The following are the meeting minutes from the meeting of the Technical Committee on Hybrid (Water and Inert Gas) Fire Extinguishing Systems held in Charleston, SC on February 2 and 3, 2016.

A. Call to order by Jeff Harrington, Chair.

B. Introductions around the room by principals, alternates, and guests.

C. Jeff Harrington comments
   a. Task group reports
   b. Review agenda
D. Staff liaison comments by Barry Chase
   a. Fire exits.
   b. Committee make-up. Now out of balance.
      i. 12 current members. 30 maximum.
      ii. Need end-users and enforcers
      iii. Maxed on manufacturers
   c. NFPA’s anti-trust statement.
   d. Discussed manual-of-style
   e. Robert’s Rules of Order to be followed.
   f. Discussed process for publishing a new standard
   g. Substantiation statements for committee actions.
   h. Voting
      i. Needs ⅔ affirmative vote to pass.
      ii. Call the question procedure
      iii. Balloting, 1 item or entire code
      i. Discussed FPRF – Fire Protection Research Foundation

E. Review previous meetings’ minutes – approved.

F. Discussed revised title and scope.
   b. Too soon to change

G. Tyco presentation on Aquamist.

H. Discussed in detail:
   a. Discussed concentration vs. test data
   b. Discussed water delivery time
   c. Agent quantity determination / total flood
   d. Need to establish minimum extinguishing time
   e. Need to establish minimum discharge time

I. Discussion on reviewing NFPA 750, Chapter 9, for application to NFPA 770.

J. Put in “place holder” on gas / water ratio.

K. Discussion on proposed Chapter 7. Rework Chapter 7.

L. Suggested we review NFPA 750, 2001 and 12 for “terms”.

M. Task group reports
   a. Use restrictions
   b. O₂ calculation for elevation
   c. Pipe and fittings
   d. Storage containers
   e. Abort switches
   f. System design – Chapter 6

N. Next meeting October 12 - 14, 2016. Location to be determined.
O. Meeting adjourned.

Task Groups – the following task groups were established and / or continued:

a. Elevation Effect on Flame Intensity – adjustments, 4.3.4
   i. Copy section from NFPA 2001, Incorporate Joe Senecal’s equations, etc.
   ii. Do not include any design related requirements
   iii. Does fire intensity reduce as elevation increases?
   iv. If so, does this affect the amount of water needed for extinguishment with lower nitrogen flows?
   v. Tom Wysocki agreed to discuss with NIST – Greg Linteras
   vi. Task group members:
       1. Tom Euson
       2. Bob Ballard
       3. Blake Shugarman
       4. Tom Wysocki

b. Pipe, Valves and Fittings ( Portions of Chapter 5)
   i. More work needs to be done on plastic pipe and welding qualification and specs
   ii. Re-order corrosion requirements
   iii. Rework welding requirements
   iv. Task group members:
       1. Brent Ehmke
       2. Bob Kasiski
       3. Bob Ballard
       4. Tom Euson

c. Design Objectives and Test Protocol - Chapter 6
   i. Task group members:
       1. Bob Ballard
       2. Shawn Mullen
       3. Zach Magnone
       4. Frank Broidy
       5. Tom Euson
       6. Eric Forsell – focus on safety margins/factors
       7. Blake Sugarman

d. Total Flood – Design Requirements – Chapter 7
   i. Specifically extinguishing time
   ii. Task group members:
       1. Bob Ballard
       2. Shawn Mullen
       3. Zach Magnone
       4. Frank Broidy
       5. Tom Euson
       6. Eric Forsell – focus on safety margins/factors

e. Local Application – Chapter 8
   i. Task group members:
       1. Tom Euson
2. Bob Ballard
3. Zach Magnone
4. Tom Wysocki
5. Bob Kasiski

f. System Design Documentation – Chapter 10
   i. Task group members:
      1. Bob Ballard
      2. Zach Magnone
      3. Tom Euson
      4. Tom Wysocki
      5. Bob Kasiski

g. Installation Requirements – Chapter 11 – (Integrate with installation, testing and maintenance, Chapter 12)
   i. Task group members:
      1. Ken Schneider
      2. Scott Bryant
      3. Steve Owens

h. Inspection, Testing and Maintenance – Chapter 12
   i. Task group members:
      1. Jeff Harrington
      2. Tom Wysocki
      3. Bob Kasiski

i. Substantiation
   i. Kevin suggested that we try to capture committee substantiation
   ii. Kevin will look at original draft and start this
   iii. Barry will create a log to get this captured for us to review and continue with
   iv. Task group members:
      1. Kevin Kelly

j. Pre and Final Quality and Consistency Review
   i. Task group members:
      1. Blake Shugarman

Respectively submitted,

[Signature]

Thomas G. Euson