

### MIKHAIL GORBACHEV: LAST SOVIET LEADER DIES AGED 91

#### In News:

- Mikhail Gorbachev, the former Soviet leader who brought the Cold War to a peaceful end, has died aged 91.

#### Mikhail Gorbachev

MAN WHO HELPED END COLD WAR		
Key moments in Gorbachev's career		
<p><b>March 2, 1931</b>   Mikhail Gorbachev born to peasant parents in a farming village in Stavropol region</p> <p><b>1952</b>   Joins ruling Communist Party of the Soviet Union</p> <p><b>1953</b>   Marries Raisa Titarenko whom he met at univ while studying law</p> <p><b>1956</b>   Begins his political career. Named first secretary of Komsomol for the Stavropol region. By 1970, becomes party chief for the entire region</p> <p><b>1980</b>   Becomes full member of the Politburo</p> <p><b>March 11, 1985</b>   Gorbachev, then 54, becomes the leader of the Communist Party of the Soviet Union, after the deaths of several older leaders in quick succession</p> <p><b>October 1985</b>   Presents modernising economic reform plan known as 'perestroika'</p> <p><b>Nov 19, 1985</b>   President Reagan meets with Gorbachev in Geneva. The two-day summit marks first encounter between</p>	 <p>A '89 photo of Gorbachev with wife Raisa in Paris</p>	<p>slashing their nuclear arsenals, ending a superpower build-up of warheads</p> <p><b>1988-1989</b>   Soviet troops withdraw from Afghanistan, defeated after a 10-year campaign</p> <p><b>July 15, 1990</b>   In a turning point for news media freedom, Gorbachev lifts the state broadcast monopoly, giving other political movements access to the airwaves. He calls for TV and radio outlets to be run 'independently of political &amp; social organisations' and to provide 'impartial and thorough' coverage</p> <p><b>Oct 15, 1990</b>   Gorbachev wins Nobel Peace Prize for contribution toward int'l peace, helping to end Cold War</p> <p><b>August 1991</b>   Hardline communists carry out a failed coup while Gorbachev is on holiday in Crimea. A series of Soviet republics begin declaring independence</p> <p><b>Dec 25, 1991</b>   Gorbachev resigns as president of the Soviet Union after six years and nine months at the helm. The next day, the Soviet Union dissolves</p> <p><b>1996</b>   Stands as independent in prez polls, loses to Boris Yeltsin</p>
<p>American and Soviet leaders in six years</p> <p><b>Jan 27, 1987</b>   Gorbachev proposes new laws to democratise Soviet life and protect citizens against abuses</p> <p>of power, including elections by secret ballot and legislation to protect open debate</p> <p><b>1987</b>   Gorbachev and Reagan sign the Intermediate-Range Nuclear Forces (INF) treaty on</p>	 <p>A 1992 photo of Gorbachev &amp; Raisa (R) with the Reagans at a ranch in US</p>	

- Ended the Cold War**
  - Mikhail Gorbachev ended the Cold War without bloodshed but failed to prevent the collapse of the Soviet Union.
  - Often termed as the last Soviet President, he forged arms reduction deals with the United States and partnerships with Western powers.
  - This led to the removal of the Iron Curtain that had divided Europe since World War Two and bring about the reunification of Germany.
  - The Iron Curtain specifically refers to the imaginary line dividing Europe between Soviet influence and Western influence.

- In other words, Iron Curtain was the political, military, and ideological barrier erected by the Soviet Union after World War II.
- It was done to seal off Russia and its dependent eastern and central European allies from open contact with the West and other non-communist areas.
- For ending the cold war without any bloodshed, Gorbachev won the Nobel Peace Prize in 1990.
- **Initiated political and economic reforms**
  - He launched ‘perestroika’ and ‘glasnost’ movements to jolt the country out of political and economic stagnation.
  - **Glasnost**—meaning “openness,” particularly openness of information.
  - **Perestroika** - meaning a “restructuring,” specifically of the Communist economy and political system.
  - These terms went hand-in-hand because, together, the reforms initiated were aimed at making the Soviet Union more democratic and incorporate some features of capitalism to revitalize the economy.
  - However, many analysts felt that the political and economic reforms were initiated simultaneously and on too ambitious a scale, unleashing forces he could not control.
  - As per them, this was one of the main reasons for the collapse of Soviet Union.
- **Responsible for disintegration of Soviet Russia**
  - Analysts held him responsible for the disintegration of Soviet Russia.
  - When pro-democracy protests swept across the Soviet bloc nations of communist Eastern Europe in 1989, he refrained from using force.
  - Previous Kremlin leaders had sent tanks to crush uprisings in Hungary in 1956 and Czechoslovakia in 1968.
  - But the protests fuelled aspirations for autonomy in the 15 republics of the Soviet Union, which disintegrated over the next two years in chaotic fashion.

