SECTION 6 FIRE STREAMS

The Certification Board suggest it will take a class of **40** individuals **24** hours to cover the following objectives in this section (actual time may vary based on class size).

BASIC

6-01.01* Trainee shall define a fire stream.

6-01.02* Trainee shall manipulate a nozzle so as to attack a Class A and a Class B fire.

6-01.03* Trainee shall define water hammer and at least one method for its prevention.

6-01.04* Trainee shall demonstrate how to open and close a nozzle.

6-01.05 Trainee shall define the following methods of water application:
- A. direct
- B. indirect
- C. combination

6-01.06 Trainee, given specific fire situations, shall select the proper nozzle and hose size for each.

6-01.07 Trainee shall identify characteristics of all types of fire streams.

6-01.08 Trainee shall identify precautions to be followed while advancing hose lines to a fire.

6-01.09 Trainee shall identify three (3) conditions that result in pressure losses in a hose line.

INTERMEDIATE

6-02.01 Trainee shall describe the operating principles of fog and smooth bore nozzles.

6-02.02 Trainee shall describe the advantages and disadvantages of solid and fog streams.

6-02.03 Trainee shall identify four (4) special stream nozzles and demonstrate at least two (2) uses or applications for each.

6-02.04 Trainee shall identify and define foam making appliances and shall demonstrate a foam stream from each.

6-02.05 Trainee shall identify three (3) observable results that are obtained when proper application of a fire stream is accomplished.

6-02.06 Trainee shall identify and define those items required to develop three (3) types of fire streams and shall demonstrate each.

ADVANCED

6-03.01 Trainee shall define the methods by which foam prevents or controls a hazard.

6-03.02 Trainee shall define the principle by which foam is generated.

6-03.03 Trainee shall define common causes for the poor generation of foam and identify the procedures for correcting each.

6-03.04 Trainee shall define the difference between hydrocarbon and polar solvent fuels and identify the type of foam concentrate required for each fuel.

6-03.05 Trainee shall define the advantages, characteristics, and precautions for use of the following types of foam:
- A. protein
- B. fluoroprotein
- C. film forming fluoroprotein (FFFP)
- D. aqueous film forming foam (AFFF)
- E. hazardous materials vapor mitigating foam
- F. medium- and high-expansion foam
- G. Class A foams
- H. Alcohol Type Concentrate (ATC)

6-03.06 Trainee, given the size of the fuel surface, the types of fuel involved, and the type of foam concentrate being used, shall determine the minimum application rate necessary for extinguishment of a fire.

6-03.07 Trainee shall define the precautions that must be taken when using high expansion foam to attack structural fires.

6-03.08 Trainee shall diagram the types of fog nozzles, identify the major parts, and trace water flow through each.

6-03.09 Trainee, given a selection of nozzles and tips, shall identify the type, design, operation, nozzle pressure, and flow of each.

6-03.10 Trainee shall identify the rate of water flow necessary to control fire in a room of specified volume.