

SpaceX Falcon 9 Cleared for Exciting Monday Launch

Description

SpaceX's renowned Falcon 9 rocket is poised to resume operations with a mission scheduled for Monday, aiming to launch the European Space Agency's Hera spacecraft from Florida, as confirmed by the U.S. Federal Aviation Administration on Sunday.

Elon Musk's pioneering company, embroiled in a public dispute with the FAA in recent times, announced its intention to conduct the launch at 10:52 a.m. ET (1452 GMT) from Cape Canaveral.

"The SpaceX Falcon 9 vehicle has been granted authorization to proceed with the Hera mission set to lift off on Oct. 7 from the Cape Canaveral Space Force Station in Florida," revealed the FAA on Sunday.

In addressing concerns over safety, the agency expressed confidence in the mitigation measures taken, noting that the absence of a second stage reentry for this mission minimizes risks to public safety in light of the mishap that occurred during the Crew-9 mission.

Furthermore, the FAA highlighted SpaceX's obligation to investigate the recent malfunction of the Falcon 9's second stage following a NASA astronaut mission, leading to the grounding of the launch vehicle for the third time in three months. This malfunction resulted in the booster landing in a zone of the Pacific Ocean outside the designated safety area approved by the FAA for the mission.

The upcoming Hera mission holds significant scientific value, as it aims to analyze the aftermath of the 2022 collision between NASA's DART spacecraft and the asteroid Dimorphos, testing a planetary defense system. Dimorphos, a moonlet of the asteroid Didymos, poses a potential collision threat to Earth, prompting the need for asteroid deflection strategies based on the data gathered from the Hera mission.

Amidst regulatory challenges and operational setbacks, SpaceX remains steadfast in its commitment to safety and excellence in space exploration, as underscored by its track record of successful missions and technological achievements in the aerospace industry.

Vocabulary List:

1. **Authorization** /ɔ:θəraɪ'zeɪʃən/ (noun): The official permission or approval to do something.
2. **Mitigation** /mɪtɪ'geɪʃən/ (noun): The act of making something less severe or serious.
3. **Malfunction** /mæl'fʌŋkʃən/ (noun): A failure to function in a normal or satisfactory manner.
4. **Collision** /kə'lɪzən/ (noun): An instance of two or more objects striking each other.
5. **Deflection** /dɪ'fleksən/ (noun): The action or process of deflecting or being deflected.
6. **Steadfast** /'stɛd,fæst/ (adjective): Firm and unwavering in belief or purpose.

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. Which word describes an intention to do harm?

- Option: Disseminated
- Option: Malicious
- Option: Anticipated
- Option: Confidential

2. Which word means intended to be kept secret?

- Option: Ambiguous
- Option: Confidential
- Option: Unpredictability
- Option: Disaster

3. What term is used to describe the path followed by a projectile flying or an object moving under the action of given forces?

- Option: Classified
- Option: Altitude
- Option: Trajectory
- Option: Radiation

4. Which word refers to a serious unexpected and often dangerous situation requiring immediate action?

- Option: Functionality
- Option: Emergency
- Option: Communication
- Option: Authorization

5. What term describes a sudden event such as an accident or a natural catastrophe that causes great damage or loss of life?

- Option: Mitigation
- Option: Malfunction
- Option: Disaster
- Option: Capability

6. Which word refers to an instance of one moving object or person striking violently against another?



Option: Revamp
Option: Anticipated
Option: Collision
Option: Deflection

7. Which term describes information or materials officially declared to be secret or confidential?

Option: Steadfast
Option: Revamp
Option: Anticipated
Option: Classified

8. Which word best describes things that create enthusiasm and eagerness?

Option: Upgrade
Option: Unveil
Option: Exciting
Option: Products

9. Which term means increasing rapidly in numbers; multiplying?

Option: Disseminated
Option: Anticipated
Option: Proliferating
Option: Clandestine

10. Which term refers to the quality of being suited to serve a purpose well; practicality?

Option: Infrastructure
Option: Disaster
Option: Capability
Option: Functionality

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. The instructions were so _____ that no one could figure out what to do.

12. The spy operation was carried out in a _____ manner to avoid detection.

13. The airplane climbed to a high _____ to avoid turbulence.

14. Efforts for environmental _____ must be taken to reduce the impact of climate change.

15. The company decided to _____ their website to improve user experience.

16. The new software update is highly _____ by users for its improved features.

17. It is time to _____ our mobile phones to the latest model for better performance.

18. The volatility of the stock market is due to its inherent _____.

19. Effective _____ is crucial for any successful team collaboration.

20. You will need _____ from your supervisor before you can access the classified documents.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. Wearing lead aprons protects medical staff from unnecessary exposure to harmful .

22. The government invested in improving the country's transportation to boost economic growth.

23. The new fighter jet has advanced technology that enhances its combat .

24. The spacecraft experienced a critical during re-entry causing a delay in the mission.

25. The company launched a range of eco-friendly to cater to environmentally conscious consumers.

26. Despite facing numerous challenges Anna remained in her commitment to her goals.

27. The organization information about the upcoming event through social media and press releases.

28. The candidate's response to the interview question was so that the panel was unsure of his intentions.

29. The goalie made an incredible save by perfectly timing his of the soccer ball.

30. The spy's activities went undetected by the authorities for years.

Answer

Multiple Choice: 1. Malicious 2. Confidential 3. Trajectory 4. Emergency 5. Disaster 6. Collision 7. Classified 8. Exciting 9. Proliferating 10. Functionality

Gap-Fill: 11. ambiguous



12. clandestine 13. altitude 14. mitigation 15. revamp 16. anticipated 17. upgrade 18. unpredictability
19. communication 20. authorization

Matching sentence: 1. radiation 2. infrastructure 3. capability 4. malfunction 5. products 6. steadfast
7. disseminated 8. ambiguous 9. deflection 10. clandestine

CATEGORY

1. Sci/Tech - LEVEL6

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