

**BY THE ORDER OF
THE COMMANDER**



**MCCONNELL AIR FORCE BASE
INSTRUCTION 21-106**

18 OCTOBER 2001

Maintenance

SEVERE WEATHER PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 21-1, *Managing Aerospace Equipment Maintenance*. It establishes procedures to ensure the protection of aircraft, personnel, and facilities from severe weather. This instruction is applicable to all aircraft maintenance activities, including the Kansas Air National Guard (KANG) and Air Force Reserves. All supervisors will ensure familiarization and compliance with these procedures.

1. General Procedures:

1.1. The 22 Air Refueling Wing (22 ARW) Maintenance Operations Center (MOC) will broadcast pertinent weather information on all radio nets as soon as possible after notification. In addition, the MOC will notify the 22d Logistics Group (22 LG), 22d Logistics Group Quality Assurance (22 LG/QA), 22d Aircraft Generation Squadron (22 AGS), and 22d Maintenance Squadron (22 MXS) supervision, 22d Transportation Squadron, transient maintenance, Petroleum Oil Lubrication (22 SUPS/POL) and 22d Civil Engineer Squadron (22 CES) when a weather warning/advisory is received. Requests for weather forecasts will be accepted only from expeditors/shop chiefs or higher. **NOTE:** Command post will perform MOC notifications if MOC is closed.

1.2. 184th Bomb Wing (184 BW) and 22 AGS production superintendents will use current weather information, this instruction, and their on-scene assessment to determine the proper actions to implement. On-scene assessment is especially important when there is lightning or rapidly changing weather conditions.

1.3. Actions should be initiated according to the weather forecasted. For example, if 45-knot winds are expected, start preparation given in paragraph 2.2. below. If severe weather arrives before required actions have been completed, the safety of personnel versus the protection of resources will be considered prior to further action.

1.3.1. Executing Ops Scheduler. Individual located in the Command Post normally responsible for monitoring the potential for icing conditions and checking the aircraft to determine de-icing requirements.

1.4. Landing aircraft will be refueled to either the next scheduled fuel load or a ramp load (B-1B = 50,000/KC-135R = 75,000), unless specific maintenance actions require a lesser fuel load.

1.5. Engine covers will be installed after flight if the aircraft is not scheduled to fly within the next 48 hours.

1.6. Open fuel tank repair areas will always have two of the three elements required to complete the fire triangle (oxygen and fuel vapors). It is our responsibility to eliminate the third (heat) (i.e.; flame, spark, static electricity, ignition source etc.). The only way to do this during severe weather is to close the fuel tanks prior to the hazardous condition being present.

1.7. Climatic conditions-high winds (usually 30kt/hr or higher), thunderstorms/lightning or other forms of severe weather can damage aircraft or injure personnel. Severe weather can cause power outages, create a hazard from wind blown materials, sand or equipment, create high levels of static electricity, cause water intrusion or cause other problems. (Ref TO 1-1-3 para 2.4.7)

1.8. WEATHER WARNING: A weather warning is issued when a severe weather condition exists, is imminent, or is likely to occur.

1.9. WEATHER WATCH: (potential)

1.9.1. A weather watch will be issued when a severe weather condition is possible, but its occurrence, location and/or timing is still uncertain. Watches are issued as a special notice that the potential exists for the development of severe weather within the forecast area during the specified valid time. Watches normally precede a weather warning.

1.10. 22 MXS will ensure the following: Prior to closing the fuel shop for unmanned shifts, weekends, or holidays; fuel system shop chief, or appointed designee will ensure stands and non-powered AGE is removed from the vicinity of aircraft. All aircraft parts removed for maintenance will be stored in appropriate storage cabinets. All equipment and CTK items will be secured in the proper locations.

1.11. 22 MXS Production Supervisor (Red Super) and MOC will ensure that the 22 MXS Fuel Shop are notified of all weather advisories.

1.12. Fuel System supervisor shall initiate action to ensure operations are suspended by the time the severe weather is within five nautical miles.

2. Conditions and Specific Procedures:

2.1. Winds or gusts from 25 to 34 Knots:

2.1.1. Loose equipment secured.

2.1.2. 22 MXS Aerospace Ground Equipment (AGE) flight will remove KC-135R radome stand from the mass parking area and secure it.

2.1.3. Secure aircraft including all doors and panels.

2.1.4. Personnel will not use JLG or de-icer baskets for de-icing or any other maintenance (unless otherwise approved by the LG).

2.1.5. All nonessential stands and support equipment will be removed from vicinity of aircraft and hangar.

2.1.6. Metro front passenger seat area will be vacated and door locked. All personnel will use the right side sliding door to enter and exit the vehicle except the driver.

2.1.7. Two personnel will accomplish opening and closing the keel beam door at all times. The keel beam door safety lock will be installed when the door is open except to remove or install cargo strut (tail stand). Keel beam doors will be closed during winds gusting or above 25 knots. The production superintendent may grant permission to open keel beam door to start or continue maintenance. In these cases, the opened door will be held open with the door rod.

2.2. Wind or gusts 35 to 64 knots:

2.2.1. All actions for lesser winds completed.

2.2.2. B-1B aircraft configured as follows:

2.2.2.1. Minimum 50,000 lbs. of fuel.

2.2.2.2. Flaps and slats raised (if hydro capable).

2.2.2.3. Cargo door closed

2.2.3. KC-135R aircraft configured as follows:

2.2.3.1. Minimum 75,000 lbs. fuel.

2.2.3.2. Flaps in full up position.

2.2.3.3. Personnel will not use JLG or de-icer baskets for de-icing or any other maintenance.

2.2.4. Nonessential flight line AGE, trailers, and equipment will be removed from the mass parking area and secured.

2.2.4.1. All available 22 AGS and 22 MXS vehicle operators will assist AGS personnel as required.

2.2.5. MOC and KANG Maintenance Operations Center, in coordination with production superintendents, determine movement and hangar occupancy.

