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# NFPA 418 Standard for Heliports 1990 Edition

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There is a concern that the growing use of synthetic materials may produce more or additional toxic products of combustion in a fire environment. The Board has, therefore, asked all NFPA technical committees to review the documents for which they are responsible to be sure that the documents respond to this current concern. To assist the committees in meeting this request, the Board has appointed an advisory committee to provide specific guidance to the technical committees on questions relating to assessing the hazards of the products of combustion.

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# NFPA 418

# Standard for Heliports

## 1990 Edition

This edition of NFPA 418, *Standard for Heliports*, was prepared by the Technical Committee on Helicopter Facilities, released by the Correlating Committee on Aviation, and acted on by the National Fire Protection Association, Inc. at its Annual Meeting held May 21-24, 1990 in San Antonio, TX. It was issued by the Standards Council on July 20, 1990, with an effective date of August 17, 1990, and supersedes all previous editions.

The 1990 edition of this document has been approved by the American National Standards Institute.

### Origin and Development of NFPA 418

Development of NFPA 418 began in 1965 after the NFPA Sectional Committee on Aircraft Hangars and Airport Facilities was asked to provide guidance on the construction and protection of elevated heliports. Earlier work had been done by the NFPA Sectional Committee on Aircraft Rescue and Fire Fighting with regards to fire protection in the event of accidents during flight operations, and the NFPA Sectional Committee on Aircraft Fuel Servicing developed the safeguards needed for the prevention of fire accidents during fueling operations at such locations. In 1967, a Tentative Standard on Elevated Heliport Construction and Protection was approved at the NFPA Annual Meeting. The 1968 text was a revision of the Tentative Standard (including the change in title). The 1973 edition was a complete revision of the 1968 edition. Further amendments were made in 1979. The title of the 1990 edition of this standard was changed from *Standard on Roof-top Heliport Construction and Protection*. This edition adds chapters for land-based facilities and offshore heliports.

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## Contents

# NFPA 418

## Standard for Heliports

## 1990 Edition

NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates explanatory material on that paragraph in Appendix A.

Information on referenced publications can be found in Chapter 6 and Appendix B.

## Chapter 1 Administration

### 1-1 Scope.

**1-1.1** This standard specifies the minimum requirements for fire protection for heliports.

**1-1.2** Temporary landing sites and emergency evacuation facilities are outside the scope of this standard.

### 1-2 Purpose.

**1-2.1** The purpose of this standard is to establish minimum firesafety requirements for operation at heliports for the protection of persons, aircraft, and other property.

### 1-3 Definitions.

**Approved.** Acceptable to the "authority having jurisdiction."

NOTE: The National Fire Protection Association does not approve, inspect or certify any installations, procedures, equipment, or materials nor does it approve or evaluate testing laboratories. In determining the acceptability of installations or procedures, equipment or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization concerned with product evaluations which is in a position to determine compliance with appropriate standards for the current production of listed items.

**Authority Having Jurisdiction.** The "authority having jurisdiction" is the organization, office or individual responsible for "approving" equipment, an installation or a procedure.

NOTE: The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner since jurisdictions and "approval" agencies vary as do their responsibilities. Where public safety is primary, the "authority having jurisdiction" may be a federal, state, local or other regional department or individual such as a fire chief, fire marshal, chief of a fire prevention bureau, labor department, health department, building official, electrical inspector, or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the "authority having jurisdiction." In many circumstances the property owner or his designated agent assumes the role of the "authority having jurisdiction"; at government installations, the commanding officer or departmental official may be the "authority having jurisdiction."

**Emergency Evacuation Facilities.** A designated and clear area at rooftop or ground level intended exclusively for emergency evacuation operations by helicopters.

**Fixed Foam Systems.** Complete installations where foam is piped from a central foam station and discharged through fixed delivery outlets to the hazard to be protected. Any required pumps are permanently installed.

**Heliport.** An identifiable area located on land, water, or on a structure, that also includes any existing buildings or facilities thereon, used or intended to be used for landing and takeoff of helicopters. The term heliport applies to all sites used or intended to be used for the landing and takeoff of helicopters.

**Landing Pad.** The minimum load-bearing area designated for touchdown of a helicopter.

**Listed.** Equipment or materials included in a list published by an organization acceptable to the "authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NOTE: The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The "authority having jurisdiction" should utilize the system employed by the listing organization to identify a listed product.

