

ANNEX C TO JTF-SFA OPORD DEEP FREEZE
OPERATIONS

OPR: JTF-SFA/J3

- REFERENCES:
- (a) AFI 11-202 Vol 3, *General Flight Rules*
 - (b) AFI 48-123, *Medical Examinations and Standards*
 - (c) AFI 11-2C-17 Vol 3, *C-17 Operations Procedures*
 - (d) AFI 11-2C-130 Vol 3, *C-130 Operations Procedures*
 - (e) AFI 24-238, *In-Transit Visibility*
 - (f) AMCI 10-202 Vol 1, *AMC Command and Control Operations*
 - (g) AMCI 11-208, *Tanker/Airlift Operations*
 - (h) AMCR 55-37, *Air Operations Security*
 - (i) Engineering Technical Letter (ETL) 02-16
 - (j) CJCS EXORD/312225ZMAR05
 - (k) AFDD-2, *Air Force Doctrine Document, Operations and Organization*
 - (l) PACAFI 10-2101, *Pacific Air Mobility Operations*

1. General.

- a. Purpose. Support the NSF with C-17 airlift from Christchurch IAP, New Zealand (NZ) to McMurdo Station, Antarctica and LC-130 airlift from McMurdo Station to South Pole Station and designated Scientific Remote Camps, during the Austral Summer in Antarctica. Coordinate sealift and direct icebreaker operations to ensure bulk fuel, container ship supply, and retrograde operations are successfully completed.
- b. Mission. Commander, Joint Task Force Support Forces Antarctica, provides operations and logistics support to the USAP consistent with the Antarctic Treaty of 1959 and Presidential Directive 6646 to maintain an active and influential presence in Antarctica.
- c. Theater. CDRUSPACOM has designated Support Forces Antarctica a standing Joint Task Force, Headquartered from 13 AF, seasonally operating from Christchurch IAP, NZ and McMurdo Station Antarctica. The 304 EAS (C-17 Expeditionary Airlift Squadron) will operate in place at Christchurch for completion of the specified operation (Phases I, II, and IV). The 139 EAS (LC-130 Expeditionary Airlift Squadron) will operate in place at McMurdo Station for Phase II and IV operations. An LC-130 maintenance support detachment will be maintained at Christchurch to conduct aircraft isochronal depot maintenance and aircraft wash. Routine Rotation of Forces is authorized. Specifically, Air Crew, Aircraft Maintenance, Support personnel and SFA staff rotations will be managed to economize efficient use of program funding. Mission requirements take precedence. Coordinate all rotations with DCJTF-SFA. See Annex J for Command Relationships.

- d. Tasking. Seasonal tasking is established via the Global Force Management (GFM) process. Those forces not mentioned in the GFM are established via the standing CJCS EXORD. After review by the Joint Staff, SECDEF directs CDRUSPACOM to conduct support operations.

2. Concept of Operations. PACOM establishes Joint Task Force (JTF) Support Forces Antarctica (SFA). The 13 AF/CC will become the Commander JTF-SFA (CJTF-SFA). The CJTF-SFA exercises OPCON or TACON over attached/assigned/dedicated ODF forces through the DCJTF-SFA. The DCJTF-SFA deploys to Christchurch IAP, NZ and McMurdo Station, Antarctica, to execute the ODF mission. The DCJTF-SFA dispatches an ODF ADVON team to stand up operations for mission execution of C-17 missions from Christchurch IAP NZ to McMurdo Station, Antarctica during Phase I and for the standup of operations to support Phase II. AMC will provide a Mission Support Team (MST) and Partial Mission Support Kit (PMSK) to sustain extended C-17 operations at Christchurch IAP, NZ. ODF aircraft flight missions will operate IAW AFI 11-2MDS Volumes.

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 three to five C-17 missions in mid August to Pegasus Field to prepare McMurdo Station's Ice Runway for main operations beginning in late September (C-17) and late October (LC-130s). End-state for this phase is ADVON/preparing operational airfields at McMurdo Station for the C-17 and up to 9 x LC-130s.

b. Phase II: Airlift Resupply Operations. Main body flight operations commence late September for the C-17 and late October for the LC-130s. 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) typically between McMurdo, South Pole Station, and outlying camps throughout Antarctica. Up to two C-17ERs based at Christchurch will fly missions as required each week. LC-130s based at McMurdo Station fly multiple sorties every day, with reduced sortie rates on weekends. End-state for this phase is:

1) Deep field put-ins, re-supply, and pull-outs of all austral inland summer camps.

2) 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.

1) JTF-SFA monitors icebreaking operations to ensure the NSF contracted icebreaker (with USCG assets on standby) cuts an adequate channel through the annual sea ice for navigation in and out of McMurdo Station. MSC contracts a tanker to deliver fuel and a naval cargo vessel to transfer supplies to/from McMurdo Station. Navy Cargo Handling Battalion 1 (NCHB-1) performs cargo ship loading duties at Port Hueneme, CA, provides personnel for line handling training at McMurdo station prior to ship operations, and offloads the ship at Ice Pier at McMurdo Station. End-state for this phase is safe entry,

station refueling, cargo offload, and departure of MSC contract vessels.

2) Ship to shore communications will be executed through the JTF-SFA Ship Officer's office via radio or land-line. The SFA Ship Ops Officer will report to DCJTF regarding all ODF sealift operations/logistics and coordinate between USCG, MSC vessels, and the NSF Station Manager. The USCG may also have a representative to assist DCJTF-SFA with USCG icebreaker coordination/operations. The Commander Sea Logistics Pacific (COMSEALOGPAC) Military Sealift Command (MSC) will inform the SFA Ship Operations Officer at McMurdo and MSC vessels on sealift operations and logistics. The DCJTF-SFA will ensure all requirements are supported (i.e. line-handlers will need to be identified and trained beforehand to ensure consistency of support and safety on the ice pier).

d. Phase IV: Redeployment. All deployed forces return to home station. Redeployment begins after last LC-130 mission. C-17 aircraft carry NSF cargo to Christchurch for NSF redeployment. End-state for this phase is all DoD personnel and equipment safely returned to home station and NSF personnel and equipment returned to Christchurch to await NSF-contracted transportation.

3. Conduct of Operations. Military airlift support consists of USAF LC-130, C-17, and Royal New Zealand AF (RNZAF) C-130 aircraft, and 757 aircraft as required. RNZAF aircraft operate under agreement with NSF.

a. Waiver Protocol. All aircraft waiver requests will be forwarded through the 13 AEG/CC to the DCJTF-SFA. If necessary the 613 AOC/AMD will route waivers as required to facilitate communication channels. The DCJTF-SFA will process requests according to applicable AFI waiver criteria and ensure coordination/approval through applicable aircraft subject matter experts.

1) LC-130 waiver requests will originate with the 139AES/CC and forwarded through the 13AEG/CC to the DCJTF-SFA (via 613 AOC/AMD). The DCJTF-SFA will consult/forward waiver requests through ANG/109 AW for waiver approvals. 109 AW will forward waivers requiring higher headquarters coordination to NGB/A4, 18AF, or HQ AMC, as appropriate for approval. HQ PACAF/A3TV or designated representatives may provide assistance, command guidance, on-site or remote waiver authority, and crew augmentation (in their primary MDS) through 613 AOC/AMD 24-hour communications.