2.2.6. Open fuel system maintenance will be suspended 30 minutes prior to winds reaching 30 knots due to potential static build-up from wind on exposed tail surface (i.e., aircraft not fully enclosed in a hangar). This lead-time is required to allow closure of any open tank.

2.3. Winds or gusts 65 knots or more (includes tornadoes):

2.3.1. All actions for lesser winds completed.

2.3.2. KC-135 aircraft will be separated and weather-vaned (nose into the wind) space and time permitting.

2.3.2.1. All outside maintenance actions not associated with aircraft separation movement will cease.

2.3.3. If directed by 22 ARW/CC, 22 OG/CC, or 22 LG/CC:

2.3.3.1. Initiate pyramid recall.

2.3.3.2. Prepare aircraft for weather evacuation.

2.4. Thunderstorms:

2.4.1. Complete actions for actual or predicted winds or gusts.

2.4.2. For hail move aircraft into hangars (if not already completed); unhangared B-1Bs will have windscreen covers installed, as applicable/safely installed.

2.5. Electrical Storms : Lightning within 5 miles.

2.5.1. Cease all fuel cell maintenance.

2.5.2. Enclosed hangar maintenance may continue. Nose dock aircraft maintenance will stop due to the exposure of the aircraft tail to lightning strikes.

2.5.3. All personnel not directly involved with in-flight or ground emergency will take cover inside a building or an enclosed vehicle until storm passes beyond the 5-mile limit.

2.5.4. Evacuate flight line and areas within the munitions storage area (MSA) containing unpackaged electro explosive devices, except where minimum manning is required to meet mission or safety requirements.

NOTE: See 184 LG OI 21-1 for munitions movement during electrical storms.

2.5.5. Ensure all hangar doors are closed to prevent inadvertent activation of aqueous fire fighting foam (AFFF) system.

2.5.6. Squibs in work/transient must be returned to AGS temporary storage or MSA.

2.5.7. Base weather station will issue a watch with potential for thunderstorms/lightning within five nautical miles, with a built in lead-time of 30 minutes.

2.5.8. Base weather station will issue a warning for observed thunderstorm/lightning within five nautical miles. At this time the 22 MXS fuel shop will be on work stoppage until all potentially severe weather within five nautical miles has expired.

2.5.9. NON-FORECASTED WEATHER

2.5.9.1. Production supervisors (i.e., Red Super and AGS Super) on duty may initiate actions to suspend open maintenance at any time he/she detects a weather hazard prior to official notification from base weather service. Additionally, he/she will make prompt notification to appropriate agencies (MOC, Red Super, AGS Super).

2.6. Snow and Ice Storms. See checklist ([Attachment 2](#)) for de-icing procedures.

2.6.1. Secure aircraft including all doors and panels; install all protective covers IAW appropriate technical data.

2.6.1.1. Alpha Alert Aircraft will be towed into a fully enclosed hangar. AGS will pre-position a tow team with the aircraft.

2.6.2. De-icing preparation. The following procedures will be used to prepare for the de-icing season (1 November – 31 March each year):

2.6.2.1. Engine Covers and plugs will be installed if down for 24 hours or more.

2.6.2.2. Debrief or maintenance will put the following discrepancy in all 781 series forms,

“Verify flight control balance bays are free of snow, ice, and slush accumulation prior to flight, IAW 1C-135A-6WC-1.” This entry will be on a Red X symbol.

2.6.2.3. When aircraft are parked on the ramp from November through March flaps should be raised to the full-up position, horizontal stabilizer positioned 2 ½ units nose down position, windows closed, window covers, and engine covers and plugs installed. When weather conditions would cause snow, ice, and slush accumulations, outside the dates listed above, the same 781A entry will be made at the time of preflight or 2B.

2.6.2.4. Local 781A pre-printed forms will be used while assigned personnel and aircraft are TDY under the above listed conditions.

2.6.2.5. At the time of panel and inlet inspection, a qualified technician will verify the completion of the inspection, necessary removal of accumulation, and sign off the 781A entry.

2.6.3. Equipment preparation:

2.6.3.1. 22 CES and 22 AGS: NLT 1 September each year, begin operational checkout of all de-icing equipment to ensure readiness by 1 November.

2.6.3.2. 22 CES will ensure operability of de-icing pits NLT 15 October of each year.

2.6.3.3. 22 MXS will shelter personnel maintenance stands (4 B4, 4 B5, and 2 B1) in Building 1169 and/or Hangar 1106 when weather reports include the potential for freezing/icing condition.

2.6.4. Personnel preparation:

2.6.4.1. 22 ARW/XP, in conjunction with 22 OG/OGV, 22 LG/LGQ, and 22 CES/CEO, will coordinate de-icing exercises to test de-icing procedures prior to 1 November each year. Additional exercises can be scheduled as required.

2.6.4.1.1. Exercise should cover notification procedures, aircrew alerting and practice de-icing of two aircraft as a minimum each time.

2.6.4.1.2. 22 ARW augmentee needs will be identified by 22 AGS supervision to 22 LSS and 22 MXS supervisions for support.

2.6.5. 22 LG/CC or their designated representative's approval is required to tow aircraft when the runway condition reading (RCR) is less than 7.

2.7. Extreme Heat.

NOTE: The following is extracted from the 22 ARW policy on heat stress for further detail on heat stress contact Bioenvironmental Engineering, x5104.

2.7.1. When Wet Bulb Globe Temperature (WBGT) reaches 85 degrees, Bioenvironmental Engineering (22 ADOS/SGGB) notifies the Command Post and Kansas Air National Guard Bioenvironmental Engineering (KANG BEE) technician, and provides updates every hour until WBGT falls below 85 degrees. After hours and on weekends WBGT is monitored by Acute Medical Control Center (AMCC) at x5020.

2.7.2. The Command Post notifies the MOC, Civil Engineering Communications Center, Law Enforcement Desk, and the Communications Job Control. Each of these centers is responsible for

notifying personnel under their span of control. The KANG BEE technician notifies guard work centers.

