



Event Type: Suppressing a Military Jet Crash Fire

Date: July 13, 2026

Location: Pine Tree Fire, Okanogan-Wenatchee National Forest; Washington

Are You Ready to Respond to a Military Jet Crash Fire? The Story and Lessons from this Downed Marine F/A-18 Jet Incident

"Fighter jet just crashed into Bear Mountain near Rimrock Lake, multiple 911 calls . . . Pilot ejected but the plane did make impact and started a fire."

—Dispatch Log

On the morning of July 13, 2026, U.S. military aircraft were conducting training flights over the Naches Ranger District on the Okanogan-Wenatchee National Forest. During this training, the pilot of a Marine F/A-18 Jet ejected from the aircraft.

The ejected pilot parachuted to the ground relatively unharmed as his suddenly unmanned aircraft crashed into a forested mountainside above Rimrock Lake, a popular recreation area. Upon impact, the unburned jet fuel onboard exploded with a highly visible ball of fire and thick, dark smoke. This jet fuel fire spread to the adjacent wildland fuels, instantly creating a one-half-acre wildland fire, the Pine Tree Fire.

In addition to being a popular recreation site, numerous U.S. Forest Service special-use "permittee" cabins and recreation facilities line the shores of Rimrock Lake. Several cabin residences as well as people recreating in the adjacent area captured video of this event and many reported the fire to 911.

The Central Washington Interagency Communication Center (CWICC) began dispatching wildland firefighting resources to this incident. Prior to any resources arriving on scene, when aircraft were being ordered, CWICC talked to a Washington Department of Natural Resources Unit Aviation Officer (UAO).

The UAO stated: *"We should not engage because it was a military jet crash site and they would want to do an investigation first."*

It is unclear if this perspective was relayed to or shared by other responding fire personnel. Several wildland firefighters responding would question: *"Why are we responding to a plane crash?"* Firefighters, ICs and district fire managers throughout this incident's duration expected the military to arrive quickly and take command of the incident. All acknowledged the need for some type of suppression action on the surrounding wildfire.

It is worth noting that the Naches Ranger District and the Okanogan-Wenatchee National Forest are a highly used training area for military jets. This is the second military jet to crash on the Naches Ranger District in the last two years. An October 2024 jet crash occurred over non-receptive fuels and no wildfire occurred. A near-miss incident in 2021 occurred when a fighter jet came dangerously close to a smokejumper plane and aerial firefighters. (See: [Fighter Jets, Risk and Culture FLA 2021](#).) This current 2026 incident was the first jet crash that also required wildfire suppression actions.

It is possible that similar aviation mishap incidents could happen here again.

Potential Hazmat Exposure to Ground Personnel

The ejected pilot was able to walk out of the forest and onto a primary road where he was picked up by a local sheriff deputy, transferred to an ambulance, and transported to the emergency department of a local hospital for further evaluation and treatment of superficial lacerations and bruising.

Prior to this medical transport, the pilot relayed to the sheriff deputy that no ammunition or explosives were onboard as this had only been a training flight. The sheriff deputy relayed this information to the Naches Ranger District Fire Duty Officer (DO). The DO then relayed it to the Engine Captain of a Type 3 Engine that had just arrived on scene.

The Engine Captain, a qualified ICT4, assumed the role of IC. The IC and DO had a phone call in which the DO stated: *"Order any resources needed and you will get it."* The IC recognized the potential for numerous hazardous materials to be present with a military plane crash. An initial size up made from approximately 1,000 feet away from the crash site was completed to reduce potential hazmat exposure.

Knowing that the pilot had been recovered and no additional medical extrication was necessary, the ICT4 directed Air Attack and helicopters to suppress the surrounding forest fuels that were burning while they devised a plan to limit potential hazmat exposure to ground personnel.

After 45 minutes on scene, the ICT4 now noted a distinct difference in smoke volume and color that was present closer to the immediate impact area. The smoke's color had shifted from a thick dark column to light greyish-white smoke—indicative of typical wildland fuels that burn in local vegetation fires.

Weather conditions that day were mild with upslope, upvalley winds with an easterly component. The IC felt confident that with the time already passed since the initial crash impact, as well as the transition in smoke and east winds, the fire could now be flanked on its eastern edge.

Initial Suppression Strategy is Vague

Alternative containment strategies were discussed between the fire DO; the local Naches Ranger District Assistant Fire Management Officer – Operations (Ops AFMO); the IC; and other firefighters on the ground. Everyone was trying to determine the best strategy and tactics for an unusual and complex response.