2) C-17 waivers will be forwarded to 18AF or HQ AMC for approval. HQ AMC/A3V or designated representatives will provide C-17 assistance and command guidance through 618th Tanker Airlift Control Center (618 TACC) 24-hour communications. Approved waivers will be forwarded to the JTF-SFA STAFF and 613 AOC/AMD Senior Director.

b. Authenticators. IAW current directives or as directed by CJTF-SFA.

c. Anti-hijacking Procedures. IAW DoD and FAA directives and applicable service regulations and instructions.

d. New Zealand Quarantine and Customs Requirements. Aircrews will comply with the AMC Border Clearance and Foreign Clearance Guide quarantine and customs requirements. Deploying organizations will brief procedures for missions returning from McMurdo.

e. Individual Equipment. Military members may acquire extreme cold weather (ECW) clothing via Christchurch USAP Clothing Distribution Center. LC-130 crews will receive ECW clothing IAW AFI 11-2C-130V3, Chapter 24. C-17 aircrew will receive ECW gear IAW established procedures.

f. Aircrew Requirements.

1) The 304 EAS/CC will determine C-17 crew ratios/crew complement and will make provisions for sustained operations and Duty Not Including Flying (DNIF). Aircrew members will be ICE certified IAW AFMAN 11-2C-17v1 and local unit guidance.

2) 139 EAS aircrews are mission qualified. LC-130 aircraft tasking will be directed IAW the JTF-SFA ODF DEPORD.

g. Airfield Requirements.

McMurdo area airfields will have both precision and non precision NAVAIDs available for flight checks prior to Phase II operations. At a minimum a non-precision approach to the primary C-17/LC-130 runway/skiway and a crosswind non-precision approach to either the primary or secondary McMurdo airfields are required. Additionally, non-precision IFR ARA approaches to the primary and secondary airfields will be available during LC-130 operations.

h. CONFERENCE HOTEL Requirements. The 304EAS/139EAS, in coordination with the 613 AOC/AMD, will utilize the CONFERENCE HOTEL checklist for airborne emergencies per AFI guidance. Checklist should also identify/reflect primary points-of-contacts with current frequencies/phone numbers. A CONFERENCE HOTEL exercise will be conducted within 10-days of employment to ensure connectivity.

4. Operational Constraints.

a. Airlift operations at McMurdo Station, Antarctica, should not be conducted during hours of official darkness unless NVG operations are approved prior to mission execution by CJTF.

b. Consult the appropriate DOD Flight Information Publications and Foreign Clearance Guide for operational restrictions.

c. Point of Safe Return (PSR). All aircraft must compute a Point of Safe Return (PSR), due to rapidly changing weather and field conditions at McMurdo Station Antarctica and lack of a suitable alternate that dictates the need to return to Christchurch IAP, NZ or an alternate field in NZ.

5. Operational Guidance.

a. General.

- 1) 304 EAS Missions are authorized over flight of Pago Pago (NSTU) on deployment and redeployment, if fuel permits, with coordination of 618 TACC.
- 2) Special Orders. See Annex E.
- 3) Space-required DVs, as defined by NSF policy, will be identified on the passenger manifest. Normal courtesy and consideration will be afforded.
- 4) All message traffic will include the flag words "Operation DEEP FREEZE."
- 5) Contract quarters will be used at Christchurch for personnel identified in this OPORD.
- 6) Government messing is not available at Christchurch.

b. Scheduling. 618 TACC will schedule all SAAM missions. Prior to departure from home station, 618 TACC will enter the positioning and de-positioning legs into GDSS. The 613 AOC/AMD will support all IFM and flight following requirements during their deployment from home station departure through arrival at Christchurch, New Zealand and redeployment flights departing Christchurch, New Zealand, and returning to CONUS home station. This includes any swap-out missions as well. Follow-on missions will be scheduled as required in coordination with the 304 EAS/CC and 13 AEG/CC. All SAAM mission deviations will be reported IAW Air Force requirements.

- 1) Use only one SAAM number per MDS for CONUS deployment/redeployment missions.
- 2) For employment missions, sortie numbers to be used in the eighth and ninth character position of the AMC mission number should reflect actual McMurdo shuttle numbers. Missions originating at Christchurch and shuttling to McMurdo should run in sequence, starting with "01." Employment mission call signs, "ICE XX", will then reflect and be congruent with mission numbers, eliminating confusion with headquarters and our user.

c. LC-130 Deployment/Redeployment. The 613 AOC/AMD will provide command and control and Integrated Flight Management and logistics recovery support for the LC-130 deployment missions from Stratton ANGB, Scotia NY to Christchurch, NZ and back, IAW AFDD-2.

- 1) AMD Flight Managers will use the Integrated Management Tool/Global Decision Support System to dispatch deployment sorties.

- 2) The projected route of flight will be Stratton ANGB – Travis AFB – JB Pearl Harbor-Hickam – Pago Pago – Christchurch.
- 3) The 109 AW will procure the required diplomatic clearances for New Zealand, and the 613 AOC/AMD will procure the PPRs when needed.
- 4) The AMD will assign a PACAF Mission Number LY33XXXXXJJJ for the deployment missions and the 109AW will use the Call Sign “SKIER.”
- 5) Aircrews redeploying from the ice are not required to upload COMSEC prior to departing NZ. However, they will pick up their COMSEC packages from the 15 AW Command Post upon arrival at JB Pearl Harbor-Hickam, HI, prior to departing for the CONUS.

8. Weather Support. See Annex H.

9. Risk Assessment. EAS/CCs will be responsible for ORM assessments for operations to, from and within Antarctica. EAS/CCs will use the Go/No-Go Decision Matrix and ORM worksheets to assess the risk. EAS/CCs will provide 13 AEG/CC with Go/No-Go Decision Matrix and ORM worksheets.

Appendixes.

- 9 – Multimedia and Combat Camera Documentation.
- 15 – Force Protection.
- 17 – Ship Operations.
- 18 – Search, Rescue, and Survival Operations.
- 19 – LC-130 Polar Airdrop Operations.
- 20 – C-17 Emergency Winter Airdrop.
- 21 – C-17 Night Vision Goggle Operations

///signed///
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APPENDIX 9 TO ANNEX C TO JTF-SFA OPORD DEEP FREEZE
MUTLIMEDIA AND COMBAT CAMERA DOCUMENTATION
OPR: JTF-SFA/J6

1. Purpose. This Appendix contains information for Combat Camera support. Multimedia personnel will comply with all requirements in AMC OMNIBUS OPLAN and this OPORD, as appropriate.

2. Execution.

a. Deploy with all resources specified by UTC. JTF-SFA/PA will coordinate Multimedia and Combat Camera requirements with US Pacific Command, Air Mobility Command, and other organization as appropriate. Combat Camera personnel should operate as self-sufficiently as possible.

b. Provide a phone or radio status report to the 13 AEG/CC and JTF-SFA/PA prior to execution and upon any deviation from originally scheduled itinerary. Upon arrival at destination, report to the 13 AEG/CC and JTF-SFA/PA daily until directed otherwise by the 13 AEG/CC and/or JTF-SFA/PA. Report team location, phone or radio identification, operational capability status, anticipated changes to mission or itinerary, and any significant concerns anticipated or encountered. Submit an after action report to JTF-SFA/PA within ten days of return to home station.

c. Supplemental requirements.

