ADVANCED CENTRIC SYSTEMS B.V

Sea / Air/ Land

COMMAND, CONTROL & COMMUNICATION SYSTEM FOR AIR-DEFENSE SYSTEMS (C3SFADS)

THE PROBLEM

A generally-accepted definition for "Air Defense" is "all measures designed to nullify or reduce the effectiveness of hostile air action."

In practical terms, these measures include purpose-specific weapon systems (ground-based, airborne and shipborne), the sensor systems that support these weapon systems, the command and control resources used to employ and manage the air-defense effort, as well as some passive resources. All of these measures are employed to protect the national airspace, vital infrastructures, high-value installations and military forces. Missile defense is a more recent aspect of air defense.

The objective of the over-all air-defense effort is to detect and identify hostile aerial targets (fixed and rotary wing aircraft, UAS, missiles, rockets, etc.), engage these targets and destroy them before they can inflict damage.

In addition to the over-all air-defense effort, deployed military forces and forces operating on the battlefield, at sea or in out-of-area situations require their own air-defense capabilities.

Ground-Based Air-Defense (GBAD) efforts may be divided into the following categories:

- Self-defense, where ground or naval forces employ their own air-defense resources.
- Accompanying air-defense, where dedicated air-defense elements operate in conjunction with and provide close protection to ground forces.
- Point defense, where air-defense elements protect a particular objective or locality, such as a seaport, airport, military base or infrastructure facility.
- Area air-defense, where air-defense elements are deployed to provide a protective umbrella over a specific area.

GBAD systems can also constitute a deterrent, as in some cases they can threaten the enemy's airspace, thereby deterring the enemy forces from using this airspace for offensive purposes.

Today's air-defense system category includes an extensive variety of surveillance systems, weapon systems, Command, Control, Communication and Intelligence (C4I) systems and integrated systems.

Modern Command, Control & Communication (C3) systems significantly enhance the effectiveness of air-defense systems, including short-range and very short range (V/SHORAD) systems.

THE SOLUTION

ACS presents C3SFADS – Command, Control & Communication System for Air-Defense Systems.

ACS Possesses extensive experience in the development and manufacture of state-of-the-art air-defense systems and elements for air-defense systems, as well as in the upgrading and modernization of legacy air-defense systems. To date, we have supplied air-defense systems to numerous clients around the world and our systems have been proven operationally.

C3SFADS is a state-of-the-art Command, Control & Communication system for air-defense systems.

C3SFADS ensures optimal deployment as part of the mission planning process. It assembles and disseminated a current, integrated status picture based on input received from multiple sensors and enables the user to manage the various air-defense missions in real time.

C3SFADS allocates priorities to the various targets and assigns responsibilities to the various elements of the air-defense system. It minimizes coordination processes based on human interaction, thereby minimizing time delays.

C3SFADS may interface with other air-defense systems, C3 systems and ATC systems and ensures optimal utilization of the performance characteristics of the fire units it commands.

KEY FEATURES & MAJOR ADVANTAGES

Key Features & Major Advantages

- State-of-the-art Command, Control & Communication (C3) system for air-defense systems
- Optimal deployment (as part of the mission planning process)
- Assembly & dissemination of integrated status picture
- Real-time mission management
- Target prioritizing & assignment of responsibilities (based on fire unit status)
- Minimization of coordination through human interaction
- Interoperability with other air-defense systems, C3 systems & ATC systems
- Optimal utilization of fire unit performance characteristics
- Prevention of "friendly fire" situations
- Prevention of saturation
- VESPA Targeting: color CCD, 640x480 thermal imager, Laser pointer, Laser rangefinder & Laser designator.
- VESPA High Definition: high definition daytime color zoom camera, HD IR sensor, Laser rangefinder & Laser designator (Laser pointer optional).