



# Department of the Interior Safety Alert

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**Subject: Copper Pellets used in ACETA Missions**

**Area of Concern: Flight Safety**

**Distribution: All Aviation Operations**

**Discussion:** Recently, an aerial capture, eradication and tagging of animals (ACETA) mission was conducted that involved shooting shotguns from a distance of 25-30 yards at about 20-40 feet above ground level (AGL). After a few shots were fired, the crew heard a second audible noise that caused immediate concern. The pilot and Helicopter Manager decided to land the helicopter and inspect for damage. On the ground, the pilot noticed a small two inch diameter shatter on the lower left windscreen. It appears the copper pellets used in the shotguns ricocheted from the rocks below and struck the helicopter. Dispatch and the OAS safety inspector were notified and the pilot received approval to fly back to base once it was determined that there were no significant airworthiness issues.



This was the first ACETA mission where copper pellets were used in shot gun ammunition. This crew used lead pellets in previous ACETA operations due the reduced potential for ricochet. There are many new diverse restrictions on the use of lead in firearms to which this is an unanticipated consequence. This type of hazard was previously identified during ground missions and was discussed by the staff prior to this flight.



Ricochet potential of copper or steel pellets is higher than lead pellets especially in rocky terrain. Before using copper or steel pellets, conduct a thorough risk assessment in order to identify potential hazards and develop appropriate mitigations. Any residual risk should then should be vetted through appropriate management.

We are very fortunate that the copper pellets hit the windscreen and not the pilot or other crew members.

*/s/ Keith C. Raley*

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