

VOLUME 7 INVESTIGATION

CHAPTER 3 INVESTIGATING OCEANIC ERRORS

Section 1 Investigating Oceanic Errors

7-81 GENERAL. This section contains guidance to be used by aviation safety inspectors (ASI) involved with the investigation and reporting of oceanic errors. This section supplements Federal Aviation Administration (FAA) Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting.

A. Special Areas of Operation (SAO) Specialists. SAO specialists in the AXX-220 branches should be consulted when an oceanic error occurs. It is FAA policy that one of the agency's SAO specialists participates in the investigation of gross navigation errors (GNE). These specialists may also participate in the evaluation of the actions proposed by the operator to preclude the occurrence of similar errors. Notify AFS-400 as soon as possible when determining that actions should be taken to suspend North Atlantic High Level Airspace (NAT HLA) authorization.

B. Applicability.

1) This order contains guidance to be used by aviation safety inspectors (ASI) involved with the investigations and reporting of incidents by Title 14 of the Code of Federal Regulations (14 CFR) parts 91, 91K, 121, 125, and 135 operators and those operating U.S.-registered aircraft flying in any oceanic airspace or by foreign operators operating within U.S. air traffic control (ATC)-controlled oceanic airspace. This section supplements FAA Order 8020.11, Aircraft Accident and Incident Notification, Investigation and Reporting, as well as FAA Order 8900.1, Volume 7, Chapter 1, Section 2, Incident Investigations and Occurrences. The appropriate military branch of service investigates military flights as per the current edition of FAA Order 2150.3, FAA Compliance and Enforcement Program, Chapter 2, paragraph 7f.

2) Oceanic errors reported on FAA Form 8020-17, Preliminary Pilot Deviation Report (Air Traffic Quality Assurance (ATQA)) are considered incidents as defined in FAA Order 8020.11.

3) Oceanic errors reported on FAA Form 7110-82, Oceanic Error Report, without a corresponding Form 8020-17, are considered occurrences according to FAA Order 8900.1, Volume 7, Chapter 1, Section 2.

4) Pilot's Bill of Rights. On August 3, 2012, the Pilot's Bill of Rights (PBR) became effective, requiring the Federal Aviation Administration (FAA) to provide certain written notifications to individuals who are the subject of an investigation relating to a certificate suspension, revocation, or modification action, or the approval or denial of a certificate. Reference should be made to Notice N 8900.230, Requirements for Written Notification During Investigations of Airman Certificate Holders or Applicants, and/or FAA Order 8900.1, Volume 14, Compliance and Enforcement, for all investigative and enforcement issues.

C. Background.

1) International Civil Aviation Organization (ICAO) working groups composed of representatives of labor, industry, ATC, and state regulators meet regularly to discuss oceanic errors in detail.

2) Oceanic airspace is procedural airspace based on strategic clearances, which means controllers issue oceanic clearances and flightcrews must follow specific navigation, speed, and altitude procedures. Because many oceanic errors occur in the nonradar environment, they tend to be more pronounced and of a longer duration than those within radar coverage. Many times the first indication an air traffic controller will have that an aircraft is flying contrary to its clearance is when the aircraft comes into radar coverage or when an air traffic controller receives a position report by one of the various means, i.e., voice, data link, etc.

3) Oceanic errors present hazards to flight safety and create barriers to future reductions in separation.

D. Definitions. The following are the predominate types of oceanic pilot errors an SAO specialist and/or inspector investigate. FAA investigations focus on errors made by those operating U.S.-registered aircraft flying within any oceanic airspace or by foreign operators operating within U.S. ATC-controlled oceanic airspace:

1) **Gross Navigation Error (GNE).** Lateral errors of 25 nautical miles (NM) or more from the aircraft's cleared route.

NOTE: The North Atlantic Systems Planning Group (NAT SPG), in its June 2012 conclusion 48/21, reclassified a GNE as a "lateral deviation from a cleared track by 10 Nautical miles (NM) or more." The FAA is examining this new ICAO NAT Region definition for possible adoption.

