**OPERATION SAFETY ACTION PLAN**

**2012 MAFFS TRAINING**

**May 06, 2012 – May 10, 2012**

**Donaldson Center Airport**

**Greenville, South Carolina**

**PURPOSE** **–** The purpose of this Plan is to provide for individual and public safety by identifying, monitoring and managing all safety hazards for the duration of the operation.

**POLICY –** It is the policy of the MLO and Mission Commander that safety of personnel is of primary importance and concern throughout all aspects of the operation. Once identified, safety hazards or concerns shall be appropriately mitigated or addressed.

**ROLES & RESPONSIBILITIES –**

**MLO** – Establish safety policy.

**Safety Officers** – Implement safety policy.

**Operations personnel** – Assure that safety considerations are included in all tactical and strategic decisions.

**Supervisors** – Communicate safety information to all assigned personnel and closely monitor their activities to assure compliance.

**All Personnel** – Responsible for performing in a safe manner at all times.

**ELEMENTS –** Safety Officers will develop a system sufficient to address safety issues associated with MAFFS operations. MAFFS operations involve many hazardous conditions to which personnel must be aware of and sensitive to in order to avoid personal injury and / or property damage. Hazards include but are not limited to: operation of vehicles, aircraft, forklifts, and other miscellaneous machinery; wet, slippery surfaces; obstructions to both walkways and vehicle routes; congestion due to limited operating space; suspended or blowing dust, retardant (not used in training operation) and debris; and especially high noise levels.Daily safety briefings will be the primary means of communicating safety concerns and issues to personnel. It is imperative that supervisors communicate information to all personnel assigned to them, to assure that the information reaches all levels.

**Daily safety briefings are required for ANYONE in the ramp and pit area within the security gates.**

Safety Officers will monitor conditions on the ramp, pits, parking areas (aircraft & vehicles), facilities, and adjacent areas to the operation. Important or useful information and mitigation measures will be communicated to affected personnel.

**MITIGATION OF CONCERNS OR HAZARDS:**

**COMMUNICATION –** The most effective mitigation measure to correct any safety hazard is communication. This includes all forms of communication including verbal, visual, or written. Any safety hazard regardless of who identifies the hazard is to be communicated to the MLO, Operations, Assistant MLO, or Safety Officer so measures can be taken to mitigate the hazard.

**HAZARDOUS MATERIALS -** In compliance with the “Hazard Communications” standard required by the Occupational Safety and Health Administration (OSHA) the following guidelines will be followed during any MAFFS operation. The following will be provided by United States Forest Service, Military, and Contractors:

 Hazardous Chemicals will be identified and labeled.

Material Safety Data Sheet (MSDS) for each identified hazardous material will be available for employee review.

Any hazard information will be communicated to all personnel and visitors through labels, signs, MSDS’s, and briefings.

**MEDICAL PLAN** – All medical emergencies will be handled by Donaldson Center Airport Fire & Rescue. They can be contacted **for emergencies by dialing (864) 277-1117** or (864) 277-1429 for business calls. DCA Fire & Rescue will arrange for any transportation needs to medical facilities. DCA Fire & Rescue may solicit the aid of adjacent Fire Departments and the Sheriff’s Department for mutual aid as part of their response team.

**EVACUATION PLAN** – An evacuation plan will be posted and reviewed during briefings. This plan will inform personnel How, When, and Where to get to safe areas in the event of thunder storms, tornados, high winds, or any other situations requiring shelter.

**SAFE MAFFS OPERATING PROCEDURE:**

1. **Aircraft**
	1. **Never** walk beneath, between, or in close proximity to aircraft propellers (turning or stopped).
	2. Do not approach aircraft until the engines have been shutdown and aircraft is chocked.
	3. Avoid the area to the rear of the aircraft while engines are running. Some Hazards include:
		1. Propeller blast, dust, debris, fumes
		2. Fumes from unspent fuel after shutdown can ignite.
	4. Only military crew/maintenance personnel will perform aircraft operational functions.
	5. Always follow the instructions of the air crew while in or around aircraft.
	6. Aircraft takeoff intervals and pit sequence will be directed by assigned military personnel with visibility of ramp/pit area. Agency will request deviations through the Mission Commander.
	7. Only essential personnel to the mission will be allowed aboard the aircraft.
	8. Air Force refueling procedures will be complied with.
	9. Air Force flight crews shall wear protective clothing during all MAFFS missions.
	10. **NO HOT RELOADING OF ANY AIRCRAFT.**

(11) Only essential civilian vehicles will be authorized in the ramp area.

