



Butterfly Mine

Why 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 are the findings of the Intelligence Assessment?

- Russia might have deployed **anti-personnel mines** to deter **freedom of movement along its defensive lines in the Donbas (Donetsk & Luhansk)**.
 - These mines have the potential to inflict **widespread casualties** amongst both the military and the local civilian population.
- In Donetsk and Kramatorsk, Russia has likely attempted employment of **PFM-1 and PFM-1S scatterable anti-personnel mines**.
 - The PFM-1 and PFM-1S are commonly referred to as **'Butterfly mines' or 'Green Parrots'**.
 - These names are derived from the shape and colour of the mines.

What is Butterfly Mine?



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▪ **About:**

- It is a **very sensitive** anti-personnel landmine.
- **An applied force of 5 kg** is enough to detonate the mine.
- It is **extremely dangerous**, even for small children.
- The major difference between PFM-1 & PFM-1S is that **the latter one comes with a self-destruction mechanism which gets activated within one to 40 hours.**

▪ **Uses:**

- They can be **dropped from helicopters** or through **ballistic dispersion** using artillery and mortar shells.
 - They glide to the ground without exploding and later explode on coming in contact.

▪ **Detection:**

- These mines are difficult to detect because **they are made of plastic and can evade metal detectors.**

▪ **Technical Specification:**

- They are moulded in **polyethene 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'.

▪ **Conventions on Anti-Personal Mines:**

- The anti-personal mines are banned by international convention on land mines but **Russia and Ukraine are not signatories to it.**
- There is a **1996 Amended Protocol II to the Convention on Certain Conventional Weapons-the Landmines Protocol** to which **Russia and Ukraine are signatories.**

[Source: IE](#)

PDF Reference URL: <https://www.drishtias.com/printpdf/butterfly-mine>