FELTON FIRE PROTECTION DISTRICT
STANDARD OPERATING PROCEDURES

ARTICLE: II SOP: 2201

SECTION: 2200 APPARATUS & EQUIPMENT

SUBJECT: HOSE TESTING PROCEDURES

PURPOSE: To provide the basis for the consistent testing of fire hose and for ensuring for maximum safety to the personnel conducting the test.

SCOPE: These procedures are to be strictly followed to insure the safety of those doing the testing. Testing shall be conducted annually on all 1 1/2", 2 1/2", and 3" hose.

PROCEDURE:

1. Hose Tester (Delta):

The fire district jointly owns a hose tester with several other fire districts. This hose tester shall be used in place of an engine/pumper. Please refer to the operating manual of the hose tester for proper usage of this tester. The following procedure as it applies to safely testing and recording the hose test shall apply when using the Hose Tester. If the Hose Tester is not availalbe, the following procedure will apply using an engine/pumper.

2. Hose Testing (Fire Engine)

EQUIPMENT NEEDED:

* Pumper
* Hose Testing Manifold
* Stop Watch or Wrist Watch with timer functions
* Various Nozzles or Gates to Bleed Air out of Hose Lines
* Personnel with turnouts

HOOK-UP AND LAYOUT PROCEDURES:

A. Connect 50' of 2 1/2" (or larger) to test valve and connect to manifold.
   # May be necessary to use more than 50' of hose depending upon placement of engine/manifold
   # Inspect each coupling for gaskets.

C. Connect hose to be tested to test manifold.
   # Inspect each coupling for gaskets.

Do not exceed 300' on any line.

D. Attach appropriate nozzles, gates, etc. to the end of each line to allow for bleeding of air.

FILL HOSE LINES AND REMOVE ALL AIR:

A. Place pump in gear.

B. Open 2 1/2" discharge gate.

Slowly fill all hose lines

C. Bleed **all** air out of each line.

Increase engine pressure to 50 psi.

D. Close each nozzle once **all** air is bled.

MARKING THE COUPLINGS FOR SLIPPAGE:

A. Each coupling shall be marked with a pen at the hose coupling connection.

B. All couplings shall be checked for leakage and tightened with spanner wrench if needed.

INCREASED ENGINE PRESSURE TO TEST PRESSURE:

A All personnel in the hose area during pressure test will wear turnout gear.

B. Raise pump discharge pressure to 200 psi.

1. Slowly

2. Maintain for five minutes.

D. Shutting down.

1. Reduce engine pressure slowly.

2. Close 2 1/2" discharge gate.

3. Open each nozzle to drain water.

INSPECTION:

A. Observe marks placed on hose at each coupling.

* If coupling has moved during test, hose length shall be removed from service.

B. Any hose section that has burst or leaked during test shall be removed from service.

* If a section bursts during the five minute test, the test must be stopped and the section replaced. The test shall start over.

TAGGING DAMAGES/OUT OF SERVICE HOSE:

A. Any section of hose that bursts, leaks or has the coupling slip, shall be "tagged".

1. The tag shall indicate:

   a. "Out of Service"

   b. Reason for failure

   c. Location of problem

   d. Hose length number

   e. Date of test

   f. Signature of person conducting test

2. The tag shall be attached to male coupling.

3. Hose shall be dried (if applicable).

4. Once dried, hose shall be rolled in an "Out of Service" roll.

B. Any hose receiving damage during a fire or other use, (torn jackets, mechanical damage, etc.), shall be rolled using an "Out of Service" roll and tagged "Out of Service Until Next Test". Tag shall include all information as stated above.

PICKING UP AND RECORD KEEPING:

A. Recording the test results.

1. The recording of test results shall be done as follows:

   # Indicate "Pass" or "Fail".
   # Record Hose Number
   # Record Date.
   # List given to Fire chief to be entered in "Hose Records" in computer

B. Breakdown all hose.

1. Wash and dry all cotton jacketed hose on the hose rack. Use hose drier when needed due to weather conditions.

2 Secure all other equipment and apparatus.