1) Still photography. Combat Camera personnel will deliver still imagery with VIRINs and detailed captions to JTF-SFA/PA no later than 14 days unless directed otherwise after return to home station. Additionally, combat camera personnel are required to transmit imagery to the Defense Imagery Management Operations Center (DIMOC). Imagery must be transmitted to the DIMOC by the most expeditious means possible.

2) Videography. Combat Camera personnel will deliver an edited video product to JTF-SFA /PA no later than 14 days unless directed otherwise after return to home station. Send all imagery to 13 AF/PA@hickam.af.mil. Also, send all raw video footage by the most expeditious means to the DIMOC.

APPENDIX 15 TO ANNEX C TO JTF-SFA OPORD DEEP FREEZE

FORCE PROTECTION

OPR: JTF-SFA/J7

- REFERENCES:
- (a). DoD I 2000.16, DoD Antiterrorism Standards, 20 Oct 06
 - (b). DoD D 2000.12, DoD Antiterrorism Program, 18 Aug 03
 - (c). DoD 2000.12-H, DoD Antiterrorism Handbook, 9 Feb 04
 - (d). AFI 10-245, Air Force Antiterrorism Standards, 21 Jun 02
 - (e). AFI 31-101, Air Force Installation Security Program, 1 Mar 03
 - (f). USPACOM OPORD 5050-08, Antiterrorism Ops Order, 18 Apr 08
 - (g). MOA between USPACOM and Chief of Mission, American Embassy, Wellington, 28 Nov 00

1. Situation. This appendix provides DoD Force Protection (FP) guidance during execution of Operation DEEP FREEZE. JTF-SFA/J7 and USPACOM/J34 will monitor FP conditions and requirements for Antarctica and New Zealand.

2. Mission. Refer to Basic Order.

3. Execution.

a. Concept of Operations.

1). General.

a) Per USPACOM / DOS Memorandum of Agreement dated April 1999, CDRUSPACOM is responsible for FP of forces assigned to, or transiting New Zealand, which applies to all forces supporting Operation DEEP FREEZE. Support Forces Antarctica (SFA) will coordinate with the Regional Security Officer (RSO) for protection of in-transit crews and assets as required. Commanders must ensure personnel deploying in support of this operation are knowledgeable of current threat reporting and follow the applicable FP measures.

b) Military maneuvers and testing of weapons is prohibited. New Zealand law and the non availability of a Status of Forces Agreement (SOFA) restrict visiting military personnel from bearing arms in the performance of their duties.

2). Tasks.

a) Commander, Support Forces Antarctica (CSFA) will ensure that at least one designated individual receives Antiterrorism/Force Protection (AT/FP) Level II training and is appointed in writing as the Force Protection Officer for ODF. This person will be responsible for the FP plans for flight line security and all permanently assigned personnel and assets. This will also include oversight of FP issues at the seaport during Military Sealift Command (MSC) vessel operations.

b) Component Commands will ensure all deploying personnel receive Level I AT Awareness training within 12 months of travel, complete an individual or group AT

plan prepared IAW PACOM policy, and receive an AOR specific location brief within 90 days of travel. CJTF will ensure deploying units verify that all DoD personnel receive the Level I brief within 12 months of travel. If required, deploying personnel must complete SERE B training within 24 months of travel. Additionally, ISOPREP data should be updated and verified in PRMS.

c) Component Commands will place additional emphasis on operational security, and movement of personnel (i.e. no passing of times, locations, specific units, or missions) while utilizing unsecured means of communication.

d) Component Commands will ensure personnel practice protective measures (i.e. traveling in groups of two or more, low profile, observant). The threat is low but vigilance is required.

4. Logistics. See Annex D.

5. Command and Control. See Annex J.

1. Purpose. This Appendix contains information for Ship support. Maritime participants will comply with all requirements in this OPORD, as appropriate.

2. Execution.

a. In order to facilitate effective ODF maritime operations, an expert meeting the job experience/description below is required to join the JTF-SFA staff as the Ship Operations Officer prior to commencement of Phase III:

- 1) Advise NSF Station Manager and DCJTF-SFA on MSC operations (cargo and petroleum vessel).
- 2) Maintain communications and current information with MSC assets.
- 3) Liaise between maritime theater sealift players, JTF-SFA and NSF.
- 4) Coordinate logistics for MSC ships in the McMurdo area.
- 5) Provide MSC C2 oversight and reporting.
- 6) Coordinate MSC ship transit plan with JTF-SFA in the JOA.
- 7) Provide operational guidance and direction to MSC ships regarding arrival fast ice (the ice edge), escort, arrival pier, and departure.
- 8) Monitor daily MSC ship positions and keep ALCON advised.
- 9) Coordinate with NCHB-1 regarding MSC ship's cargo handling gear capabilities, capacities, and limitations.
- 10) Liaison between MSC ships and shore on matters pertaining to operational and logistical issues/requirements.
- 11) Monitor MSC performance ISO ODF (contractual oversight).
- 12) Record all information available on MSC-related discrepancies/damage associated with the operation should any occur.
- 13) Mediate any disputes that arise between MSC ships and shore.
- 14) Maintain situational awareness and communications with inbound/outbound MSC ships.
- 15) Arrange for MSC ships communications while alongside the ice pier.

- 16) Prepare for the transfer of MSC personnel to and from ships.
- 17) Meet with MSC ship masters and arrange for minimum twice daily support.
- 18) Serve as ship's agent for MSC vessels docking at McMurdo.

b. The JTF-SFA Ship Ops Officer (McMurdo) will not perform/be responsible for the following duties:

- 1) Advise, liaise or provide any type of oversight or support to non-DoD contract icebreakers.
- 2) Conduct pier inspections.
- 3) Coordinate, train and supervise line handlers for all docking evolutions at the ice pier.
- 4) Set up james-way on pier.
- 5) Inspect ice and approach to pier.

c. Deploy with all resources specified by the following schedule:

2011-12 ODF Ship Schedule (Approximate Dates)	
Date	Event
28 Dec 2011	Cargo Vessel Onload Port Hueneme
4 Jan 2012	Cargo Vessel Onload Complete Port Hueneme/Departs CONUS
10 Jan 2012	Icebreaker arrives McMurdo Sound
14 Jan 2012	Icebreaker completes initial break-in to McMurdo
23 Jan 2012	Cargo Vessel Arrives Lyttleton for Onload
25 Jan 2012	Cargo Vessel Onload Complete Lyttleton, NZ/Departs NZ
26 Jan 2012	MSC Tanker arrives McMurdo Sound
27 Jan 2012	MSC Tanker escorted to McMurdo Ice Pier
27-29 Jan 2012	Tanker offloads ~ six million gals of fuel to station
30 Jan 2012	Tanker escorted from McMurdo Station
29 Jan – 3 Feb 2012	Nathanial B. Palmer arrives McMurdo Station
2 Feb 2012	Cargo ship arrives McMurdo Sound
3 Feb 2012	Cargo ship escorted to McMurdo Ice Pier
3-9 Feb 2012	Cargo ship offloaded
10 Feb 2012	Cargo ship escorted from McMurdo Station/Icebreaker Departs

Notes - MSC coordinates MSC vessel arrivals as required.

d. Supplemental requirements.