 Vehicles must obtain and display a ramp pass, which will be issued by the

 MLO, prior to entering ramp area.

 (12) All press/news and other visitors will be escorted by authorized MAFFS

 personnel and obtain a visitors pass while on the ramp.

1. **Compressors**
	1. Only qualified personnel will operate compressors.
	2. Avoid walking/standing near compressors and high pressure hoses while in operation. Pressure is released from the air line by a pressure relief valve mounted on the compressor. Noise, air release, and moving parts hazards exist.
	3. Loaders and compressor operators will prearrange hand signals before commencing loading operations.

**Note: Compressors produce up to 3,500 psi of pressure.**

1. **Safety equipment**
	1. Ear protection is required in the ramp/pit area.
	2. Safety glasses or eye protection is required in the ramp/pit area.
	3. Personnel involved in ramp/pit operations will wear shoes with non-skid soles, long trousers, and shirt at all times (gloves recommended).
	4. Fire extinguishers will be immediately accessible to the air compressor units.
	5. Eye wash stations will be available. One located at the Sugar Shack and portable ones will be located at each of the compressors.
	6. Loading and maintenance personnel will use reflective vest or reflective strips on clothing if working after dark.
2. **Vehicles & Traffic**
	1. MLO will designate type of vehicle authorized in each operation. Vehicles in the ramp/pit area must be kept to the minimum necessary for the operation.
	2. No vehicles other than refueling, security, MAFFS maintenance, and fire rescue will approach aircraft nearer than 50 feet.
	3. Crossing ramps/planks for vehicle traffic will be placed at hose crossing points.
	4. Golf cart type vehicles are highly recommended for there low profile, low impact nature.
	5. No vehicles will cross pressurized hoses.
	6. Hose couplings, valves, ect. will be marked with pylons to avoid damage from vehicles, equipment, ect. Pylons and other loose objects will be weighted to avoid prop blast.
3. **Visitors**
	1. Visitors to the ramp/pit area must be authorized by the MLO, Tanker Base Manager, or Mission Commander. It is required that the visitors receive a full safety briefing and are escorted by agency or military personnel.
	2. Visitors will be provided appropriate safety equipment, including ear protection.
	3. Members of the press will be escorted by the assigned Incident Information Officer or other appropriate personnel assigned by the MLO.
	4. Visitors should remain clear of parking ramps, aircraft, pits, compressors, and retardant operation.
4. **Smoking Areas**
	1. Smoking is permitted in designated break area.
5. **Other**
	1. Any spills will be mitigated immediately.
	2. Fire lanes will remain clear for fire/rescue vehicles.
	3. Liquid oxygen will only be handled by qualified personnel.
6. **Hazard Analysis**

The following matrix generally defines working areas for personnel and hazards existing in those areas. Personnel should review applicable sections of the analysis to become familiar with hazards and attempt to avoid areas they are not assigned to reduce congestion.

**AUTHORIZED PERSONNEL**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Military Crews & Maintenance Personnel  | Loaders | Tanker Base Managers | Mix Masters & Contractors | MAFFS Mechanic | Wash Down Crew  | Ramp MGR | \*Hazards |
| Aircraft Parking Ramp  | X | X | X | X | X | X | X | All |
| Loading Pits |  | X | X | X | X | X | X | 1,2,3,5,6,7,8,9 |
| Aircraft | X | X | X | X | X | X | X | All |
| Compressor & Hose  |  | X | X |  | X |  |  | 1,3,4,5,6,7,8,9 |
|  |  |  | X | X |  |  |  | 1,4,5,6,7,9 |

