NWCG Standards for Aerial Ignition, PMS 501, Summary of Changes

October 2025

Topic	Location	Changes to Publication
Reorganization of document	Entire document	Reorganized the document for better field use, by aligning the document to follow the logical progression of operations.
External linked references	Entire document	Ensured all links were updated and active.
Scope and Authority	Chapter 1: Introduction	Developed and added scope, authority, and resource operations statements.
Background	Chapter 1: Introduction	Developed an introductory chapter to provide history and context to aerial ignition operations.
Aerostat Plastic Sphere Dispenser (PSD) Mark V	Chapter 3: Approved Aerial Ignition Devices	Added that Aerostat Mark V's PSD devices will be removed from service by 2027.
Unmanned Aircraft Systems (UAS) Operations	Chapter 6: Unmanned Aircraft Systems (UAS) Aerial Ignition	Removed UAS qualifications, operations, and considerations from document. Replaced with reference to NWCG Standards for Fire Unmanned Aircraft Systems Operations, PMS 515.
Device Malfunctions and Emergency Procedures	Chapter 7: Device Malfunctions and Emergency Procedures	Developed Chapter 7 for defining Device Malfunctions and Emergency Procedures.
Definitions under Device Malfunctions	Chapter 7: Device Malfunctions and Emergency Procedures	Defined terms for Device Malfunctions: • Jam • Clog • Hangfire
Aircraft Emergency	Chapter 7: Device Malfunctions and Emergency Procedures	Grouped aircraft emergencies into two categories: • "Immediate" • "Delayed"
Development of Aircraft Emergency Response Actions	Chapter 7: Device Malfunctions and Emergency Procedures	Defined roles and responsibilities of each crew member during aircraft emergencies.
Appendix A:	Appendix A – Plastic Sphere Dispenser Operations	Updated external links. Removed Aerostat from Manufactures list.
Appendix B:	Appendix B - Helitorch Operations	Added Mission Aviation Project Plan (MASP) for interagency compliance.
Required Forms	Appendix B - Helitorch Operations	Updated hyperlinks and removed archived reference material.