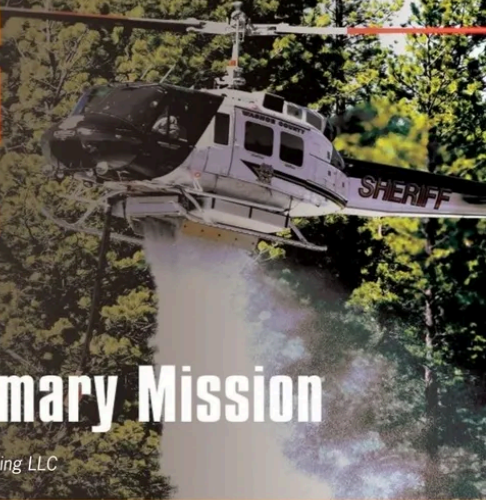


SUPPORTING THE FIGHT:

When Wildfire Isn't the Primary Mission

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As the 2026 wildfire season continues to expand across multiple U.S. regions, public safety aviation units are increasingly finding themselves supporting missions outside their traditional operational focus. While dedicated aerial firefighting agencies remain at the center of suppression efforts, law enforcement aviation units, sheriff's offices, search and rescue programs, EMS operators and multi-mission helicopter teams are often called upon to assist with evacuations, reconnaissance, logistics, command support, search operations and coordination during rapidly evolving incidents.

For many of these organizations, wildfire response is not a daily mission profile. Their crews may be highly experienced in patrol, rescue, tactical operations, medical transport or disaster response, yet have limited exposure to the operational demands associated with fire environments.

As wildfire incidents become larger, more complex and more frequent, the challenge for public safety aviation is no longer simply whether agencies can respond, but whether they are adequately prepared for the unique conditions.

Expanding Roles in a Complex Environment

Wildfire operations often require a level of interagency coordination and operational adaptability that differs significantly from routine public safety aviation missions. Aircraft from multiple jurisdictions and agencies may suddenly be operating within the same airspace under temporary flight restrictions, often in mountainous terrain, reduced visibility, rapidly changing weather and high-workload environments.

Public safety aviation units may be tasked with:

- Evacuation support.
- Aerial reconnaissance.

- Thermal imaging operations.
- Search and rescue coordination.
- Transportation of personnel or equipment.
- Communications support.
- Incident command observation.
- Urban interface patrol operations.
- UAS reconnaissance and incident support.

The assignments may develop quickly with little advance preparation, particularly during rapidly expanding fires affecting populated areas. In many cases, agencies that normally operate independently must immediately integrate into larger incident management structures involving federal, state, local, military and contract aviation resources.

The aviation challenges extend well beyond basic flight proficiency.

The Rapidly Changing Environment

Wildfire incidents create a dynamic operational environment where conditions can deteriorate quickly. Smoke, turbulence, shifting winds, reduced visibility, high density altitude and terrain all contribute to increased workload and elevated risk. Airspace can become congested with helicopters, fixed-wing aircraft, unmanned aircraft systems and support aircraft operating simultaneously under significant time pressure.

Communications discipline becomes critical. Multiple frequencies, changing assignments, unfamiliar terminology and heavy radio traffic can quickly create confusion for crews not accustomed to large-scale fire operations. Maintaining situational awareness while coordi-

nating with ground resources, air attack personnel and incident command structures requires focused crew coordination and strong operational discipline.

In addition to traditional aircraft coordination challenges, wildfire incidents increasingly involve unmanned aircraft systems operating in the same environment. Public safety agencies may deploy drones for reconnaissance, thermal imaging, perimeter assessment, damage documentation, search operations and incident command support. While UAS platforms provide valuable situational awareness and operational flexibility, they also add a layer of coordination within already congested airspace. Integrating manned and unmanned operations safely requires clear communication procedures, defined operational boundaries and coordination between aviation resources, ground personnel and incident command teams. As more agencies incorporate drones into public safety operations, familiarity with UAS integration is becoming an increasingly important part of overall wildfire response readiness.

