Report of the Committee on
Garages and Parking Structures

Michael Crowley, Chair
Rolf Jansen & Assoc. Inc., TX [SE]

Michael D. Cato, Delray Beach Fire Dept., FL [E]
Rep. Fire Marshals Assn. of North America
Allan Davis, Allan Davis Assoc. Inc., CT [U]
Rep. Institutional & Municipal Parking Congress
Thomas J. Forrythe, Cage-Babcock & Assoc., CA [SE]
Richard C. Gewalt, Hughes Assoc. Inc., MD [SE]
Rep. T/C Automotive/Marine Service Sta
Howard R. May, Desman Assoc., IL [U]
Joseph J. Messersmith, Portland Cement Assn., VA [M]
Robert L. Ruyle, Ruyle & Assoc., NE [SE]
Domenick A. Serrano, S&S Fire Suppression Systems Inc., NY [M]

Alternates
James Goliaveaux, Central Sprinkler Corp., PA [M]
(Alt. to J. A. Serrano)
James M. Hunnicutt, Hunnicutt & Assoc., MD [U]
(Alt. to J. Davis)

Stephen V. Shalko, Portland Cement Assn., GA [M]
(Alt. to J. J. Messersmith, Jr.)

Staff Liaison: James D. Lake

This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of the book.

Committee Scope: This Committee shall have primary responsibility for documents on construction, control of fire hazards, ventilation, fire protection and maintenance of garages and parking structures.

The Report of the Technical Committee on Garages and Parking Structures is presented for adoption.


This Report has been submitted to letter ballot of the Technical Committee on Garages and Parking Structures, which consists of 10 voting members. The results of the balloting, after circulation of any negative votes, can be found in the report.
88B-1 - (3-1.1*): Accept
SUBMITTER: Technical Committee on Garages and Parking Structures,
RECOMMENDATION: Add to 3-1.1*: "Electrical wiring for light, power, heat, and signal or control circuits, and electrically operated tools, portable appliances, and devices shall be in accordance with the provisions of NFPA 70, National Electrical Code, Article 511 of the National Electrical Code shall apply to wiring and equipment within the hazardous areas. Where compressed natural gas (CNG) vehicles are repaired or stored, the area within 18 in. of the ceiling shall be classified as Class 1, Division 2 except where ventilation of a least four air changes per hour is provided."

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10

SUBSTANTIATION: CNG and gasoline are considered a group D atmosphere in accordance with NFPA 70 Section 500-3.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 10
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10

88B-2 - (3-1.2): Accept
SUBMITTER: Technical Committee on Garages and Parking Structures,
RECOMMENDATION: Change 3-1.2 NFPA 30, Flammable and Combustible Liquids Code and NFPA 30A, Automobile and Marine Service Station Code, as applicable, shall be used to delineate and classify areas or the purpose of installation of electrical equipment where flammable liquids are stored and handled.

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10

88B-3 - (3-2.1): Reject
SUBMITTER: William T. Hathaway, Volpe National Transportation Systems Center
RECOMMENDATION: Revise the second sentence to read as follows: "Improvised furnaces, salamanders, space heaters or any open flame heaters shall not be permitted." 

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10

88B-4 - (3-2.1.1, 5-2.3.1): Reject
SUBMITTER: Ronald D. Kangas, U.S. Dept. of Transportation, Federal Transit Administration
RECOMMENDATION: 1. In 3-2.1.1 revise the second sentence to read: "Approved suspended unit heaters shall not contain an open flame or other potential ignition source.

2. In 3-2.3 add the following: "Approved suspended unit heaters shall not contain an open flame or other potential ignition source."

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10

88B-5 - (3-2.1.1, 5-2.3.1): Reject
SUBMITTER: Jeffrey G. Mora, U.S. Dept. of Transportation, Federal Transit Administration
RECOMMENDATION: 1. In 3-2.1.1 revise the second sentence to read: "Approved suspended unit heaters shall not contain an open flame or other potential ignition source.