**Offshore Landing Heliports.** Heliports located on fixed or mobile structures and vessels in a marine environment that do not have means of entry and egress connected directly to shore.

**Semifixed Foam Systems.**

(a) Foam systems in which the hazard is equipped with fixed discharge outlets connected to piping that terminates at a safe distance. The fixed piping installation may or may not include a foam maker. Necessary foam-producing materials are transported to the scene after the fire starts and are connected to the piping.

(b) Foam systems in which foam solutions are piped through the area from a central foam station. The solution is delivered through hose lines to portable foam makers, such as monitors, foam towers, hose lines, etc.

**Shall.** Indicates a mandatory requirement.

**Should.** Indicates a recommendation or that which is advised but not required.

**Temporary Landing Sites.** Sites intended to be used for a period of less than 30 consecutive days, and for no more than 10 operations per day.

## Chapter 2 General Requirements — Land-Based Facilities

**2-1*** Plans for construction and protection of heliports shall be approved by the authority having jurisdiction.

**2-2** Aboveground flammable liquid storage tanks, compressed gas storage tanks, and liquefied gas storage tanks shall be laterally located at least 50 ft from the edge of takeoff and landing areas as defined in FAA A/C 150/5390-2, *Heliport Design Advisory Circular*.

**2-3** The heliport shall have at least one access point for fire fighting/rescue personnel. Where practical, a second access point shall be available and located as remotely as possible from the other.

**2-3.1** Fences shall not prevent rapid access by fire fighting/rescue personnel.

**2-4** The heliport shall be pitched or sloped so that drainage is away from access points and passenger holding areas.

**2-5** No smoking shall be permitted within 50 ft of the landing pad edge. No smoking signs shall be erected at access/egress points to the heliport.

**2-6** Fueling systems shall be designed in accordance with NFPA 407, *Standard for Aircraft Fuel Servicing*.

## Chapter 3 Rooftop Landing Facilities — Additional Protection

**3-1** Main structural support members that would be exposed to a fuel spill shall be made fire resistant using listed materials and methods to give a fire-resistive rating of not less than 2 hours.

**3-2** The landing pad shall be pitched to provide drainage away from passenger holding areas, access points, stairways, elevator shafts, ramps, hatches, and other openings.

**3-3** The landing pad surface shall be constructed of noncombustible, nonporous materials that are approved. The contiguous building roof covering within 50 ft of the landing pad edge shall have a Class A rating.

**3-4** Any pits or other penetrations on the roof beneath the landing pad and within 15 ft laterally of the edge of the landing pad shall be equipped with approved raised edges at least 3 in. in height around the opening to prevent entry of fuel.

**3-5*** At least two approved means of egress from the landing pad edge shall be provided and shall be remotely located from each other to the extent practical.

**3-5.1** For heliports occupied by 50 or more people, two approved means of egress from the roof shall be provided and shall be remotely located from each other to the extent practical but shall not be located less than 30 ft from each other. For heliports occupied by fewer than 50 people, one approved means of egress from the roof shall be provided.

**3-5.2** Means of egress from the landing pad and roof shall not obstruct flight operations.

**3-6** The helicopter landing pad shall have at least two access points for fire fighting purposes. Access for fire fighting personnel through landing pad egress shall be permitted.

**3-7** A foam fire protection system shall be designed and installed to protect the practical critical fire area (*see Table 3-7*).

**Table 3-7**

| Category | Helicopter Overall Length* | Practical Critical Fire Area |
|---|---|---|
| H-1 | Up to but not including 50 ft | 375 $ft^2$ |
| H-2 | From 50 ft up to but not including 80 ft | 840 $ft^2$ |
| H-3 | From 80 ft up to but not including 120 ft | 1440 $ft^2$ |

*Helicopter length, including the tail boom and the rotors.

*Exception: This requirement does not apply to the following:*

*1. Parking garages.*

*2. Elevated structures that are not on buildings and are not normally occupied.*

*3. Other similar structures.*

**3-7.1*** The discharge rates and minimum amounts of water for foam production for a semifixed system shall be as specified in Table 3-7.1.