1) NCHB-1 embarkation: Port Hueneme, CA requires one (1) senior hatch captain from 28 Dec thru 4 Jan and four (4) documentation clerks from 29 Dec thru 4 Jan. Pier Line Handling training requires one (1) senior NCO and one (1) NCO to train McMurdo personnel on line handling procedures prior to ship arrival/ice pier operations on 10 Jan. Debarkation: McMurdo Station Antarctica requires fifty-four (54) team alpha members to provide vessel offloading and loading in two (2) twelve-hour shifts with a minimum of three (3) hatch gangs per shift. Request five (5) Team Bravo Members to provide container stuffing, blocking, bracing, material handling equipment (MHE) operators, and hatch checker on the backload. Request five (5) members be licensed to operate material handling equipment up to 10K capacity. A total of fifty-nine (59) personnel from NCHB-1 are required to deploy. NCHB-1 will arrive McMurdo Station Antarctica on 29 Jan and depart McMurdo Station Antarctica on/or about 10 Feb.

2) The NSF Prime Contractor will ticket all NCHB-1 personnel to depart origin on 25 Jan, arriving Christchurch, New Zealand on 27 Jan in order to meet military transport to arrive McMurdo Station, Antarctica on 29 Jan, with open-end individual return tickets for each person. Please forward NSF Prime Contractor POC a copy of NCHB-1 Roster of names of personnel deploying, and ECW Clothing Requirement Form NLT 22 Sep.

APPENDIX 18 TO ANNEX C TO JTF-SFA OPORD DEEP FREEZE
SEARCH, RESCUE, AND SURVIVAL OPERATIONS

REFERENCES: (a) International Aeronautical and Maritime Search and Rescue Manual
(b) DODD 3003.01 DoD Support to Civil Search and Rescue (SAR) dated 20 January 2006
(c) Joint Publication 3-50 dated 5 January 2007

1. Situation. Joint Task Force Support Forces Antarctica (JTF-SFA) will conduct airlift and maritime operations in support of the National Science Foundation (NSF) to re-supply Antarctic research stations. Re-supply will consist of numerous flights and maritime operations within the Antarctic region over a six-month period. Due to the nature of aviation and maritime operations, there is a potential for JTF personnel to become isolated in the Antarctic region. In addition, other governments and nongovernmental organizations operating in the Antarctic region may have personnel isolated requiring Civil SAR. IAW references, JTF-SFA is obligated to support such Civil SAR events on a non-interfering basis.
2. Mission. JTF-SFA will coordinate PR operations in support of Operation DEEP FREEZE and support requests for DoD support to Civil SAR.
3. Purpose. To outline a plan for Personnel Recovery and DoD support to Civil SAR in the Antarctic Region during Operation DEEP FREEZE.
4. Definitions.
 - a. Personnel Recovery (PR). The sum of military, diplomatic, and civil efforts to prepare for and execute the recovery and reintegration of isolated personnel.
 - b. Civil Search and Rescue. Search operations, rescue operations, and associated civilian services provided to assist persons and property in potential or actual distress in a non-hostile environment.
 - c. Personnel Recovery Coordination Center (PRCC). The primary joint force component organization responsible for coordinating and controlling component personnel recovery missions.
 - d. Rescue Coordination Center (RCC). Is an operational facility responsible for promoting efficient organization of SAR services and for coordinating the conduct of SAR operations within a Search and Rescue Region (SRR).
5. Execution.
 - a. Concept of Operations
 - 1) PR of JTF-SFA forces. JTF-SFA will coordinate and conduct PR in support of its own operations. In the event of a PR incident, the primary course of action is recovery

using JTF organic forces. When able, JTF forces will be postured to mutually support and recover other JTF forces. Additionally, other governments and nongovernmental organization operating in the Antarctic region have some capability to locate and recover isolated JTF forces. In the event a JTF PR incident exceeds organic JTF capability, JTF-SFA will request support from other governments and non-government agencies operating in the Antarctic Region. JTF-SFA will coordinate directly with the appropriate civil RCC or other agencies to request support for recovery. 13 AF PRCC will monitor JTF-SFA PR events and coordinate additional support as required.

2) JTF-SFA support to Civil SAR within Antarctic Region. JTF-SFA will support requests for DoD support to Civil SAR, in coordination with the National Science Foundation, on a not to interfere basis. Civil RCCs may contact 13AF AEG directly to request support to civil SAR. 13AF AEG will coordinate with NSF and notify 13AF PRCC

b. Tasks.

1) 13 AEG.

- a) Plan, coordinate and conduct PR in support of Operation DEEP FREEZE.
- b) Establish a communications plan, detailing how JTF forces will report an isolating event (i.e. HF radio, IRIDIUM phone) and provide their location.
- c) Be prepared to provide support to isolated JTF personnel in the event recovery is significantly delayed.
- d) Report PR incidents to appropriate civil RCC and 13 AF PRCC.
- e) Maintain situational awareness of other than JTF-SFA recovery and medical capability within Antarctic region.
- f) Employ forces to provide mutual support and self-recovery in the event of a PR incident whenever possible.
- g) Coordinate with civil RCC's and the 13 AF PRCC to request support when a PR incident exceeds JTF organic capability.
- h) In coordination with the NSF, provide DoD support to civil SAR on a not to interfere basis IAW reference (b).

i) Notify NSF and 13AF/PRCC of requests for support to Civil SAR.

2) 13 AF PRCC.

- a) Monitor JTF-SFA PR and support to civil SAR events.

- b) Coordinate additional support as required.
- 3) 304 EAS.
- a) Be prepared to report PR incidents IAW JTF-SFA PR communications plan.
 - b) Ensure aircrews have formal SERE training and are equipped as appropriate for employment in the Antarctic region.
- 4) 139 EAS.
- a) Be prepared to report PR incidents IAW JTF-SFA PR communications plan.
 - b) Ensure aircrews have formal SERE training and are equipped as appropriate for employment in the Antarctic region.
- 5) TRANSCOM, Maritime Support Command.
- a) Be prepared to reposition vessels to support JTF-SFA PR incidents or requests for DoD support to civil SAR.
 - b) Report PR incidents involving DoD maritime forces supporting Operation DEEP FREEZE to 13 AF and PCC.
- 6) USCG.
- a) Be prepared to reposition vessels operating in direct support of JTF-SFA to support PR incidents or civil SAR.