2. In 3-2.3 add the following: "Approved suspended unit heaters shall not contain an open flame or other potential ignition source."

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10

88B-6 - (3-2.1.1 and 5-2.3.1): Reject
SUBMITTER: Jerry L. Trotter, American Public Transit Assoc.
RECOMMENDATION: 1. 3-2.1.1 Add "Open flame heaters shall not be permitted in those facilities where gaseous fuels are being used."

2. 5-2.3.1 Add "Open flame heaters shall not be permitted in those facilities where gaseous fuels are being used." or "See Section 5-2.1.1."

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10
A-3.2.1.2 Enclosed rooms or spaces should prohibit the transmission of gases from the room or space or, if not complying, open flame heaters or non-combustible materials shall be operated. Open flame heaters shall not be operated in accordance with NFPA 9, Standard for the Storage and Handling of Flammable Liquids. Facilities that turn off non-combustible material to repair or store CNG or LNG fueled vehicles cannot comply with this section.

SUBSTANTIATION: The committee recognizes the hazards involved with these devices and in deliberation with the proponents agree that the proposal accomplishes the intent of the submitter. The original proposal was restrictive and a safe and reasonable solution was needed.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 10
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 9
NEGATIVE: 1

EXPLANATION OF NEGATIVE:
MESSERSMITH: I did not attend the meeting of the committee; however, Steve Skalko, my alternate did attend. According to his notes, some important words have been omitted from the proposal. It should read:
"A-3.2.1.2 When compressed natural gas (CNG) or liquefied natural gas (LNG) fueled vehicles are repaired or stored in enclosed rooms, open flame heaters or heating equipment... (remainder unchanged)."

The appendix note also suggests that these words need to be added. My vote will change to "affirm" if the change suggested above is made.

COMMENT ON AFFIRMATIVE:
DAVIS: I believe the language accepted by the Committee reflected the discussion. The wording of the appendix note may not be clear enough, judging by Joe Messersmith's reading of it. We did not intend that open space heaters could be used in an area which is not enclosed. Only that attached enclosed rooms could have such heaters.

88B-7 - (3.2.1.2): Accept
SUBMITTER: Technical Committee on Garages and Parking Structures,
RECOMMENDATION: Add a new 3.2.1.2 and appendix, renumber the rest of the section.
3.2.1.2 When compressed natural gas (CNG) or liquefied natural gas (LNG) fueled vehicles are repaired or stored, open flame heaters or heating equipment with exposed surfaces having a temperature in excess of 750°F shall not be operated.

A-3.2.1.2 Enclosed rooms or spaces should prohibit the transmission of gases from the room or space or, if not complying, open flame heaters or non-combustible materials shall be operated. Open flame heaters shall not be operated in accordance with NFPA 9, Standard for the Storage and Handling of Flammable Liquids. Facilities that turn off non-combustible material to repair or store CNG or LNG fueled vehicles cannot comply with this section.

SUBSTANTIATION: Adds the appropriate standards to address CNG fueled vehicles.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 10
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10

88B-9 - (3.5): Accept
SUBMITTER: Technical Committee on Garages and Parking Structures,
RECOMMENDATION: Modify title to 3-5 to read: "Storage and Handling of Flammable Liquids, Liquefied Petroleum Gases, and Compressed Natural Gases."

Modify 3.5.1 to read: "The storage and handling of flammable liquids shall be in accordance with NFPA 30, Flammable and Combustible Liquids Code. The storage and handling of liquefied petroleum gases shall be in accordance with NFPA 58, Standard for the Storage and Handling of Liquefied Petroleum Gases. The storage and handling of flammable compressed gas fuels shall be in accordance with NFPA 55, Standard for the Storage, Use and Handling of Compressed and Liquefied Gases in Portable Cylinders and NFPA 52, Standard for Compressed Natural Gas Vehicular Fuel Systems."

SUBSTANTIATION: Adds the appropriate standards to address CNG fueled vehicles.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 10
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 10