*Exception No. 1: A fixed foam system may be used to satisfy this requirement. The discharge rates for a fixed foam system shall be 0.10 gpm/$ft^2$ for aqueous film-forming foam (AFFF), 0.16 gpm/$ft^2$ for protein foam, or 0.16 gpm/$ft^2$ for fluoroprotein foam for a duration of 5 minutes.*

*Exception No. 2: Two portable foam fire extinguishers having a rating of 20-A:160-B each may be used to satisfy this requirement for Category H-1.*

**Table 3-7.1 Minimum Extinguishing Agent Quantities and Discharge Rates**

| Heliport Category | AFFF Water U.S. Gal | AFFF Discharge Rate gpm | Fluoroprotein Foam Water U.S. Gal | Fluoroprotein Foam Discharge Rate gpm | Protein Foam Water U.S. Gal | Protein Foam Discharge Rate gpm |
|---|---|---|---|---|---|---|
| H-1 | 98 | 49 | 135 | 68 | 150 | 75 |
| H-2 | 220 | 109 | 302 | 151 | 336 | 168 |
| H-3 | 374 | 187 | 518 | 259 | 576 | 288 |

NOTE: Discharge rate may be adjusted slightly to reflect equipment available.
Examples:

(1) 190 gpm = 2 hose lines @ 95 gpm each.

(2) 250 gpm = 2 hose lines @ 125 gpm each.

(3) 28 gpm = 3 hose lines @ 95 gpm each.

**3-7.2** The water supply for the foam system shall be from a reliable source, approved by the authority having jurisdiction.

**3-7.2.1** Fire pumps, if used, shall be installed in accordance with NFPA 20, *Standard for the Installation of Centrifugal Fire Pumps*.

**3-7.2.2** Standpipes and hose stations, if used, shall be installed in accordance with NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*.

**3-7.2.3** Where freezing is possible, adequate freeze protection shall be provided.

**3-7.3** The foam components shall be installed in a readily accessible area of the heliport and shall not penetrate the primary approach, departure, and transitional surfaces defined in paragraphs 3J, 3K and 3L and 13 and 21 of FAA A/C 150/5390-2, *Heliport Design Advisory Circular*.

**3-7.4** At facilities where there is more than one landing pad, the supply of foam available shall be sufficient to cover an incident on at least one of the pads.

**3-7.5** Where fixed foam systems utilizing fixed deck nozzles and/or oscillating foam turrets are installed, system components shall be listed or approved.

**3-8** If a building with a rooftop heliport is supplied with a standpipe system, a Class II standpipe shall be extended to the roof level on which the rooftop heliport is located. Such standpipe systems shall be installed in accordance with NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*.

**3-9** Where buildings are provided with a fire alarm system, a manual pull station shall be provided for each designated means of egress from the roof. (*See 3-5.1.*)

## Chapter 4 Offshore Heliports

**4-1*** Plans for construction and protection of heliports located on fixed and mobile offshore installations shall be approved by the authority having jurisdiction.

**4-2** The heliport shall have at least one access point for fire fighting/rescue personnel. Where practical, a second access point shall be available and located as remotely as possible from the other.

**4-3** Heliports shall be designed to prevent the standing collection of liquids and to prevent liquids from spreading to or spilling on accommodation spaces or working spaces.

## Chapter 5 Portable Fire Extinguishers

**5-1** At least one portable fire extinguisher as specified in Table 5-1 shall be provided for each takeoff and landing area, parking area, and fuel storage area.

*Exception: This requirement shall not apply to unattended ground level heliports.*

**5-2** Portable fire extinguishers shall comply with Chapters 1, 4, 5, and 6 of NFPA 10, *Standard for Portable Fire Extinguishers*.

**Table 5-1 Minimum Ratings of Portable Fire Extinguishers for Heliport Categories**

| Category | Helicopter Overall Length* | Minimum Rating |
|---|---|---|
| H-1 | Up to but not including 50 ft | 4-A:80-B |
| H-2 | From 50 ft up to, but not including, 80 ft | 10-A:120-B |
| H-3 | From 80 ft up to, but not including, 120 ft | 30-A:240-B |

*Helicopter length, including the tail boom and the rotors.

## Chapter 6 Referenced Publications

**6-1** The following documents or portions thereof are referenced within this standard and shall be considered part of the requirements of this document. The edition indicated for each reference is the current edition as of the date of the NFPA issuance of this document.