## Gorbachev and India

- Mikhail Gorbachev came to the helm in the Soviet Union just a few months after a forced leadership change in India.

- Indira Gandhi's assassination in 1984 led to Rajiv Gandhi assuming the mantle.
- Between 1985 and 1989, Rajiv Gandhi and Gorbachev found enough common ground to mark a high point in India-Soviet relations.
- This was despite their differences over the Russia's idea of an all-Asia forum along the lines of the common European home.
- The then Indian PM had conveyed that India was against countries interfering, intervening in areas outside their own.
- Gorbachev visited India twice, in 1986 and 1988.
- 1986 visit was Gorbachev's first visit to a non-Warsaw Pact country after taking over as leader of the Soviet Union.
- He also addressed Indian Parliament during the visit.
- This period also saw lavish cultural exchanges between the two countries, with the Festival of India in the Soviet Union in July 1987 the centrepiece.

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## CCS APPROVES TEJAS 2.0 MEGA PROJECT

### **In News:**

- Building on the success of the Tejas light combat aircraft, Government of India has approved the development of a much more capable and powerful version of the indigenous jet.
- The Prime Minister-led Cabinet Committee on Security (CCS) cleared the project to develop **Tejas Mark-2** with prototypes, flight testing and certification.

### **About Cabinet Committee on Security (CCS):**

- Major decisions with respect to the significant appointments, issues of national security, defence expenditure of India, are taken by the Cabinet Committee on Security (CCS) in India.
- The Prime Minister chairs the CCS which comprises of:
  - Minister of External Affairs,
  - Minister of Home Affairs,
  - Minister of Finance, and

- Defence Minister

## Functions:

- To deal with all defence related issues.
- To deal with issues relating to law and order and internal security.
- To deal with policy matters concerning foreign affairs that have internal or external security implications.
- To consider all cases involving capital expenditure of more than Rs. 1000 crore in respect of Department of Defence Production & Department of Defence Research and Development.
- All matters relating to atomic energy.

## About HAL Tejas Combat Aircraft:

THE CONTINUING SAGA OF		INDIGENOUS CONTENT: 65% <small>(American engines &amp; ejection seats, Canadian canopy sheaths, etc.)</small>	
<b>Tejas Light Combat Aircraft</b>			
<b>Aug 1983:</b> LCA project is approved with initial cost of ₹560 crore to replace aging MiG-21s			
<b>Jan 2001:</b> First prototype of lightweight multi-role fighter flies			
<b>Dec 2013:</b> Tejas gets initial operational clearance (IOC)			
<b>Mar 2015:</b> First fighter, in IOC configuration, to be handed over to IAF			
<b>Dec 2015:</b> Tejas likely to get final operational clearance (FOC)			
<b>2017-2018:</b> All 20 jets of first IOC squadron slated to be delivered			
<b>Post-2018:</b> Second squadron, with 20 Tejas in FOC configuration			
<b>2012-2022:</b> IAF likely to begin getting 80 Tejas Mark-II to form 4 squadrons			
<b>TEJAS CHARACTERISTICS</b>		<b>TOTAL COST</b>	
Weight (fully-loaded)	12tonne	At least ₹55,000 crore	
Length	13.2metre	Developmental (including air force & naval variant trainers & fighter)	
Height	4.4metre	stands at ₹17,500 crore	
Wing Span	8.2metre	to cost ₹2200 crore	
Service Ceiling	15km	120 Tejas will cost ₹37,440cr	
Speed	1,350 kmph		
Radius of Action	Over 400km (without refuelling)		

- The HAL Tejas is an Indian, **single engine, delta wing, light multirole fighter** designed by the Aeronautical Development Agency (ADA) in collaboration with Hindustan Aeronautics Limited (HAL) for the **Indian Air Force and Indian Navy**.

## Historical Background –

- It came from the Light Combat Aircraft (LCA) programme, which began in the 1980s to replace India's ageing MiG-21 fighters.
- It later became part of the general fleet modernisation programme.
- In 2003, the LCA was officially named "**Tejas**".
- It is India's first self-made fighter jet and received the final operational clearance for induction into the air force as a fully-weaponised fighter jet in February 2019.
- It is the second supersonic fighter jet that has been developed by HAL (the first one being **HAL HF-24 Marut**).

