

Wk2 progress a assign. intl304

Government, Military



Military science due: Why is GEOINT not a true INT? GEOINT refers to the intelligence of human being's activities on the earth's surface derived from the manipulation of and analysis of geospatial information that describes physical features and geographical activities on the earth surface. It comprises of geospatial information and imagery intelligence. GEOINT is not a true INT because INT does not deal with manipulated information.

Intelligence in military science deals with information collected and analysis that helps commanders to make decisions.

What is the three ways in which electromagnetic waves interact with matter?

Electromagnetic waves interact with matter in the following ways;

1) The electromagnetic waves may undergo surface reflection.

Optic describes the laws of reflection. This can be applied in all types of electromagnetic reflections. They range from the radio waves to gamma rays.

2) The electromagnetic waves may be transmitted in the substances it comes across.

When there is no energy absorbed by the material, the waves are said to be transparent to materials.

3) The electromagnetic waves can be fully or partially absorbed by the substance it comes across.

If the energy is absorbed by the medium, it may cause some changes in the medium. 1

What is a sensor suite?

Sensor suite refers to all systems and the hardware and software systems

that are associated with the sensor arrays. There are different types of sensor suites. These are the easiest way to monitor the things inside a building from any part of the world.

Describe the orbits of satellite sensor platforms

An Orbit refers to a path of an object found in the space. There are four types of orbit of satellite sensor. The first one is satellite orbit; this satellite follows an elliptical path, round the earth. One complete revolution is known as the orbital period. Geostationary orbits, this occurs when a satellite follows an orbit that is parallel to the equator that moves in a similar direction as the earth's rotation. Near polar orbits, refers to the orbital plane that is inclined at an angle with respect to the rotation of the earth's axis. Sun-synchronous orbits, follows an orbit whose altitude is in a way that the satellite will pass over a location at a local solar time.

Describe the drawbacks of airborne sensor platforms in the collection of technical intelligence

Technical intelligence is not easy because it not possible to collect complete information from the adversaries. This is because the chips may be down, and some of the strategies may fail. Designing a satellite of balanced force has been another drawback of the airborne sensors platform in collecting technical intelligence. 2

Describe resolution

Resolution is the clarity of an image. It is the ability of the sensors to see the smallest objects in an image. Resolution determines the sharpness of an image. Spatial resolution refers to the ability of measuring how closely lines can be resolved in an image. Spatial resolution is limited by diffraction. The

pixel spacing the ground sample of an image on the earth's surface is small compared to resolvable spot size. 3

Bibliography

Lahneman, William J. Keeping U. S. Intelligence Effective: The Need for a Revolution in Intelligence Affairs. Lanham, Md: Scarecrow Press, 2011.