**6-1.1 NFPA Publications.** National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 10-1990, *Standard for Portable Fire Extinguishers*

NFPA 14-1990, *Standard for the Installation of Standpipe and Hose Systems*

NFPA 20-1990, *Standard for the Installation of Centrifugal Fire Pumps*

NFPA 407-1990, *Standard for Aircraft Fuel Servicing*

**6-1.2 Other Publication.**

**6-1.2.1 FAA Publication.** Federal Aviation Administration, Department of Transportation, Distribution Unit, M-494.3, Washington, D.C. 20590.

A/C 150/5390-2, *Heliport Design Advisory Circular,* January 4, 1988.

## Appendix A

*This Appendix is not a part of the requirements this NFPA document, but is included for information purposes only.*

**A-2-1** FAA A/C 150/5390-2, *Heliport Design Advisory Circular*, contains design and construction information on heliports. This advisory circular provides for adequate clearance between operating aircraft and buildings or structures located at the heliport. The FAA advisory circular should be consulted to ensure that adequate safe practice and facilities are maintained.

**A-3-5** For further information on exit principles, see NFPA *101,® Life Safety Code.®*

**A-3-7.1** The calculations used to develop the minimum extinguishing agent quantities and discharge rates presented in Table 3-7.1 for rooftop heliports include the following factors:

(a) *Aircraft Size.* Reflects the potential level of risk, e.g., passenger load; the potential fire load, e.g., fuel capacity; and the dimensions, i.e., fuselage length and width, that allow the identification of a meaningful operational objective, i.e., the area to be rendered fire-free (controlled or extinguished).

(b) *Relative Effectiveness of Agent Selected.* Represented by the specific application rate identified for each of the common generic foam concentrate types.

(c) *Time Required to Achieve Control.* Large scale fire tests, empirical data, and field experience indicate that one minute is both a reasonable and a necessary operational objective.

(d) *Time Required to Maintain Controlled Area Fire-Free.* An operational objective that provides a safety factor for the initial fire attack while waiting for the arrival of backup support.

The calculation method is supported by research and experimental work done mainly at the U.S. FAA's Technical Center. It was developed by the "Rescue and Firefighting Panel II" (RFFP II), a group of international experts in the field, convened by the International Civil Aviation Organization, Montreal Canada, circa 1970.

The RFFP II initially focused on the "Theoretical Critical Fire Area," which was identified in the FAA's large-scale fire tests as "... the area adjacent to the fuselage extending outward in all directions to a limit beyond which a large fuel fire would not melt an aluminum fuselage, regardless of the fire exposure time." For this concept to be useful, specific information about the size of the area was needed. Again, using the FAA Technical Center's work as a basis, the RFFP II's working definition of the Theoretical Critical Fire Area (TC) is "the area adjacent to an aircraft in which fire must be controlled." This definition implies control of the fire within a specific area. In order to achieve this, dimensions are required. Formulas (1) and (2), shown below, were developed from that earlier work. Using these formulas, the size of the area of interest can be calculated. For example:

(1) Where $L < 65$ ft, $TC = L \times (40 \text{ ft} + W)$

or

(1a) $L < 20$ m, $TC = L \times (12 \text{ m} + W)$

and

(2) Where $L > 65$ ft, $TC = L \times (100 \text{ ft} + W)$

or

(2a) $L > 20$ m, $TC = L \times (30 \text{ m} + W)$

Where: L = Average aircraft length and W = Average width of aircraft served at the airport of interest.

Conceptually, the TC serves as a means for perceiving the magnitude of the potential fire hazard of the aircraft accident environment. It *does not represent* the average, maximum, or minimum spill fire size associated with a particular aircraft. However, it does represent a starting point for determining realistic fire extinguishing agent requirements. The formulas allow for the calculation of the TC area for different sizes of aircraft. They are widely accepted throughout the aircraft fire service community and are applied as described below.

A 1970 study concluded that in survivable aircraft crashes a "practical fire area" should be considered that was smaller than the "theoretical area." Detailed criteria for the practical fire area and the related quantities of extinguishing agents were formulated during the Second Meeting of the RFFP II. In developing its material, the panel's work included a study of the quantities of agents used on actual fires. In 99 out of 106 such fires, the quantities of agents used were less than those suggested by the theoretical critical fire area calculations.

