

SOC-910/E Sector Operation Center



DESCRIPTION

Command and Control systems provide required methods to collect, process, and propagate the information related to staff, equipment, and military installations. This information is necessary for commanders and decision-makers to plan, organize, manage, coordinate, and control the operation in a mission. Main applications of commander and control systems are as follows:

- 1-Continuous collecting, processing and propagating the environmental information
- 2-Establishing and keeping communication between members of the commander system
- 3-Planning, organizing, coordinating, and leading the operation
- 4-Complete and continuous supporting the forces during the mission
- 5-Commanding and controlling the forces in battlefield
- 6-Nullifying the enemies' actions by deceiving operation, psychic operation, Electronic Warfare, etc.

Considering unique role of command & control systems in coordinating goals and activities of fighting units with environmental conditions and their fighting power, establishing secure and reliable intercommunication/external communication between parts of the command & control systems available in different locations of the country are highly important. Obviously strong and effective informational supporting the command sight as main core of the command & control systems, including battlefield coordinates, audio/video reports of enemies' activities and location, and so on have direct influence on the commanders' correct, accurate, and on time decision making.

Therefore, operating mobile communication centers connected to the command sights via secure communication infrastructures, protects the commanders from dangers due to direct operation of the communication equipment in these sights by providing variety of secure and reliable communications capabilities.



- Establishing secure voice/video/data network using encryption algorithms over the Ethernet infrastructure
- Equipped with radio equipment in all frequency bands and holding conference between different bands
- Equipped with private telephone network and capability of connecting telephone lines to the network
- Remote control facility for keeping the system operators away from the propagating equipment
- Resistant against Electronic Warfare
- Equipped with circumstance vision and night vision system
- Equipped with video conference system
- Equipped with the modern MUXs with capability of transmitting the Ethernet, E1, and telephone lines (FXO,FXS) over the fiber optics with capacity of 155Mb
- Capability of establishing parallel links as alternative
- Capability of establishing communication with lower and upper layers via pair wire with capacity of up to 11.6Mb
- Capability of establishing microwave network with other nodes in distances of up to 30km
- Operating the local data network and supporting the WAN network as well as data transmission via different communication infrastructures (fiber optics, cable, and microwave)
- Connecting to/Communicating with various communication systems all over the country
- Tactical system
- Resistant against chemical attacks by the technique of making positive pressure inside the shelter using air capsules available in the system
- Thermal/audio insulator on the shelter's body
- Capability of using thermal nets, infrared, environmental concealment, and band X