, ceiling, and fog present unique mission risks and constitute greater challenges to command and control. Vigilant application of Operational Risk Management and personal risk management techniques are imperative to assure safe operations.

6. Time to Commence Effective Operations. Table 1 illustrates the major phases of ODF, key assets required to execute each phase, and beginning and end of each phase.

7. Availability and Capabilities of Transportation Resources and Facilities. This operation depends on the availability of airlift, sealift and icebreaking resources. In some cases, shortfall can be handled through other agencies with which the NSF can contract.

However, this comes at considerable expense to the NSF, and every effort will be made to satisfy DoD obligations efficiently.

8. Command Relationship. Commander, United States Pacific Command (CDRUSPACOM) is designated the supported combatant commander. CDRUSTRANSCOM, CDRUSJFCOM, and USCG PACAREA are supporting combatant commanders. Supporting combatant commanders transfer OPCON or TACON of DoD/USCG common-user transportation assets and personnel in support of the USAP IAW CJCS EXORD, 2005. CJTF-SFA, as CDRUSPACOM designee, is the theater commander for all DoD operations and support forces in Antarctica and executes specified ADCON, as well as OPCON and/or TACON over attached forces for CDRUSPACOM.

9. Logistics Appraisal. Annexes A, C, D, E, and M list equipment and augmentee personnel required to support this OPOD.

a. DoD support for ODF is fully reimbursable by NSF in accordance with the NSF-DoD MOA. Additional DoD personnel have been authorized to perform this mission. Additional support may include, but is not limited to, augmentees from Chaplain, Safety, Legal, MWR, Public Affairs, Finance, Personnel, and Communications and will be managed through CJTF-SFA.

b. Routine logistics and operations support may be provided to any and all DOD USAP participants operating out of Christchurch, New Zealand by on site Air Mobility Command (AMC) Flight Operations, if available. AMC Flight Operations are conducted by the Chief, 735th Air Mobility Squadron, Operating Location B (735 AMS/OL-B), and do not fall under the command or control of CJTF-SFA. Such support will be provided at the discretion of the Chief, 735 AMS/OL-B.

c. NSF Additional Support. NSF may provide additional support for requirements at McMurdo and/or Christchurch not called out in manpower attachments of this document. Some additional requirements may include:

(1) Commercial Contractor Support (Air New Zealand Engineering Services, BOC Gases, Fuels, Fleet Service, etc.)

(2) Aircraft Facilities (hangars, etc.)

(3) Heavy Maintenance Support (Air Logistics Center [ALC] authorized maintenance)

(4) ALC Engineering Support

10. Consolidated Listing and Impact Assessment of Shortfalls and Limiting Factors.

a. Weather modeling/forecasting assets. Due to the extreme environment, likelihood of shortfall is medium, impact of shortfall is medium. This is presently a limiting factor to the operation.

b. Condition of roads to and from ice runways and skiways, relative to ground

transportation available for maintenance and aircrews. Likelihood of shortfall is medium. Impact of shortfall is medium. This is presently a limiting factor to the operation.

c. Major changes in primary NSF support contractor and associated personnel. Likelihood of shortfall is medium, impact of shortfall is medium. This is presently a limiting factor to the operation.

d. End of season re-supply by contracted vessels. Likelihood of shortfall is low, impact of shortfall is severe. This is presently a limiting factor to the operation.

e. LC-130 airframe availability. Likelihood of shortfall is low, impact of shortfall is significant. This is **not** presently a limiting factor to the operation.

f. Airfield capabilities and availability. Likelihood of shortfall is low, impact of shortfall is significant. This is **not** presently a limiting factor to the operation.