As a result, RFFP II developed material recommending the practical area be approximately two-thirds the theoretical area. [See Figure A-3-7.1(a).] This principle has been adopted by the ICAO, the NFPA, and the U.S. FAA, in the development of tables that show extinguishing agent volumes for their respective standards and/or recommended practices. The practical critical fire area (PC) for fixed-wing aircraft is commonly expressed as:

(3) (Practical Critical Fire Area) = (.67) × (Theoretical Critical Fire Area)

or

(3a) PC = (.67) (TC)

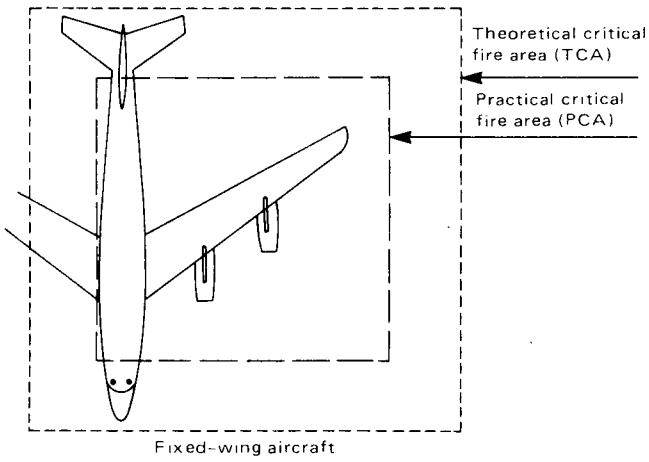


**Figure A-3-7.1(a).**

In adapting the fixed-wing fire protection methodology to helicopters, the committee considered the following additional factors that make the fire protection problem of helicopters (rotary-wing aircraft) unique:

(a) *Occupied Space.* Relative to its fixed-wing counterpart, a smaller portion of the overall aircraft length is occupied.

(b) *Fuel Quantities and Location.* Fuel tanks are not located in the "wings" or rotor blades, and relatively small quantities of fuel are involved.

(c) *Impact Energy.* Relative to the fixed-wing counterpart, a helicopter accident generally occurs at slow ground speeds.

(d) *Expected Aircraft Size.* In general, heliports are designed for the largest helicopter expected to utilize the facility, not the median size for the category. (*See Table 3-7.*)

After considering both the factors involved in the fixed-wing methodology and these factors that are unique to helicopters, the committee arrived at a "theoretical critical area" for helicopters that has a longitudinal dimension of half the overall length of the helicopter and a width equal to three times the fuselage width. In addition, in the absence of any data that suggested another alternative as being more appropriate, the "practical critcal fire area" has been determined to be 100 percent of the "theoretical critical area." [*See Figure A-3-7.1(b).*]

Another established principle is a distinction between control and extinguishment of a fire. Test data and a wide range of field experience indicate that the quantities of foam agent needed to control and extinguish an aircraft fire should be determined separately. This principle is expressed in the following equalities numbered (1) through (6) :

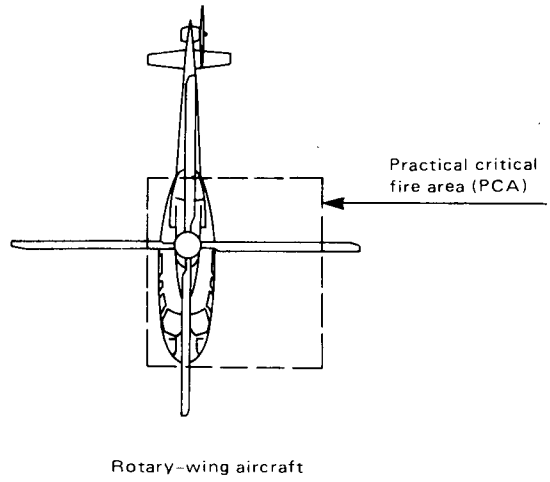


**Figure A-3-7.1(b).**

(1) When $Q_1$ = Volume of agent required for one-minute control of PC,

(2) and $Q_2$ = Volume of agent required for continued control and/or complete extinguishment of fire related to PC.

(3) We have: $Q = Q_1 + Q_2$ = Minimum agent volume for effective fire service operations.

