



US Army Corps  
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# ENGINEERING AND CONSTRUCTION BULLETIN

No. 2005-10 Issuing Office: CECW-CE-D Issued: 31 Aug 2005

**Subject:** Scheduling Requirements for Testing of Mechanical Systems in Construction Contracts

**Applicability:** Information

1. Background: Most guidelines for determining construction contract duration do not include a check that addresses the mechanical systems testing requirements in a construction contract. The estimated construction time for mechanical systems testing will vary by the type of facility. Also, many contractors are not addressing or including all mechanical systems testing requirements on the Network Analysis System (NAS), especially the time necessary to perform Testing Adjusting and Balancing (TAB) and Commissioning (Cx) of HVAC systems. As a result contractors are not scheduling sufficient time during the contract for each phase of testing. This directly affects the time needed to perform a proper TAB and Cx of HVAC systems.
2. Purpose: The purpose of this bulletin is to provide information on the sequence of mechanical systems testing and the need for both the contractor and project delivery teams (PDT's) to address funds and time duration to perform mechanical systems testing.
3. Recommendations: Mechanical systems testing requirements should be addressed in the guidance for determining construction contract durations. The testing requirements for HVAC systems also needs to be emphasized to the contractor during the Pre-construction Conference and discussed in detail during the Coordination Meeting Conference. It should be addressed during review of the contractor's NAS submittal. The Area/Resident Engineer should carefully review the contractor's progress schedule to ensure sufficient time and funds are assigned to each testing phase. Mechanical systems testing milestones should be confirmed during the Red Zone meeting. Appropriate progress payments must be retained and held until completion of this phase. See pages 2 and 3 for sample NAS that includes the normal testing requirements and sequence for testing of mechanical systems.
4. This bulletin supersedes ECB 2003-6. Point of contact for this bulletin is Gary Bauer, CECW-CE-D, 202-761-0505.

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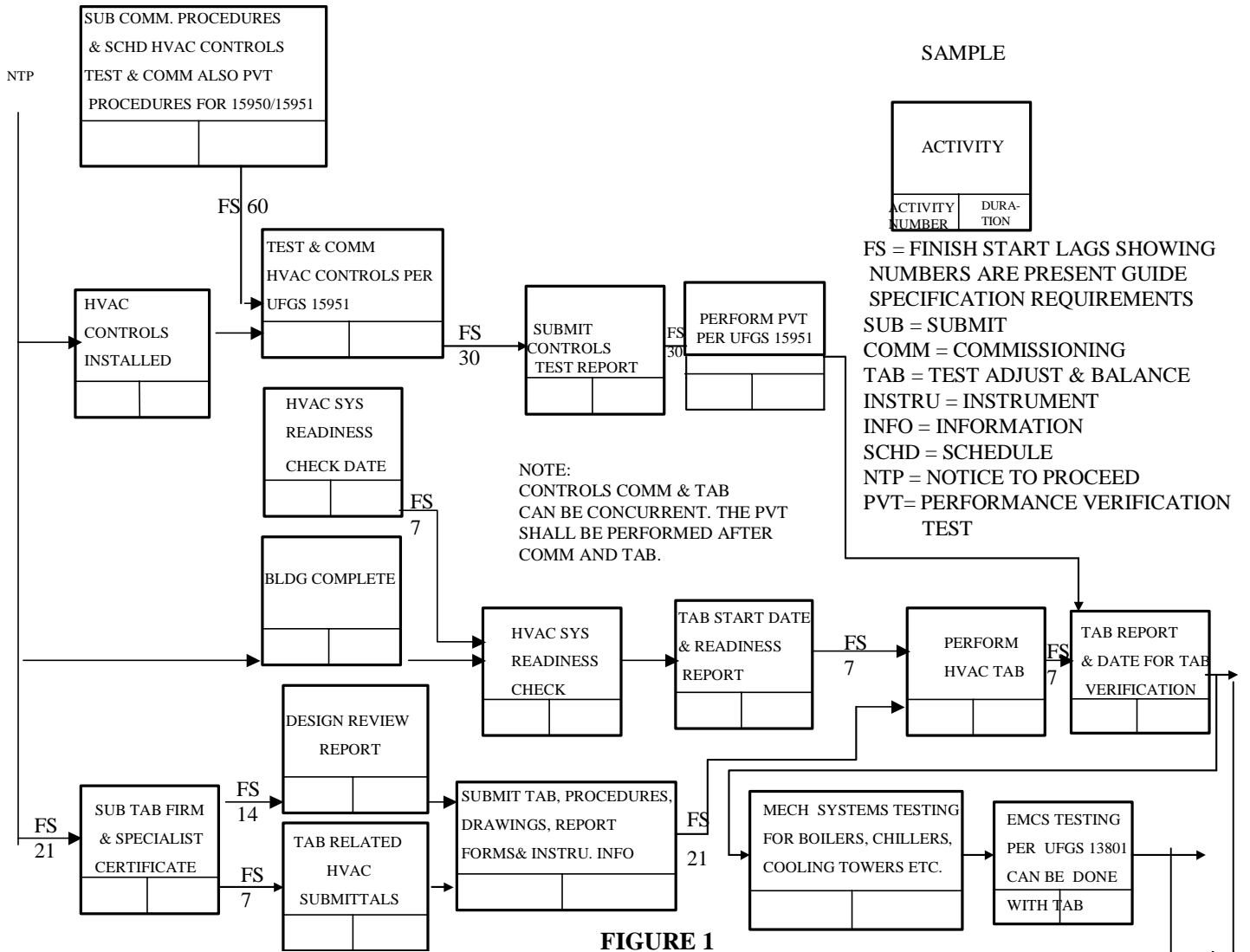