JTF-SFA OPORD DEEP FREEZE
TABLE OF CONTENTS

CONTENTS PAGES

BASIC OPORD

Letter of Transmittal i
Security Instructions and Record of Changes ii
Plan Summary iii
Table of Contents ix
Basic Plan..... 1→12

ANNEX A, TASK ORGANIZATION..... A-1
 Appendix 1, LC-130 Deployment List A-1-1
 Appendix 2, Strategic Deployment List..... A-2-1→A-2-2
 Appendix 3, Command and Support Staff Deployment List..... A-3-1

ANNEX B..... Not Used

ANNEX C, OPERATIONS C-1→C-6
 Appendix 9, Multimedia and Combat Camera Documentation..... C-9-1
 Appendix 15, Force Protection C-15-1→C-15-2
 Appendix 17, Ship Operations C-17-1→ C-17-3
 Appendix 18, Search, Rescue and Survival Operations C-18-1→C-18-4
 Appendix 19, LC-130 Polar Airdrop Operations..... C-19-1→ C-19-3
 Appendix 20, C-17 Emergency Winter Airdrop..... C-20-1→ C-20-4
 Appendix 21, C-17 NVG Operations..... C-21-1→ C-21-4

ANNEX D, LOGISTICS D-1→D-5
 Appendix 5, Mobility and Transportation D-5-1→D-5-7
 Tab A, Aircraft Fleet Requirements D-5-A-1
 Tab B, Vehicles/MHE Equipment Available at Christchurch NZ D-5-B-1
 Appendix 9, Equipment and Supplies..... D-9-1→D-9-2
 Tab A, Strategic Aircraft Requirements (Maintenance) D-9-A-1→ D-9-A-6
 Tab B, Basic Aircraft Equipment D-9-B-1
 Tab C, Required Equipment and Supplies (MST/TALCE) D-9-C-1
 Tab D, 139 EAS Aircraft Requirements in Christchurch, NZ D-9-D-1
 Appendix 11, Aircraft Rescue and Fire Fighting (ARFF) D-11-1→D-11-2
 Appendix 12, Aircraft Maintenance D-12-1→D-12-2
 Appendix 13; Support Agreements..... D-13-1D-13-2

ANNEX E, PERSONNEL E-1→E-3
 Appendix 3, Finance E-3-1→E-3-3
 Appendix 4, Legal..... E-4-1→E-4-3
 Appendix 5, Military Postal Service E-5-1→E-5-3

Appendix 6, Chaplain Support Services	E-6-1→E-6-5
Appendix 7, Services	E-7-1→E-7-3
ANNEX F, PUBLIC AFFAIRS.....	F-1→F-6
ANNEX G.....	Not Used
ANNEX H, METEOROLOGICAL AND OCEANOGRAPHIC SERVICES	H-1→H-5
Appendix 1, Terminal Climatology	H-1-1
Appendix 2, Climatological Wind Factors	H-2-1
ANNEX J, COMMAND RELATIONSHIPS.....	J-1→J-6
Appendix 1, Command Relationships Diagrams.....	J-1-1→J-1-2
Appendix 2, JTF Support Forces Antarctica Joint Operating Area	J-2-1→J-2-2
ANNEX K, COMMAND, CONTROL, & COMMUNICATIONS SYSTEMS	K1→K8
Appendix 1, Draft Communications MOA w/ NSF	K-1-1→K-1-6
Tab A to Appendix 1, Annex K.....	K-1-A-1→ K-1-A-2
Appendix 2, Satellite Communications Planning	K-2-1
ANNEX L, N, O, P.....	Not Used
ANNEX M, GEOSPATIAL INFORMATION and SERVICES.....	M1→M4
Appendix 7, Imagery Requirements	M-7-1→ M-7-3
ANNEX Q, MEDICAL SERVICES.....	Q-1→Q-14
Appendix 1, Casualty Evacuation Protocol	Q-15→ Q-17
Attachments 1 – 5	Q-1-1→ Q-7-1
ANNEX R, REPORTS	R1→R2
Appendix 1, C-17, Operations Summary Format	R-1-1→R-1-2
Appendix 2, JTF-SFA SITREP Format	R-2-1→ R-2-2
Appendix 3, ODF Lessons Learned Format	R-3-1
Appendix 4, ODF After Actions Format	R-4-1
ANNEX X, GLOSSARY.....	X-1→X-4
ANNEX Y, SAFETY.....	Y-1→ Y-4
ANNEX Z, DISTRIBUTION	Z-1→Z-2