* **Hazards**

1. Noise 6. Slippery Surfaces

2. Operating Aircraft Hazards 7. Suspended Dust, Debris or Retardant

3. High Pressure Hoses 8. Fire

4. Moving Parts 9. Moving Vehicles

5. Walkway Obstructions

MODULAR AIRBORNE FIREFIGHTING SYSTEMS

DONALDSON AIR CENTER

GREENVILE, SOUTH CAROLINA

 ANNUAL CURRENCY 2012 EXERCISE

**SPILL PLAN**

Location of Operations and Sensitive Areas:

The National Modular Airborne Firefighting System's Currency Exercise will be held on Donaldson Air Center's C (Charlie) apron. Note: The Donaldson Air Center Fire Department's local nomenclature for this aircraft apron is "Indiana Jones". This apron is located on the south side of the airfield is adjacent to the Lockheed Martin hangars and ramp. A trench drain is located on the south side of the aircraft ramp and functions as a channel for run-off to the municipal sewer storm drain

system. This is the trench that outlines the light aircraft parking area. Spills other than water shall not be allowed to enter this drain. Ditch work along the taxiways and runways, to include the grassy area northeast of and adjacent to the MAFFS ramp are sensitive areas. Spill barricades will be used to block or direct spills from these locations.

Local Fire Department Crash Rescue Organization

Donaldson Air Center Fire Department will be notified in the event of a spill. Donaldson Air Center Fire Department crash rescue equipment and trained personnel are available to respond from Fire Station Headquarters (2291Perimeter Road) and Fire Station #2 (696 Delaware Street). The 911emergency response systems do not give direct access to this local fire department. Emergency services can be contacted and activated for a flight fine emergency by dialing (864) 277-1117 a dedicated emergency reporting number.

Spill Kits

A small spill containment kit is available in each MAFFS portable pit (total of 3). The small spill kits are packaged in five gallon plastic buckets with tight fitting lids. The buckets are marked on the exterior sides and lid as "Spill Kit". These kits are equipped with absorbent pads and socks to clean up or contain a spill. **Question this: Do we have these…Sgt Mac**

Containment of Bulk Petroleum Products

During aircraft and equipment maintenance, efforts will be made to capture drained or residual petroleum products. Pans or absorbents may be placed beneath potential leak sites.

Hazardous Materials Disposal

A 55 gallon metal drum with lid will be onsite for storage of absorbents that are contaminated with petroleum hydrocarbons. Hepaco will serve as the local vendor for Haz-Mat disposal. The Hepaco point of contact is Chris Burch at

{864) 918-9478 cell and cburch@hepaco.com. (QUESTION THIS CONTACT)

Region 8 Environmental Engineer

The Forest Service point of contact will be the Region 8 Environmental Engineer,Walt Sternke wsternke@fs.fed.us,office at (404) 347-3369 or fax {404)·341-2399.

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2010 ANUAL CURRENCY EXERCISE

**SPILL PLAN**

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In Accordance With (JAW) Air Force

Technical Order: TO 00-25-172

Spill Classification

Air Force Technical orders identify 3 classifications for spills. Each will be dealt with according to following regulation standards (verbiage taken directly from lAW AF T.O.00-2S-172):

• Class I spills - involve an area less than two feet in any plane dimension (direction). Using fireguards, determine if these spills create a fire hazard to the aircraft or equipment. Generally, these spills need only be monitored until the aircraft is dispatched.

• Class II spills- involve an area not over 10 feet in any plane dimension (direction), or not over SO square feet and not of a continuing nature. Immediately notify the fire protection organization and the base agency responsible for cleanup of hazardous spills.

• Class Ill spills- involve an area over 10 feet in any plane dimension (direction) or over SO square feet in total or of a continuous nature. Follow all procedures as with dealing with a Class II spill. Class Ill spills shall be considered a ramp mishap (accident or incident).

