

Pinaka Long Range Guided Rocket

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Why in News?

The Defence Research and Development Organisation (DRDO) has successfully conducted the maiden flight test of the Pinaka Long Range Guided Rocket (LRGR-120) at the Integrated Test Range (ITR), Chandipur.

- **LRGR-120** - It is a **long-range, precision-guided rocket** for India's Pinaka Multi-Barrel Rocket Launcher (MBRL).
 - **Pinaka MLRS** is an indigenous, all-weather artillery system that can fire 12 rockets in under a minute.
- **Maximum strike range** - Up to 120 km.
- **Launcher** - Fired from existing Pinaka launchers, so no new platform was needed.
- **Developed by** - DRDO's Armament Research and Development Establishment (ARDE), Pune, and
- **Supporting labs** includes
 - High Energy Materials Research Laboratory (HEMRL)
 - Defence Research and Development Laboratory (DRDL)
 - Research Centre Imarat (RCI)
- **Evolution of Pinaka Rocket** -

Variant	Range	Guidance	Role
Mk-I	40 km	Unguided	Short-range artillery support
Mk-II	75 km	Unguided	Extended battlefield reach
LRGR-120	120 km	Precision-guided	Deep-strike, counter-force, stand-off capability

Key Features

- **Enhance accuracy** - It is equipped with a guidance system that significantly improves accuracy.
- **Guidance system** - A Combination of
 - Inertial navigation,
 - With mid-course updates and
 - Terminal correction,

- Reducing circular error probable (CEP) compared to earlier variants.
- **Targets** - Capable of engaging enemy artillery positions, command nodes, and logistics installations at long distances.
- **Stand-off Strike Capability** - The system lets the Army strike targets from a safe distance, keeping the launch units protected.
- **Precision** - This rocket achieved textbook accuracy, validating its guidance system.
- **Operational Deployment** - It is intended for deployment across artillery regiments operating the Pinaka system.
- **Strategic significance** - It provides the Indian Army with a **cost-effective, rapid-deployment alternative** to missiles for deep-strike operations.

To know more about the Pinaka Missile System, click [here](#)

References

1. [The Hindu | DRDO successfully tests 120-km strike range Pinaka rockets](#)
2. [Times of India | DRDO conducts Pinaka test](#)