JTF-SFA OPORD DEEP FREEZE
BASIC DIRECTIVE OPR: DCJTF-SFA

References:

- (a) CJCSM 3122.03A, Joint Operation Planning and Execution System, Vol II
- (b) Office of Management and Budget Circular A-51, (revised) 4 August 1971
- (c) DoD/NSF MOA, 1 May 2007
- (d) NSF/SPAWARSYSCEN MOA, Engineering and Aviation Technical Services Support for the United States Antarctic Program
- (e) Antarctic Conservation Act of 1978 (Public Law 95-451)
- (f) Antarctic Treaty of 1959
- (g) AFI 36-3017, Special Duty Assignment Pay (SDAP) Program
- (h) AFI 48-123, Medical Examination and Standards
- (i) Memorandum of Agreement, USPC/CC and Chief of Mission American Embassy Wellington for Security and Force Protection of DoD Elements and Personnel in New Zealand.
- (j) Presidential Memorandum 6646, 5 February 1982
- (k) Presidential Decision Directive/NSC-26, 9 June 1994
- (l) Designation of the Secretary of the Air Force as DoD Executive Agent for Support to the NSF's Polar Programs, 3 Mar 2005

1. Situation.

a. General. The multilateral Antarctic Treaty, signed 1 December 1959, and placed in which entered into force 23 June 1961, provides that Antarctica shall be used for peaceful purposes only, and for international freedom of scientific investigation in Antarctica. The DoD is responsible for planning and executing operations in support of the USAP based on the requirements of the NSF. The Secretary of the Air Force has been designated as the Executive Agent for polar programs logistics support functions. The Assistant Secretary of the Air Force (Manpower and Reserve Affairs SAF/MR) is the designated representative and principal point of contact within DoD for USAP. CDRUSPACOM is designated the Supported Commander for the Antarctic program.

(1) Antarctic Treaty. The Treaty provides that Antarctica shall be used for peaceful purposes only, and specifically allows employment of military personnel and equipment for support of scientific investigation. The Treaty further provides complete freedom of access to carry out any inspection by designated observers of the Treaty signers. Guidance relative to operations in Antarctica is provided in references (b) and (c).

(2) Presidential Memorandum 6646 and Presidential Decision Directive/NSC-26. The United States has important foreign policy and national security interests in Antarctica. The NSF is responsible budgeting and management of the entire U.S.

program in Antarctica. The NSF Office of Polar Programs (NSF/OPP) manages the program and acts as the coordinating agency for the United States government activities. The NSF retains sole responsibility and cognizance over all coordination and contacts with foreign countries that may be involved in the conduct of the USAP. Operation DEEP FREEZE. "Operation DEEP FREEZE" (ODF) is the unclassified name given to the operations conducted by the DoD to provide logistic support for the United States Antarctic Program (USAP). ODF involves the deployment and redeployment of scientific and support personnel, logistic and supply operations, air and surface operations in logistic and scientific support missions (including icebreakers and other ship operations as requested by NSF).

b. Area of Concern. JTF-SFA primary area of operation is below 60°S latitude and within the Country of New Zealand, for all participating DoD assets. Christchurch, New Zealand is the primary operating location for the air bridge to Antarctica. CJTF-SFA will command all DoD supporting forces assigned and/or attached to SFA, in the country of New Zealand and below 60°S latitude. CDRUSTRANSCOM retains OPCON of C-17 forces operating within the JTF-SFA Joint Operations Area (JOA). If required, a memorandum of understanding between CJTF-SFA and 18 AF/CC may be accomplished to enhance theater operations and establish flexible execution of the mission. See Annex J for a depiction of JOA boundaries.

