



Interagency Aviation Accident Prevention Bulletin



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Subject: Aviation Life Support Equipment Guide/Handbook

Area of Concern: Flight Safety

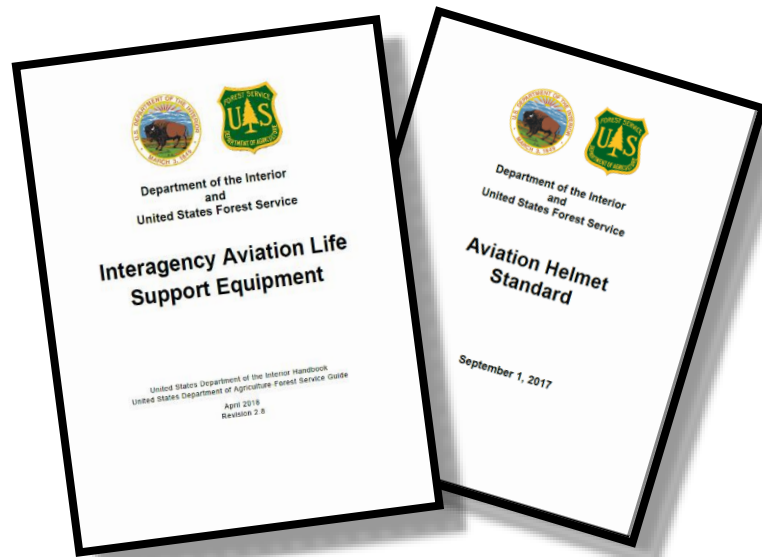
Distribution: All Aviation Activities

**The New Interagency Aviation Life Support Equipment (ALSE) Handbook/Guide¹
has just been approved!**

Previously a DOI only handbook, this newly revised document has been adopted by both the DOI and the USFS. This replaces the previous version dated October, 2008. A working group consisting of personnel from both DOI Bureaus and USFS worked together to review and refine ALSE standards. It can be found on the OAS website: <http://www.doi.gov/aviation/safety/helmet>.

Although there are many meaningful changes (listed in the revision history) the most significant and anticipated development is the new Aviation Helmet Standard. This required identifying helmet testing industry experts and acquiring their services in order to prevent any bias from the manufacturing industry.

As additional helmet manufacturers were entering the marketplace, it was clear that we needed to identify criteria that will provide an acceptable performance level for aviation helmets. Adopting the military's extensive knowledge and expertise was once the only logical option until recently.



How can we add new helmets to the authorized list?

The main challenge was that there is no civil aviation helmet performance standard to reference. Government regulatory agencies (such as OSHA) do not provide any guidance nor have the helmet manufacturers established common industry standards. Simply adopting military specifications as our own standard was eliminated as some of those specifications included military specific design elements and referred to an obsolete standard (ANSI Z90.1) which is unusable for ISO 9001 certified or ISO 17025 accredited testing labs.

¹ Handbooks and guides mean different things in the DOI and the USFS. It is officially a "United States Department of the Interior Handbook" and a "United States Department of Agriculture-Forest Service Guide."

“If you build it, they will come.”

The only option left was for us to build our own standard. OAS contracted with the Southwest Research Institute (SwRI) to provide technical, scientific systems engineering and human factors subject matter expertise to develop a modern, cost effective civilian aviation helmet standards. SwRI has been involved in helmet testing for almost 50 years for a wide range of helmet types. Their helmet program has included standard compliance testing, specialized testing, and component testing, as well as development of helmet test standards, test methodology, and test apparatus.

Result: The DOI/USFS Aviation Helmets Standard Specification

The DOI/USFS Aviation Helmet Standard will provide an avenue to allow non-military approved helmets to be considered for acquisition within our aviation communities. Both manufacturers and distributors can test their helmets with an ISO certified laboratory to the DOI/USFS Aviation Helmet Standard. Those meeting or exceeding the standard will be issued a certificate of compliance by the testing laboratory. These helmets will be identified by the manufacturer and model number on the OAS website within 30 days of receiving the certificate.

Non-military approved helmets previously approved under the old (2008) ALSE Handbook that do not possess a certificate of compliance are authorized for use for a two year grace period – expiring on April 19, 2020. Bureaus/units may be more restrictive if they desire. This will allow individuals and units to plan on any new purchases. Keep in mind that procuring helmet models that meet the new ALSE requirements should also be based on the ability of the Bureau/Agency or manufacturer to acquire repair parts, tools, equipment, other related supplies, and trained personnel to repair and inspect helmets.

All of the documents are on the OAS website including the ALSE handbook, the Aviation Helmet Standard and any certificates of compliance received.

www.doi.gov/aviation/safety/helmet

The ALSE handbook is not one size fits all.

Each unit conducting aviation fire and resource missions may have unique and specific requirements. The ALSE handbook provides a baseline for equipment and procedures, but each operating unit in the DOI, USFS, and individuals are encouraged to supplement these requirements to better meet the needs of the mission and environment and mitigate their risks.

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