



7 Hills Industries
Accident Investigation Department



Crash Investigation Report

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Draft Preliminary Spaceship Accident Investigation Report

Aegis Eclipse firing Seeker IX torpedo
In orbit above Calliope
Friday, April 22nd 2952



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This report will remain preliminary until the UEE releases the final report.



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Preliminary Aircraft Accident Investigation Report

Accident:

7 Hills Industries, Origin 890 Jump and Aegis Sabre Comet exploded after being hit by a Seeker IX fired from an unidentified Aegis Eclipse.

Location:

On descend to surface of Calliope.

Date: Friday, April 22nd 2952

Signatures:

Udel, 7 Hills Industries, Agent

Investigation team leader

Kazuto, 7 Hills Industries, Board Member

Qualified technical investigator

Investigation team members:

Undisclosed

Investigation technical consultants:

Undisclosed



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Preliminary Factual Section

Executive Summary

What first appeared as a collision between the Sabre and its 890 Jump carrier caused by pilot error, turned out to be a stealth attack by an Eclipse on the 890 Jump. Evidence was found in the video recording found in the Sabre's wreckage.

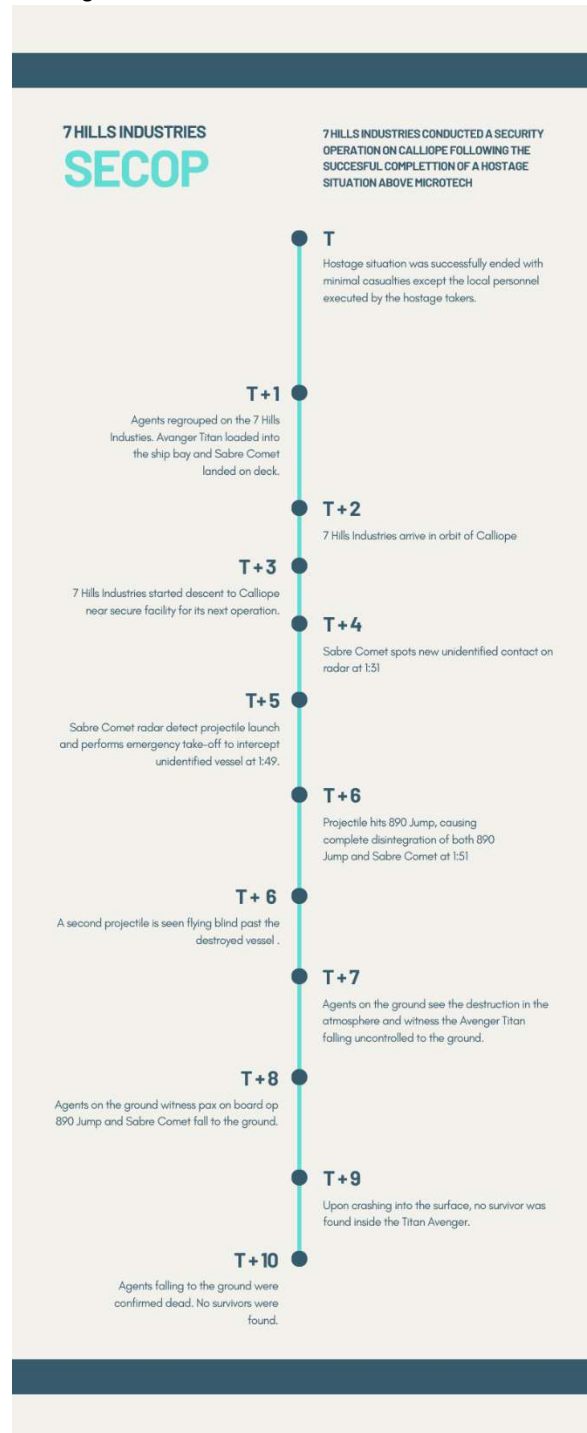
Narrative

Mission

1. 7 Hills Industries operation ongoing to clear a secure facility of a terrorist cell on Calliope.
2. The weather conditions on Calliope were optimal:
 - a. during daytime, with less than usual fog and no extreme winds.
 - b. The facility's defense system did not target the 890 Jump.
3. Pilot and agents on board the 890 Jump, pilot on board the Sabre Comet were reviewing the ongoing operation and tactics to engage. Sabre pilot was given final instructions and safety rules for taking off from a moving vessel. Other 7 Hills Industries personnel on comms witnessed the event leading onto the destructions of the Origin 890 Jump, the Aegis Sabre Comet and the loss of life of all pax on board those vessels.
4. Due to the nature of the mission, agent's identities are classified information. For the report, the identity of two agents were disclosed.
 - a. TheBanjolorian, Origin 890 Jump. Pilot.
 - b. Kazuto, Aegis Sabre Comet, Pilot.
5. Vessels involved in the accidents are:
 - a. 7 Hills Industries, Origin 890 Jump
 - b. 52-06954-X0, Aegis Sabre Comet
 - c. Unidentified Spacecraft, most likely and Aegis Eclipse
6. The 890 Jump was operation the manufacturer stock configuration. The Sabre Comet was running a custom stealth configuration:
 - a. Powerplant: Slipstream x2
 - b. Shields: Mirage x2
 - c. Coolers: Snowblind x2
 - d. Weapons: FL33 x4
 - e. Missiles:
 - i. Thunderbolt III x2
 - ii. Arrester III x2
7. Missions was approved by 7 Hills Industries Manager Marmot.
8. Flights were approved by NBIS air traffic controllers for the Microtech space sector.