These discussed options included: aviation only; building an indirect "big box" fireline versus going direct; utilizing some type of sprinkler lines; and point protection around cabins.

Initially, the strategy remained somewhat vague. The initial plan that was communicated was to keep firefighters out of the smoke and allow suppression aircraft to continue working along the fire's western flank with water bucket drops.

While this bucket work from three helicopters on this relatively small fire significantly reduced fire behavior, it also limited the area that ground personnel could access. Bucket work seemed to be the most effective tool to contain this fire and limit exposure to ground personnel.

The IC gave a safety briefing to firefighters on scene and emphasized hazmat concerns with statements such as: *"Stay out of the smoke. Let's keep our distance—no digging line, just spray water."* *"We know fire. What we don't know are the hazards associated with this plane crash."* *"This is more of a 'tip-toe around it' approach."*

Firefighters Begin Working Closer to Crash Site

A staging area was established approximately 1,000 feet east of the fire. Additional resources were ordered and a hose lay was started from the staging area toward the fire's eastern flank. Initially, the Ops AFMO was dispatched to the fire to take over the IC role due to this incident's perceived complexity. However, after the Ops AFMO and the IC discussed this possible transfer of command they decided that the current IC would keep the fire and the Ops AFMO would help coordinate with local law enforcement officers on scene to establish a perimeter and encourage public evacuations from this very high-use recreation area.

The Ops AFMO then coordinated with Dispatch and the on-scene Law Enforcement Officers (LEO) to try to identify an appropriate Military Liaison. It was hoped this liaison could offer additional guidance on how to safely proceed with this type of military incident.

As incoming resources arrived, the IC continued to emphasize in all briefings that hazmat is the biggest concern: *"We still don't know exactly what the plane crash may be giving off. So try to stay away from the smoke and debris."* As fire behavior and smoke volume continued to diminish, firefighters began working closer to the crash site.

Concerns About Possible Hazmat and Other 'Unknowns'

Meanwhile, the Central Washington Interagency Communications Center had been attempting to contact all nearby military bases. No official military pathways were able to offer additional information or assistance with how to manage this specific military jet crash site. This became a large source of frustration for personnel at the Dispatch Center and in the field.

While communication with military personnel was limited, the Ops AFMO was able to communicate with a U.S. Navy Safety Team about what type of hazards might be present and what ground personnel were doing to limit fire spread from the wrecked aircraft. Information from that conversation was relayed to the ICT4, including the update that the crashed jet was a U.S. Marine platform, originating from Marine Corps Air Station Miramar in San Diego, California.

Initial direction to the IC from the DO: *"Try to have the fire contained and in a controlled state as quickly as possible while minimizing exposure of smoke and hazmat hazards to firefighters—due to rec residences in the area and the anticipated military presence for their investigation."*

At some point that first afternoon, it was relayed back to the DO that "containment" would not be possible by that evening due to hazmat and a cliff band that limited movement. There was also some confusion in how the word "controlled" was interpreted by ground resources.

Recognizing that ground resources would not be able to safely complete handline around the entire fire by the end of shift without additional exposure to downwind hazmat fumes on the right flank and the high-risk cliff band terrain, the IC transferred command to a Night Shift IC with a small group of firefighters to: monitor the site overnight, limit public access, and be in place should fire behavior intensify.

Concerns about possible hazmat, unexploded ordnance (UXO) or ammunitions, and other "unknowns" were shared with the Night Shift IC and supporting resources from the Washington State Department of Natural Resources (Washington State DNR).

In the absence of specific military guidance, wildland firefighters continued to communicate their concerns about the potential hazmat presence and the desire to keep firefighters as safe as possible—while also getting the fire under control and limiting any future risk to public safety and the nearby structures.

That evening was relatively uneventful. The Night Shift IC transferred command to a new incoming Day Shift IC for the next—July 14—day shift.

Day 2

On the morning of Day 2, the previous Night Shift IC transitioned to a qualified ICT4 from the local Naches Ranger District's Initial Attack Crew. The two ICs discussed their continued concerns surrounding hazmat from the aircraft crash and their expectations to avoid anything hazardous. There was still no specific guidance from the military on safe distances or exactly what hazardous chemicals might be present.

No aircraft were utilized on Day 2.

