

17 JANUARY 2003

Maintenance

PUBLICATION FOR DEICING OPERATIONS



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at:
<http://www.e-publishing.af.mil>

OPR: 89 MXG/MXMS
(1st Lt Rosalie Shomon)

Certified by: 89 MXG/CC
(Colonel David B. Lee)
Pages: 5
Distribution: F

This instruction establishes Andrews AFB policy and procedures for deicing and deicing fluid recovery for all aircraft on Andrews AFB. This instruction applies to all 89th Airlift Wing organizations, partner units, civilian contractors and all organizations that are responsible for aircraft deicing operations. All units are required to follow their supplemental regulations to ensure safe aircraft operations and environmental compliance.

1. General: Technical Order 42C-1-2, *Anti-icing Deicing & Defrosting of Parked Aircraft*, and specific aircraft technical orders, contain cold weather procedures, deicing procedures and adverse weather condition practices. The aircraft commander is the final authority for decisions regarding adequacy of deicing prior to flight.

2. Responsibilities. The maintenance unit representatives/contractor responsibilities are as follows:

2.1. Deice aircraft in accordance with (IAW) T.O. 42C-1-2.

2.2. Deice aircraft IAW environmental regulations and permits applicable to Andrews AFB operations. The discharge of aircraft deicing fluids to stormwater sewer systems or sanitary sewer systems is not authorized.

2.2.1. The general discharge permit for stormwater associated with industrial activities issued to Andrews AFB by the State of Maryland per 40 CFR 122.26 under the authority of the Clean Water Act prohibits the discharge of aircraft deicing compounds to the stormwater sewer. The permit further requires Andrews AFB to manage stormwater run-off in a manner that reduces pollutants in stormwater discharges from the site. In addition, the permit requires the development and implementation of a stormwater pollution prevention plan (SWPPP).

2.2.2. HQ USAF guidance *Aircraft and Airfield Deicing/Anti-icing Guidance for Pollution Prevention and Best Management Practices (P2/BMPs)*, 11 Nov 98, requires the implementation of

BMPs to reduce environmental impacts from aircraft deicing operations. In addition, the Andrews AFB SWPPP requires the implementation of all applicable best management practices (BMP) to reduce the discharge of deicing chemicals to the stormwater sewer system. To reduce discharge of aircraft deicing chemicals, BMPs shall be implemented by all organizations on Andrews AFB. BMPs include the following:

- 2.2.2.1. Reduce the number of sorties during icing conditions to the greatest extent possible.
 - 2.2.2.2. Park aircraft inside hangars to minimize icing as availability permits.
 - 2.2.2.3. Remove snow and ice via mechanical means.
 - 2.2.2.4. Contain and capture all deicer fluids prior to discharge reaching waterways.
 - 2.2.2.5. Recycle and/or dispose of spent deicing fluids according to environmental standards.
 - 2.2.2.6. Apply deicing materials using the most efficient application equipment and procedures.
 - 2.2.2.7. Train and supervise deicing personnel to minimize deicing fluids used.
 - 2.2.2.8. Collect data and maintain record data on deicing operations.
- 2.3. Maintenance units/contractors will perform the following:
- 2.3.1. Conduct annual deicing training for designated personnel. Training will include, but is not limited to, deicer vehicle and boom operation, servicing, manual removal of snow, application of deicing fluids and deicing fluid recovery procedures.
 - 2.3.2. Ensure all personnel wear appropriate personal protective equipment IAW regulations.
 - 2.3.3. Ensure assigned deicers are operational and serviced with deicing fluid. In addition, ensure assigned deicing recovery vehicles are operational and serviced as required.
 - 2.3.4. Prepare aircraft deicing area as required including blocking of any storm drains in the immediate area to prevent deicing fluid from entering drains.
 - 2.3.5. Ensure deicing operations are accomplished IAW established procedures.
- 2.4. All base agencies/designated contractors will:
- 2.4.1. Provide personnel to augment snow removal teams, when requested. Augmentees will report directly to deicing coordinators (military units only).
 - 2.4.2. Perform deicing fluid recovery procedures IAW BMPs.
 - 2.4.2.1. Initiate mandatory fluid recovery after aircraft has cleared the deicing spot to prevent discharge into stormwater and sanitation drains. Use recovery equipment to collect all deicing fluid.
 - 2.4.2.2. Remove deicing unit from ramp and clear ramp as applicable. Clear storm drains if applicable.
 - 2.4.2.3. Discharge fluids into holding tank and notify the designated representative for pick up. If recovered fluid is hazardous, contact bioenvironmental engineering for sampling support and environmental management for disposal support.
 - 2.4.2.4. In the event deicing fluid is spilled or inadvertently released to the environment,

storm drain or sanitary sewer, contact the Base Fire Department immediately by calling 911.

DAVID S. GRAY, Brig Gen, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

Aircraft and Airfield Deicing/Anti-icing Guidance for Pollution Prevention and Best Management Practices (P2/BMPs), 11 November 1998

T.O. 42C-1-2, *Anti-icing Deicing & Defrosting of Parked Aircraft*, 30 May 2002

Abbreviations and Acronyms

BMP—Best Management Practices

IAW—In Accordance With

SWPPP—Stormwater Pollution Prevention Plan

Attachment 2**DEICING RECOVERY METHODS FOR 89 AW AND PARTNER UNITS****Deicing recovery method for 89 AW:**

The 89 AW will deice aircraft IAW BMPs. After aircraft removal from deicing location, DynCorp will recover dispensed deicing fluid using Tennant 1550 units. Once the internal tanks of the units reach capacity, DynCorp will empty the collected fluid into storage containers located between Hangars 2 and 3. If needed, Presidential Airlift Group will request a loan of the recovery equipment through hand receipt and follow the same deicing and recovery procedures IAW BMPs.

Deicing recovery method for 201st Airlift Squadron (AS), 459th Airlift Wing (AW) and Naval Air Facility (NAF) Washington:

The 201 AS, 459 AW and NAF will deice aircraft IAW BMPs. The contractor, Inland Technologies, will receive verbal notification through the Maintenance Coordination Center (MCC) for all requested deicing fluid recovery operations at least two hours prior to all requested services. Immediately after aircraft removal from the deicing location, the contractor is notified. Within 5 minutes after completion of requested services, the contractor will notify the mission support section. Afterwards, the collected deicing fluid is discharged into a contractor-provided temporary mobile storage tank located within close proximity to the flight line. Lastly, the contractor will recycle/dispose of collected deicing fluid at an approved location IAW all state and federal laws. (Note: The 201 AS is the only squadron within the 113 WG that performs deicing procedures.)

Deicing recovery method for 457th Airlift Squadron (AS):

DynCorp is the point of contact for recovering deicing fluid for the 457 AS. Therefore, the procedures for the 457 AS are the same as the 89 AW.