2. Mission. Commander, Joint Task Force Support Forces Antarctica (CJTF-SFA) provides operations and logistics support to the USAP consistent with the DoD/NSF Memorandum of Agreement, 1 May 2007, and within the provisions of the Antarctic Treaty of 1959, and Presidential Directive 6646, to maintain an active and influential presence in Antarctica.

3. Execution.

a. Concept of Operation. Mission execution commences in August with operations running through early March, as required. Throughout the year, JTF and USAP planning, budgeting, conferences, protocol and aero-medical support requirements are conducted thus constituting a year-round mission for CDRUSPACOM.

(1) Classification. Unclassified.

(2) Priority. Use transportation priority 1B2 for all JTF-SFA airlift missions.

(3) 304 Expeditionary Airlift Squadron (EAS). Operates Extended-Range (ER) C-17 aircraft under an Air Tasking Order in support of direct funded NSF requirements.

(4) 139 EAS. Operates LC-130 aircraft under a JTF-SFA Air Tasking Order in support of direct funded NSF requirements.

(5) Allowable Cargo Load and Point of Safe Return. Planned Allowable Cargo Load (ACL) figures for ice missions will be coordinated during the annual USAP

Airlift Planning Conference, or as otherwise coordinated by the NSF. Southbound intercontinental missions will be planned to include a Point of Safe Return (PSR) due to airfield limitations on continent and unforeseen weather deterioration.

(6) NSF contracted airlift. NSF contracts civilian fixed-wing and rotary-wing aircraft in addition to DoD aircraft to support the USAP. Information for airfield operations in the USAP is located in the Antarctic Flight Information Manual (AFIM) published by Council of Managers of National Antarctic Programs at www.comnap.aq/publications/afim. The manual contains information that is useful to DoD personnel.

(7) Phases. Operation DEEP FREEZE executes in four phases.

(a) Phase I: Deployment. C-17 deploys in mid August to Christchurch for ADVON Operations (WINFLY). Essential personnel and equipment will stage to McMurdo Station from Christchurch via C-17 in August to prepare for main operations that commence near the end of September and terminate approximately in early March. End-state for this phase is operational McMurdo area airfields, 1 x C-17 in Christchurch ready for operations, and LC-130s deploying into the JOA in late October.

(b) Phase II: Airlift Resupply Operations. C-17 main body operations begin late September and LC-130 main body operations commence late October. CJTF-SFA will determine a start date based on climatic conditions and mission requirements. Operations consist of supply flights between Christchurch, NZ and McMurdo Station (inter-continental), and LC-130 flights (intra-continental) between McMurdo and outlying field camps throughout Antarctica. Up to 3 x C-17ERs (or other contracted airlift) will fly missions as required each week. LC-130s based at McMurdo Station fly multiple sorties every day, with reduced sortie rate on the weekends. End-state for this phase is:

(a) Deep field put-in, re-supply, and pull-out of all austral summer, inland camps.

(b) McMurdo and the South Pole to have sufficient supplies for sustainment through the austral winter or until climatic conditions/ORM no longer allow safe aircraft flight operations.

(c) Phase III: Vessel Resupply Operations. MSC provides naval and contract vessels to deliver fuel and dry cargo to McMurdo Station. JTF-SFA ensures the channel through the sea ice is adequate for passage to and from the McMurdo ice pier before the ships enter the channel. NCHB-1 offloads and onloads the ship at the ice pier. End-state for this phase is safe entry, loading, and departure of the vessels.

(d) Phase IV: Redeployment. All deployed forces return to home station. Redeployment begins after last LC-130 on-continent mission. C-17 aircraft carry USAP cargo for USAP redeployment. End-state for this phase is all DoD personnel and equipment safely returned to home stations, NSF and contractor personnel in place for winter.

(e) Emergency Winter Airdrop Operations. See Annex C Appendix 20 for details.