A Type 2 Support Water Tender had been ordered in conjunction with another U.S. Forest Service Type 6 Engine and a 20-person Initial Attack Crew from the Washington State DNR. Knowledge of hazmat and unexploded ordnance was still limited to information gained from the pilot, the local AFMO, and the U.S. Navy Safety Team conversations from the previous day.

Upon arrival at the incident, day resources encountered personnel from the U.S. Navy Safety Team doing their initial assessment of the aircraft mishap. These military personnel were not wearing PPE associated with wildland fire suppression nor any additional hazmat PPE. Even so, they expressed some concern that wildland fire personnel had been in the fire perimeter due to the possible exposure from materials that burned during the aircraft/wreckage upon impact.

The "laid-back" demeanor and street clothing (shorts and running shoes) of this military group conveying the hazmat concern while seeming to expose themselves to the same hazmat potential was confusing to firefighters. One firefighter noted how when two military personnel were joking with each other, one said: *"Try not to breathe in the 'Carbon Fiber smoke'."* And the other joked back: *"Oh, whatever. We'll just add it to our disability."*

Fire is Fully Lined – Several Firefighters Note 'Weird Smells'

Day 2 resources observed smoldering and creeping fire behavior with a few pockets of two-to-three-inch flame lengths. There was much less smoke than the previous day. The primary crash site was still smoking. The Pine Tree Fire was estimated to be one and one-half-acre in size.

The IC briefed resources and emphasized the desire to keep people as safe as they can be. The phrase *"Avoid carbon fiber smoke"* began to be emphasized, even if the dangers of carbon fiber smoke were not yet fully realized.

The day shift resources built off the previous shifts' progress, extending handline along the fire's east flank, down and around the lowest point of fire on the slope, and then up the right flank, connecting with the east flank line at the top of the fire.

They also lined a couple of small spot fires and extended the hose lay to completely encircle the fire. Once the fire was fully lined and plumbed, they utilized water from the hose lay to suppress the fire. As the work shift continued, they gradually began to mop up the fire by mixing water from the hose lay with hot ash and dirt, stirred together by hand tools.

Numerous firefighters reported that it felt like a smooth shift and would have been a very normal wildfire response except that the jet's wreckage was in the middle of the fire. Several firefighters noted *"weird smells"* presumed to be jet fuel, hydraulic fluid, or smoldering plane debris.

They tried to stay out of the smoke that remained as best they could while continuing to make progress in suppressing the fire.

Toward the end of the Day 2 day shift, one of the engine captains on scene agreed to assume the IC role for the following July 15 day shift. At end of the Day 2 day shift, with the progress made during the first two shifts, no night shift was deemed necessary. Resources departed to their duty stations for the night.

Day 3

They returned on the morning of Day 3 to even less visible smokes than the prior day and continued to mop up the fire as they had been doing. With most of the wildfire smoke now gone, several firefighters continued to report that they could perceive “weird chemical smells” in the green surrounding the fire—up to 1,000 feet away.

In the early afternoon, firefighters positioned lateral hoses into a makeshift sprinkler system to allow them to step back into cleaner air while this “sprinkler system” continued to put water on the fire. This allowed firefighters to increase their separation distance from potential hazmat remaining in the area.

On the afternoon of Day 3, additional military personnel arrived to continue their investigation mission. This group appeared to be more experienced than the previous military group. They expressed surprise and concern that firefighters wearing only wildland PPE had been working the fire footprint so closely to potential hazmat exposure.

One of the official investigation team representatives told the IC: *“Anyone working near or in the crash site should go to the hospital and get checked out. And they should also decontaminate or destroy any permeable gear that has been exposed.”*

Following this statement, the nature of concerns escalated during conversations with the IC, U.S. Navy Safety Team, the Ops AFMO and the local Naches Ranger District Fire Management Officer (FMO). This group decided to pull all firefighters off the incident and monitor the fire from a safe vantage point one mile down the road.

Safety Stand Down

Many conversations continued to unfold about what contaminants firefighters may have been exposed to, what medical screenings or treatment to follow, and how to decontaminate gear and equipment.

This led to a “Safety Stand Down” to remove firefighters from the incident and any additional hazmat exposure. Fire leadership consulted with subject matter experts to determine next steps. A Microsoft Teams video conference call brought together the fire IC(s) and Okanogan-Wenatchee Fire leadership with Regional and National U.S. Forest Service Fire, Risk, Health and Wellness subject matter experts.