Figure 1 to Appendix 18, Annex C, JTF-SFA OPORD DEEP FREEZE
 Antarctic JTF-SFA Personnel Recovery SAR Wire Diagram – OPR JTF-SFA J3:

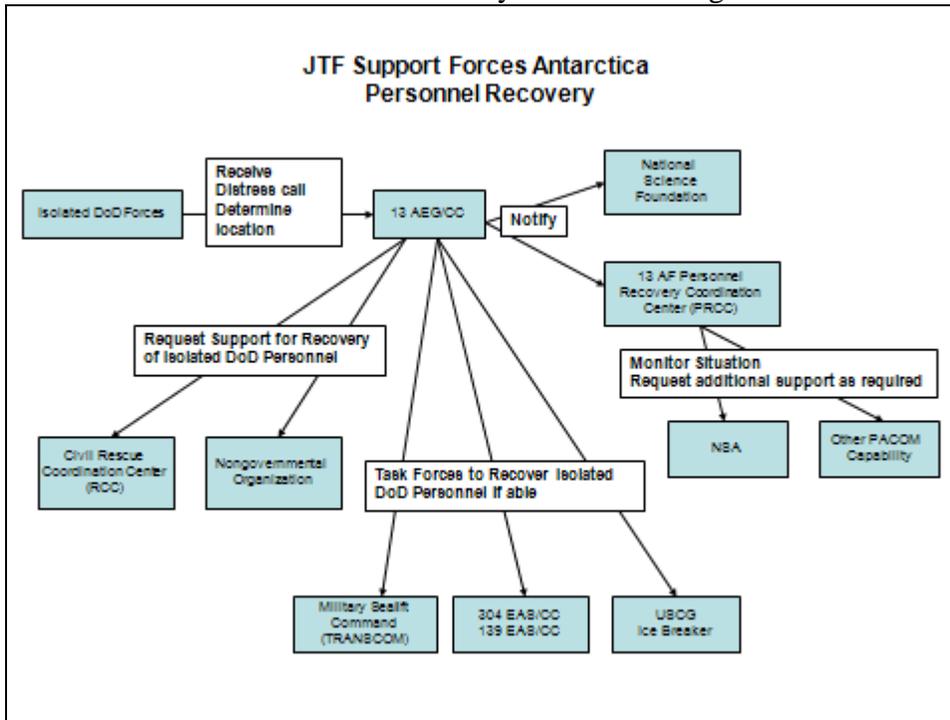
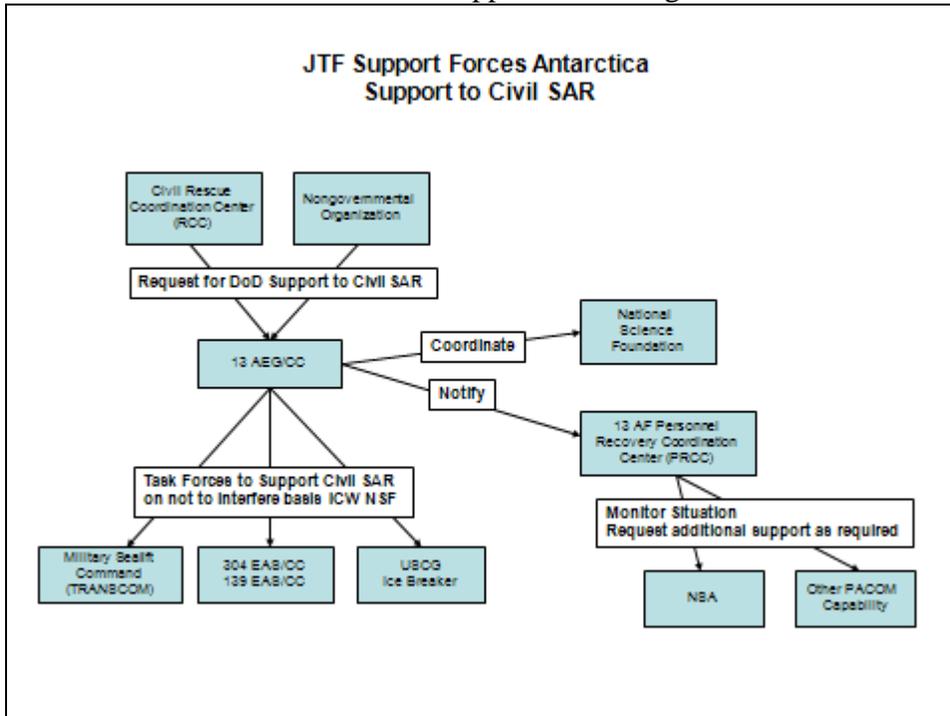


Figure 2 to Appendix 18, Annex C, JTF-SFA OPORD DEEP FREEZE
 Antarctic JTF-SFA Civilian SAR Support Wire Diagram – OPR JTF-SFA J3:



APPENDIX 19 TO ANNEX C TO JTF-SFA OPORD DEEP FREEZE

LC-130 POLAR AIRDROP OPERATIONS

OPR: JTF/J3

- REFERENCES:
- (a) AFI 11-2C-130V3 C-130 Operations Procedures
 - (b) AFI 13-217, Drop Zone and Landing Zone Operations
 - (c) T.O. 1C-130-(L)-1 CH 8, LC-130 Technical Order

1. General.

- a. Situation. This appendix provides operational and logistical guidance for execution of LC-130 supply airdrops in support of NSF missions on the continent of Antarctica. Airdrops are staged out of McMurdo Station and require extensive and careful coordination between multiple agencies to ensure a safe and effective airdrop and recovery of supplies. Due to the austere and remote environment in Antarctica, it is often necessary to drop to unmarked, non-surveyed Drop Zones without a DZCO or reception party present.
- b. Mission. Utilize an LC-130 to fly an airdrop mission to various locations on the Antarctic continent to support NSF objectives or provide emergency supplies to a stranded aircraft utilizing either container delivery system or door bundles.
- c. Tasking. Airdrop tasking will be IAW Annex C to JTF-SFA OPORD DEEP FREEZE.

2. Concept of Operations. LC-130 Polar Airdrop is a mid or high-level route profile, to a Ski ARA run-in, then to a CDS/door bundle airdrop. Polar drop zones are mission specific, seasonal, remote sites that change on a yearly basis. The drop will be accomplished in an environment requiring special consideration of weather and a lack of ground references. The aircrew will be Polar Airdrop qualified. Airdrops will only be accomplished by aircraft equipped with an operational APN-241 Low Power Color Radar, Self Contained Navigational System (SCNS), and radar altimeter.

3. Conduct of Operations. Crews will gather all information available concerning the drop zone (e.g., sketch/drawing of drop zone, exact coordinates, camp locations, and any man-made or natural obstructions). Charts will need to be brought from outside the polar theater as their availability at the FOB may be limited.

- a. Airdrop crews will confirm airdrop location/coordinates with the USAP Fixed Wing Coordinator prior to mission execution.
- b. LC-130 aircrews will show four hours prior to takeoff in order to accommodate load time as well as in-depth mission planning and coordination.
- c. LC-130 Polar Airdrop Parachutes. All parachutes packed by or under supervision of RNZAF riggers will be identified for Breakaway / Non-breakaway on a piece of tape placed on the parachute bag and or a tag tied to the bag. The rigger will also sign and date the tape and or the tag.
- d. The new Low Cost Airdrop Systems (LCADS) will be implemented on a test basis for LC-130s until fully approved by the JTF-SFA/J4 for operational use in ultra cold temperatures. Loads dropped using LCADS will be approved in advance by JTF-SFA/J4.

e. 139EAS aircrew will use Polar Airdrop procedures defined below. Pilots, Navigators and Flight Engineers use standard CDS airdrop checklists. Loadmasters will use the CDS checklist located in T.O. 1C-130-(L)-1 CH 8. CDS airdrop checklists begin with the Pre-slowdown checklist. Polar Airdrop operations are accomplished in an environment considered to be tactical threat free. The Combat Entry and the Combat Exit checklists may be referenced, but are not normally required for safe and effective polar operations.

