



Background

The National Fire Protection Association (NFPA) is an international member organization whose mission is to reduce the worldwide burden of fire and other hazards by providing and advocating consensus codes and standards, research, training, and education. The NFPA has over 80,000 members from 80 different countries. The NFPA currently develops, publishes and updates over three hundred standards and codes designed to reduce the potential of fire and minimize the damage done by fire in a wide variety of environments.

The NFPA Board of Directors oversees all of the organization’s activities, including the appointment of a 13-person Standards Council. The Standards Council oversees the development of codes and standards, issues final codes and standards, administers the association’s rules and regulations and acts as an appeals body.

As part of its oversight of the code and standard development cycle, the Standards Council appoints members to over 250 individual code making panels and technical committees. The technical committees are the bodies that propose new codes or standards and modify existing ones.

NFPA 409

The stated purpose of NFPA 409 is:

“1.2.1 The purpose of this standard is to provide a reasonable degree of protection from fire for life and property in aircraft hangars, based on sound engineering principles, test data, and field experience.”

The standard accomplishes this purpose by first classifying aircraft hangars by size and construction materials, then sets forth specific fire protection requirements for each class of hangar. The standard also includes detailed engineering and technical requirements for the various fire protection systems.

Most general aviation aircraft hangars are of similar construction, therefore classification of the hangar, and thus protection requirements, are based on size.¹

TALKING POINTS

- ❖ NFPA 409 provides guidance on the fire protection requirements of all aircraft hangars large and small without providing a detailed balance of risk vs. cost that the general aviation industry needs.
- ❖ A new proposal is being drafted to create a new standard, NFPA 409A – Standard on Group III and Residential Hangars - incorporating all general aviation hangars.
- ❖ NATA believes that the effort to create a new standard on general aviation hangars must be driven by the realities of the general aviation environment.



- **Group I Hangar**
 - Meets any of the following
 - Aircraft access door height greater than 28ft
 - Single Fire area in excess of 40,000ft²
 - Provision for housing aircraft with a tail height greater than 28ft
 - Fire Protection Requirements
 - One of the following
 - A foam-water deluge system
 - Automatic sprinkler system and an automatic low-level, low-expansion foam system
 - Automatic sprinkler system and an automatic low-level, high-expansion foam system

- **Group II Hangar**
 - Meets both of the following:
 - Aircraft access door height of 28ft or less
 - Single fire area between 12,001ft² and 40,000ft²
 - Fire Protection Requirements
 - One of the following
 - A foam-water deluge system
 - Automatic sprinkler system and an automatic low-level, low-expansion foam system
 - Automatic sprinkler system and an automatic low-level, high-expansion foam system
 - A closed-head foam-water sprinkler system

- **Group III Hanger**
 - Meets both of the following:
 - Aircraft access door height of 28ft or less

- Single fire area of 12,000ft² or less
- Fire Protection Requirements
 - Group III hangars where hazardous activities are performed are required to have the same fire protection system as a group II hangar.²
 - All other group III hangars are required to have portable fire extinguishers.

- **Group IV Hangar**
 - A group IV hangar is a structure constructed of a membrane-covered steel frame
 - Fire protection requirements vary by hangar size and use.

2009 NFPA Proposed Revisions

The call for proposals for the 2009 revision cycle for NFPA 409 closed on May 30, 2008. Thirty proposed revisions were received. A new standard, NFPA 409A, was proposed to cover group III and Residential Hangars. In addition, the same proposal will require language added to the existing 409 standard that will require automatic sprinkler systems in all group III hangars. Both proposals were accepted by the committee, with two members voting against accepting and one member abstaining.

NATA Position

The National Air Transportation Association (NATA) recognizes the countless hours of research and planning that go into creating and developing an NFPA code or standard. NFPA members have saved countless lives and

² Hazardous activities are defined as: fuel transfer operations, welding, torch cutting, torch soldering, doping and spray painting.

treasure with their dedication to reducing the risk that fire presents. NFPA 409 provides guidance on the fire protection requirements of all aircraft hangers, from the largest airline maintenance facility to a single-bay “garage” hangar. Because this standard covers such a broad range of structures, with values from a few thousand dollars to millions of dollars, it is not able to provide the detailed balance of risk vs. cost that an industry such as ours demands.

In addition, to the proposed changes to group III hangars, NATA is concerned with the costs of complying with the group II hangar fire protection requirements.

NATA believes that the solution to these problems lies in collaboration between the general aviation industry and the professionals who compose the NFPA Standards Council and Technical Committees. The Technical Committee on Airport Facilities has already begun the process by receiving a proposal to create a new standard, NFPA 409A – Standard on group III and residential hangars. This new standard should incorporate all general aviation hangars, and the first step in development must be to reject the proposed new requirements for group III hangars. Adoption and enforcement of NFPA 409 codes already vary by locality, and adding new requirements to group III hangars while preparing to establish a new standard for those same hangars would only add to the disparity and confusion in adoption and enforcement.

NATA firmly believes that the effort to create a new standard on general aviation hangars must be driven by the realities of the general aviation environment.