

BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

U.S. DEPARTMENT OF THE INTERIOR

FISCAL YEARS 2022 - 2024





BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT U.S. DEPARTMENT OF THE INTERIOR



Combined BSEE Aviation Safety Report for Fiscal Years 2022 - 2024, Oct. 1, 2021 - Sept. 30, 2024

	Total BSEE	Total BSEE	Flight Hours	Percentage of	Crewed Aircraft	UAS Missions*
	Flight Hours	SAFECOMS	Per SAFECOM	DOI SAFECOMS**	Missions	
FY 2022	5389.9	140	38.49	44%	506	0
FY 2023	5445.6	212***	37	53%	424	0
FY 2024	4954.6	188****	27	19%	8500 Flight Legs	0

^{*}BSEE utilized Exclusive Use Contracted Aircraft and no Unmanned Aircraft Systems (UAS).

Introduction

Safe and dependable air transportation is a critical element of the Bureau of Safety and Environmental Enforcement's (BSEE) inspection program of oil and gas operations on the U.S. Outer Continental Shelf (OCS). BSEE's Aviation Safety Program supports the bureau's mission by establishing and implementing effective safety programs, procedures and training requirements and mitigating potential aviation safety risks and hazards before an accident occurs.

BSEE's mission requires regular flights to and from the offshore oil and gas facilities we regulate. Despite the risks of flying over water and landing on helidecks, the bureau has achieved an impressive 50 years of flying without experiencing an aircraft accident. A key tool for identifying hazards is the Department of the Interior's (DOI) SAFECOM (Safety Communiqué) Program (www.safecom.gov). SAFECOM refers to DOI's voluntary aviation hazard reporting program. DOI agencies, including BSEE, use SAFECOM reports to document any condition, maintenance problem or circumstance with personnel or the aircraft that has the potential to cause an aviation-related mishap. SAFECOMs may also be used to document mishap prevention efforts and commendable actions. SAFECOM reports aren't meant to be a substitute for immediate safety corrections, but instead serve as data for aviation managers to track hazards and conduct trend analysis, ensuring effective corrective actions are taken. SAFECOMs can be submitted anonymously and cannot be used for punitive purposes. The submission of a SAFECOMs do not replace the need for initiating an accident or incident report.

This report presents a summary of the flight statistics and SAFECOMs reported to BSEE by our inspectors, engineers and aviation contactors over the fiscal years 2022-2024. The SAFECOMs reveal critical insights into safety incidents, including mechanical issues, weather-related diversions, and human factors, underscoring the importance of proactive reporting and collaborative efforts in enhancing operational safety and mitigating risks within aviation operations.

^{**}BSEE originated SAFECOMs as a percentage of the total reported for DOI.

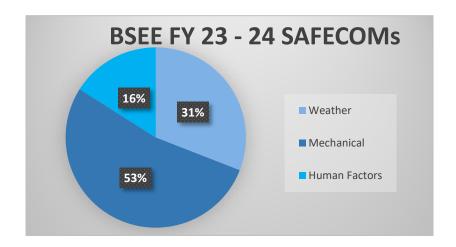
^{***}BSEE saw increased SAFECOMs from FY22 to FY23. This is attributed to Managers and Supervisors increased promotion of BSEE's aviation hazard reporting system (SAFECOM System) while continuing to build: Teamwork; Follow-through of each concern; And building trust and accountability.

^{****}BSEE saw decreased SAFECOMs from FY23 to FY24 resulting from weather impacts in the Pacific & Gulf of America Regions.



BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT U.S. DEPARTMENT OF THE INTERIOR





What Was Identified Through Our SAFECOMs

During FY22-FY24, BSEE employees and contractors voluntarily reported the following:

Mechanical Issues: 285 total (FY 22: 86, FY 23: 100, FY 24: 99); primarily linked to isolated incidents without systemic failures.

Weather-Related Events: 166 reported incidents related to weather conditions that necessitated flight diversions, primarily due to reduced visibility below established minimums and the presence of unforecasted weather phenomena such as thunderstorms and low cloud layers. Pilots consistently exercised excellent situational awareness by returning to base to ensure the safety of operations in adverse weather conditions.

<u>Human Factors</u>: 86 incidents reported, including miscommunication, distractions, pressure to operate, and non-adherence to established protocols. Specific concerns included:

- Hydrocarbon gas venting during helideck operations
- Maintenance and inspection errors
- External pressures (affecting decision-making)
- Internal pressures (affecting adherence to established procedures)
- Complacency

Corrective Actions Taken by BSEE

BSEE effectively used the information reported through the SAFECOM System to strengthen the aviation programs of BSEE and their stakeholders.

Key Products Developed from Insights Provided through SAFECOMs:

The key products developed from insights gained through the SAFECOMs include comprehensive executive summaries and weekly incident reports that compile and analyze safety data, facilitating informed discussions on aviation safety at meetings and with stakeholders. Additionally, training compliance and needs assessment spreadsheets were created to support BSEE's aviation training programs, ensuring adherence to safety protocols and training requirements while enhancing overall operational safety across the agency.

