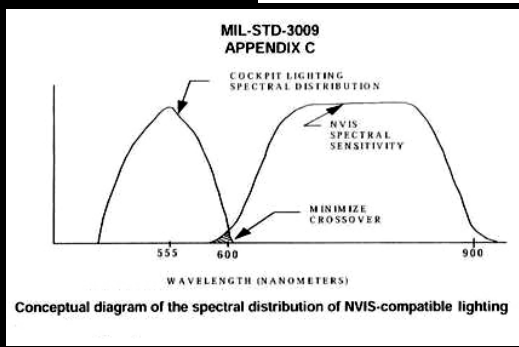
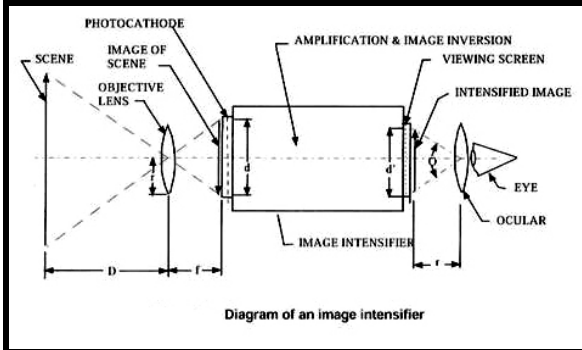


RECENT PROGRAMS

Night Vision Imaging System (NVIS)



Increased emphasis on covert and night time operations for mission success and safety have led to widespread use of Night Vision Imaging System goggles by users.

The problem is in the integration of goggles with standard aircraft interior and exterior lighting systems. If aircraft lighting is incompatible with the goggles, aircrew members may be unable to see well enough to accomplish their missions.

SSAI has provided solutions to the problems of integrating NVIS goggles with aircraft lighting systems for the MC-130P and the AC-130H Special Operations Forces aircraft and has provided engineering oversight for the NVIS Compatible Aircraft Lighting System (NCALS) modification on the HC-130P/N fleet. This included development of the NCALS specification and Test Plan.

SSAI's engineering-related experience with these programs has enabled us to develop a core capability of people and processes in several key areas:

- Cockpit, cargo compartment and exterior lighting systems design
 - No in-band (IR) or stray IR (leaks) – all lighting is outside the NVIS spectrum*
- Operation consideration driven by NVIS lighting design
 - Apparent changes in the colors of warning lights, NVIS-related maintenance requirements*
- Proper testing of individual components and of the system as a whole
 - Visual acuity checks to ensure NVG view not degraded, component testing/qualification to NVIS compatibility, daytime readability testing of aircraft lighting*
- How to specify NVIS requirements
 - Applying MIL-STD-3009 "Interface and Performance Specifications," Crew Station Working Group inputs required, Cost/Benefit analysis, must reflect TOs and IPBs*

SSAI is also deeply involved in the logistics of NVIS. Currently, under the SOF Support Services Contract (SSSC II) SSAI provides technical and logistics services to support development of Technical Order (TO) source data and engineering drawings for flight manuals, maintenance manuals and On-Equipment Maintenance Manual Set (OMMS) manuals for seven existing Time Compliance Technical Orders (TCTO). In addition, SSAI is in the process of developing a complete TCTO (1C-130-1853s).

As a Certified ISO 9001 company, SSAI has documented all process and procedures for engineering, technical and logistics support in accordance with ISO 9001:2000.

