

Prelim Bits 20-03-2022 & 21-03-2022 | Daily UPSC Current Affairs

Eugene Parker

Eugene Parker, an American astrophysicist who theorized the existence of solar wind has died.

- Dr. Parker is a visionary in the field of helio-physics, focused on the study of the sun and other stars.
- He has contributed to science and to understanding how our universe works.
- He is best known for his 1958 **Theory of the existence of solar wind** - a supersonic flow of particles off the sun's surface.
- In 1962, a NASA's Mariner II spacecraft mission to Venus confirmed his theory and solar wind's effect on the solar system, including occasional disruptions of communications systems on Earth.
- In 2018, he became the first person to witness the launch of a spacecraft bearing his name, NASA's Parker Solar Probe.

Reference

1. <https://www.thehindu.com/sci-tech/science/physicist-eugene-parker-dies-aged-94/article65232338.ece>
2. <https://www.sciencealert.com/visionary-us-astrophysicist-eugene-parker-namesake-of-nasa-solar-probe-has-died>
3. <https://www.nasa.gov/press-release/nasa-mourns-passing-of-visionary-heliophysicist-eugene-parker>

Kamikaze Drones

After Ukraine urged the US for more military support to defend the country against Russia's invasion, the US has send kamikaze drones as part of a massive military aid package.

There are drones that fire missiles and then there are ones which are missiles themselves.

- The Kamikaze are called the Killer or Suicide drones.
- These are small **unmanned aircraft packed with explosives** that can be flown directly at a tank or troops that are destroyed when it hits the target and explodes.
- The single-use weapons are cheaper than most US drones, and come in two sizes, according to AeroVironment, the manufacturer.
 1. The Switchblade 300 flies up to 15 minutes at a time, and is designed to be carried in a backpack, assisting small infantry units.
 2. The Switchblade 600 flies up to 40 minutes, and is known as a "loitering missile" that can target armoured vehicles.

- The Switchblade can be taken into battle in a backpack and fly up to 7 miles to hit a target.
- They are called Switchblade because their bladelike wings spring out on launch. It is also described as a flying shotgun.
- **Significance** - As it has a feature that allows the operator to adjust the blast radius, it can kill the driver of a vehicle but not a passenger.
- The Switchblade can be “waved off” up to 2 seconds before impact, in the event of a mistake or a risk to civilians.
- It also has cameras that show a target seconds before impact.
- The drones have the capability of going past traditional defences to strike its targets and also cost a fraction of what the larger counterparts do.
- The small lethal drones are difficult to detect on radar, and they can even be programmed to hit targets without human intervention, based on facial recognition.

Although the Kamikaze might be the most advanced form of this genre of drones, Russia, China, Israel, Iran and Turkey all have some version of it.

Reference

1. <https://indianexpress.com/article/explained/explained-what-kamikaze-drones-lethal-weapon-being-sent-us-ukraine-7824474/>
2. <https://www.firstpost.com/world/what-are-kamikaze-drones-the-new-weapons-that-us-might-send-to-ukraine-10467831.html>

POSH Law

Kerala High Court has asked organisations associated with the film industry to take steps to constitute a joint committee to deal with cases of sexual harassment of women.

These steps are to be taken in line with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act or POSH Act of 2013.

During the #MeToo movement, a number of women in India called out influential men (actors, senior journalists, etc) for alleged sexual harassment.

- Passed in 2013, the POSH Act defines sexual harassment; lay down the procedures for a complaint and inquiry, and the action to be taken.
- It broadened the legally-binding Vishaka guidelines (1997), which were already in place.
- The Visakha guidelines defined sexual harassment and imposed three key obligations on institutions — prohibition, prevention, redress.
- The institutions should establish a Complaints Committee, which would look into matters of sexual harassment of women at the workplace.
- The POSH Act 2013 mandated that every employer must constitute an Internal Complaints Committee (ICC) at each office or branch with 10 or more employees.
- **Applicability** - The Act lays down the procedures and defined various aspects of sexual harassment, including the aggrieved victim,
 1. Who could be a woman of any age whether employed or not,
 2. Who alleges to have been subjected to any act of sexual harassment.
- This meant that the rights of all women working or visiting any workplace, in any capacity,

were protected under the Act.

- **Procedure** - Technically, as per the Act, it is not compulsory for the aggrieved victim to file a complaint for the ICC to act.
- She “may” do so and if she cannot, any member of the ICC “shall” render “all reasonable assistance” to her to complain in writing.
- If the woman cannot complain because of “physical or mental incapacity or death or otherwise”, her legal heir may do so.
- Under the Act, the complaint must be made within 3 months from the date of the incident.
- However, the ICC can “extend the time limit” if it is satisfied that the circumstances prevented the woman from filing a complaint.
- Before inquiry, and at the request of the aggrieved woman, the ICC may take steps to settle the matter between her and the respondent through conciliation.
- No monetary settlement shall be made as a basis of conciliation.
- **Enquiry** - The ICC may either forward the victim’s complaint to the police, or it can start an inquiry that has to be completed within 90 days.
- It has powers similar to those of a civil court.
- When the inquiry is completed, the ICC must provide a report of its findings to the employer within 10 days.
- The report is also made available to both parties.
- **Guilty** - If the allegations of sexual harassment are proved, the ICC recommends that the employer take action “in accordance with the provisions of the service rules” of the company.
- These may vary from company to company.
- It also recommends that the company deduct from the salary of the person found guilty, “as it may consider appropriate”.
- Compensation is determined based on five aspects:
 1. Suffering and emotional distress caused to the woman;
 2. Loss in career opportunity;
 3. Her medical expenses;
 4. Income and financial status of the respondent; and
 5. The feasibility of such payment.
- After the recommendations, the aggrieved woman or the respondent can appeal in court within 90 days
- **False accusation** - Section 14 of the Act deals with punishment for false or malicious complaint and false evidence.
- In such a case, the ICC “may recommend” to the employer that it take action against the woman, or the person who has made the complaint, in “accordance with the provisions of the service rules”.
- The Act, however, makes it clear that action cannot be taken for “mere inability” to “substantiate the complaint or provide adequate proof”.

