TEST YOUR FPVE KNOWLEDGE; SECTION VALVES

The following represents the testing procedures of a section valve onboard a modern cruise ship with some embedded errors. Please review and identify the disparities in the testing procedures. See below on page 2 to compare your findings with the CSNCOE work instruction.

1. Identify all section valves on ship, test all section valves in your area of responsibility according to the CSNCOE recommended job-aid
2. Identify presence of "means to prevent unauthorized access", must include a locking device
3. Verify the presence of a diagram identifying area serviced by the valve(s)
4. Identify that each valve is labeled
5. Identify and record static pressure at valve (if any)
6. The CG FPVE should close the valve to verify it is free moving and easy to manipulate
7. Attach the test hose to the valve, if the vessel does not have a test hose, one should be fabricated prior to resuming the test
8. The CG FPVE should open the drain valve to verify it is free moving and easy to operate
9. Verify operation of flow alarm
10. Make note of possible deficiencies observed and discuss with the ships officer prior to resuming exam

23 - Examine Section & pre-action valves

- In choosing section valves to examine, ensure you get a mix of stations that include upper and lower decks and different main vertical zones

Verify the follow at a section valve station:

- Means to prevent unauthorized operation; for example, a locking device or an addressable alarm that is sounded in a central control station*
- Legible diagram of the area serviced by the station
- Valves are labeled (for addressability)
- System is under pressure (this is static pressure of system)
- Equipment is accessible and in good working order
- Spare heads (if stored at the section valve station)

Evaluate section & pre-action valve tests:

- For a wet system, close stop valve. If a stop valve is fitted with an alarm, verify that the alarm works as designed after the valve is closed
- For a dry system (pre-action or remote activated) the stop valve is in a normally-closed condition. Verify it opens with local manual operation and remote operation
- Crew may attach test hose to section valve test fitting or open drain valve. This will cause the system pressure to drop.
- Evaluate the flow alarm*
- The system pressure will drop to a set pressure and will cause the automatic starting of pumps to bring system up to operating pressure
- Turn the pump off and reset
- Confirm that alarms and system have been restored to normal operation

*Bridge should confirm addressability of the alarm. If bridge cannot confirm verbally the activation of the alarms due to ship operations, you should note the location of the alarm and type and request a printout from the bridge later