FIGURE 1

See Figure 2 on page 3 for continuation

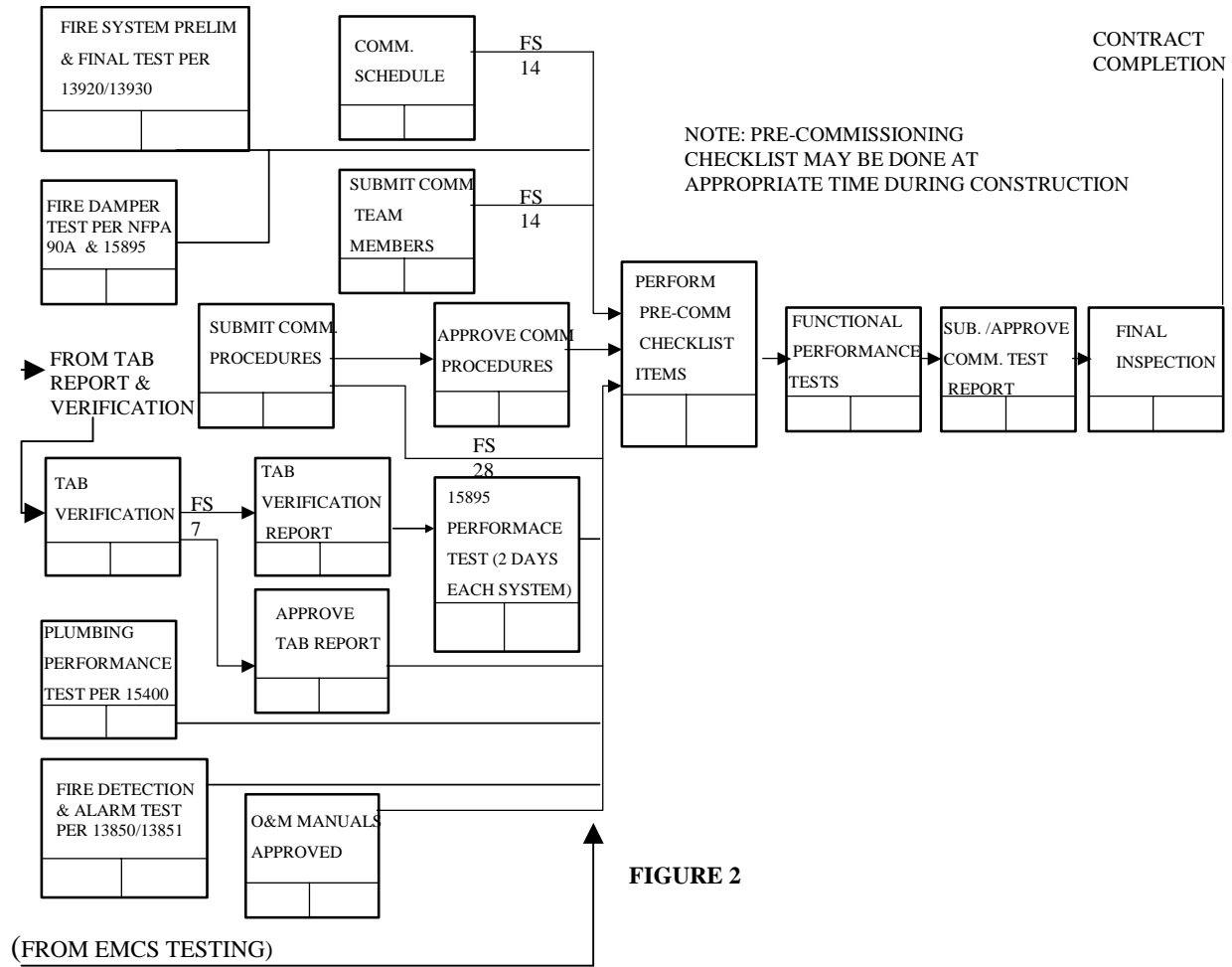


FIGURE 2