2) **ATC Interventions.** An ATC intervention is an event where the controller caught and corrected a lateral deviation before it developed into a GNE. Normally, an out-of-conformance waypoint ("next" or "next +1") in a position report alerts the controller of a pending deviation, which he is able to prevent or alleviate by clarifying the clearance with the flightcrew.

3) **Height Errors.** Errors of 300 feet or more from an ATC clearance altitude.

4) **Time Errors (Estimated Time of Arrival (ETA)/Actual Time of Arrival (ATA) Error).** ICAO Annex 2 was amended in 2012 and now specifies a more stringent tolerance: "if the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, is found to be in error in excess of 2 minutes from that notified to air traffic services, or such other period of time as is prescribed by the appropriate ATS authority or on the basis of air navigation regional agreements, a revised estimated time shall be notified as soon as possible to the appropriate air traffic services unit." Failure to provide a timely and accurate ETA may jeopardize planned separation between aircraft. See also ICAO Document 7030, Regional Supplementary Procedures, and

North Atlantic (NAT) Doc 007, North Atlantic Operations and Airspace Manual, Chapter 5. Tolerance for U.S. airspace is found in the AIM, Chapter 5.

5) Operator Authorization Check. An Operator Authorization Check (formerly called Special Areas of Operation Verification (SAOV)) is an investigation to determine whether the operator has a current letter of authorization (LOA), management specification (MSpec) or operations specification (OpSpec) for operation in the SAO.

6) Emergency Event. An emergency event occurs when a flightcrew experiences an emergency requiring deviation from the assigned ATC clearance, and then notifies ATC as soon as practical.

7) Weather Event. A weather event occurs when a flightcrew requests a weather deviation clearance and ATC is unable to issue the clearance due to traffic or communications problems and the flightcrew exercises emergency command authority to execute the approved oceanic weather deviation procedure.

E. Objectives.

1) Determine the cause of an oceanic pilot deviation and report it to the applicable aviation safety stakeholders.

a) Reporting is via the ATQA system and the Program Tracking and Reporting Subsystem (PTRS), as applicable.

b) In determining the cause, the inspector should coordinate with an SAO specialist, and as appropriate, recommend action to prevent future errors.

c) Some errors may warrant enforcement action; for that, guidance in FAA Order 2150.3 pertains.

2) Help operators, regulators, and air navigation service providers recognize oceanic hazards and mitigate accordingly.

a) Reports of ATC operational errors are disseminated to regional SAO inspectors, who analyze oceanic hazards and engage with Flight Standards field offices and operators to develop and promote mitigations.

b) Headquarters (HQ), Flight Standards, analyzes reports and coordinates with regional SAO inspectors, as well as U.S. and foreign air navigation service providers to develop and promote mitigations.

F. Oceanic Errors are Reported to and Investigated By:

1) Parts 91K, 121, 125, and 135 operators – assigned CHDO or CMO.

2) Foreign operators who commit errors in U.S.-controlled oceanic airspace:

a) Operating under part 129 – assigned IFO or IFU.

b) Not operating under part 129 – the IFO/IFU with the designated international Service Area corresponding to where the foreign operator’s aircraft is registered. See https://www.faa.gov/about/office_org/field_offices/ifo/.

3) Part 91 operators:

a) Where aircraft is listed on an LOA – FSDO that issued LOA.

b) Where aircraft is not listed on an LOA – nearest FSDO to where the aircraft owner is located.

G. Applicability of Flight Rules while Over the High Seas. Part 91, § 91.703(a)(1) makes the flight rules contained in ICAO Annex 2, 3.6.2.1.1 binding for U.S. operators operating over the high seas and states that the aircraft “shall adhere to its current flight plan” and “when on an established ATS route, operate along the defined centerline of that route.” (Exception allowed for Strategic Lateral Offset Procedures (SLOP) as noted in paragraph I.)