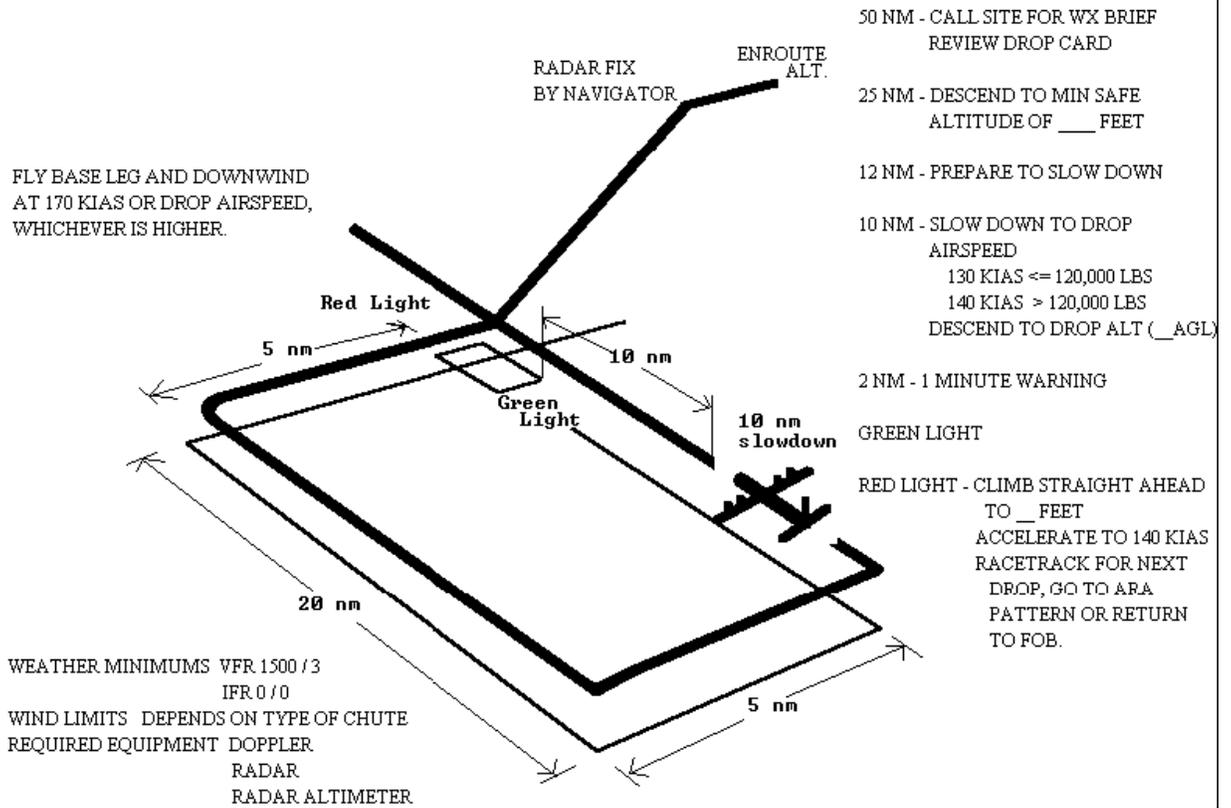
1) Airdrop Approach. The departure and flight should follow a normal ski mission profile. Prior to 50 NM, attempt to contact ground personnel (e.g., Combat Control Team, distressed aircraft, etc.) to get the most up-to-date drop zone weather, alignment, and other relevant information. Fly the ski enroute descent procedure. This should allow the crew to view the area in the vicinity of the drop zone without creating contrails at drop altitude. Fly a standard Ski ARA box pattern, starting over the drop zone. Timing, SCNS, and GPS should be used as a back-up. The crosswind, downwind, and base legs will be flown at 170 KIAS. The pre-slowdown checklist will be accomplished on downwind. Base should be flown 10-20 NM from the drop zone. Turn onto the extended drop zone axis to commence the run-in. The slowdown call will be made at 10 NM based on the radar/SCNS. The navigator will continue to direct the run-in until acquiring the drop zone visually. Once the drop zone is in sight, she/he will direct the aircraft to the release point. Due to potential lack of ground references the navigator should use all equipment available to maintain situational awareness.

2) Special Considerations. For airdrops near a camp or another aircraft, catabatic winds may be present. When drop wind direction/speed is a concern, crews are authorized to make a pass over the drop area at 500AGL (doors closed) to better judge winds affecting the CARP.

3) Airdrop Execution. The one minute warning will be based on radar distance, SCNS, or visual cues. The drop will be made visually or off coordinates. Escape and recovery will follow the normal airdrop or polar landing procedures, as required. Manual Gate cut is authorized for missions in Antarctica.

**FIGURE 1 TO APPENDIX 19 TO ANNEX C TO JTF-SFA OPOD DEEP FREEZE
LC-130 POLAR AIRDROP PROFILE OPR: JTF-SFA/J3**

FIGURE 1 : POLAR CDS AIRDROP PROFILE



APPENDIX 20 TO ANNEX C TO JTF-SFA OPORD DEEP FREEZE
C-17 EMERGENCY WINTER AIRDROP OPR: JTF-SFA/J3

REFERENCES: (a) AFI 11-2C-17 V3, C-17 Operations Procedures
(b) AFTTP 3-3.35A, Combat Aircraft Fundamentals – C-17
(c) AFI 13-217, Drop Zone and Landing Zone Operations

1. General.

a. Situation. This appendix provides operational and logistical guidance for execution of a mid-winter airdrop of emergency supplies in support of the NSF mission on the continent of Antarctica. Emergency winter airdrop operations are coordinated when airfields at McMurdo and South Pole Station are non-operational (late February through August) and an emergency supply requirement exists for the NSF. Operations during the dark, brutally cold Austral Winter in Antarctica requires extensive and careful coordination between multiple agencies to ensure a safe and effective airdrop and recovery of emergency supplies.

b. Mission. Utilize a USAF C-17ER to fly an emergency mid-winter airdrop mission to South Pole station or anywhere on the continent of Antarctica in support of NSF requirements. Emergency supplies can be airdropped from the C-17 utilizing any of the airdrop delivery systems (heavy equipment, container delivery system, dual row airdrop system, or door bundles).

c. Tasking. Emergency mid-winter tasking will be IAW Annex C to JTF-SFA OPORD DEEP FREEZE.

2. Concept of Operations: 1 Extended Range C-17 from the 62AW will depart Christchurch, refuel with a KC-10/KC-135 tanker (if required) or at McMurdo Station if Pegasus White ICE Runway is usable, fly to a specified drop zone on Antarctica, perform an airdrop of emergency supplies, and return to Christchurch. 62/446AW will provide an ice qualified airdrop mission commander, ice qualified airdrop aircrew, a maintenance mission support team, a maintenance mission support kit, life support personnel, life support equipment, and joint airdrop inspectors to sustain C-17 operations at Christchurch. Airdrop operations will operate IAW with AFI 11-2C-17 V3.

a. Phase 1: Deployment. C-17 deploys to Christchurch with mission support staff, aircrew, joint airdrop inspectors, life support, and maintenance team. KC-10/KC-135 tanker and aircrew will deploy to Christchurch (if required). The 613 AOC/AMD will support all IFM and flight following requirements during their deployment from home station departure through arrival at Christchurch, New Zealand and redeployment flights departing Christchurch, New Zealand, and returning to CONUS home station. This includes any swap-out missions as well. 613 AOC/AMD will ensure coordination with 618 TACC as required. End-state for this phase is SPAWAR weather/air traffic control support ready, Prime Contractor support ready, NSF support ready, validated drop zone survey, emergency supplies rigged for airdrop, C-17/KC-10/KC-135 aircrew ready, and C-17/KC-10/KC-135 aircraft ready for operations.

b. Phase 2: Emergency Airdrop Operations. C-17 will depart and recover to Christchurch.