Accident Chronology/Sequence of Events

9. Timeline of events reconstructed based on eye-witness accounts and video footage recovered from Sabre Comet's wreckage:





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Crash Sequence/Accident Response

10. The 890 Jump initiated a smooth controlled descent towards the security facility for its next operation. During this uneventful approach, final instructions were given to the Sabre Comet as well as the mandatory safety rules for taking off from a moving carrier vessel to avoid catastrophic accidents.
11. Based on the recordings recovered from the Sabre Comet's wreckage, this preliminary investigation rules out a collision between the 890 Jump and the Sabre Comet.
12. The lead investigator and technical investigator have concluded that this accident was caused by a 4th unidentified vessel attacking the 890 Jump, most likely using a size nine Seeker IX torpedo fired from what investigators believe to have been a Aegis Eclipse, a stealth bomber designed to deliver size nine torpedoes to (sub-)capital vessels.
13. The sequence of events leading to the accident consists of several phases, based on video footage from Sabre Comet's wreckage:
 - a. Sabre Comet's radar detecting unidentified vessel at 1:31.
 - b. Sabre Comet on flight deck receiving instructions.
 - c. Sabre Comet's radar detecting torpedo launch at 1:49, estimated at less than 1000m from 890 Jump.
 - d. Sabre Comet performing emergency take-off, raising fast, aggressively banking right to prevent collision with 890 Jump.
 - e. Fatal impact by Seeker IX at 1:50.
 - f. Explosion seen on 890 Jump starboard, around the area of the atrium at 1:51.
 - g. Sabre Comet comes to 'halt' entering 890 Jump atrium as 890 Jump is disintegrating.
 - h. Avenger Titan falls out of the disintegrated 890 Jump.
 - i. Second Seeker IX is seen on undefined trajectory.



14. Agents on the ground scrambled to the area getting littered with the parts of the wreckages and the heavily damaged Avenger Titan. Their efforts to recover survivors has been unsuccessful as all agents onboard the 890 Jump and Sabre Comet suffered instant death caused by the explosion of their

respective vessels. Bodies have been recovered and sent to their respective home planets for regeneration.

15. Following the investigation:
 - a. No anomaly was found in the agents' way of communication.
 - b. All casualties were highly skilled and trained agents.
 - c. All equipment followed all mandatory and legally enforced maintenance and operation procedures.
 - d. 7 Hills Industries and the UEE have openly cooperated during this investigation.

Injury and Damage Descriptions

16. All personnel involved has:
 - a. Suffered fatal injuries caused by the combined blast of the Seeker IX, 890 Jump and Sabre Comet.
 - b. All personnel's remains have been recovered, identified and sent to UEE approved medical facilities in the Stanton system for regeneration.
17. The involved vessels' status is:
 - a. 890 Jump: Disintegrated.



b. Sabre Comet: Disintegrated

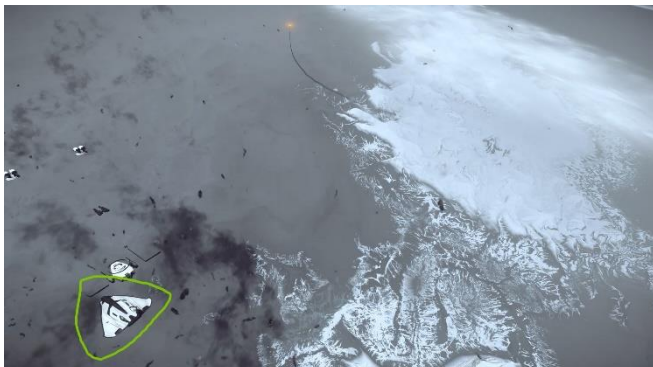




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- c. Avenger Titan: Heavy structural damage, insurance experts have concluded repairs to be too extensive.



- d. Aegis Eclipse: Unknown, possibly damaged as likely to be situated inside its Seeker IX blast radius.



- 18. On-Site, no considerable damage is to be reported as the accident happened outside of the secure facility's area. Calliope has few manned settlements. No casualties on the ground have been found or reported by eye-witnesses.

