

### **E.1.0 APPENDIX E - AERIAL REFUELING MISSION AREAS, DESCRIPTION OF CURRENT SYSTEM/SITUATION**

One of the primary responsibilities of a Strike Leader is to ensure that enough fuel is available for all mission aircraft to successfully complete the assigned mission. The process of determining the amount of required fuel and the development of a tanking plan involves the Strike Leader, Strike Element Leaders, and the Refueling Element Leader. During a typical aerial refueling mission planning process, the Strike Leader receives inputs from each Element Leader as to how much airborne fuel, if any, their aircraft require for completion of the assigned mission. Fuel requirements are currently calculated on Navy Portable Flight Planning Software (N-PFPS), using specific aircraft Flight Performance Modules (FPMs). Element Leaders also notify the Strike Leader as to whether the additional fuel is required overhead the ship, enroute to the target, upon return from the mission, or more than once during the mission. The Strike Leader compiles the total fuel requirements from the Element Leaders and develops a preliminary tanking plan for the entire strike. The tanking plan is discussed with the Refueling Element Leader and adjustments are made as necessary. The Refueling Element Leader determines how many tankers are required to support the needs of the mission and a final tanking plan is developed that addresses the amount of fuel each strike aircraft is scheduled to receive, tanking altitudes, and tanking locations. The finalized tanking plan is included in the overall strike plan and is addressed by the Strike Leader at the final strike briefing.

### **E.2.0 DEFICIENCIES AND LIMITATIONS OF CURRENT SYSTEM**

- The current version of N-PFPS does not contain FPMs for all aircraft platforms, therefore, fuel calculations are performed manually using Naval Air Training and Operating Procedures Standardization (NATOPS) tables. This manual process extends the time required to complete refueling mission planning and impacts the overall mission planning timeline.
- The Refueling Mission Element Leader does not have network access to other element leaders' mission planning which would streamline the refueling mission planning process.

### **E. 3.0 CONCEPT FOR A NEW OR MODIFIED SYSTEM**

- Development and distribution of FPMs for each platform in the Naval inventory would correct the current deficiency.
- Having an automatic fuel calculator for all aircraft would streamline the mission planning process and shorten the overall mission planning timeline.
- As the various FPMs are developed and tested, they should be released with updated versions of N-PFPS.
- Network connectivity between all mission planners would enhance the efficiency of the planning process.

- The Refueling Element Leader should be able to automatically access other Element Leaders missions to obtain fuel requirements and in turn, forward preliminary tanking plans to all concerned.