



India-Us Defence Deal

Why in News

Recently, the **Ministry of Defence** has signed a deal with the US Government for procurement of **MK 54 Torpedo** and Expendable (**Chaff and Flares**) for the Indian Navy, under **Foreign Military Sale (FMS)**.

- FMS is the U.S. Government's program for **transferring defense articles, services, and training** to its international partners and international organizations.
- **Expendables** are something which can be consumed or used during flight and can not be recovered.

Key Points

- **MK 54 Torpedo:** [//](#)



- It is a **cigar-shaped, self-propelled underwater missile**, launched from a submarine, surface vessel, or airplane and designed for exploding upon contact with the hulls of surface vessels and submarines.
- The MK 54 uses **sophisticated processing algorithms to analyze the information**, edit out false targets or countermeasures, and then pursue identified threats.
- The primary use of this equipment is for **offensive purposes when deployed by anti-submarine warfare aircraft and helicopters**, and for defensive purposes when deployed by ships and against fast, deep-diving nuclear submarines and slow-moving, quiet, diesel-electric submarines.

- India intends to use the Mk 54 torpedoes on its [P-8I patrol aircraft](#).

- **Expendables:**

- **Chaff:**



- Chaff is a part of **CounterMeasure Dispensing System (CMDS)** is a passive expendable electronic counter measure used for protection of the naval ships from enemy's radar and missile seekers based on radio frequency.
 - **CMDS** provides self-protection in sophisticated, diverse and dense threats to the aircraft against Radar guided & Infrared seeking missiles.
- It is composed of many **small aluminium or zinc coated fibres** stored on-board the aircraft in tubes.
- In case the aircraft feels threatened by any radar tracking missiles, chaff is ejected into the turbulent wake of air behind the plane.

◦ **Flare:**



- A flare or decoy flare is also a part of CMDS, used by a plane or helicopter to counter an **infrared homing ("heat-seeking") [surface-to-air missile](#) or [air-to-air missile](#).**
- Flares are commonly composed of a **pyrotechnic composition based on magnesium or another hot-burning metal**, with a burning temperature equal to or hotter than engine exhaust.
- The Infrared Flares are used to save the fighter and transport aircrafts from Infrared guided missiles (both surface to air and air to air threats).
- **Flares on being fired provide an alternate strong IR (Infrared) source** to heat-seeking anti-air missiles so that they are lured away from the aircraft.

▪ **Significance of the Deal:**

- It will improve **India's capability to conduct anti-submarine warfare missions** and serve "as a deterrent to regional threats and to strengthen [India's] homeland defense".
- It is part of the US commitment to share cutting-edge technology with India and to ensure that both nations enjoy the **benefits of a secure and stable [South Asia](#).**
- It is significant in **wake of the [threat that China](#) poses to both countries.** In recent times, China has shown off its muscle power in the Indian Ocean, which can be seen as a threat to India.
- It is anticipated as America's **way of warning China and trying to retain balance in the geopolitical context.**
- In the recent past, the **[Quad collective](#)**, made up of India, Japan, Australia and the United States, had stated that they would do all they can to ensure peace in the **[Indo-Pacific region](#).**

Source: IE

PDF Reference URL: <https://www.drishtias.com/printpdf/india-us-defence-deal>