This leadership group believed that they had an appropriate plan to keep ground firefighters away from additional hazmat exposure by utilizing only aviation resources if any additional suppression activity was needed on the Pine Tree Fire.

They also identified options for employees who may have received hazmat exposure to document the incident via the U.S. Forest Service eSafety tracking and reporting tool with CA-1s and CA-2s. In addition, those employees who so desired were told to seek medical evaluation as well as receive decontamination or replacement of their firefighting equipment and PPE clothing.

Confusion and Anxiety

It was acknowledged that the time lag between potential exposure on this incident and the inconsistent delivery of practical guidance to potentially affected employees created some confusion and anxiety.

There was misunderstanding regarding who qualified for medical screenings and how to best document or seek evaluation. There was also confusion about who was responsible to pay for any needed medical screenings as well as gear decontamination or replacement. There was additional anxiety associated with so many “unknowns” and wondering if employees were doing enough to keep themselves safe and healthy. As a local Battalion Chief phrased it: *“What we missed was following up as the information evolved.”* Some people believed that the post-incident response was insufficient—while others felt it was excessive or unnecessary.

Lessons

1. It is difficult to safely mitigate risks from hazardous material when the materials and their associated hazards are unknown.

- a) The IRPG has guidance for Aircraft Mishap Response Actions (blue) page 79; HazMat Operations (yellow) page 54; HazMat Isolation Distances (yellow) page 55. In addition, consult the IRPG for general Hazmat Isolation Distances, page 55.

HazMat Isolation Distances

- Minor event (<1 drum, 1 bag, etc.) = 150'
- Major event (>1 drum, etc.) = 500'
- Residential and light commercial = 300'
- Open areas = 1,000'
- Boiling Liquid Expanding Vapor Explosion (BLEVE) potential = 2,500' (one-half mile)
- Stage arriving units = 2,500' upwind
- Position vehicles headed out

The following 24-hour emergency response communication services have agreed to provide immediate information about chemicals and/or assistance from a manufacturer:

- b) The Department of Transportation (DOT) Emergency Response Guidebook is also a readily available hazmat quick reference tool. It is available in a physical print as well as digital version. The [2024 Emergency Response Guidebook](#) that can be downloaded as an offline app.



2. Trying to contact “The Military” is a nebulous concept for wildland firefighters, fire managers, dispatch centers, and agency leadership. The U.S. military is comprised of many different branches and specialists.

“I kept waiting for the military to call or arrive on scene that first day, but they never did.”

-Pine Tree Fire Firefighter-

- a) Consult with Military Liaisons. Identify contact information during pre-incident planning if possible.
- b) Establishing Military Liaisons in advance and coordinating communication drills could help prepare for future wildfire-military collaborations.
- c) Current IRPG Military contact info:

**U.S. Army Operations Center for incidents
involving explosives and ammunition:
1-703-697-0218**

**Federal law requires that all spills of hazardous
substances be immediately reported to the U.S.
Coast Guard/National Response Center:
1-800-424-8802**

3. **MISSION CREEP.** “Mission Creep” are those slow, incremental actions that gradually deviate away from stated priorities or intent toward a less desirable end state and increased hazard exposure. Mission Creep was a major theme on this fire.

On this incident, day-by-day resources started to engage in more traditional styles of direct suppression and mop up, despite the obvious hazards that were present. To their credit, when the full scope of potential hazmat was revealed, resources disengaged from direct attack and went into monitor mode.

We tend to gravitate toward what we are comfortable with and avoid what we are less comfortable with. We are comfortable suppressing fire. We are less comfortable with hazmat or military coordination. Intentional effort may be needed to resist defaulting to fire suppression in the presence of a potentially greater but less known hazmat hazard.

Discussion Question:

Have you ever had a similar experience where you felt yourself gravitating toward the familiar and avoiding something because it was unfamiliar?

4. **Trust Your Gut.** We all have varying degrees of life experience and professional firefighting experience. As one AFMO phrased it: *“The thing I would share is to use your training, trust your gut, and make the best decisions you can where you are with what you are encountering. Stop, Think, and Talk about what you have available to you (resources, information, etc.). Hearing the voice of my mentors and those I respect in this job, we can trust our basic training, 10 & 18, LCES, IRPG, and Hazmat Guides to communicate with all involved to make good decisions. Then, make sure to follow up with your people so they know that they are valued and that their concerns are taken with the utmost respect for their safety and wellbeing.”*

This incident highlights the value of having primary and alternative options. Multiple options and continuous reevaluation of strategies and tactics allow us the flexibility needed to ensure exposure to responders is mitigated to the lowest level possible and that firefighter and public safety remains the highest priority.

