

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ  
КАФЕДРА ІНОЗЕМНИХ МОВ  
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР**

**МАТЕРІАЛИ  
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КОНФЕРЕНЦІЇ  
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КАФЕДРИ ІНОЗЕМНИХ МОВ**

**“TO LIVE IN A SAFER WORLD”**

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## STEALTH TECHNOLOGY

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Stealth technology also termed as LO technology (low observable technology) is a sub-discipline of military tactics and passive electronic countermeasures, which cover a range of techniques used with personnel, aircraft, ships, submarines, missiles and satellites to make them less visible (ideally invisible) to radar, infrared, sonar and other detection methods.

Diffused lighting camouflage was trialed by the Royal Canadian Navy from 1941 to 1943. In 1945 the concept was followed up, but for aircraft, by the Americans and the British.

Stealth technology is not a single technology. It is a combination of technologies that attempt to greatly reduce the distances at which a person or vehicle can be detected; in particular radar cross section reductions, but also acoustic, thermal, and other aspects:

- Internal construction;
- Radar-absorbing material.

Ships have also adopted similar methods.

But there are some limits and countermeasures for radar stealth:

- Low-frequency radar;

Low-frequency radar is limited by lack of available frequencies - many are heavily used by other systems, and by the radar's size, making it difficult to transport.

- Acoustics;

Acoustic stealth plays a primary role in submarine stealth as well as for ground vehicles. Submarines use extensive rubber mountings to isolate and avoid mechanical noises that could reveal locations to underwater passive sonar arrays.

- Visibility.

Most stealth aircraft use matte paint and dark colors, and operate only at night. Lately, interest in daylight stealth has emphasized the use of gray paint in disruptive schemes, and it is assumed that Yehudi lights could be used in the future to mask shadows in the airframe or as a sort of active camouflage.