2.7.3. Commanders are responsible for ensuring their work center supervisors are prepared for heat threat.

2.7.4. Supervisors must educate workers on the signs and symptoms of heat stress, and make it easy for workers to comply with control methods.

2.7.4.1. A very effective and simple means of deciding if a worker has reached his/her limit is through the pulse rate. Personnel who exceed 125 bpm after one minute of rest are at risk of heat injury. If a person is at risk move them to an indoor area 78 degrees (or cooler) and rest for at least 60 minutes. Consider remaining indoors for the rest of the day.

2.7.4.2. Control methods supervisors should use to prevent heat injuries include:

2.7.4.2.1. Provide cool, good tasting water and encourage consumption.

2.7.4.2.2. Use buddy rule and allow for frequent micro breaks so workers can set their own pace.

2.7.4.2.3. Educate workers on symptoms and controls; closely supervise to ensure understanding.

2.7.4.2.4. Work out of direct sunlight if possible (create shade if necessary).

2.7.4.2.5. Use sunscreen with SPF of 15 or higher on all exposed skin.

2.7.4.2.6. Have workers check pulse rate after one minute of rest, modify work if more than 125 bpm.

2.7.4.2.7. Implement work/rest cycles as per [Attachment 1](#).

2.7.4.2.8. Workers must comply with the precautions, work/rest cycles, and water consumption directed by their supervisors.

RONALD R. LADNIER, Colonel, USAF
Commander

Attachment 1

**TABLE OF PRECAUTIONS, WORK/REST CYCLES, AND WATER CONSUMPTION AND
COLD WEATHER WORK/REST CYCLES¹**

A1.1. Use the table below to plan work/rest cycles and water consumption, based on WBGT data provided by bioenvironmental engineering. (WBGT is a modified temperature, which considers air temperature, air speed, humidity, and solar load. It is nearly always lower than the air temperature or heat index. Don't be fooled!)

WBGT	Population ²	I	II	III
85 – 89		B	A	A
90 – 94		C	B	A
95 and Above		C	C	B

¹ Codes:
A) 10 minute breaks each hour; 1 hour break in cool area after 4 hours. ½ quart water per hour.
B) Work 45 minutes, rest 15 minutes; 1 hour break in cool area after 2 to 3 hours. 1 quart water per hour. If pulse rate after 1-minute rest exceeds 125 bpm, take at least 60 minutes rest in cool area.
C) Delay work until cooler, if possible. If mission essential, work max of 30 to 45 minutes followed by equal rest time (in cool area if possible), stay alert for symptoms of overexposure. If pulse rate after 1-minute rest exceeds 125 bpm, rest in cool area at least 45 minutes. Consume 1.5 to 2 quarts water per hour during rest time.
² Populations: I) Young children, senior citizens, personnel who are ill, obese or unacclimated, personnel with heavy workload and heavy clothing.
II) Personnel with medium to heavy clothing, and/or personnel with medium to heavy workloads.
III) Personnel with light workload and light clothing
<i>Workload:</i> Heavy (using shovel, lifting heavy objects, running, etc.)
Medium (carpentry, carrying medium objects, operating equipment, etc.)
Light (tightening bolts, walking with light objects, troubleshooting, etc.)
<i>Clothing:</i> Heavy (fireman coat or full encapsulation)
Medium (cotton or Tyvek coveralls, BDUs with sleeves down)
Light (short-sleeve shirt and pants, BDUs with sleeves up)
Note: When wearing mission oriented protective posture (MOPP) gear, refer to AFI 32-4005
<i>Information prepared by Bioenvironmental Engineering, 21 Nov 96</i>

<i>22 ADOS/SGGB, x5104</i>
Based on research provided by Armstrong Laboratory, AL-CL-1991-0046
Cold Weather Work/Rest Cycles
Use the table below to plan work/rest cycle, based on wind chill temperature data provided by Bioenvironmental Engineering.
-- Wind chill above +40F: Little danger.
--- Wear warm clothing in layers as necessary to avoid both chills and sweating.
-- Wind chill from +40 to -24F: Increasing danger.
--- Wear warm layers of insulating, dry clothing on all major areas of body (head, chest, arms, and legs).
--- As much as possible within mission constraints, cover the face and wear insulating gloves or mittens.
--- Work/rest cycle: Maximum one hour work/minimum 15 minutes rest in warm area.
--- Use buddy rule, and check for signs of hypothermia and frostbite.
-- Wind chill from -25 to -49F: Moderate to high danger.
--- Limit outdoor work to the minimum possible within mission constraints.
--- Wear warm layers of insulating dry clothing on the entire body.
--- Do not expose flesh, cover face and wear insulating gloves or mittens.
--- Work/rest cycle: Maximum 30 minutes work/minimum 15 minutes rest in warm area.
--- Use buddy rule, and check for signs of hypothermia and frostbite.
-- Wind chill below -50F: Great danger.
--- Cease all non-emergency outdoor work.
--- In emergency follow guidelines for -25 to -49F.