Definition of sexual harassment

- Under the 2013 law, sexual harassment includes any one or more of the following unwelcome acts or behaviour committed directly or by implication,
 1. Physical contact and advances
 2. A demand or request for sexual favours
 3. Sexually coloured remarks
 4. Showing pornography
 5. Any other unwelcome physical, verbal or non-verbal conduct of sexual nature.
- Ministry of Women & Child Development has published a Handbook with more detailed instances of behaviour that constitutes sexual harassment at the workplace. These include,

broadly:

1. Sexually suggestive remarks or innuendos; serious or repeated offensive remarks; inappropriate questions or remarks about a person's sex life
 2. Display of sexist or offensive pictures, posters, MMS, SMS, WhatsApp, or emails
 3. Intimidation, threats, blackmail around sexual favours; also, threats, intimidation or retaliation against an employee who speaks up about these
 4. Unwelcome social invitations with sexual overtones, commonly seen as flirting
 5. Unwelcome sexual advances.
- The Handbook says "unwelcome behaviour" is experienced when the victim feels bad or powerless; it causes anger/sadness or negative self-esteem.
 - It adds unwelcome behaviour is one which is "illegal, demeaning, invading, one-sided and power based".
 - Additionally, the Act mentions five circumstances that amount to sexual harassment
 1. Implied or explicit promise of preferential treatment in her employment;
 2. Implied or explicit threat of detrimental treatment;
 3. Implied or explicit threat about her present or future employment status;
 4. Interference with her work or creating an offensive or hostile work environment;
 5. Humiliating treatment likely to affect her health or safety.

Vishaka Guidelines

- Vishaka guidelines were laid down by the Supreme Court in a judgment in 1997.
- This was in a case filed by the women's rights groups, one of which was Vishaka.
- They had filed a Public Interest Litigation (PIL) over the alleged gang rape of Bhanwari Devi, a social worker from Rajasthan.
- In 1992, she had prevented the marriage of a one-year-old girl, leading to the alleged gangrape in an act of revenge.

Reference

<https://indianexpress.com/article/explained/everyday-explainers/explained-posh-law-against-sexual-harassment-in-india-7825733/>

Par Tapi Narmada River-linking Project

- The Par Tapi Narmada link project was envisioned under the 1980 National Perspective Plan under the former Union Ministry of Irrigation and the Central Water Commission (CWC).
- A MoU was signed between **Gujarat, Maharashtra** and the central government in 2010.
- The Par Tapi Narmada link project is a multipurpose project that proposes to link three rivers - **Par, Tapi and Narmada**.
- It has envisioned transferring river water from the surplus regions of the Western Ghats to the deficit regions of **Saurashtra and Kutch**.

DID YOU KNOW?

Par originates from Nashik in Maharashtra and flows through Valsad.

Tapi originates from Saputara and flows through Maharashtra and Surat in Gujarat.

Narmada originates in Madhya Pradesh and flows through Maharashtra and Gujarat (Bharuch and Narmada districts)

- The link mainly includes the construction of
 - a. 7 dams (Jheri, Mohankavchali, Paikhed, Chasmandva, Chikkar, Dabdar and Kelwan),
 - b. 3 diversion weirs (Paikhed, Chasmandva, and Chikkar dams),
 - c. 2 tunnels (5.0 km and 0.5 km length),
 - d. The 395-km long canal (205 km in Par-Tapi portion including the length of feeder canals and 190 km in Tapi-Narmada portion), and
 - e. 6 powerhouses.
- Of these, the Jheri dam falls in Nashik, while the remaining dams are in Valsad and Dang districts of South Gujarat.
- **Working** - During the monsoon season, the water which is supplied to Saurashtra through the state government from Sardar Sarovar dam will be saved and used for other purposes.
- Presently the water of Sardar Sarovar is used in urban areas and for irrigation in Saurashtra.
- **Benefits** - It provides irrigation benefits to the enroute command and Narmada command.
- The reservoirs will also provide flood relief to the people residing in downstream areas.
- The six power houses installed at 4 dam sites will generate 93.00 Mkw of hydropower.

Reference

1. <https://indianexpress.com/article/explained/par-tapi-narmada-river-linking-project-protests-explained-7826710/>
2. http://nwda.gov.in/upload/uploadfiles/files/4_Salient_Features_ Revised .pdf
3. <http://nwda.gov.in/content/innerpage/par-tapi-narmada-link-project.php>

Gandhi Green Triangle

A "Green Triangle" named after Mahatma Gandhi was jointly inaugurated in Madagascar's capital Antananarivo.

- This naming was done as part of the 'Azadi ka Amrit Mahotsav' to commemorate India's 75th year of independence.

- This “Gandhi Green Triangle” would create the maximum green space in the capital city of Madagascar, Antananarivo.

Reference

1. <https://www.thehindu.com/news/national/green-triangle-named-after-mahatma-gandhi-inaugurated-in-madagascars-capital-as-part-of-azadi-ka-amrit-mahotsav/article65233286.ece>
2. <https://indianexpress.com/article/world/green-triangle-named-after-mahatma-gandhi-inaugurated-in-madagascars-capital-as-part-of-azadi-ka-amrit-mahotsav-7823939/#:~:text=As%20part%20of%20the%20'Azadi,inaugurated%20in%20Madagascar's%20capital%20Antananarivo.>