The relationship between $Q_1$ and $Q_2$ as they were developed by the committee that studied the fixed-wing fire protection problem is as follows:

(4) $Q_1$ = (Application Rate) × (Practical Critical Area)

or

(4a) $Q_1 = (AR)(PC)$ Where the "Application Rate" is the unit volume of agent applied to a unit area of fire in a unit time; the exact units such as $gpm/ft^2$ or $lpm/m^2$ depend upon the units convention being used.

(5) $Q_2 = f(Q_1)$ And it has been determined that, for all categories of heliports, "f" = 1.

(6) Therefore $Q = 2[(AR)(PC)]$

The accepted operational application rates for three of the common generic foam types, where used in the aircraft flammable liquid fuel fire environment, are as follows:

Aqueous Film Forming Foam = 0.13 $gpm/ft^2$

Fluoroprotein Foam = 0.18 $gpm/ft^2$

Protein Foam = 0.20 $gpm/ft^2$

A sample calculation of the total water quantity, "Q," needed where aqueous film-forming foam concentrate is to be used at each of the three categories of heliport is provided in Table A-3-7.1. A similar set of water quantities can

**Table A-3-7.1 Method to Determine Helicopter Critical Fire Area and Required Minimum Amount of Water for a Semi-Fixed Foam (AFFF) System for Table 3-7.1**

| NFPA/ICAO Heliport Category | ½ × O.L. of *Largest* Helicopter* | Fuselage Width tripled** | Practical Critical Fire Area | Application Rate ($gpm/ft^2$) | $Q_1$ Water to Control within 1 minute | $Q_2$ Reserve to Extinguish | Q TOTAL WATER TO EXTINGUISH |
|---|---|---|---|---|---|---|---|
| H-1 0 ft < 50 ft | 25 ft × | 15 ft = | 375 $ft^2$ | × 0.13 | = 49 U.S. Gal | + 100% | = 98 U.S. Gal |
| H-2 50 ft < 80 ft | 40 ft × | 21 ft = | 840 $ft^2$ | × 0.13 | = 110 U.S. Gal | + 100% | = 220 U.S. Gal |
| H-3 80 ft < 120 ft | 60 ft × | 24 ft = | 1440 $ft^2$ | × 0.13 | = 187 U.S. Gal | + 100% | = 374 U.S. Gal |

*O.L. = Overall Length, measured from tip of Main Rotor fully extended to tip of Tail Rotor fully extended.

**Fuselage Width = Actual fuselage width (does not include landing gear) measured from outside of cabin.

be calculated for any other foam concentrate for which an accepted application rate is known. Simply substitute that value for the AFFF application rate in column 5 of Table A-3-7.1 and perform the indicated calculations to arrive at the required value of "Q" for the foam concentrate of interest.

To fully appreciate the significance and simplicity of this methodology as a means of determining levels of fire protection, it must be clearly understood that "$Q_1$" is only that minimum quantity of fire fighting agent required for one-minute fire control (90 percent extinguishment) of the anticipated practical critical fire area. Hence, any fire and rescue service cannot be expected to perform an effective rescue effort where equipped with any less than the quantity of primary extinguishing agent specified by the volume of $Q_1$ for the specific airport/heliport category. Furthermore, a fire suppression/rescue mission that is initiated using the required minimum application rate and continued at that rate, while extinguishing fire or securing unburned fuel within the practical area, will cease operations at the end of one minute. In other words, the agent specified by the volume $Q_1$ is depleted. There is no agent for mop-up activities, foam blanket repair, or standby protection for continued rescue or salvage activities. Thus, while the control volume $Q_1$ takes on an operational significance that is critical to the rescue operation, it is, at the same time, limited.

It should therefore be clear that in order to extend an effective fire suppression and rescue operation past the initial one-minute fire control period, an additional volume of foam agent, "$Q_2$", must be available. This volume of agent is used to repair foam blanket damage that may be caused by evacuees and rescue workers walking through the foamed areas or by hot surfaces caused by the initial fire. Furthermore, $Q_2$ is needed to extinguish all fire in the practical critical fire area and those fires outside the practical critical area that were initially determined to pose no threat to life. Agent from $Q_2$ also provides standby protection before total extinguishment during interior aircraft search operations and for the removal of immobile survivors after fire control. It is also used for securing the fire area during initial aircraft salvage operations immediately after total fire extinguishment. Hence, an aircraft fire service equipped with only the one-minute fire control volume represented by $Q_1$ is asked to assume a significant level of risk. That risk cannot be called a "calculated risk" unless the manager selecting the reduced agent volume knows the nature of the fire area and the potential hazard involved.

