

# AERIAL & GROUND-BASED SUPPRESSION: EFFECTIVENESS & SAFETY

**Air & Ground Suppression Resources** should be deployed together so effective containment lines can be constructed efficiently. Water, foam, gel, or retardant can be aerially delivered in front of equipment and personnel to reduce fire intensity and spread rates to allow direct suppression tactics. Drops can also be made outside of containment lines to control spotting.

**Firefighters must continuously assess** the effectiveness of their tactics and line-building progress and should make adjustments by adding, removing, or rearranging resources.



**Clearance around drop areas** must be maintained to provide a safe working environment for ground personnel. **These minimum standards should be followed:**

**Fixed Wing & Heavy Helicopter Operations:**

- 200' laterally for personnel & equipment
- 300' in front of or behind canopied equipment
- 500' in front of or behind unprotected personnel

**Light Helicopter Operations:**

- 50' laterally for personnel & equipment
- 100' in front of or behind personnel & equipment in grass/brush fuel types or canopied equipment in timber fuel types
- 1½ times the canopy height in front of or behind unprotected personnel in timber fuel types



**Positive communication** with all resources is critical for coordinating suppression tactics and is required for safe operations. The ATGS, IC, DIVS, TFLD and HMGB should communicate information and updates to give each other situational awareness.

**Equipment operators should have a radio** system that allows communication without interference from engine noise.

- ATGS communicates directly with equipment operator.
- ATGS communicates with TFLD who directs HEQB or operator.
- Helicopter Manager (HMGB) can serve as TFLD or HEQB.

**Frequency management is critical** for success when coordinating multiple assets. Keeping resources on one frequency allows a gain in situational awareness. Additional frequencies should be used when communication is hampered by frequency congestion. Communication between aerial and ground firefighters most commonly occurs on Air to Ground frequencies.

**\*Ground Firefighters and equipment operators should scan the assigned A/G Frequency (ies) during air operations.**