Attachment 2

SNOW AND ICE STORM CHECKLISTS

ATTACHMENT 2, CHECKLIST 1

ALL PURPOSE CHECKLIST		PAGE1	QF	PAGES
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL		OPR	DATE	
Snow and Ice Storm Checklist		22 LG/QA		
NO.	ITEM <i>(Assign a paragraph number to each item. Draw a horizontal line between each major)</i>	YES	NO	N/A
<p>(*Asterisk item(s) indicate to AFI 11-2KC-135, Volume 3, Chapter 10 aircraft de-icing). The following items will be accomplished any time icing conditions exist or are anticipated.</p> <p>1. POC CP – Command Post/Executing Ops Scheduler (EOS) will call the MOC, and CE Customer Support at 5735 (or Fire Department after hours at 3902) when receiving weather watches and warnings indicating freezing precipitation conditions.</p> <p>2. POC MOC – MOC will notify, AGS and MXS supervision, POL, and TRANS when receiving weather watches and warnings from CP indicating freezing precipitation conditions.</p> <p>2.1. OPS Scheduling will hold a reconciliation meeting at 1600 the day prior to an anticipated snow / ice event. LG/MOC, MXS, AGS and CE will be represented at the meeting to discuss mission aircraft and facility priorities.</p> <p>2.1.1 Facility priorities for clearing snow will be runways, taxiways and hangars housing alert aircraft IAW the base snow removal plan.</p> <p>3. *POC AGS Supervision - Maintenance production supervisors will check mission priorities when finalizing tail numbers and parking locations. Note: The 22 LG/CC approval is required to tow an aircraft when the RCR is less than 7.</p> <p>4. * POC AGS Supervision- When possible, aircraft assigned to the highest mission priorities will be hangared when icing conditions are anticipated. The OG/CC and LG/CC will decide when to hangar aircraft based on the recommendations of the AGS Pro-Super and the EOS. Optimum parking locations during projected/actual icing conditions are A-5/6/17/20-21, B-5/6/22-24, C-5/6, and D-1-4. AGS Supervision and/or the MACC will notify CE Snow Control of the parking spots where aircraft will be launched from (including Alert aircraft) and will keep Snow Control advised of any changes. NOTE: Snow removal assets will remain on the runway and taxiway until they can maintain a suitable Runway Condition Rating.</p> <p>5. * POC CP - Command Post will alert active duty aircraft commanders at their LFA time (call the 931 ARG Operations Duty Officer for Reserve missions) for early reporting when directed by the EOS.</p> <p>6. POC AGS Supervision- Warm up and prepare required number of de-icing trucks.</p> <p>7. POC AGS Supervision- Aircraft maintenance personnel will clear as much snow and ice as possible from the aircraft prior to crew arrival. APU exhaust ports and engine inlets will be free of snow and ice.</p> <p>7.1. POC AGS Supervision-Will contact CES Snow Control (extension 5740, 5745, 5746, or through Fire Department after hours at 3902) to determine which parking spots require chocks, fire bottles, and equipment cleared so they can clear the spot off.</p> <p>7.2. POC AGS Supervision-Will notify TA when a TA driver is required to operate the Follow-me truck for de-ice operations during hours of darkness during normal TA operating hours. During other than normal TA operating hours, AGS will provide a driver for the Follow-me truck for de-ice during hours of darkness.</p>				

ATTACHMENT 2, CHECKLIST 2

	2		4	
Snow and Ice Storm Checklist	22 LG/QA			
	YES	NO	N/A	
<p>8. POC AGS Supervision - If aircrew does not show at the aircraft 2 hours 30 minutes before scheduled take off the production supervisor will contact the MOC to determine aircrew location.</p>				
<p>8.1 Aircraft requiring de-icing will taxi as directed by the AGS Pro-Super/EOS to the de-icing pit (target time for taxi is 1.40 prior to take-off). If Civil Engineering does not show-up 2:40 prior to take-off, contact CE Snow Control immediately.</p>				
<p>9. POC MOC - Notify 22 CES Customer Support at 5735 two hours prior to de-icing (after duty hours notify the fire department X3902) and Bioenvironmental Engineering Flight x5360 that de-icing operation will be performed.</p>				
<p>10. POC MOC - On weekends and holidays contact POL to ensure standby personnel are called in for de-icing unit refill requirements.</p>				
<p>11. POC MOC - MOC will coordinate with the maintenance de-icing team prior to approving aircraft movement to de-icing pads.</p>				
<p>12. POC AGS Supervision and MXS Supervision - Maintenance will have the following equipment propositioned at the appropriate de-icing pads 3 hours 30 minutes prior to first scheduled take-off.</p>				
<ul style="list-style-type: none"> - De-icing trucks (2 per pad and 1 spare per pad) (AGS) - Light carts, during hours of darkness (2 per pad and 1 spare per pad) (MXS) - Fire bottles (1 per pad) (AGS) - Power carts (1 per pad and 1 spare) (MXS) - Aircraft chocks (2 per pad) (AGS) - Launch kit (1 per pad) (AGS) - De-icing technical data (1 per pad) (AGS) - 2 AGE tow vehicles - 1 -95 LASS - H-1 Heater (1 per pad) (MXS) 				
<p>12.1 POC CES: Will preposition the de-icing pit valves IAW attachment 3-6 of this instruction.</p>				
<p>WARNING: If the red light next to the de-icing pad control panel flashes, immediately stop the de-icing process and contact CES.</p>				
<p>12.2 POC AGS Supervision: AGS will provide a de-icing supervisor. This individual will be an NCO/Officer who will brief all personnel on sequence of events and safety. This person will have a vehicle with a radio and communicate with MOC. Finally this person will work with the EOS to prioritize and schedule aircraft through the pits for de-icing.</p>				
<p>12.3 POC AGS Supervision: Will ensure there is nothing parked on D-5 which may contain hazardous cargo. If a vehicle is present, immediately contact Base Operations to ensure the vehicle does not contain hazardous cargo which would prevent de-icing operations. NOTE: MAFBI 91-205 outlines level of hazardous material allowed to be parked on D-5 before de-icing must stop.</p>				