H. Requirements for Operations in NAT HLA. Flights within NAT HLA (FL 285-FL 420) require that aircraft have approved navigation performance capabilities and be authorized by the Administrator to perform such operations.

NOTE: Flights without a NAT HLA authorization may operate above or below NAT HLA. ATC may authorize flights to climb or descend through NAT HLA, but normally without intermediate level offs. This climb/descent does not require an LOA, MSPEC, or OpSpec, but the appropriate ATC authority must clear the flight.

NOTE: An excellent source of information for NAT HLA operations is NAT Document (Doc) 007, North Atlantic Operations and Airspace Manual located at: http://www.paris.icao.int/documents_open/files.php?subcategory_id=108.

I. Strategic Lateral Offset Procedures (SLOP). ICAO Doc 4444, Procedures for Air Navigation Services-Air Traffic Management (PANS-ATM) and NAT Doc 007, North Atlantic Operations and Airspace Manual, allow aircraft to fly on a parallel track to the right of the centerline relative to the direction of flight. Flightcrew operating in oceanic airspace are encouraged to offset the assigned course by one mile or two miles to the right for reduced collision risk and for wake turbulence avoidance. A full description of SLOP can be found in ICAO Doc 4444, Chapter 16 at <https://portal.icao.int>. The “Login Procedures” tab should be selected for access to the ICAO site. SLOP guidance is also located in NAT Doc 007, Chapter 8 at http://www.paris.icao.int/documents_open/files.php?subcategory_id=108.

J. Separation Minimums.

- Separation minimums establish the minimum lateral, vertical, and longitudinal distances used to separate aircraft, and correlate to an established minimum level of overall navigation performance that can be accommodated at any time without jeopardizing safety.
- ICAO Document 7030, Regional Supplementary Procedures, prescribes separation minimums in international airspace for various regions of the world.

K. SAO.

- LOAs authorize part 91 operators (except 91K) to conduct operations in designated SAOs.
- OpSpecs authorize parts 121, 125, 129, and 135 operators to conduct operations in designated SAOs.
- MSpecs authorize part 91K, fractional ownership operations to conduct operations in designated SAOs.
- Guidance for issuing LOAs for SAOs is found in FAA Order 8900.1, Volume 4, Chapter 12, Section 1.

NOTE: Most LOAs are found in WebOPSS and are numbered the same as OpSpecs and MSpecs. Select “part 91” under the CFR tab to find an LOA.

7-82 TYPES OF INVESTIGATIONS. ATC units generate oceanic error reports (OER) and submit them through email addresses to the SAO specialists, FAA headquarters (HQ) and to the appropriate monitoring agency. These reports are handled as:

A. Occurrences. Occurrences are defined in Volume 7, Chapter 1, Section 2. If ATC generates an Oceanic Error Report (FAA Form 7110-82) without filing a Preliminary Pilot Deviation Report (FAA Form 8020-17), or a monitoring agency (e.g., North Atlantic Central Monitoring Agency, NAT CMA) or a non-FAA air navigation service provider reports an oceanic error, the error is considered an occurrence. Occurrences are often ATC operational errors (no AFS investigation required), or are of a nature better suited to a less formal type of investigation, which should be recorded (as appropriate) in PTRS.

B. Incidents. Incidents are defined in FAA Order 8020.11. If ATC files a Preliminary Pilot Deviation Report (FAA Form 8020-17 in ATQA), in addition to the Oceanic Error Report, the error is considered to be an incident. The corresponding investigation is formal, following guidance in FAA Order 8020.11 and FAA Order 2150.3, as applicable.

C. Operator Authorization Check (Formerly Called SAOV). Such an investigation focuses on determining whether the operator has a current LOA, MSpec, or OpSpec for operation in the SAO.

7-83 PREREQUISITES AND COORDINATION REQUIREMENTS.