**A-4-1** The design of heliports located on fixed or mobile offshore installations is generally based on landing sites of steel construction. However, in no way should this be construed as a recommendation of steel over other suitable building material.

## Appendix B Referenced Publications

**B-1** The following documents or portions thereof are referenced within this standard for informational purposes only and thus are not considered part of the requirements of this document. The edition indicated for each reference is the current edition as of the date of the NFPA issuance of this document.

**B-1.1 NFPA Publication.** National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA *101*-1988, *Life Safety Code*

# Index

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# SUBMITTING PROPOSALS ON NFPA TECHNICAL COMMITTEE DOCUMENTS

**Contact NFPA Standards Administration for final date for receipt of proposals on a specific document.**

## INSTRUCTIONS

**Please use the forms which follow for submitting proposed amendments. Use a separate form for each proposal.**

1. For each document on which you are proposing amendment indicate:
   (a) The number and title of the document
   (b) The specific section or paragraph.

2. Check the box indicating whether or not this proposal recommends new text, revised text, or to delete text.

3. In the space identified as "Proposal" include the wording you propose as new or revised text, or indicate if you wish to delete text.

4. In the space titled "Statement of Problem and Substantiation for Proposal" state the problem which will be resolved by your recommendation and give the specific reason for your proposal including copies of tests, research papers, fire experience, etc. If a statement is more than 200 words in length, the technical committee is authorized to abstract it for the Technical Committee Report.

5. Check the box indicating whether or not this proposal is original material, and if it is not, indicate source.

6. If supplementary material (photographs, diagrams, reports, etc.) is included, you may be required to submit sufficient copies for all members and alternates of the technical committee.

7. Type or print legibly in black ink.

NOTE: The NFPA Regulations Governing Committee Projects in Paragraph 10-10 state: Each proposal shall be submitted to the Council Secretary and shall include:

(a) identification of the submitter and his affiliation (Committee, organization, company) where appropriate, and

(b) identification of the document, paragraph of the document to which the proposal is directed, and

(c) a statement of the problem and substantiation for the proposal, and

(d) proposed text of proposal, including the wording to be added, revised (and how revised), or deleted.

## FORM FOR PROPOSALS ON NFPA TECHNICAL COMMITTEE DOCUMENTS

**Mail to:** Secretary, Standards Council
National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101

Note: All proposals must be received by 5:00 p.m. E.S.T./E.S.D.T. on the published proposal closing date.

**Date** 5/18/85 **Name** John B. Smith **Tel. No.** 617-555-1212

**Address** 9 Seattle St., Seattle, WA 02255

**Representing (Please indicate organization, company or self)** Fire Marshals Assn. of North America

1. a) **Document Title:** Protective Signaling Systems **NFPA No. & Year** NFPA 72D

   b) **Section/Paragraph:** 2-7.1 (Exception)

**FOR OFFICE USE ONLY**
**Log #:** _____
**Date Rec'd:** _____
**Proposal #:** _____

2. **Proposal recommends: (Check one)** ☐ new text
   ☐ revised text
   ☒ deleted text.

3. **Proposal (include proposed new or revised wording, or identification of wording to be deleted):**

   Delete exception.

SAMPLE

4. **Statement of Problem and Substantiation for Proposal:**

   A properly installed and maintained system should be free of ground faults. The occurrence of one or more ground faults should be required to cause a "trouble" signal because it indicates a condition that could contribute to future malfunction of the system. Ground fault protection has been widely available on these systems for years and its cost is negligible. Requiring it on all systems will promote better installations, maintenance and reliability.

5. ☒ **This Proposal is original material.**
   ☐ **This Proposal is not original material; its source (if known) is as follows:** _____

(Note: Original material is considered to be the submitter's own idea based on or as a result of his own experience, thought, or research and, to the best of his knowledge, is not copied from another source.)

**I agree to give NFPA all and full rights, including rights of copyright, in this Proposal and I understand that I acquire no rights in any publication of NFPA in which this Proposal in this or another similar or analogous form is used.**

John B. Smith
**Signature**

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