



The Safety Corner

From the Marine Corps Center for Lessons Learned
January 25, 2007



Fire Safety

This issue of the Safety Corner highlights lessons and observations about air operations and several aviation mishaps during operations in the War on Terror.

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From the Director:

The lessons learned team works to provide current and relevant information which you can use. A recent mishap aboard Al Asad Air Base relates to several topics previously noted in Safety Corner publications. This issue of the Safety Corner highlights some initial lessons learned from a tent fire and it reinforces the importance of basic risk management practices. Thanks to the quick actions of the base fire department, this mishap was contained quickly to prevent the spread of the fire.

Since 1 January 2007, Al Asad Air Base has reported five fires. The dry conditions, merging of expeditionary, contract, and host nation equipment, combined with the construction of permanent facilities, has created an environment ripe for mishaps. We have begun to see electrical mishaps, fall injuries, explosive safety mishaps, and fires. All of these can be mitigated or reduced through leadership, awareness, close attention to detail, and training. I remember back in the old corps living in a tent up on the Korean DMZ during the winter of 1983. We had a pot bellied stove to keep us warm, when we left the tent we had to make sure it was turned off as you would certainly not leave a fire burning unattended even in the stove. I think you should treat your space heaters and other electrical devices with the same caution that we treated the fire in our pot bellied stoves - consider turning off and unplugging electrical devices that are not monitored just like we shut off the stove at night and when we were gone. The electrical wiring on base has caused other fires. Ensure you are reducing your risk when possible.

Unfortunately, we or at least I, only have 20/20 hindsight. Using that hindsight after the incident, we can see there is a chain of events which leads to every mishap. A break anywhere in that chain can prevent that mishap. There was no break in the chain of events for this fire but we did get lucky - the 40mm grenades found in the ashes of the fire did not detonate and cause another mishap which could have resulted in the death or injury to the fire fighting personnel who responded. Relying on luck should be avoided as we know hope and luck are not viable courses of action. Let's try to get ahead of the mishap and break that chain of events with thoughtful leadership, attention to detail, and training. Check out the explosive ordnance report we put out on 21 Dec- it has some good points for proper ammo storage.

Log on to www.mccll.usmc.mil to download previous editions of the Marine Corps Center for Lessons Learned Safety Corner as well as our Monthly Lessons Learned Newsletters and other reports.

Related Safety Corner Issues:

Electrical Safety – 14 Aug 2006

Electrical Safety Update – 21 Aug 2006

Space Heaters – 20 October 2006

Explosive Safety – 21 December 2006

I look forward to your comments, observations, and concerns.

Semper Fidelis,

Col Monte Dunard, Director MCCLL

Email : monte.dunard@usmc.mil. Telephone: 703.432.1286 DSN: 378.1286

The observations and recommendations contained in The Marine Corps Center for Lessons Learned (MCCLL) Safety Corner represent the considered judgment of Marines who have identified safety issues in their units. The purpose of this newsletter is to apprise other Marines of these safety recommendations and to encourage them to enter their own lessons into the Marine Corps Lessons Management System (LMS).



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Fires of Al Asad

*By Miles Bowman,
3D MAW (FWD) Tactical Safety Specialist*

On New Years Day, 1 January 2007, a fire started in an unoccupied tent in the Rockhouse compound. At the time of this printing, the apparent cause of the fire is assessed to be a heater that was left on when personnel moved out of the tent. The fire spread to another tent before being extinguished by the fire department.

The fire burned so quickly that the first tent was completely engulfed in fire and all combustible material was incinerated. Nothing remained of the mattresses but the bare metal springs by the time the fire was put out.

After the fire was extinguished, inspection of the rubble revealed that someone had stored 40mm rounds in the tent. If they had cooked off during the fire, first responders could have been killed or severely injured.



Much can be learned from this mishap, and two things in particular should be understood by everyone:

- 1) Last man out turn off heaters, lights and other electrical appliances. If a building or tent will be vacated and unoccupied for a period of time, call the KBR Help Desk to have the electricity shut off. This will prevent accidental overheating of wires and heaters.
- 2) Do not store ammunition in any place that is not properly designated and approved for ammunition storage. This base has plenty of armories and amnesty boxes, there is no acceptable excuse to store ammunition in any place that could cause unintentional injury or death.

Contact 3D MAW(FWD) DOSS or your local Safety Officer if you have any questions about your local regulations.

<http://www.acemnf-wiraq.usmc.mil/DOSS/>

Phone: DSN 318-3411-133 or 301

Email: OMB_ACE_Safety@acemnf-wiraq.usmc.mil



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Fire Extinguishers 101

Other Safety Tips:

Fire Exits:

- Make sure all fire exits are clearly marked
- Keep fire exits and evacuation routes clear and free of obstructions
- Mark doors "Not an Exit" if they can be easily confused as an exit

Evacuation Plans:

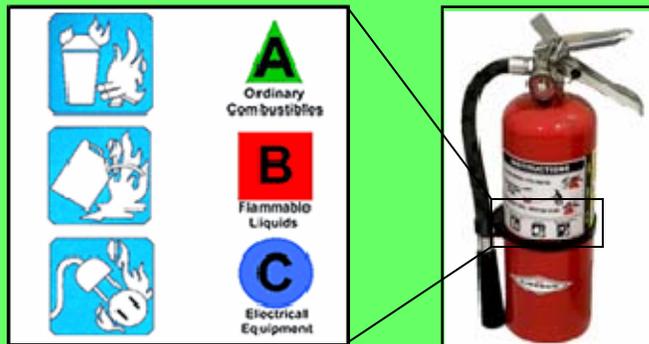
- Ensure evacuation plans are posted in visible locations
- Have a primary and secondary evacuation routes
- Ensure all personnel are familiar with evacuation procedures, conduct regular fire drills, update your plan as needed
- Have designated muster areas and a plan for accountability