A. Prerequisites. Investigating oceanic pilot errors requires qualification as an ASI (Operations).

B. Timeliness of Investigations. Investigation of navigation/height/time error reports should begin immediately to ensure the availability of evidence necessary to establish the cause(s) of the error. The nature and extent of the investigation will depend upon factors such as the status of the equipment at the time of the error, crew qualifications for oceanic operations, and other factors.

- ATC keeps voice and communications records for between 15-45 days.
- ARINC keeps voice communications for 30 days.
- Investigations should be complete within 45 days of the incident.

NOTE: ATC does not always advise a crew that it files a report; therefore, the inspector should contact the crew as soon as possible so the crew will remember details of the event.

C. Aviation Safety Action Program (ASAP) Participating Carriers. Investigations of oceanic errors associated with an air carrier that participates in ASAP will be in accordance with Volume 7, Chapter 1, Section 2. Additional guidance related to ASAP investigations is contained in Volume 11, Chapter 2, Section 1. A list of participating carriers may be viewed at the following link: <http://www.faa.gov/about/initiatives/asap/>.

D. Coordination Requirements. Investigating oceanic errors involves complex international regulations, procedures, and equipment requirements. An SAO specialist should participate in the investigation. In addition to coordinating with a designated SAO specialist, the ASI may require coordination with the AFS regional counsel. Coordinate as necessary with inspectors from other specialties, such as maintenance or avionics.

E. Documents and Records. A thorough investigation requires retention and collection of relevant documents and records. Whenever an oceanic error is reported, flight plans, releases, load manifests, plotting charts, and maintenance logs carried on the airplane must be preserved and analyzed.

7-84 REFERENCES, FORMS, AND JOB AIDS.

A. Primary References (current editions):

- Title 14 CFR Part 91, § 91.703.
- FAA Order 2150.3, FAA Compliance and Enforcement Program.
- FAA Order 7110.82, Reporting Oceanic Errors.
- FAA Order 8020.11, Aircraft Accident and Incident Notification, Investigation and Reporting.
- Volume 7, Chapter 1, Section 2, Incident Investigations and Occurrences.

B. Additional References (current editions). The following references refer to oceanic navigation and procedures but are not all inclusive:

- FAA North Atlantic (NAT) Resource Guide for U.S. Operators. File located at: http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs470/media/NAT.pdf.
- FAA Pacific (PAC) Resource Guide for U.S. Operators. File located at: http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs470/media/PAC.pdf.
- Advisory Circular (AC) 91-70, Oceanic and International Operations.
- ICAO Document 7030, Regional Supplementary Procedures.
- NAT Document 007, North Atlantic Operations and Airspace Manual.
- ICAO Annex 2, Rules of the Air.
- ICAO Annex 6, Part I International Commercial Air Transport – Aeroplanes.
- ICAO Annex 6, Part II International General Aviation—Aeroplanes.

C. Forms:

- FAA Form 7110-82, Oceanic Error Report Form.
- FAA Form 8020-17, Preliminary Pilot Deviation Report (ATQA).
- FAA Form 8020-18, Investigation of Pilot Deviation Report (ATQA).
- FAA Form 8020-19, Reclassification of Aviation Incident Report.
- FAA Form 8000-36, Program Tracking & Reporting System Data Sheet.

D. Inspector Job Aids:

- Figure 7-1, Oceanic Navigation Error Report/Oceanic Altitude Deviation Report.
- Figure 7-2, Operator Authorization Check Job Aid.

7-85 PROCEDURES AND RESPONSIBILITIES.

A. SAO Specialist Responsibilities. SAO specialists will coordinate with the office assigned to investigate the error. (See subparagraph 7-81F.) If ATC files a Preliminary Report of Pilot Deviation (FAA Form 8020-17), it will be submitted through the ATQA computer program.

B. IFO/IFU/CMO/CHDO/FSDO Responsibilities.

- 1) On receipt of a report, the office will determine how to proceed based on:
 - a) If FAA Form 8020-17 is filed, a pilot deviation investigation is required.
 - b) If FAA Form 8020-17 is not filed, the office in concert with the AXX-220 SAO specialist will determine the extent of the investigation required. See paragraph 7-88, Task Completion.
- 2) An operations ASI will conduct the investigation.