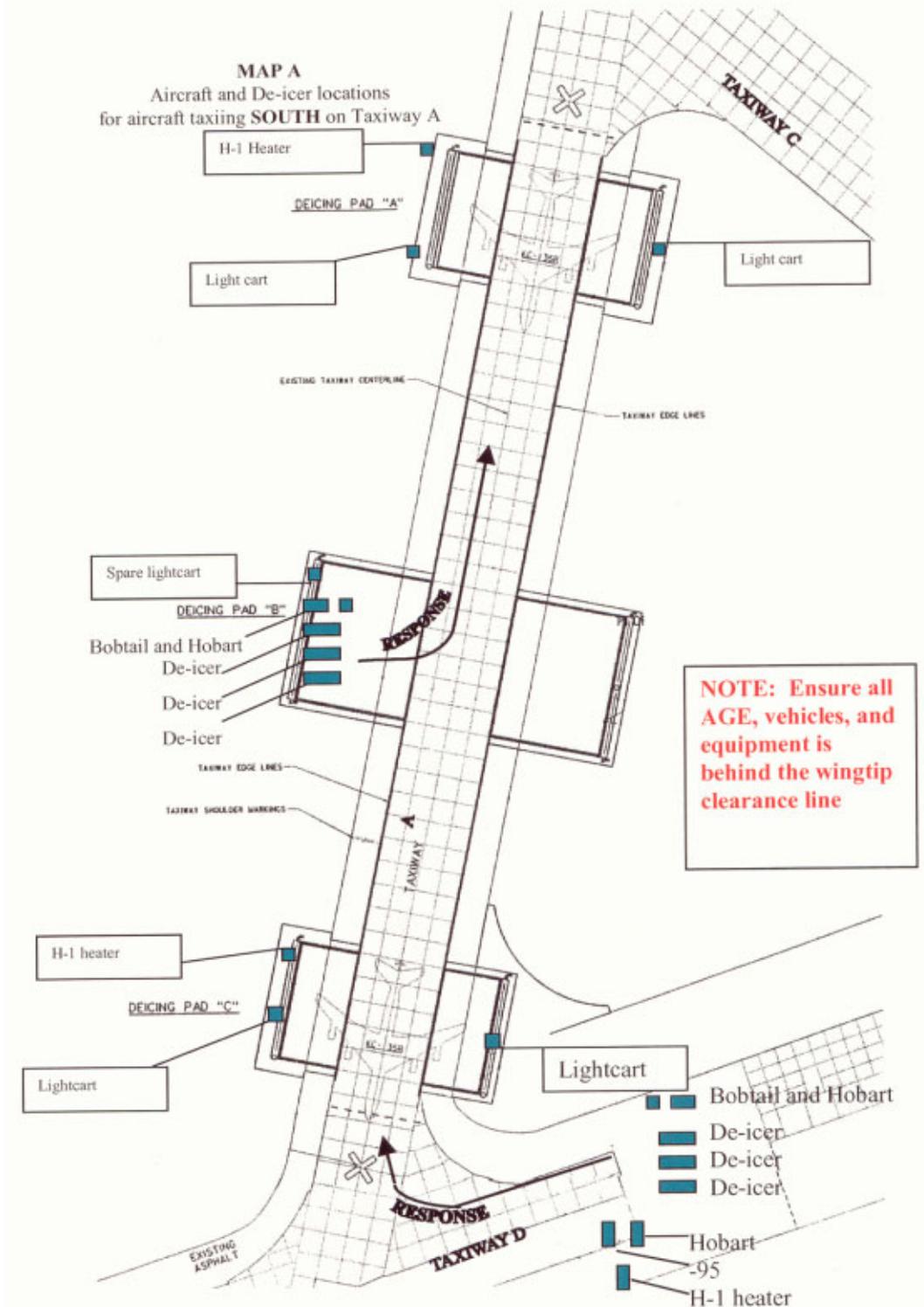
ATTACHMENT 2, CHECKLIST 3

ALL PURPOSE CHECKLIST		PAGE 3	OF 4	PAGES
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL		OPR	DATE	
Snow and Ice Storm Checklist		22 LG/QA		
NO.	ITEM <i>(Assign a paragraph number to each item. Draw a horizontal line between each major)</i>	YES	NO	N/A
12.4	POC is MXS AGE and will provide 2 drivers for Bobtails at de-icing pit during de-icing operations.			
12.5	De-ice Super will verify correct valve settings in accordance with attachments 3-6. If valve settings are incorrect, contact CES at ext 4453/5704. DO NOT ATTEMPT DE-ICING UNTIL VALVES ARE IN THE CORRECT POSITION.			
13.	Aircraft positioning for aircraft taxiing south on Taxiway Alpha.			
13.1.	POC AGS Supervision - If no other aircraft are in the facility, the first to arrive will be parked on de-icer pad C (the southern most pad). Note: Ensure aircraft is positioned nose into the wind.			
13.2	POC AGS Supervision - When de-icing two aircraft concurrently, de-icing pads C and A will be used. Three de-icers and bobtail/hobart will be parked on the west side of de-ice pad B and will respond to de-ice pad A. Three de-icers and bobtail/hobart will be parked on Taxiway D and will respond to de-ice pad C. The spare hobart and -95 will be pre-positioned on Taxiway D. See attached map for locations.			
13.3	POC Transient Alert - Large aircraft (C-5, KC-10, C-17, etc.) will be de-iced on de-icing pad B.			
13.4.	Three aircraft may be de-iced if all of the following conditions are met:			
13.4.1.	POC CP - Mission priority dictates.			
13.4.2	POC CP - Coordinated 22 LG/CC, 22 SPTG/CC and 22 OG/CC with final approval granted by the 22 ARW/CC or CV.			
13.4.3.	POC MOC - Prior coordination with fire department for pre-positioned coverage.			
14.	Aircraft positioning for aircraft taxiing north on Taxiway Alpha			
14.2.	POC AGS Supervision - If no other aircraft are in the facility, the first to arrive will be parked on de-icer pad A. Note: Ensure aircraft is positioned nose into the wind.			
14.3	POC AGS Supervision - When de-icing two aircraft concurrently, de-icing pads A and C will be used. Three de-icers and bobtail/hobart will be parked on the west side of de-ice pad B and will respond to de-ice pad C. Three de-icers and bobtail/hobart will be parked on Taxiway C and will respond to de-ice pad A. The spare hobart and -95 will be pre-positioned on Taxiway D. See attached map for locations.			
14.4.	POC Transient Alert - Large aircraft (C-5, KC-10, C-17, etc.) will be de-iced on de-icing pad B.			