KC-10/KC-135 will depart and recover to Christchurch. End-state for this phase is emergency supplies dropped on and recovered from the drop zone and aircraft safely recovered at Christchurch.

c. Phase 3: Redeployment. All deployed forces return to home station. End-state for this phase is all DoD personnel and equipment safely returned to home station.

3. Conduct of Operations.

a. Aircraft Waivers. All aircraft waivers will be forwarded IAW with JTF-SFA DEEP FREEZE OPOD. Flight duty period and tactical event duty waivers may be required in order to execute this mission. Delegation of an on-scene waiver authority to AFI 11-2C-17V3 Chapter 4, limited to mission execution, is recommended. Approved waivers will be forwarded to the JTF-SFA staff and the 613 AOC/AMD Senior Director.

b. Authenticators. IAW current directives or as directed by CJTF-SFA.

c. Anti-hijacking Procedures. IAW DoD and FAA directives and applicable service regulations and instructions.

d. New Zealand Quarantine and Customs Requirements. Aircrew will comply with AMC Border Clearance and Foreign Clearance Guide quarantine and customs requirements.

e. Individual Equipment. Aircrew will be issued Extreme Cold Weather (ECW) clothing as listed IAW established procedures.

f. Aircrew Requirements. The 304 EAS/CC will determine the crew composition strictly based upon mission requirements. All aircrew members will be highly qualified airdrop and ICE certified IAW AFMAN 11-217 V1. Additionally, pilots will be ICE AIRDROP certified prior to conducting emergency airdrop operations on Antarctica. C-17 crew ratios/crew complement will make provision for extended operations and Duty Not Including Flying (DNIF).

4. Operational Constraints:

a. Consult appropriate DoD Flight Information Publications and Foreign Clearance Guide for operational restrictions.

b. Point of Safe Return (PSR). Due to rapidly changing weather conditions on the continent and a lack of suitable alternates, aircraft must compute a Point of Safe Return (PSR) to Christchurch or an alternate field in NZ. Two points will be calculated if air refueling is planned (one prior and one after air refueling. The second point will be planned to ensure a “drop no later than time” is established in case of delays on the drop zone).

c. Approximate flight time for route of flight from Christchurch to South Pole back to Christchurch is 15 hours and would require a KC-10/KC-135 air refueling.

d. Maximum Airdrop Weight across the South Pole Drop Zone is 497,500 lbs due to 3 engine performance. (Assumptions: -28 deg C, 28.35 altimeter, 150 KIAS, 5 degree deck

angle, and drop altitude of 10,500 MSL).

e. Maximum airdrop weights for heavy equipment (HE)/dual row airdrop system (DRAS) is 90,000 lbs.

f. Maximum airdrop weight for container delivery system (CDS) is 88,000 lbs.

g. Drop Zone weather requirements: ceiling 3000 feet / visibility 5 miles from drop TOT +/- 1 hour.

h. Ideally, the Drop Zone axis will be aligned with a line of longitude to maximize the C-17 navigation systems capabilities. The South Pole Skiway provides the best Drop Zone for mid-winter operations and will facilitate recovery of material. However, the established South Pole Drop Zone is acceptable if the Skiway is unavailable.

i. Drop Zone markings will be, at a minimum, lighted burn barrels at the four corners of the Drop Zone and a lighted barrel on the Point of Impact (PI). Other suitable markings, pre-coordinated with the airdrop mission commander are acceptable. More markings are preferred.

j. Radio comms with the drop zone is required (Must receive drop clearance and weather information).

k. Cargo must be dropped in close proximity to recovery facilities to aid effective recovery of cargo. Extreme cold and dark conditions makes for challenging recovery environment.

l. Moon illumination should be considered if time permits. Full moon is the optimum for visibility.

5. Operational Guidance.

a. General.

1) All message traffic should include the flag words "Operation DEEP FREEZE – Emergency Midwinter Airdrop".

2) Contract quarters should be used at Christchurch for personnel identified in this OPOD.

3) Government messing is not available at Christchurch.

b. Scheduling. 618 TACC will schedule all SAAM missions. Prior to departure from home station, 618 TACC will cut positioning and deposition legs in addition to the active airdrop legs of the mission.

c. Tasks.

1) 62 AW is responsible for providing extended range C-17 aircraft.

2) AMC is responsible for tasking a KC-10/KC-135 tanker and aircrew for missions requiring air refueling.

- 3) The 613 AOC/AMD will support all IFM and flight following requirements during their deployment from home station departure through arrival at Christchurch, New Zealand and redeployment flights departing Christchurch, New Zealand, and returning to CONUS home station. This includes any swap-out missions as well.
- 4) 62/446AW is responsible for providing qualified ICE AIRDROP aircrew to accomplish airdrop operations.
- 5) 62/446 AW will provide maintenance support team / mission support kit for deployment.
- 6) 62 AW will provide life support personnel and equipment.
- 7) 62 AW will provide joint airdrop inspectors personnel and equipment.
- 8) SPAWAR will provide weather support, air traffic control, and navaid monitoring.
- 9) Prime Contractor will provide logistical support.
- 10) Prime Contractor/62 AW Tactics will provide validated drop zone survey.
- 11) Prime Contractor will provide Drop Zone Control Officer and drop zone communications support for designated drop zone.
- 12) Prime Contractor will coordinate the airdrop rigging of the emergency supplies.
- 13) Prime Contractor will be responsible for the recovery of supplies from the drop zone.

6. Weather Support: See Annex H

7. Risk Assessment.

- a. 304 EAS/CC will be responsible for ORM assessments for operations to, from, and within Antarctica. 304 EAS/CC will use Go/No Go Decision Matrix and ORM worksheets to assess the risk. 304 EAS/CC will provide 13 AEG/CC with Go/No Go Decision Matrix and ORM worksheets as required.

APPENDIX 21 TO ANNEX C TO JTF-SFA OPORD DEEP FREEZE

C-17 NIGHT VISION GOGGLE OPERATIONS

OPR: JTF-SFA/J3

- REFERENCES: (a) AFI 11-2C-17 V3, C-17 Operations Procedures
(b) AFTTP 3-3.35A, Combat Aircraft Fundamentals – C-17
(c) AFI 13-217, Drop Zone and Landing Zone Operations
(d) Engineering Technical Letter (ETL) 02-16
(e) AFI 11-202 Vol 3, General Flight Rules

1. General

a. Situation. This appendix provides operational and logistical guidance for C-17 Night Vision Goggle (NVG) Operations in support of the NSF mission on the continent of Antarctica during periods of darkness. This includes mid-winter medical and CASEVAC missions. NVG operations require extensive and careful coordination between multiple agencies to ensure mission safety and effectiveness.

b. Mission. Utilize a USAF C-17 to transport personnel and cargo to/from McMurdo Station during periods of darkness in support of NSF requirements. The utilization of NVGs permits a year-round capability for McMurdo and provides a valuable means to evacuate personnel or deliver emergency supplies during the Austral Winter (approximately 1 Mar to 21 Aug).

c. Tasking. Night operations requiring the use of NVGs will be IAW Annex C to JTF-SFA OPORD DEEP FREEZE.