Class I Spill Event Protocols (involve an area less than two feet in any plane dimension (direction) :

1. Post the area; personnel will man the flight line fire extinguishers.

2. Contain direct and absorb as much of the spill as possible. Note: Every effort should be made to prevent the spill from moving to the municipal sewer storm drain system. See "Spill Kits" above.

3. Take precautions to eliminate spark sources

4. All movement of aircraft vehicles ,and personnel will be done under the guidance and expressed direction of dedicated task specific military or agency personnel.

5. Contaminated pads and absorbents will be placed in an identified or placarded container. This container and contents will be relinquished to an appropriate entity for environmentally correct disposal.

Class II and Class Ill Spill Event Protocols

1. Contact Donaldson Air Center Fire Department Dispatch at: (864) 277-1117

Emergency Services should respond to the following descriptive location:

MAFFS Operations

Behind Donaldson Air Center's Fire Substation

End of Delaware Street on Donaldson Air Center

 Indiana Jones Ramp

2. Post the area; personnel will man the flight line fire extinguishers.

3. Contain direct and absorb as much of the spill as possible. Note: Every effort should be made to prevent the spill from moving to the municipal sewer storm drain system. See "Spill Kits" above.

4. Take precautions to eliminate spark sources

5. All movement of aircraft, vehicles, and personnel will be done under the guidance and expressed direction of dedicated task specific military or agency personnel.

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**SPILL PLAN**

Class II and Cal ss Ill Spill Event Protocols (continued)

6. Only Fire Department vehicles will be allowed to approach the spill event area. Upon the Fire Department's arrival, the aircraft ramp and spill site are the jurisdiction of the Fire Department and their Incident Commander. The Incident Commander will make the contacts to expedite spill cleanup.

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GREENVILLE SOUTH CAROLINA

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**LIGHTNING PLAN**

Determination of lightning activity:

• The FAA Tower at Donaldson Air Center receives airfield weather and lightning information from the National

Weather Service at Greer, South Carolina.

• The following sequence describes the notification for lightning activity within 5 nautical miles of the airfield: FAA Tower personnel will notify Donaldson Air Center Fire Department Dispatch.

The Fire Department Dispatch will contact MAFFS Ops

The Fire Department Dispatch will contact Lockheed to open their gates in the fence separating lockheed and the MAFFS operations ramp.

MAFFS Ops will notify Ground Safety Managers, the "Sugar Shack", and relay the weather alert via radio. The "Sugar Shack" will relay the weather alert via agency ramp radio frequency. (Need to Review)

• A light intensity meter may serve as the contingency mechanism for local lightning detection. If the is flight line is NOT active:

• Three blasts of an air horn will serve as notification to take cover.

• Personnel will move into designated buildings MAFFS “Sugar Shack” primary and the Donaldson Fire Department overflow of personnel. MLO Operations, “Sugar Shack” will serve as primary shelter during lightning or wind events.

• When threat of lightning has passed, personnel will be allowed to return to the outside environment.

• Verbal permission from appropriate authority {Safety MLO Officer,Line Chief, etc.) or one long blast from an air horn may serve as notification of release from restrictions. (NEED TO REVIEW)

Flightline Active:

• Aircraft engine noise can obscure conventional methods of notification for personnel to take cover. An agency representative {NCANG Safety Officer, MAFFS MLO Base Manager, etc.) and *I* or a military representative {Safety Officer, line Chief, etc.) should walk the operations area and notify personnel. Face to face notification will be expedited to reduce exposure.

• Personnel will move into designated buildings . MLO Operations “Sugar Shack” will serve as primary shelter during lightning or wind events. Overflow personnel will go to the Donaldson Fire Department and the entrance gate.

• If aircraft enter the ramp area, military and agency personnel will remain under cover. MAFFS Operations will have radio contact with C-130 pilots to communicate detection of lightning. Military pilots may exercise the choice to park at their discretion and shut-down aircraft engines. Once lightning danger has passed these aircraft can be towed into appropriate pit or parking areas.

• When threat of lightning has passed, personnel will be allowed to return to the outside environment.