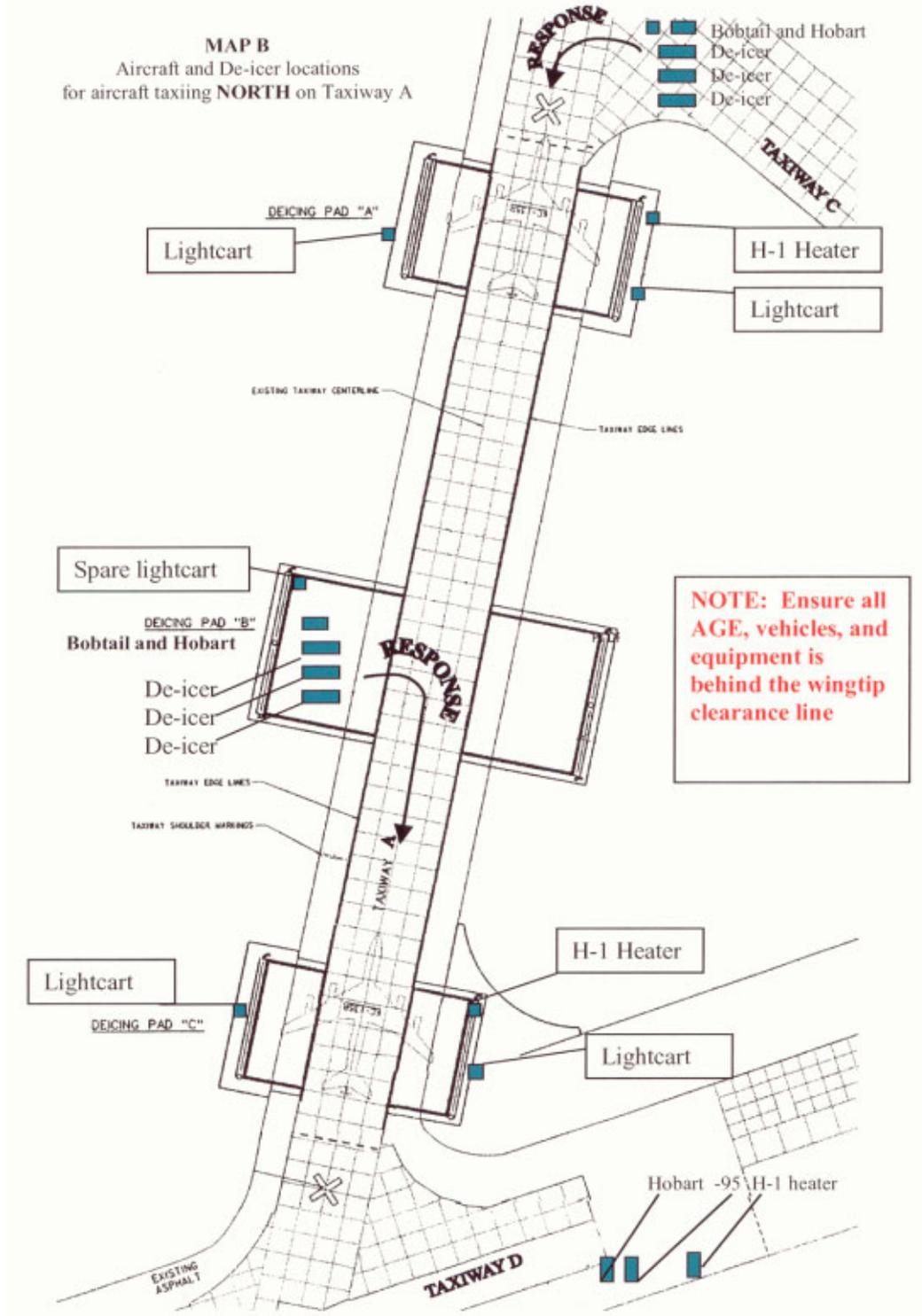
ATTACHMENT 2, CHECKLIST 4

ALL PURPOSE CHECKLIST		PAGE 4	OF 4	PAGES
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL		GPR	DATE	
Snow and Ice Storm Checklist		22 LG/QA		
NO.	ITEM <i>(Assign a paragraph number to each item. Draw a horizontal line between each major</i>	YES	NO	N/A
	<p>15. POC AGS Supervision - After aircraft de-icing is complete ensure the pad diversion valves are left in the open position and all AGE equipment is removed.</p> <p>16. *Alternate de-icing procedures.</p> <p>16.1. POC CP - If the de-icing facility is unusable or unable to accommodate the aircraft flow dictated by operational mission priorities (priority A alert aircraft taking off on runway 19R, the following parking spots are designated as the alternate aircraft de-icing locations B-5 and B-6. The decision to use the alternate method must be coordinated between the OG/CC, LG/CC, SPTG/CC with final approval given by the 22 ARWCC or CV.</p> <p>16.2. POC MOC - MOC will coordinate with Civil Engineering 1 hour prior to the start of aircraft de-icing so they can preposition the drainage dam and two sweeper trucks.</p> <p>16.2.1. POC CES - Fluids collected from the ramp area will be disposed of using the collection facility located by the primary de-icing pads.</p> <p>16.2.2. POC MOC - Should a sortie cancel or delay, MOC will keep civil engineering apprised.</p> <p>16.3. Alpha Alert Aircraft that require de-icing after being towed out of the hangar will be de-iced between parking rows Alfa and Bravo. Other Alfa Alert Aircraft requiring de-icing will be de-iced in the same location or on the de-icing pits, time permitting.</p> <p>17. *Kansas Guard (B-1B). The 184 BW will coordinate their de-icing requirements through the 22 ARW Command Post to determine aircraft priority for use of the de-icing pads. In most cases, B-1 aircraft will require tow operations to move to and from the de-icing pads. This limitation must be considered when developing the aircraft flow through the de-icing facility.</p> <p>18. *Transient Aircraft. Transient Alert or the aircraft commander will coordinate de-icing requirements through the Command Post/MOC. Transient aircraft will be de-iced based on mission priority. Transient aircrews will follow the published taxi flow for the de-icing pads. If unable to taxi, transient aircraft will be towed to the pads for de-icing.</p> <p>19. Base Operations will provide transient crews a copy of the de-icing flow plan upon their arrival at McConnell during the applicable months it is in effect.</p> <p>20. POC MOC - A log will be maintained to track the dates and number of aircraft de-iced. This information will be submitted to 22 CES/CEV (Environmental Flight) by the 15th of each month during snow and ice operations. .</p> <p>Civil Engineer POCs: Customer Support (duty hours) - 5735 Snow Control (24 hrs during snow/ice events) - 5740, 5745, 5746 Fire Department (24 hrs) - 3902</p>			