(8) McMurdo Station Airfields. A combination of two available airfields may be used: Sea Ice Runway (conditions permitting until mid-December) and Pegasus Field. The airfields must be re-established annually prior to the start of airfield operations. Each Field will be evaluated prior to the season to determine the feasibility of operations for the austral summer. Pegasus Field is the runway used for WINFLY. Williams Field is maintained as an alternate ski landing area for LC-130 operations.

b. Tasks.

(1) CDRUSTRANSCOM.

(a) Support CDRUSPACOM with airlift, sealift and en route support to deploy, execute and redeploy ODF.

(b) Transfer TACON and OPCON as required and specified ADCON of deployed assets and personnel to CDRUSPACOM. CDRUSTRANSCOM retains OPCON of C-17 forces. AMC retains concurrent ADCON of C-17 AMC forces.

(c) SDDC provides port management services (cargo reception, documentation, labeling, RFID processing, cargo staging, and cargo loading) in support of MSC vessel operations at the CONUS SPOE.

(d) Provide seasonal dry cargo and fuel deliveries to McMurdo Station. Seasonal tasking is established through a standing ODF EXORD. JTF-SFA will have representation (i.e., DoD/ANG LNOs) at all NSF-MSC deliberations. MSC will have representation via JTF-SFA Ship Operations Officer who will submit daily SITREP to DCJTF whenever vessel resupply operations are underway.

(2) COMPACAREA (USCG).

Provide icebreaking and/or intelligence support for seasonal afloat resupply of McMurdo Station. Seasonal tasking is determined by the NSF. When present, the USCG representative will submit daily SITREP to DCJTF whenever USCG icebreaker operations are underway.

(3) COMPACAF.

(a) Provide Base Operating Support (BOS) to the JTF-SFA staff and JTF assigned and attached forces, garrisoned or transient, at JB Pearl Harbor-Hickam, HI.

(b) Provide reachback staff expertise as required to support 13AF A-staff and JTF-SFA J-staff.

(4) ANGRC/CC and 201 MSS/CC.

(a) Provide 201 MSS/CC concurrent ADCON for ANGUS forces deployed in support of ODF, as required and directed by regulation and law.

(b) Support 109 AW LC-130 readiness and ODF deployment as required. IAW the MOA between DoD and NSF.

(c) Provide ANG chaplains for rotations as requested by NSF, IAW the MOA between DoD and NSF.

(d) Meet TPFDD requirements for deployment augmentees as able and agreed upon.

(5) CJTF-SFA.

(a) Accept OPCON, TACON, and/or Direct Support of DoD forces deployed in support of Operation DEEP FREEZE with specified ADCON (i.e. military justice, discipline) over all forces operating in the JOA.

(b) Manage the DoD operational and logistical support to the NSF.

(c) Coordinate and de-conflict all operational issues between DoD and NSF with the assistance of the NSF DoD/ANG Liaison Officers.

(d) Provide SITREPS to CDRUSPACOM and info copy to NSF, USTRANSCOM/J3, and ANGR.

(e) Maintain visibility of sea support operations.

(f) Serve as AETF/CC, COMAFFOR, and JFACC for JTF-SFA.

(g) Ensure a viable Christchurch Communication Network architecture, via a Virtual Private Network (VPN) or OWA capability to 15 AW Communications. The intent is to provide deployed military leaders access to their home station military communications and email accounts.

(h) Appoint G-series commanders for the 13 AEG, 139 EAS, 304 EAS,

and 13 AEG Det 1 on a continuous basis.

(i) Provide funding, line of accounting, other authority as appropriate to DOD organizations supporting ODF, not otherwise directly reimbursed by NSF under the DOD/NSF MOA.

(6) DCJTF-SFA and 13 AEG/CC.

(a) DCJTF-SFA is dual-hatted as standing 13 AEG/CC when deployed to the JOA. When DCJTF-SFA is in garrison, a forward 13 AEG/CC or 13 AEG/CD may be appointed by CJTF-SFA.