2. Concept of Operations: 1 Extended Range C-17 from the 62d AW will depart Christchurch, deliver/load required personnel and cargo utilizing a runway outlined by High Intensity Retro-Reflective, Heliport/Runway Identification Markers (HIRRRIM) or similar approved device, then return to Christchurch. Dependent upon the mission profile, an air-to-air refueling (AAR) or a ground refuel at Pegasus, may be required. The 62d/446th AW will provide a WINFLY and ICE NVG certified mission commander, ICE certified aircrew, a maintenance mission support team, a maintenance mission support kit, life support personnel and life support equipment to sustain C-17 operations at Christchurch. Conduct of operations will be IAW with AFI 11-2C-17 V3.

a. Phase 1: Deployment. C-17 deploys to Christchurch with mission support staff, aircrew, life support and maintenance team. KC-10/KC-135 tanker and crew will deploy to Christchurch (if required). The 613 AOC/AMD will support all IFM and flight following requirements during their deployment from home station departure through arrival at Christchurch, New Zealand and redeployment flights departing Christchurch, New Zealand, and returning to CONUS home station. This includes any swap-out missions as well. End-state for this phase is SPAWAR weather/air traffic control support ready, Prime Contractor support ready, NSF support ready, Pegasus runway prepared and aircrew/aircraft ready for operations.

b. Phase 2: Operations. C-17 will depart and recover to Christchurch. KC-10/KC-135 will depart and recover to Christchurch (if required). End-state for this phase is required personnel/cargo delivered to destination and aircraft safely recovered at Christchurch.

- c. Phase 3: Redeployment. All deployed forces return to home station. End-state for this phase is all DoD personnel and equipment safely returned to home station.

3. Conduct of Operations.

- a. Waivers. All waivers will be forwarded IAW with JTF-SFA DEEP FREEZE OPOD. For night operations utilizing NVGs, the use of HIRIM to provide runway definition and landings with a NIL Surface Condition will need to be approved in accordance with AFI 11-202V3 and the ETL for the runway. Flight duty period and tactical event duty waivers may be required in order to execute this mission. Delegation of an on-scene waiver authority to AFI 11-2C-17V3 Chapter 4, limited to mission execution, is recommended. Approved waivers will be forwarded to the JTF-SFA staff and the 613 AOC/AMD Senior Director.
- b. Authenticators. IAW current directives or as directed by CJTF-SFA.
- c. Anti-hijacking Procedures. IAW DoD and FAA directives and applicable service regulations and instructions.
- d. New Zealand Quarantine and Customs Requirements. Aircrew will comply with AMC Border Clearance and Foreign Clearance Guide quarantine and customs requirements.
- e. Individual Equipment. Aircrew will be issued extreme cold weather (ECW) clothing IAW established procedures.
- f. Aircrew Requirements. The 304 EAS/CC will determine the crew composition strictly based upon mission requirements, maximizing the selection of NVG ICE certified pilots and WINFLY certified loadmasters. At a minimum, the mission/aircraft commander will be WINFLY and NVG ICE certified IAW AFMAN 11-217 V1. All aircrew members will be highly experienced using NVGs. Crew ratios/complement will make provisions for extended operations and Duty Not Including Flying (DNIF).

4. Operational Constraints:

- a. Consult appropriate DoD Flight Information Publications and Foreign Clearance Guide for operational restrictions.
- b. Point of Safe Return (PSR). Due to rapidly changing weather conditions on the continent and a lack of suitable alternates, aircraft must compute a Point of Safe Return (PSR) to Christchurch or an alternate field in NZ. Two points will be calculated if air refueling is planned (one prior and one after air refueling).
- c. Approximate flight time for route of flight from Christchurch to McMurdo and back to Christchurch is approximately 10.5 hours.
- d. Maximum Allowable Cargo Load (ACL) is dependent upon mission profile. For planning purposes, an ACL of 70K lbs negates the need for refuel at McMurdo or an AAR. If the task is a medical/casualty evacuation with cabin altitude restrictions, ACL may be

reduced and extensive coordination and planning is required.

e. McMurdo weather requirements: Established daylight PSR and minima guidance apply to NVG Operations. Minimum ceiling and visibility is 1500 ft/3 SM (ETA +/- 1 hr) with a fully functioning straight-in IAP approach, and runway end identifier lights or similar lead-in lighting. The maximum crosswind component limitation for landing is 15 knots. Due to the inherent degradation of NVG effectiveness in areas of precipitation, continuation past PSR is not permitted if observed or forecast weather includes continuous or heavy snow showers. Operations are permitted during periods of light snow (-SN).

f. HIRROM will be installed every 500 ft along the runway edge and must be inspected prior to use to ensure any contaminant that would decrease reflectivity is removed. Other suitable markings, pre-coordinated and approved by the Mission Commander, are acceptable.

5. Operational Guidance.

a. General.

- 1) All message traffic should include the flag words "Operation DEEP FREEZE".
- 2) Contract quarters should be used at Christchurch for personnel identified in this OPOD.
- 3) Government messing is not available at Christchurch.

b. Scheduling.

- 1) 618 TACC will schedule all SAAM missions. Prior to departure from home station, 618 TACC will input positioning and de-positioning legs in addition to the active legs of the mission.
- 2) Response times from mission validation and notification to execution and closure are dependent upon aircraft/aircrew availability and location, waiver approval and alert posture. Anticipated arrival times at Pegasus from notification for non-scheduled/emergency operations range from approximately 18 hrs (all assets in place at Christchurch) to 56 hrs (originating from Joint Base Lewis-McChord).

6. Tasks.

- a. 62 AW is responsible for providing extended range C-17 aircraft.
- b. 618 TACC is responsible for tasking a KC-10/KC-135 tanker and aircrew for missions that require AAR.
- c. The 613 AOC/AMD will support all IFM and flight following requirements during their deployment from home station departure through arrival at Christchurch, New Zealand and redeployment flights departing Christchurch, New Zealand, and returning to CONUS home station. This includes any swap-out missions as well.
- d. 62/446AW is responsible for providing qualified aircrew to accomplish the mission.

- e. 62/446 AW will provide maintenance support team / mission support kit for deployment.
- f. 62 AW will provide life support personnel and equipment.
- g. SPAWAR will provide weather support, air traffic control, and NAVAID monitoring.
- h. Prime Contractor will provide logistical support to include load preparation, passenger and ground handling support.
- i. Prime Contractor will install HIRRRIM and prepare the runway for operations.

7. Weather Support: See Annex H.

8. Risk Assessment: 304 EAS/CC will be responsible for ORM assessments for operations to, from, and within Antarctica. 304 EAS/CC will use Go/No Go Decision Matrix and ORM worksheets to assess the risk. 304 EAS/CC will provide 13 AEG/CC and 618 TACC with Go/No Go Decision Matrix and ORM worksheets as required.