Housekeeping:

- Do not store flammables/combustibles in the open; store in approved lockers
- Do not store ammunition and explosives in billeting or working areas
- Keep fire extinguishers clear of obstacles
- Fire extinguishers need to be stored where they are protected from the elements and from any physical damage

Extinguisher Ratings

Fire extinguishers are rated by the type of fire they can put out.



Class A extinguishers can put out fires from "ordinary combustibles" such as wood, plastic or paper.

Class B can put out burning liquids such as [gasoline](#) or grease.

Class C can put out electrical fires. Extinguishers marked A, B and C can put out all types.

Class D extinguishers, designed to put out burning metal, are rare.

Check the letters and pictures on your extinguisher to find out what it can handle.

Although a fire extinguisher can be vital in preventing the spread of a small fire, the primary use should be to preserve the safety of yourself and that of others around you.

Use a fire extinguisher to ensure a safe means of egress out of a building or workspace before attempting to fight a fire.

To Fight a Fire or Evacuate

All fires can be very dangerous and life-threatening. Your **safety** should always be your primary concern when attempting to fight a fire.

Before deciding to fight a fire, be certain that:

- The fire is small and not spreading. A fire can double in size within minutes
- You have the proper fire extinguisher for what is burning
- The fire won't block your exit if you can't control it. A good way to ensure this is to keep the exit at your back
- You know how to use your fire extinguisher. There's not enough time to read instructions when a fire occurs.

How to Fight a Fire Safely:

- Always stand with an exit at your back, but keep aware of the exit to ensure it does not become blocked
- Stand several feet away from the fire, moving closer once the fire starts to diminish
- Use a sweeping motion and aim at the base of the fire
- If possible, use a "buddy system" to have someone back you up or call for help if something goes wrong
- Be sure to watch the area to ensure it doesn't re-ignite

Never Fight A Fire If:

- You have not been properly trained on a fire extinguisher. Improper use of a fire extinguisher can make a fire worse
- The fire is spreading rapidly
- There is considerable heat or significant smoke or fumes
- You don't have the proper fire extinguisher. The wrong type of extinguisher can be dangerous or life-threatening.



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TOP TEN things you need to know about Fire Extinguishers:

1. Most extinguishers will be ABC or BC type and will work for most fire situations
2. Extinguishers should be stored near exits or hazard areas
3. They are for small fires. They will not extinguish large fires
4. Household extinguishers operate for 10 to 20 seconds at the most
5. Extinguishers can hold the fire in check to allow escape
6. Make sure everyone is out and 911 has been called before fighting a fire
7. Never turn your back on a fire
8. An extinguisher must be recharged or replaced after each use
9. Always store the extinguisher in an easy to reach area never higher than 5 feet
10. Pull, Aim, Squeeze and Sweep!

Inspections

Fire Extinguishers need to be inspected at least once a month (more often in severe environments).

You must ensure that:

- The extinguisher is not blocked by equipment or objects that could interfere with access in an emergency
- The pressure is at the recommended level. On extinguishers equipped with a gauge (such as that shown on the right), the needle should be in the green zone - not too high and not too low
- The pin and tamper seal (if it has one) are intact
- There are no dents, leaks, rust, chemical deposits and/or other signs of abuse/wear. Wipe off any corrosive chemicals, oil, gunk, etc. that may have deposited on the extinguisher



Some manufacturers recommend shaking your dry chemical extinguishers once a month to prevent the powder from settling/packing.

Make sure to sign the inspection tag of every fire extinguisher after each inspection

Navy Petty Officer 2nd Class Joseph L. Entrekin inspects a fire extinguisher at Al Asad, Iraq



U.S. Consumer Product Safety Commission announces Kidde brand Industrial Fire Extinguisher Recall

Kidde is recalling some of its 10-pound industrial fire extinguishers that have a welded steel neck collar cylinder and were manufactured between 1991-2000. These units incorporate black plastic Zytel® nylon valves that may degrade over time, and may result in the valve spontaneously separating from the cylinder. These units were primarily designed for the commercial and industrial market, and the vast majority of them will be found in businesses and other commercial spaces. However, a limited number of consumers may have purchased these for their home.

If you suspect your fire extinguisher is subject to this recall, contact your safety officer immediately. You can also contact Kidde directly at (800) 631-7377.

More information can also be obtained by visiting Kidde's Web site at www.kiddeus.com and referencing Kidde Service Bulletin 007 and Recall Alert.



AFFECTED 10 LB MODEL STEEL CYLINDER WITH WELDED NECK RING & NYLON VALVE.
REMOVE FROM SERVICE



NON-AFFECTED 10 LB INDUSTRIAL MODEL INCORPORATES ALUMINUM CYLINDER AND NYLON VALVE
ALUMINUM CYLINDER HAS TAPERED NECK AND NO WELDED NECK RING
LEAVE IN SERVICE