(b) DCJTF-SFA executes and manages JTF-SFA operations in the JOA on behalf of CJTF-SFA—joint commander forward.

(c) 13 AEG/CC will exercise OPCON and Specified ADCON over the 139 EAS and TACON and Specified ADCON over the 304 EAS.

(d) DCJTF-SFA will exercise specified ADCON over NCHB-1, and SPAWAR military personnel and exercise command as required over other attached and supporting joint personnel in JOA, including AFRTS, VNDA, military public health, etc.

(e) Maintain command and control of JOA air operations in support of ODF. Serve as DIRMOBFOR for ODF.

(f) Manage and/or delegate the JTF's part of In-transit Visibility (ITV) requirements at McMurdo Station and Christchurch IAP NZ.

(g) Ensure the daily SITREP is accurately compiled and transmitted to CJTF-SFA.

(h) Appoint a rated airlift-experienced deputy commander, 13 AEG/CD. When not appointed, or during non-deployed periods, the JTF-SFA Chief, Joint Operations and Plans, reporting to the DCJTF-SFA may be dual-hatted as 13 AEG/CD.

(7) 613 AOC/AMD

(a) Provide command and control and In-flight Management of LC-130 and C-17 aircraft deploying to and redeploying from Christchurch, NZ. Coordinate with 618 TACC as required.

(b) Provide enroute maintenance recovery support to LC-130 and C-17 aircraft deploying to and redeploying from Christchurch, NZ, in coordination with 618 AOC Logistics Readiness Cell.

(8) 304 EAS/CC. (C-17)

(a) 304 EAS activated to support ODF through SAAM inter-theater and JTF-SFA scheduled intra-theater missions.

(b) The 304 EAS/CC position will be filled by a current, rated, ICE-certified O-5. Rank substitutions are not authorized.

(c) To maintain optimum continuity, 304 EAS will minimize rotations of the CC position.

(d) 304 EAS/CC may be dual-hatted as 13 ESS/CC for Christchurch operations at DCJTF-SFA discretion, or when no ESS/CC is appointed.

(9) 139 EAS/CC. (LC-130)

(a) 139 EAS activated to support ODF by providing LC-130s for either inter- or intra-continental airlift support consistent with NSF requirements.

(b) The 139 EAS/CC position will be nominated by the 109 OG/CC, and filled by a rated, LC-130 ski mission experienced O-5.

(c) In order to maximize continuity, 139 EAS and CJTF-SFA will attempt to minimize the number of commander rotations.

(10) 13 AEG Detachment 1/CC. 13 AEG Det 1 may be positioned in Christchurch, New Zealand and/or McMurdo Station, Antarctica as required to provide force, operational, and administrative support to all JTF-SFA participants in the JOA. Functions not otherwise assigned to a flying squadron, or joint billets, will be typically assigned to Det 1. The Det 1/CC reports directly to the 13 AEG/CC and may be appointed as 13th Expeditionary Support Squadron Commander, 13 ESS/CC, if activated. 13 AEG Det 1 roles and subordinate duties will be outlined in TPFDD and G-series orders.

(11) Additional expeditionary airlift units may be activated as required to meet mission needs.

(12) DOD JOINT STAFF (previously JFCOM). Provide Navy cargo handlers, from the Navy Cargo Handling Battalion One (NCHB-1), to document cargo during ship onload at Port Hueneme, CA, to offload/upload vessel(s) and supervise the training of ice pier line handlers at McMurdo Station. Task Space and Naval Warfare System Center (SPAWARSYSCEN), Charleston to support ODF with air traffic control, meteorological support and electronic maintenance of Navigational Aids as outlined in the SPAWARSYSCEN/NSF MOA.

(13) DoD Supporting Agencies. Provide support to the USAP IAW CJCS direction as required by the CJTF-SFA.

c. Contingency Requirements.

(1) Emergency Winter Airdrop. Airdrop operations may be conducted when airfields are non-operational at McMurdo or South Pole Station, roughly March through August. See Annex C Appendix 20 for details.