• Verbal permission from appropriate authority (Safety Officer, line Chief, etc.), or one long blast from an air horn may serve as notification of release from restrictions.

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 DONALDSON AIR CENTER,GREENVILLE SOUTH CAROLINA

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**LIGHTING PLAN**

Security personnel at entrance gates:

• It is strongly advised that vehicle be made available to security personnel and staged in close proximity to a guarded entry gate. Upon notificati6n,security personnel will take cover from lightning inside the vehicle.

• If a vehicle is not available to shelter security personnel, gates will be secured and personnel will move into a designated building. Donaldson Air Center Fire Department's substation adjacent to the FAA Tower will serve as lightning and wind shelter for security personnel and overflow of flightline personnel.

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**EMERGENCY PROCEDURES PLAN**

Aircraft Crash Rescue Response (continued)

Dependent on declared emergency the Fire Department Crash Rescue unit can elect to stop the aircraft on any airfield surface. Aircraft attached to MAFFS training may be diverted to another area other than the "Indiana Jones" ramp.

In the event of an emergency requiring Crash Rescue *I* Fire Department response, the aircraft and  **aircraft** ramp are the jurisdiction of the Fire Department and their Incident Commander. Until the response has been cleared by the Fire Department, Agency and military personnel will not enter the aircraft ramp or. Approach the aircraft.

Fire Hydrant Precedence

Fire hydrants adjacent to the aircraft ramp will supply water to MAFFS operations. These hydrants are primary water supplies for Fire Department emergency operations. Fire Department use of these hydrants will take precedence over MAFFS operations.

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| --- | --- | --- | --- | --- |
| **MEDICAL PLAN** | 1. Incident Name

MAFFS Training Greenville, SC | 1. Date Prepared

6 MAY 2012 | 1. Time Prepared

10:00 AM | 1. Operational Period
 |
| 5. Incident Medical Aid Station |
| Medical Aid Stations | Location | Paramedics Yes No |
| Donaldson Center Airport | Fire Service Area, | X |     |
|       | Donaldson Center Airport |     |     |
|       | Greenville, SC |     |     |
| **EMERGENCY'S ONLY** | **Ph. No. 864-277-1117** |     |     |
| Business Office | (864) 277-1429 |     |     |
| 6. Transportation |
| A. Ambulance Services |
| Name | Address | Phone | Paramedics Yes No |
| Emergency Medical Service | Greenville County | 864-277-1117 | X |     |
| Gantt District Fire Dept. | 1331 White Horse RD | 864-277-0429 | X |     |
| South Greenville Fire District | 8305 Augusta RD Pelz | 864-243-5650 | X |     |
|       |       |       |     |     |
|       |       |       |     |     |
| B. Incident Ambulances |
| Name | Location | Paramedics Yes No |
| EMS UNIT @ DONALDSON | Donaldson Center Airport | X |     |
| CENTER FIRE SERVICE |       |     |     |
|       |       |     |     |
|       |       |     |     |
|       |       |     |     |
| 7. Hospitals |
| Name | Address | Travel TimeAir Ground | Phone | HelipadYes No | Burn CenterYes No |
| Greenville Memorial | 701 Grove Road, Greenville, SC | 4  | 10 | 864-455-7000 | X |     |     | X |
| TRAUMA CENTER |       |     |     |       |     |     |     |     |
| St. Francis Hosp. | 1 St. Francis Drive | 5 | 15 | 864-255-1000 | X |     |     | X |
| Augusra Burn Center | Augusta, GA | 30 | 150 | 706-651-3232 | X |     | X |     |
|       |       |     |     |       |     |     |     |     |
| 8. Medical Emergency Procedures |
| **Any emergency’s are to be routed through Donaldson Airport Fire Department @ (864) 277-1117. They are the first responders and will dispatch closest Emergency Services (EMS) as necessary.** |
| **Prepared by: 145th AW – Safety Manager – SMSGT J. ALLEN “SGT MAC” MCGAHA – CELL# 980-721-0142****REVIEWED BY: US FORREST SERVICE MLO OFFICER AND SAFETY OFFICER** |