1. **SCOPE:**

   1.1 Title: Combat Systems, Light-Off Support; provide

2. **REFERENCES:**

   2.1 Standard Items

   2.2 S9095-AD-TRQ-010/TSTP, Total Ship Test Program

3. **REQUIREMENTS:**

   3.1 Complete work in designated compartments and support systems prior to the Command, Control, Communications, Computer, Combat Systems and Intelligence (C5I) Light-Off (C5ILO) Key Event to the degree required to support uninterrupted completion of government AIT installations as well as all Stage 3 and follow-on C5I tests. Stage test definitions are detailed in 2.2. Designated compartments and support systems required to support AIT production and testing are listed in a Compartment Release Schedule (CRS) which is provided to the Lead Maintenance Activity (LMA) by the SUPERVISOR as Government Furnished Information (GFI). The selected Stage 3 through 7 or Operational Verification Tests to be conducted during the C5I Light-Off period are to be identified in the LMA’s Integrated Test Schedule (ITS) required by SI 009-67 of 2.1.

      3.1.1 Obtain from the SUPERVISOR, no later than A-30, a C5I Compartment Release Schedule (CRS), indicating compartments and Combat Systems Support Equipment (CSSE) required in support of C5I Light-Off.

      3.1.2 Ensure all work and testing required to meet CRS dates are fully integrated into the Integrated Production Schedule (IPS) and Integrated Test Schedule (ITS) required by 009-60 and 009-67 of 2.1. Include all work and testing planned for accomplishment by all organizations involved including Commercial Industrial Services (CIS), Alteration Installation Teams (AIT), Ships Force, Government-Contracted Third Party Maintenance Providers, and Fleet Maintenance Activity (FMA).

      3.2 Release compartments to the Government no later than the dates indicated in the approved CRS.
3.2.1 Submit one legible copy, in approved transferrable media, of a report listing the status of CRS completion including a list of preliminary C5I Light-Off discrepancies to the SUPERVISOR weekly beginning at the 50 Percent Review Conference. Submission can be concurrent with reports required by 009-60 and 009-81 of 2.1.

3.2.2 Notify the SUPERVISOR immediately upon determination of any discrepancies that cannot be corrected prior to scheduled compartment release dates for each compartment. Include the reason for the discrepancy and when applicable, highlight the new expected completion date on a revised CRS.

(V)(G)“JOINT INSPECTION”

3.2.3 Accomplish a joint inspection of the compartments to be released with the SUPERVISOR, PEO IWS designated Combat Systems Project Engineer (if assigned), and Ship's Commanding Officer (or designated representative), upon completion inspection, and acceptance of industrial work and prior to the required release date per the CRS.

3.2.3.1 Acceptance criteria is completion of 3.2.3.2 through 3.2.3.3.

3.2.3.2 The joint inspection team must document the discrepancies and determine if the scope and nature of work to correct the discrepancies will impede uninterrupted testing. This inspection satisfies the requirements of 009-81 of 2.1.

3.2.3.3 Identify each discrepancy as contractor responsible or government responsible. Develop and implement a discrepancy correction plan for contractor responsible discrepancies identified during the compartment inspection process that allows the release of compartments to the government in support of government responsible work.

3.2.3.4 Submit one legible copy, in approved transferrable media, of a report listing the discrepancies identified during each inspection that will impede testing and the discrepancies identified that will not impede testing, to the SUPERVISOR.

3.2.3.5 Ensure the joint inspection team identified in 3.2.3 will sign the report upon completion of discrepancy correction.

3.2.4 Allow no work in compartments released to the government until the end of the availability without written permission of the SUPERVISOR.

3.3 All industrial work in compartments and work on CSSE listed on the CRS must be complete to the degree that allows for the safe and uninterrupted operation and testing of the ship’s C5I equipment. When required, so as not to cause delays in the Light-Off test schedule, suitable temporary support systems and services may be considered acceptable but only after joint concurrence by the SUPERVISOR, PEO IWS Combat Systems Project Engineer (if assigned), and Ship's Commanding Officer.
3.3.1 Industrial work in 3.3 includes but is not limited to hot work, cutting, grinding, deck work (PRC, nonskid, Terrazzo, NOMEX) and spray painting. Repair and installation of electronics equipment, antennas, machinery, equipment, piping systems, gauges, thermometers, meters, operating instructions and warning plates, remote shutdown devices, strainer shields, valves and hand wheels, access door and scuttles, ventilation systems, lighting systems, electric cables and runs, alarm systems, ground straps, flex hose, resilient mounts, safety devices, interior communication systems, tachometers, and resiliently mounted pipe hangers must be completed. Newly installed or repaired gauges, thermometers, and meters must be calibrated. Access routes need not be released but must be passable or alternate routes made available at all times. Services, either ship or shore based, must be available on a reliable basis. These services are dependent on ship class and include, but are not limited to, 60HZ/400HZ, Air Conditioning (AC), Chilled Water (CW), Firemain or AEGIS Salt Water Cooling pumps, Ventilation, Electronic Cooling Water (ECW) (demineralized water), Dry Air, High Pressure Air (HP), Low Pressure Air (LP), Fwd and Aft SPY skids (AEGIS only), Sonar skid, AN/SPS 49 skid, Command and Decision (C&D) skid (AEGIS only), AN/SLQ 32 Cooling Unit and CIWS heat exchanger. In addition, the Electric Plant Control Equipment (EPCE) console or remote 400HZ console must be available. Cabling from 60HZ Power panels, Chilled Water (CW) hoses (if CHW cooled) and routes must be intact to 400HZ converters. ECW modifications must be completed and all contractor flushes accomplished. If the ship is in dock, and installed equipment or systems (i.e. AC plants, Cooling Skids, Fire-main) must be placed in operation to support C5ILO, then acceptable means to contain overboard discharge(s) must be installed, when directed by the Supervisor.

3.3.2 When in the best interests of the test program, the SUPERVISOR may waive the requirement for final decking installation as part of the initial compartment release. In these cases, install/remove temporary decking to allow safe use of the space will be installed, and final decking installation will occur at a time that does not impede the test program, as authorized by the SUPERVISOR.

3.3.3 C5I testing must not begin in a compartment which has not been formally released per the joint inspection process in 3.2.3. When discrepancies prevent final compartment release, the SUPERVISOR, PEO IWS Combat Systems Project Engineer (if assigned), and Ship's Commanding Officer will determine if industrial work is completed to the degree allowing for the safe and uninterrupted operation and testing of the ship's C5I Systems and Combat Systems Support Equipment.

4. NOTES:

4.1 C5ILO is an availability Key Event scheduled to allow the start of a comprehensive testing and operation of the ships C5I equipment. C5ILO marks the Project Team’s and Combat Systems Project Engineer’s (if assigned) transition from industrial production work to testing and installation of alterations not able to be performed coincident with industrial work. If discrepancies which preclude uninterrupted testing are identified prior to C5ILO, those discrepancies must be corrected prior to the C5ILO Key Event being declared met.
4.2 The PEO IWS designated representative (if assigned) will provide all CRS documentation, including a list of spaces and systems/equipment along with required completion dates to the SUPERVISOR at A-240 for use in planning and contract award.