Attachment 2, Snow and Ice Storm Checklist (3) with Maps (A and B)



Attachment 2, Snow and Ice Storm Checklist (3) with Maps (A and B)



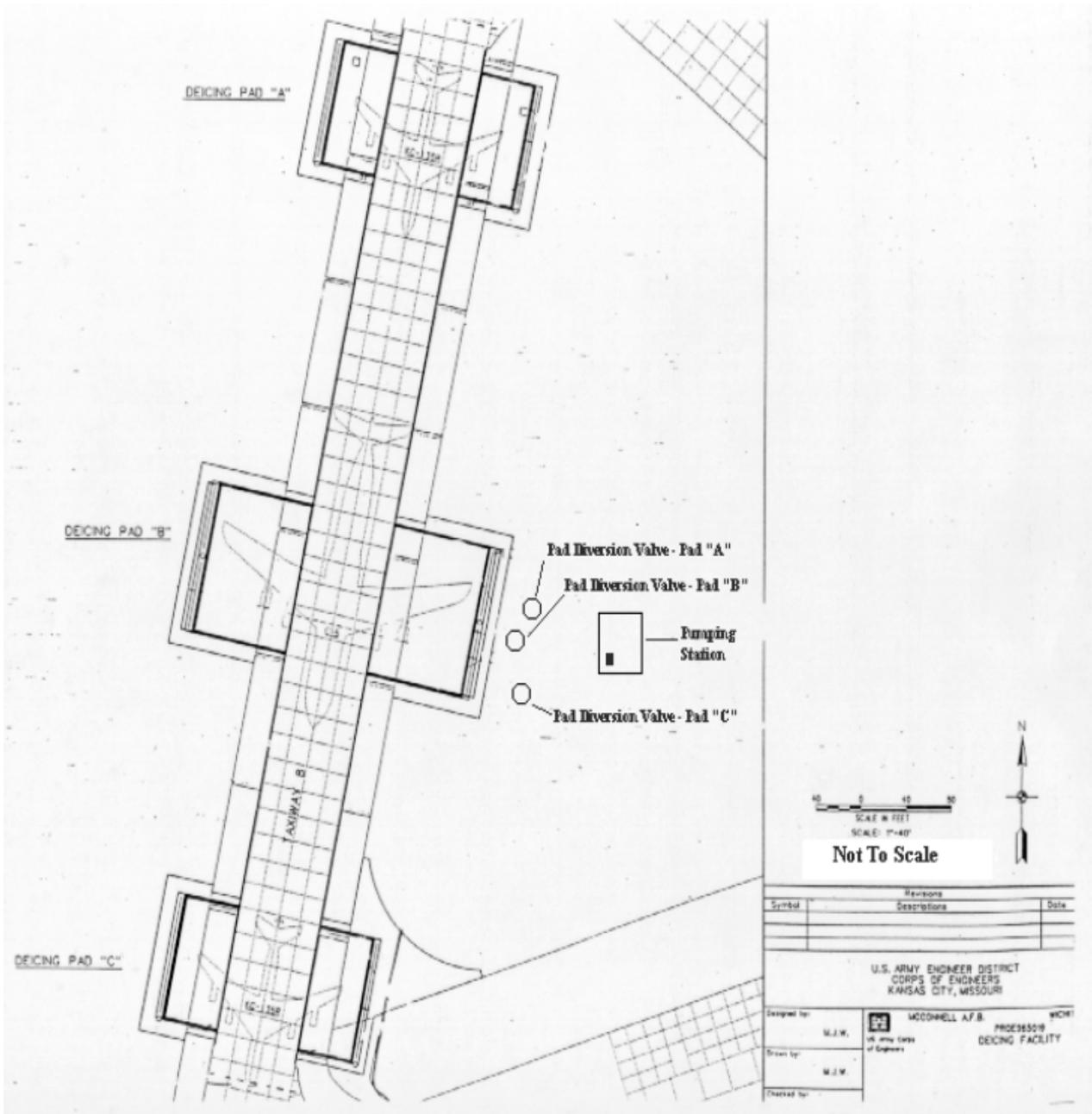
Attachment 3**DE-ICING PAD DIVERSION VALVE OPERATION PROCEDURES**

WARNING: Entrance to the pit via the manhole cover constitutes entering a confined space. The area must be determined safe for entry using a “sniffer” kit that can be obtained through the 22d Aircraft Generation Squadron Consolidated Tool kit section.

