

# Wk5 progress a assign. intl304

Government, Military



Intelligence affiliation Intelligence Increased technological innovations have been faced with escalating security threats, which are unidentifiable using traditional method of threat identification; this therefore has led to an upsurge investment in the security sector to trace threat, which can be done through collection of intelligence. This paper will discuss materials sampling intelligence collection and materials acquisition intelligence collection. It will also describe limitations of non-electromagnetic sensors and purpose of acoustic sensors.

### Task 1

To detect threats, there is need to collect information which will be processed, exploited and analyzed hereby giving intelligence upon which actions will be taken. Measurement and signatures intelligence is a form of material sampling intelligence collection which detects, locates and explains those characteristics which are possessed by the target objects. The data which is collected from these objects is then translated into understandable target characteristics. It is used to avail needed intelligence to commander all through the spectrum of operations so as to give them a full understanding.

### Task 2

Raw information which is to be later processed is to be collected through materials acquisition intelligence collection. A number of sources can be used to collect this important data. Signals intelligence is the first source whereby interception of signals between people is done. This is done by the National Security Agency which collects processes and reports the signal intelligence. Imagery intelligence is also collected from visual photography

and radars sensors by the National Geospatial Intelligence Agency. The central Measurement and Signature intelligence organization identifies and describes the characteristics of specific targets through use of scientific and technical intelligence. To collect intelligence from human sources, the Central Intelligence Agency, Department of State and the FBI are used. Intelligence is also collected from the publicly available information such as print and mass media by the Foreign Broadcast Information Service and the National Air and space Intelligence center. Lastly, the information available in the imagery and geospatial data is collected by the National Geospatial Intelligence Agency<sup>1</sup>.

### Task 3

With increase in nuclear attacks threats, there is a change in demand for innovation of technologies, which can identify the origin of a detonated nuclear weapon. The tool, which carries out this particular task, has the capability of collecting and identifying the radioisotopes that have been left behind as a result of atomic blast. The radioactive materials then undergo sensor analysis aiming at determining the kind and quantity of substance used.

### Task 4

Biometric sensors are important as they provide means to identify the physical attributes and characteristics which are unique to a given individual. They provide information by being able to sense such organs as the eyes, fingerprints and the DNA of a human being. This is by those producing electrical currents as they scan an individual hereby identifying his/her characteristics. They are used to monitor security while doing away with

nuisance caused by security locks.

#### Task 5

Intelligence collected from non-electromagnetic sensors faces several limitations. The information collected cannot be predicted with certainty like human intelligence whereby they can provide what was not intended<sup>2</sup>. Data may also be passed on by the enemy intentionally so as to deceive the collector like in the case of signal intelligence.

#### Task 6

Acoustic sensor systems are used in battlefields to sense the signatures of vehicles used such as tanks, helicopters, and submarines. They are important since they can provide the exact speed with which the vehicle is moving with together with the location and direction. This provides the users with a competitive advantage as they can now attack with minimal chances of failure. They also operate at minimal power consumption with which favors the conditions in battlefield. They can also be easily deployed in these battlefields.

The use of intelligence hereby plays a vital role in ensuring sustained security and therefore more inventions needs to be done to increase range with which intelligence can be gathered.

#### References

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