Fatigue is another growing concern. Extended operational periods, heat, smoke exposure and sustained high-workload flying can affect decision making and performance even among experienced crews. Public safety aviation units that normally conduct shorter-duration missions may not routinely experience the same operational tempo encountered during prolonged wildfire deployments.

These factors do not suggest that public safety aviation units are unprepared or incapable of participating in firefighting operations. However, an understanding of the environment and adequate training are critical.

Qualification & Operational Readiness

Wildland firefighting agencies use established qualification systems and annual refresher requirements to help maintain operational standards. But qualification alone does not always guarantee operational readiness in complex, rapidly evolving wildfire environments.

Many public safety aviation units maintain strong general aviation proficiency, along with basic incident command system familiarity. Some personnel may complete introductory wildland fire courses or periodic refresher training. Yet, without regular operational exposure, it can be difficult to maintain familiarity with wildfire-specific procedures, communication practices and mission demands.

Understanding the challenges is especially important during large incidents where crews may encounter:

- Congested fire traffic areas.
- Rapidly changing tactical priorities.
- Unfamiliar interagency procedures.
- Extended duty periods.
- High cockpit workload.
- Degraded visual environments.
- Pressure to maintain operational tempo.

The issue is not simply training hours or certifications. Operational readiness also involves familiarity, coordination, judgment and the ability to adapt safely under pressure.

As wildfire activity expands nationally, agencies may increasingly face situations where they must support missions with limited recent wildfire experience. In some cases, crews receive "just-in-time" orientation before deployment into environments far more demanding than those associated with their routine operations.

Building Familiarity Before the Incident

Scenario-based training and interagency exercises can help bridge the readiness gap before real-world incidents occur. Public safety aviation units do not necessarily need to become full-time wildfire operators to benefit from greater exposure to wildfire operational concepts and coordination practices.

Adding capability requires a serious commitment to standardization and proficiency training. That is especially true in modern firefighting. Fire buckets, external-load equipment, thermal imaging systems, UAS platforms, rescue gear and communications tools can expand what an aviation unit is able to support, but equipment alone does not create readiness. The personnel using the equipment must understand the operating environment, the coordination structure, and the limitations of both the aircraft and the mission.

Training that incorporates realistic operational environments can help crews develop familiarity with:

- Wildfire airspace coordination.
- Communications procedures.
- Interagency resource management.
- Crew resource management under high workload.
- Smoke and visibility considerations.
- Landing zone management.
- Contingency planning.
- Operational risk assessment.
- Air and ground coordination.
- Manned and unmanned aircraft integration.

Integrated training involving aircrews, tactical personnel, fire agencies, emergency management teams, communications personnel and UAS operators can also improve coordination during actual incidents. Many challenges encountered during wildfire operations are not solely aviation problems, but coordination and information-management problems affecting the entire response system.

Importantly, the training concepts necessary for the mission support far more than wildfire response alone.

Lessons for All Airborne Public Safety Missions

Preparation for wildfire support operations can strengthen broader public safety aviation capabilities across multiple mission areas. Communication discipline, interagency coordination, workload management, operational adaptability, crew resource management and manned/unmanned aircraft integration are transferable skills that improve overall mission effectiveness in law enforcement, SAR, disaster response and EMS operations.

As public safety aviation continues evolving into a highly integrated, multi-mission environment, agencies are increasingly expected to adapt quickly to changing operational demands. Wildfire support is one example of how rapidly mission requirements can expand beyond routine daily operations.

The goal is not for every public safety aviation unit to become a dedicated wildfire operator, but to ensure that when wildfire support is required, crews are not encountering the environment, terminology, coordination demands or risk profile for the first time.

Building familiarity with fire support environments before they occur may help reduce risk, improve coordination, and strengthen operational effectiveness when public safety aviation units are called upon to help communities facing serious wildfire threats. ▀

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