

What is a 'Butterfly Mine'?

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In news- The UK Ministry of Defence, in its intelligence assessment of the ongoing war in Ukraine, has sounded an alarm on the possible use of PFM-1 series 'Butterfly Mines' by the Russian military in Donetsk and Kramatorsk.

What is a 'Butterfly Mine'?

- The PFM-1 and PFM-1S are two kinds of anti-personnel landmines that are commonly referred to as 'Butterfly mines' or 'Green Parrots'.
- These names are derived from the shape and colour of the mines.
- The main difference between the PFM-1 and PFM-1S mine is that the latter comes with a self destruction mechanism which gets activated within one to 40 hours.
- PFM-1 mine is a scatterable high explosive anti-personnel landmine of Soviet and Russian production.
- The 'Butterfly mine' has earned a reputation for being particularly attractive to children because it looks like a coloured toy.
- It is very sensitive to touch and just the act of picking it up can set it off.
- Because of the relatively lesser explosive packed in this small mine, it often injures and maims the handler rather than killing them.
- These mines are also difficult to detect because they are made of plastic and can evade metal detectors.
- These mines can be deployed in the field of action through several means, which include being dropped from helicopters or through ballistic dispersion using artillery and mortar shells.
- These mines glide to the ground without exploding and later explode on coming in contact.
- Since these mines were green in colour when they were first put to use they also earned the name 'Green

Parrots'.

- The PFM series mines are moulded in polythene plastic and have two wings, one of which is heavier than the other.
- The thicker wing is the pressure activation for the main fuse which is contained in the central body.
- The thinner wing acts as a stabiliser for the mine when it is air-dropped, thus giving it the name 'butterfly'.
- As per data available on the mine, a pressure exceeding 5 kg will activate the mine which contains 40g of explosive.
- By some estimates more than a million 'Butterfly mines' litter Afghanistan and were airdropped in valleys and mountain passes to impede the movement of the Afghan Mujahideen. PFM-1 was also used during the Soviet Invasion of Afghanistan.
- The anti personnel mines are banned by the [United Nations](#) Convention on Certain Conventional Weapons (CCW), but Russia and Ukraine are not signatories to it.
- However, there is a 1996 Amended Protocol II to the Convention on Certain Conventional Weapons – the Landmines Protocol to which Russia and Ukraine are signatories.