Outputs from BSEE's collaboration with stakeholders, including the Helicopter Safety Advisory Conference (HSAC), comprise targeted Notices to Lessees (NTL) and BSEE Safety Alerts that effectively communicated critical safety information and best practices to the aviation and offshore oil and gas industries, raising situational awareness and promoting proactive measures to enhance helicopter safety. In response to SAFECOMs highlighting concerning conditions on offshore facility helidecks, BSEE also developed NTL 2021-N03 regarding Helideck Closures and Markings, which helped prevent landings on hazardous helidecks or incorrect locations. The positive industry feedback



BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT U.S. DEPARTMENT OF THE INTERIOR

FISCAL YEARS 2022-24

underscores the value of the SAFECOM system in gathering information and implementing meaningful safety enhancements.

BSEE has incorporated best practices, safety trends, and lessons learned into monthly Regional Aviation Safety Meetings, Aviation Incident Response Exercises, and Safety Stand-Downs attended by BSEE, our contracted aviation teams, and DOI Acquisitions Directorate (AQD). The following training was also updated in collaboration with DOI's Office of Aviation Services (OAS) Training Branch to increase training effectiveness for BSEE offshore travelers, and other DOI agencies, the National Park Service, and Cal-Fire:

- FY 22: 12 A310/Overview of Crew Resource Management Webinars for 155 students.
- FY 23: 9 A310/Overview of Crew Resource Management Webinars for 114 students.
- FY 24: 5 A310/Overview of Crew Resource Management Webinars 71 students.

BSEE has also issued multiple Safety Alerts flagging conditions identified in our SAFECOMs. The aviation centered <u>BSEE Safety Alerts</u>:

- <u>Safety Alert 491</u> BSEE Urges Increased Crane Safety Awareness During Offshore Helideck Operations
- <u>Safety Alert 490</u> Delay in Publication of Derated Helideck Weight Capacity Leads to Near Miss Incident
- <u>Safety Alert 481</u> Hazardous Helideck Conditions Result in Near Miss Incident
- <u>Safety Alert 479</u> Lack of Adherence to Helideck Safety Procedures Results in Series of Near Miss Incidents
- <u>Safety Alert 474</u> BSEE Issues Recommendations for Safely Approaching, Entering, and Exiting a Helicopter on Offshore Helidecks

Guidance Documents and Policies:

BSEE has implemented multiple procedural changes as the result of issues raised through our SAFECOM program. These include:

- Developing enhanced Stop-Work Authority language and training for BSEE's offshore travelers.
- Improving the Airborne Project Aviation Safety Plan risk analysis to simplify completion and streamline approvals, documentation, and ensure adherence to policy.
- Expanding the scope of Aviation Incident Response Exercises to cover broader scenarios regarding potential hazards.
- Providing more detailed explanations and direction for the inspection, maintenance, and use of Aviation Life Saving Equipment.

These updates, which arose from insights collected through SAFECOM reports, are crucial for enhancing communication and ensuring safe operations. The cascading impacts resulted in updates to policy such as BSEE's National and Regional Aviation Management Plans, and the collaborative production of the Interagency Aviation Accident Prevention Bulletin (IA APB) 24-04. This was issued by the DOI Office of Aviation Services, focusing on best practices for Helicopter Ground Operations and emphasizing safety measures and situational awareness.

Weather Standard Operating Procedures:

Lessons learned attributed to the development and implementation of BSEE's Gulf of America Regional Weather Standard Operating Procedure, which established an effective working relationship to successfully complete the mission. It outlines a detailed written procedure that discusses weather sources, use of weather ships, weather dispute protocol, and overall transparency for aviation operations.

Support for Renewable Energy:

The aviation team advised BSEE, BOEM, and industry stakeholders on aligning with international aviation standards. BSEE's participation in projects stems from lessons learned through SAFECOMs, further illustrating how critical the system is for shaping future operational protocols, including the use of helicopters and drones for offshore Inspection activities.



BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT U.S. DEPARTMENT OF THE INTERIOR



<u>Continuous Collaboration with External Organizations:</u>

BSEE has actively engaged with various stakeholders, including:

- Helicopter Safety Advisory Conference (HSAC)
- Federal Aviation Administration (FAA)
- DOI Office of Aviation Safety (OAS)
- National Transportation Safety Board (NTSB)
- United States Coast Guard (USCG)
- The Offshore Operators Committee (OOC)
- Other DOI bureaus and agencies to bolster operational safety through shared insights and coordinated efforts.

<u>Promotion of Safety Culture with Consistency in</u> Recognition:

BSEE recognized positive Human Factors including updates of best practices into guidance and operational practice. These were shared through safety meetings and trainings. Recognition of individual and teams included nominations for seven Aviation Safety Awards in 2022, one in FY 2023, and ten in FY 2024 for exemplary actions and teamwork, reinforcing accountability and recognition of safe

practices.

Conclusion

The SAFECOM System is the cornerstone for collaboration, continuous improvement, and the effective safety culture within BSEE and the broader aviation community. Everyone flying on BSEE contracted aircraft knows that they can report safety concerns and great practices. They also know that their concerns will be investigated, and when necessary, corrective actions will be implemented. Our SAFECOM metrics show that BSEE leads DOI in SAFECOM participation. As frequent flyers on BSEE aircraft, our numbers show our employees are investing in and owning their aviation safety.

Lessons learned from these reports and a proactive approach to aviation safety have significantly impacted BSEE's aviation safety history. BSEE has proudly achieved the following historic milestones:

First and Only:

BSEE has flown more than 300,000 accident-free flight hours, completing more than 150,000 missions over the past 50 years. BSEE is the first and only bureau within the DOI to maintain an accident-free operational record for this extended period.