



# **HELICOPTER AVALANCHE CONTROL**

**(CLASSIFIED - CDOT USE ONLY)**

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16. Abstract The Colorado Department of Transportation (CDOT) performs a large number of helicopter-based avalanche control missions annually. Due to the high cost of helicopter-based control work and the safety issues inherent to using helicopters at high altitude in poor weather conditions, this study was commissioned to look at ways to maximize the efficiency of helicopter-based control work. This document reports the results of surveys and experimental testing and the conclusions that can be drawn from those results to fulfill this goal.  The three major conclusions from this project are as follows: <ul style="list-style-type: none"> <li>• The current helicopter avalanche control practices used by CDOT fall within the “best practices” as determined by industry surveys</li> <li>• The current initiation geometry used in CDOT’s helicopter-deployed avalanche control charges is more efficient than the other option tested</li> <li>• There appears to be potential to increase the effectiveness of the helicopter-deployed avalanche control charges used by CDOT by changing the fuel from diesel oil to nitromethane</li> </ul>					
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