Operational History

Compliance With Directives

- 23. Operational procedures.
 - a. Were standard procedures followed?
 - i. Pilot proficiency/currency. **Yes**
 - ii. Weight and balance/manifests. **Yes**
 - iii. Load calculations/manifest. **Yes**
 - iv. Aircraft and preflight checklists. **Yes**
 - v. Power trend checks. **Yes**
 - vi. Go/no-go checklists. **Yes**
 - vii. Personal protective equipment, PPE, (worn/used). **Yes**
 - viii. Pilot and aircraft approvals. **Yes**
 - ix. Flight following. **Yes**
 - x. Passenger controls (exposure to hazards). **Yes**
 - xi. Flight and duty limitations. **Yes**
 - xii. Contracting. **N/A**
 - xiii. Spaceport guides. **Yes**
 - xiv. Minimum altitudes. **Yes**
 - xv. Safety briefings. **Yes**
 - xvi. Other. **N/A**
- 24. Training and Qualifications
 - a. All involved pilots and agents were highly skilled and trained professionals.
 - b. No violations of established policies or rules of engagement have been reported.
- 25. Records Management
 - a. All laws, regulations, rules of engagement were known by all the involved individuals.
 - b. Registration and recording of missions' performance is recorded by the UEE as per UEE legislation.
- 26. Accident prevention opportunities
 - a. Attitudes and performance: All 7 Hills Industries agents are known with safety rules of all their equipment and have acquired the necessary knowledge for basic survival and first-aid



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procedures. Specialized agent went through advanced education and training to perform complex medical and rescue interventions.

27. Mission risk factors.
 - a. The mission was determined as a relatively low risk operation considering the size of the team. No spacecraft in orbit or in atmosphere were reported by the team on the ground.
 - b. Risk analysis is always taken into consideration prior to accepting contracts to reduce the risk of injuries or fatalities.
 - c. The fact that a rogue spacecraft would intervene was not taken into consideration for this operation.
28. Safety emphasis.
 - a. Emphasis on safety is provided by the 7 Hills Industries board and management.
 - b. Prior to each operation, equipment, gear and TTPs are reviewed and acknowledged by each team member.
 - c. Safety briefings are generally given prior to retrieving and boarding ships at spaceports or space stations.
 - d. Generally, 3rd parties do not participate. It is possible that an observer joins an operation.

Findings

29. Thorough investigation has concluded that an assault on the 890 Jump by the Aegis Eclipse, a stealth bomber provided little to no chance of survivability by the targeted vessel considering the destructive power of the Seeker IX's warhead.

Furthermore, the assailant made use of the 890 Jump's radar signature to cloak its own presence and be able to fire a torpedo from a range inferior to 1000m. The speed of the Seeker IX made it impossible to deploy countermeasures and perform an evasive maneuver. Take-off of the Sabre Comet from the 890 Jump's flight deck has not directly contributed to the destructions of two vessels. Video evidence however suggest that the Sabre Comet might have first exploded after being directly expose to the Seeker IX's blast, after which its proximity to the 890 Jump may have amplified the damage to the 890 Jump caused by the Seeker IX as parts of the Sabre Comet's wreckage directly collided with its central atrium, affecting the inner space at the most fragile part of the vessel.

Causal and Contributing Factors

30. Casual factor definition:
 - a. No clear behavior, act or omission has been determined that could have started or sustained the accident. Investigators however point out the

fact that pilot Kazuto role, who scrambled without prior authorization, has added a negligible contribution to the events leading to the accident.

- b. Investigators deduced that the conversation between both pilots about the final safety instructions for take-off might have considered as the permission to do so, in the confusion following detection of a torpedo on radar and decision to intercept the attacker as only available fighter in the air at that time.
31. Contribution factor definition:
 - a. No contributing factors could be determined by investigators.
 - b. No management actions, failures or behaviors have contributed to accidents in the past nor the present.

Appendixes

32. Video Recording recovered from the Sabre Comet's wreckage has been disclosed and published at <https://youtu.be/p7zAr4Pbh1w>

Preliminary Recommendations

Recommendations

Following the analysis of this accident, investigators formulated several practically feasible recommendations that can help avoid such a catastrophic chain of events for future operations.

- Recommendation 01
An agent from the contact team already on the ground should patrol the area in a 20 km radius to detect possible spacecrafts waiting to ambush the main force during the last leg of its flight.
- Recommendation 02:
A (sub-)capital ship in transit, having many passengers on board and transporting goods should be escorted by one or more fighters, able to sweep the area for hidden spacecraft, determine their intentions when discovered or engage hostile actions.
- Recommendation 03:
Pilots sitting in spacecraft transported on the flight deck should be given specific guidelines on when and how to scramble for emergency situations, especially on fast moving carriers to avoid accidents.
- Recommendation 04:
Carrier-based operations should be a mandatory part of combat pilot education and training. Procedures should be created in cooperation with veteran pilot and flight instructors.