(2) NVG Operations. C-17s will employ NVG operations as required during WINFLY. Such missions will be based on NSF mission requirements or generated as training lines to validate mission capability in anticipation of NSF requirements. 304 EAS will secure appropriate permissions and develop appropriate procedures to accomplish safe and effective NVG operations.

(3) Contingency Operations. Specific contingency procedures may be used by 304 EAS when Pegasus airfield can be utilized on a short notice and/or aircraft are not currently in theater. CJTF-SFA will develop and maintain a separate document for this operation. NOTE: Under this OPORD, the whole of ODF may be designated, at DOD discretion, as overseas, noncombat *contingency operations*, as defined in USC Title 10, Part I, Chapter 1, § 101, definitions.

4. Administration and Logistics.

a. Concept of Support

(1) Logistics support will consist of:

- (a) Any combination of C-17 or C-130 aircraft.
- (b) LC-130 aircraft.
- (c) Commercial aircraft.
- (d) Aircraft maintenance support at home station.
- (e) Aircraft maintenance support for operations at Christchurch NZ.
- (f) Aircraft maintenance support for operations at McMurdo Station.
- (g) Aircraft maintenance and recovery on continent in Antarctica.

(2) DoD agency support. DoD agency support will be coordinated through CJTF-SFA and NSF.

b. Coordination Instructions.

(1) 304 EAS and 139 EAS are authorized direct communication (DIRLAUTH) with all agencies dealing with the air mobility support of Operation DEEP

FREEZE. EAS/CCs will keep 13 AEG/CC and DCJTF-SFA informed.

(2) Aircraft maintenance status at en route stations will be passed to the Air Mobility Division within the 613 AOC for LC-130 and C-17 deployment/redeployment operations. Update 618 TACC as required. Updates to JTF-SFA are strongly encouraged.

(3) DCJTF is authorized DIRLAUTH with USDAO, Wellington.

c. Logistics. See Annex D.

d. Personnel. See Annex E. All personnel TDY to Christchurch in support of this OPORD will report to the SFA representative upon arrival at Christchurch Terminal for required in processing. The 304 EAS/CC and 139 EAS/CC will direct the immediate return of any personnel in excess of unit mission needs, or who are unfit for duty.

e. Public Affairs. See Annex F.

f. Meteorological and Oceanographic Services. See Annex H.

g. Medical Services. See Annex Q.

h. Visitors.

1) Definitions.

a) NSF/OPP. National Science Foundation/Office of Polar Programs.

b) Distinguished Visitor. For ODF, these are defined under special provision by NSF, but typically Military Officers (O-7 and above) and civilian appointed officials in the Senior Executive Service (SES), or higher.

c) SAF/MR. Assistant Secretary of the Air Force for Manpower and Reserve Affairs

d) Visitor(s). General term inclusive of DVs and staff visitors to the JOA.

e) Media. Civilian and DoD media representatives.

2) Guidelines.

a) The periods approved by the NSF for Distinguished Visitors (DV) are usually from mid-November to mid-December, and Mid-January to early February. All visitors must be approved by the NSF prior to traveling to Antarctica. Visits to the ice originate in Christchurch, NZ and normally include a 4-5 day stay at McMurdo Station, Antarctica.

b) The goal of the ODF DV Program is to ensure effective logistical support

of the USAP by enabling key DoD officials with oversight or operational command responsibilities to inspect DoD operations in Antarctica as well as the scientific research the operation supports.

3) Policy.

a) Nominations. Nominations for the ODF DV Program may be made by any interested person. All nominations are vetted through SAF/MR before being submitted to the NSF for final approval.

(1) Distinguished Visitors selected to visit Antarctica must have direct oversight or command of operations that support the USAP, or have a substantial need to evaluate operations within the USAP that will substantially benefit the objectives of the Program.

(2) Invitations are for the Distinguished Visitors only and do not include staff or spouses.