1. Press the “Divert to Tank” button on the control panel (see attachment 5). This causes the tank diversion valve to open and the pump station diversion valve to close.
2. Press the “De-icing” button for each pad that will be used for de-icing. This causes the storm sewer valve at that de-icing pad to close and the diversion valve (to the tank) at that pad to open.
3. Verify at the valve box vault that the valves are in the correct position for each de-icing pad. At pads A and C, the storm sewer valve is visible through the view hole adjacent to the manhole (valve indicator light will be green to indicate the closed position) and the diversion valve is visible through the manhole (valve indicator light will be red to indicate open). At pad B, the storm sewer valve is visible through the view hole that is furthest from the manhole (light should be green to indicate the closed position) and the diversion valve is visible through the view hole closest to the manhole (light should be red to indicate the open position). See Figure 3 for instructions for reading the valve position indicators.
4. De-ice aircraft.
5. 22 CES/CEOIW will be the only agency allowed to change the valves from “Divert to Tank” to “Divert to Wet Well” position.
6. When the water shop (22 CES/CEOIW) determines that the de-icing fluid should be pumped to the sanitary sewer, they will contact the Bioenvironmental Engineering Flight (22 ADOS/SGGB) at X5360 to take samples out of the wet well. Once these samples are taken, 22 ADOS/SGGB will contact the Environmental Flight (22 CES/CEV) at X4446 so that they may contact Wichita Water and Sewer Department (WWSD) at 529-9974 or 529-9975 to inform them that a release of de-icing fluid will be made to the sanitary sewer system. Once WWSD is contacted, the 22 CES/CEV will notify the water shop (22 CES/CEOIW) that the holding tank may be pumped down into the sanitary sewer.

Attachment 4

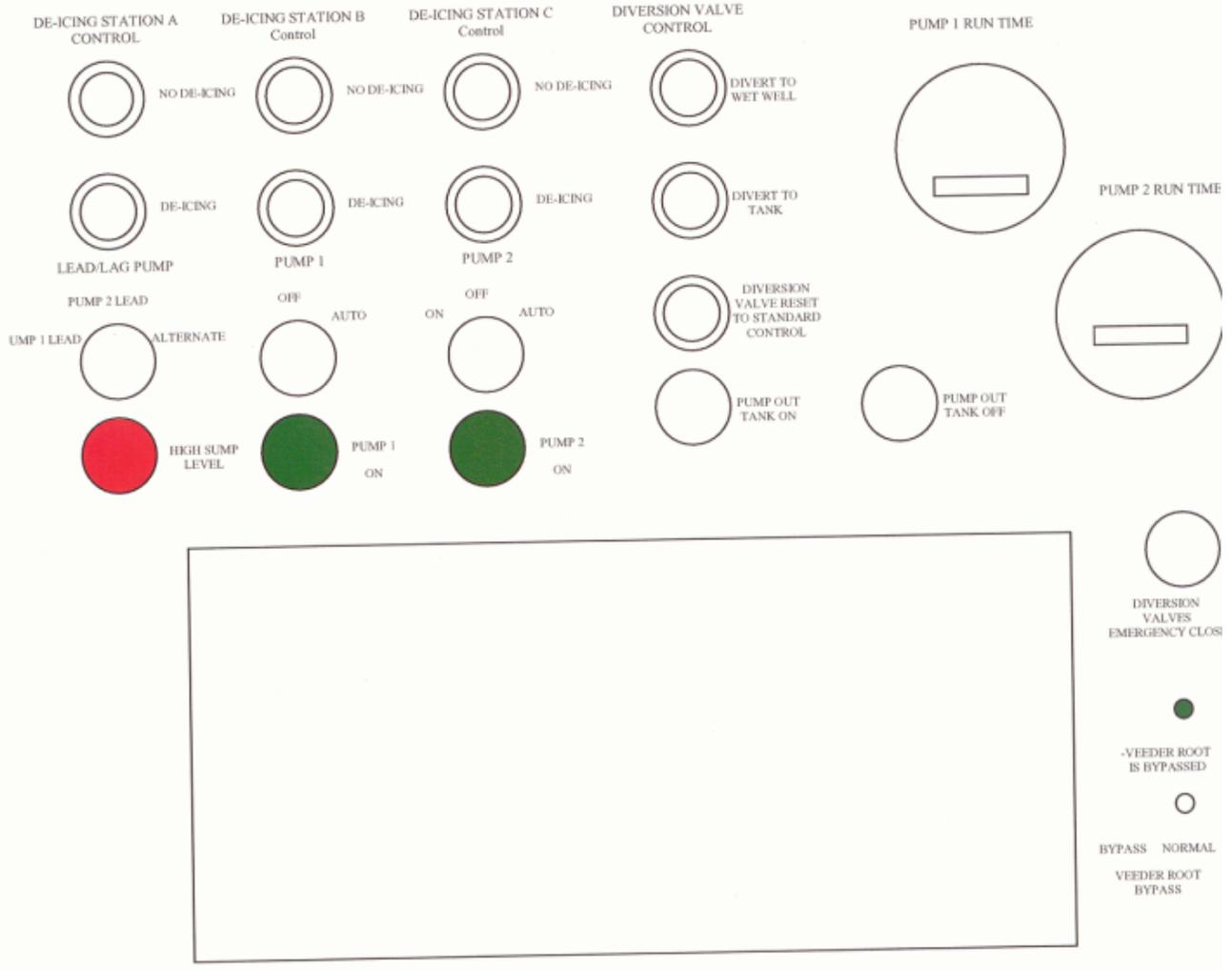
DE-ICING PAD DIVERSION VALVE AND CONTROL PANEL LOCATION



Attachment 5

DE-ICING PAD CONTROL PANEL

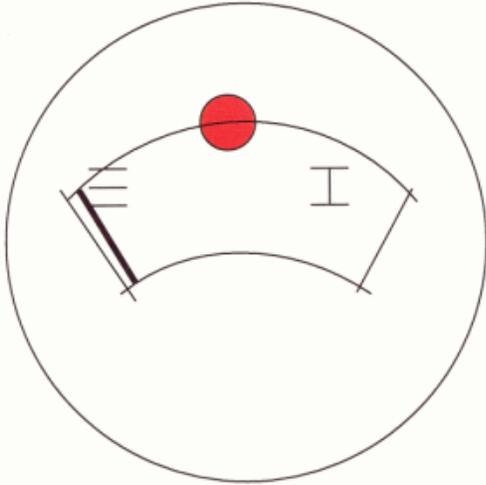
Attachment 5, De-icing Pad Control Panel



Attachment 6

DE-ICING PAD VALVE IDENTIFICATION

Attachment 6, De-icing Pad Valve Identification
Valve Open (Indicator is RED)



Valve Closed (Indicator is Green)