5. **Dual Roles.** Every day for three days there was a transfer of command to a new IC. Each of these ICs arrived to the fire in some type of dual role capacity. The initial IC was the Engine Captain from the first engine on scene;

the Day 2 IC was the Crew Supervisor of a hand crew assigned to the fire; and the Day 3 IC was the Engine Captain of an engine assigned to the fire.

The issue compounded with some of the ICs also acting as qualified trainers for trainees wanting to gain experience on this incident. While there is no indication that dual roles on this incident led to less desirable outcomes—it is something to be aware of.

It was noted that some overall incident complexity was reduced as a result of relatively low wildfire behavior after the first day and reduced further by multiple District overhead employees coordinating military, dispatch, and fire leadership communications offsite.

Dual roles can overwhelm span-of-control capacity and focus. They can also lead to communication inconsistencies based on previous relationships rather than the current position.

It has also been pointed out that while dual roles might be more common than we would prefer, they are difficult to avoid entirely given current staffing shortages, an influx of new employees, an increased fire load and a desire to quickly train newer employees to meet the increasing fire demand.

Our most qualified firefighters on scene are typically the module leaders. They will likely be asked to fill fire incident leadership roles with their modules in tow. This is a complex issue that warrants additional attention.

6. **Multiple Transfers of Command.** This incident had three different ICs over three days, plus a Night IC on the first shift, and two IC trainees. This volume of unique individuals in leadership roles may have allowed communication silos where not all messages were communicated with the same intent or desired emphasis. All firefighters reported receiving operational briefings at the beginning of each shift that emphasized potential hazmat presence and the need to limit or avoid hazmat exposure. Anytime there is a transfer of command, the potential exists that some specifics or emphasis are lost.
7. **UAS.** Consider UAS (drones) for initial incident size-up of potential hazmat sites. More information can be found at: <https://uas.nifc.gov/>. Contact the National UAS Coordinator at 208-387-5335 (staffed 24/7).
8. **Transferring Risk to Aviation Resources.** There have been many conversations around risk transference versus risk mitigation. If we are going to transfer hazmat smoke exposure to aviation resources, are we communicating the perceived hazard appropriately so that the pilots can make an informed decision to accept or decline the risk transference? On this incident, ground resources did communicate the hazmat presence and concerns to arriving aviation assets.

Helicopters typically have non-pressurized cabins and are susceptible to inhalation hazards.

Some military guidelines that were reviewed restrict rotor-wing operations to at least 500 feet above and 1,000 feet horizontally away from aircraft mishap hazmat sites as a minimum precaution. Wind force from rotor wash can aerate—or stir up—hazmat, increasing its exposure to personnel.

9. **Starlink Mobile for Communications.** Starlink was identified as a significant technology improvement that improved communications on this incident. There are known issues in this geographic area due to steep mountainous terrain and radio repeater limitations. Starlink helps resources maintain clear communications via cell phone and internet. It was noted that Starlink is a closed point-to-point (phone call, text, or email) communication system. Therefore, some messages are lost when they aren't able to be heard by everyone—like when messages are broadcast over a radio transmission. This observation was countered that messages transmitted over the radio can also be lost when radios don't effectively transmit the message being sent.
10. **Hazardous Material Exposure Documentation, Screening, and Treatment Training.** The post-incident response directions related to hazmat exposure, documentation, and medical treatment were unclear. Documentation treatment and policies vary depending on employment agency or entity. Two guiding themes emerged that are consistent across agencies. 1) Never delay medical treatment or patient care because of paperwork confusion.

2) It is strongly recommended that employees train on documentation and treatment policy well before it is needed. *“Do not wait until the moment you need a fire extinguisher to learn how to use a fire extinguisher.”*

The U.S. Department of Agriculture and the U.S. Department of the Interior have Industrial Hygienists and Medical Physicians who may be consulted to provide additional guidance.

RLS Team

Philip Capurro and John Bitzberger

Do you have a Rapid Lesson to share?

(<https://lessons.wildfire.gov/submit-a-lesson>)

**[Share Your
Lessons](#)**