## Specifications:

- Tejas has a maximum payload capacity of 4000 kg.

- It is a single pilot single-engine aircraft that has a maximum take-off weight of 13,300 kg. It is a **fourth-generation** fighter aircraft with the capability of air-to-air refuelling.
- It can attend the maximum speed of **Mach 1.8**.
  - The Mach number describes the aircraft's speed compared with the speed of sound in air, with Mach 1 equating to the speed of sound.
- It has a general range of 850 km and a combat range of 500 km.

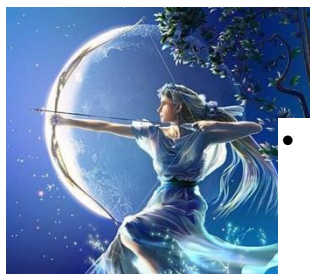
### News Summary:

- The Cabinet Committee on Security has cleared the project to develop Tejas Mark-2 at a cost of over Rs 6,500 crore, in addition to the Rs 2,500 crore earlier sanctioned for it.
- The cabinet clearance to build fifth-generation advanced medium combat aircraft (AMCA), with stealth features will follow within the next few months.
- While the Tejas Mark-1 (13.5 tonne weight) has been designed to replace obsolete MiG-21s, the **Mark-2 variant** (17.5 tonne) will succeed fighters like Mirage-2000s, Jaguars and MiG-29s in the Indian Air Force's combat fleet.
- Lightweight Tejas Mark-1 is primarily meant for air defence. Medium-weight Mark-2 fighter, with its heavy standoff weapons, will be for offensive operations into enemy territory.

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## ARTEMIS (LUNAR GODDESS)

**Artemis I will send a rocket without a crew on a month long journey around the Moon.**



### About:

- The programme aims to increase women's participation in space exploration. In addition, the Artemis I mission will carry two mannequins designed to study the effects of radiation on women's bodies so that NASA can learn how to protect female astronauts better.
- The Greeks and Romans associated Artemis with the Moon, and she has also become a modern-day feminist icon.
- Artemis was a major deity in ancient Greece, worshiped at least as early as the beginning of the first millennium B.C., or even earlier.

- She was a daughter of Zeus, the chief god of the Olympians, who ruled the world from the summit of Mount Olympus. She was also the twin sister of Apollo, god of the Sun and oracles.
  - Her independence and strength have long inspired women in a wide range of activities.
  - As the goddess of animals and the wilderness, Artemis has also inspired environmental conservancy programs, in which the goddess is viewed as an example of a woman exercising her power by caring for the planet.
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## CHINOOK HELICOPTERS

The US Army has grounded its fleet of CH-47 Chinook helicopters after finding the helicopter to be at risk of engine fires. The Indian Air Force (IAF) also operates a fleet of Chinook Helicopters.



### **About:**

- The US Army operates around 400 Chinook helicopters which are medium-lift, multi-role helicopters manufactured by Boeing who perform a variety of tasks in support of Army operations.
- The Chinook fleet has been grounded by the US Army as it is suspected that some engine fires broke out on an unspecified number of helicopters.

### **What implications does this development have for IAF?**

- The IAF operates a fleet of 15 Chinook helicopters and it has not grounded them as it awaits more word on the US development.
  - The Chinooks were inducted into the IAF in 2019 in a ceremony at Chandigarh. One Helicopter Unit of Chinooks is based in Chandigarh while the other is based at Mohanbari airbase in Assam.
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## ANTI-RADIATION PILLS

With fears of a nuclear disaster at Ukraine's Zaporizhzhia power plant growing, the European Union has decided to pre-emptively supply 5.5 million anti-radiation pills to be distributed among residents in the vicinity.



## What is a radiation emergency?

- These are unplanned or accidental events that create radio-nuclear hazard to humans and the environment. Such situations involve radiation exposure from a radioactive source and require prompt intervention to mitigate the threat.

- Dealing with such an emergency also involves the use of anti-radiation tablets.

## What are anti-radiation pills?

- Potassium iodide (KI) tablets, or anti-radiation pills, are known to provide some protection in cases of radiation exposure. They contain non-radioactive iodine and can help block absorption, and subsequent concentration, of radioactive iodine in the thyroid gland.
  - The thyroid gland, which uses iodine to produce hormones to regulate the body's metabolism, has no way of telling radioactive from non-radioactive iodine. Potassium iodide (KI) tablets rely on this to achieve 'thyroid blocking'.
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