



# Interagency Aviation SAFETY ALERT



**No. IASA 16-03**

**Date: June 3, 2016**

**Page 1 of 2**

**Subject: Ground and Water Drop Operations with the CH-47D and BV-234 Helicopters**

**Area of Concern: Type I Helicopter Operations**

**Distribution: All Fire and Aviation Operations**

**Discussion:** In 2016 the US Forest Service added six CH-47D's and one BV-234 Type I helicopters to the large fire support national contract. The amount of water delivered with these aircraft is equivalent to a large airtanker. The force of the water drop could dislodge rocks, knock over trees, and seriously injure ground personnel and equipment. The rotor wash from these helicopters can also knock trees over, snap off tree tops, as well as dislodge large branches and hurl them with great force. Personnel need to maintain a safe distance from the drop area, as you would with an Airtanker drop. [Reference the Incident Response Pocket Guide (IRPG) pages 56-58]

These are new firefighting assets and users are encouraged to use these helicopters only in areas not in close proximity to firefighters until additional operational experience and safety data is collected. Additionally, consider separation of dip sites – these helicopters are faster than other helicopters. As with any helicopter or airtanker drop, firefighters must have positive communication with the helicopter pilots or aerial supervisor to ensure the area is clear.

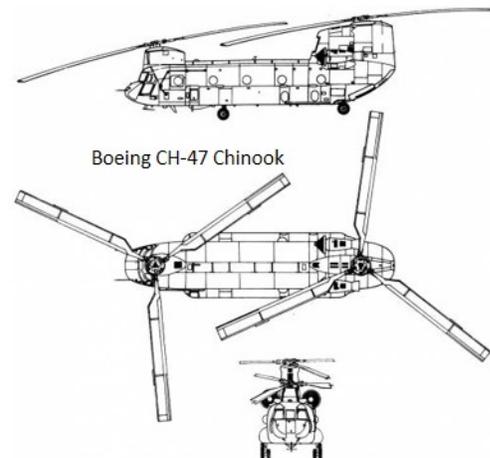
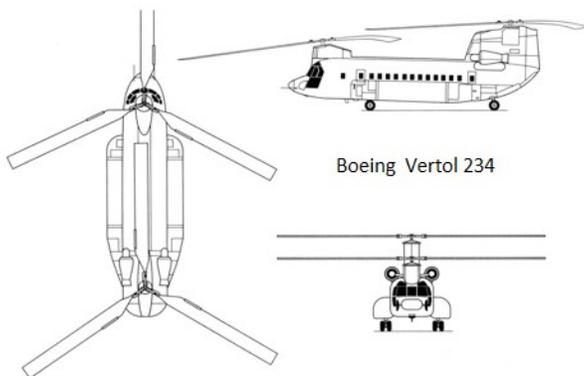


**Key Points:**

- These aircraft can carry 2,000-2,600 gallons of water.
  - Two of the CH-47D's will have internal tanks
  - Five will have variable capacity water/retardant buckets

**Additional considerations when operating these aircraft:**

- The overall size of these aircraft are up to 98 feet 10 inches, rotor tip to rotor tip, making the safety circle nearly 150 feet. When choosing landing areas consider the surrounding environment and amount of rotor wash that could cause damage to personnel, ground vehicles and other aircraft.
- Rotor Diameter is 60 feet.
- Cruise speed is 160 knots.
- Mobilization and demobilization times will be faster.
- Operating speed with water or retardant on board is 140 knots.



Any questions or concerns, please contact Jim Arbaugh, Acting National Helicopter Program Manager at 208-387-5684, cell 916-203-4583, email [jdarbaugh@fs.fed.us](mailto:jdarbaugh@fs.fed.us) or Don Campbell, Acting National Helicopter Operations Specialist at 208-387-5593 cell 208-861-9487, email [dcampbell105@fs.fed.us](mailto:dcampbell105@fs.fed.us).

*/s/ John Mills*

Acting, Chief, Aviation Safety,  
Training & Program Evaluations  
DOI, Office of Aviation Services

*/s/ Gary Sterling*

Branch Chief, Aviation  
Safety Management Systems  
USDA Forest Service