(3) NSF places high value on visits for individuals who will be involved with the USAP for future seasons.

b) Program resources must be used carefully in order to adequately support the needs of planned science and support projects. The accommodation of visitors must be carefully weighed and stringently controlled.

c) SAF/MR will forward recommendations to the NSF, Director, and Office of Polar Programs who will consider nominees for approval, then issue invitations to the approved visitors.

4) Administration.

a) The extent to which each year's U.S. Antarctic Program will accommodate visitors will be addressed annually in early planning liaison between NSF and JTF-SFA.

b) Each visitor event will have a designated Sponsor/On-Site Host. This will usually be the in-theater SFA Commander, SFA Executive Officer, or the Senior NSF Representative, Antarctica.

c) The NSF/OPP Polar Coordination Specialist will be responsible for coordination control of proper administration of visitor events with SAF/MR. Procedures may be found in policy memorandum signed by SAF/MR.

d) NSF/OPP designates a Visitor Event Number (V-0xx) for each Visitor Event. NSF/OPP issues a list of approved Visitors to key USAP organizations prior to the start of the each season, with updates when necessary throughout the season.

e) Approximately 45 days are required to complete medical screening, clothing plans, and other pre-travel arrangements.

f) The designated Sponsor/Host will provide a special background information package suitable for each visitor event. The package should include, but not limited to:

(1) USAP clothing and medical forms (active duty military and reservists need only to submit a current AF Form 422 – Physical Profile Report)

(2) U.S. Antarctic Program *Participant Guide*

g) The Sponsor/Host should provide orientation briefings for the visitors tailored to their individual needs.

5) Visitor Events. Visitor events are planned for the Christchurch and McMurdo locations, and will normally include four days in Antarctica. Other program locations are determined in accordance with program oversight responsibilities. Program aviation assets are fully subscribed; therefore, flights to and from New Zealand are dictated by the scheduled airlift.

i. Activity Planning. Activity planning emphasizes exposure to research facilities and projects and the role of DoD in facilitating them: field sites accessible by vehicle, helicopter, or ship; contact with research investigators; activities of the program's logistic support units; and careful observance of the Antarctic Treaty.

5. Command and Control.

a. Command. See Annex J.

b. Communications.

(1) Communications with CJTF-SFA, 13 AEG/CC, EAS units and supporting units are via e-mail and message, commercial telephone circuits, and/or two-way HF or satellite radio.

(2) Communication between units at Christchurch, NZ and McMurdo Station is via e-mail, telephone, HF radio, SATCOM, and Iridium phones (when approved by MAJCOM). USTRANSCOM (USTRANSCOM/J6-OP MILSATCOM Resource Planner will submit Satellite Access Requests and DAMA waivers.

(3) Ground-based UHF, VHF, HF, and SATCOM radios will be provided by units as tasked by the 618 TACC. Airborne SATCOM equipment and personnel will be provided by the deployed units. Auckland Radio and McMurdo Station will be used for HF flight following. Monitoring stations are available at Christchurch Flight Operations Christchurch, NZ.

(4) Communications will be via non-secure means to the maximum extent

possible. When required for mission accomplished, secure communications will be accomplished according to Annex K of this documents and appropriate DOD and USAF policy.

6. Reports. See Annex R.

Annexes:

- A – Tasked Organizations.
- C – Operations.
- D – Logistics.
- E – Personnel.
- F – Public Affairs.
- H – Meteorological and Oceanographic Services.
- J – Command Relationships.
- K – Command, Control, Communications and Computer Systems.
- M – Geospatial Information and Services
- Q – Medical.
- R – Reports.
- Y – Safety.
- Z – Distribution.

STANLEY T. KRESGE
Lieutenant General, USAF
Commander, JTF-Support Forces Antarctica

OFFICIAL:

PAUL R. SHEPPARD
Colonel, USAF
Deputy Commander, JTF-Support Forces Antarctica