- 3) Determine if the operator has an ASAP program:
 - a) If so, the FAA representative will participate in accordance with ASAP guidelines (see Volume 11, Chapter 2, Section 1).
 - b) If not, contact the operator and conduct the investigation.
- 4) Contact the appropriate ATC unit, if necessary, and obtain all available flight data within 15 days of the error occurring.
- 5) Establish the cause and/or factors contributing to the deviation.
- 6) Complete the appropriate forms (FAA Forms 8020-18, 8020-19, Enforcement Investigation Report (EIR), etc.). Refer to FAA Order 8900.1, Volume 7, Chapter 1, Section 2, Paragraph 7-36 (“Reports”), particularly with reference to FAA Form 8020-18, Block 18.
- 7) Take action as necessary to prevent recurrence of the error and determine if remedial training, counseling, administrative action, equipment replacement, or enforcement action is the most appropriate course of action and proceed accordingly.
- 8) Complete the PTRS and ATQA entries, as required.

7-86 REPORT COMPLETION DIFFICULTIES.

A. Operational Errors. ATC operational errors are reportable, but AFS does not investigate them. However, there may be cases when an ASI is investigating a pilot error and discovers an error was made by the ATC or was the result of a coordination error between ATC incidents. If this should be the case, complete an FAA Form 8020-19, Reclassification of Aviation Incident Report, in ATQA.

B. Ownership. Accurate ownership or operation of an aircraft at the time the error occurred can be difficult to determine.

1) When the current owner of the aircraft is listed as a bank, attorney firm, or corporate entity, the aircraft’s operator may be in a different location. A SPAS/NPTRS search may provide the physical location of the aircraft, and contact with the local FSDO may determine the operator’s name or responsible person.

2) If the current owner or operator of the aircraft cannot be located, a certified letter should be sent to the registered owner, at the FAA address of record, explaining the aircraft’s involvement in an investigation and that the owner may be liable.

3) If the inspector is unable to determine the operator, contact one of the SAO specialists for guidance.

C. Limited Information. Information provided by ICAO regional monitoring agencies (e.g., the North Atlantic Central Monitoring Agency) and ATC can be very limited and may

require relying on the operator for details regarding the error. Investigations that cannot be completed should be referred back to a SAO specialist.

7-87 EXAMPLES OF ERROR INVESTIGATIONS THAT MAY REQUIRE ENFORCEMENT ACTION.

A. Possible Situations. While conducting investigations of navigation/altitude/time errors, inspectors should be alert for the following situations:

- 1) When applicable, ensure that the aircraft involved was authorized to operate in the airspace by researching the operator's current OpSpecs/MSpecs/LOAs. The ASI should ensure the name, address, and responsible person are accurate. (See Figure 7-2.)
- 2) Ensure that the aircraft was equipped with the appropriate equipment for overwater operations.
- 3) Ensure flightcrew possesses the required publications and flight paperwork for international operations, including flight planning packages, documents, and forms.
- 4) Ensure flightcrew was operating with company international operations standard operating procedures (SOP). If not, ascertain if an SOP is provided to the crew.
- 5) Ensure that the pilots have the proper qualifications/training to operate the communications/navigation/surveillance systems, including having the ability to monitor the progress of the flight.

NOTE: Inspectors should determine what type of international operations training the flightcrew received. If the training is lacking in quality or content, the inspector should arrange for surveillance of the training program as a remedial action to prevent future errors. (Volume 4, Chapter 12, Section 1, International Aviation, contains training curriculum content requirements for oceanic operations.)

B. Additional Research. Determine if the following occurred:

- 1) The aircraft was flown contrary to an ATC clearance in violation of § 91.123, Compliance with ATC Clearances and Instructions. (ICAO Rule 3.6.1, Annex 2, Air Traffic Control Clearances.)
- 2) The aircraft was flown off course in violation of § 91.181, Course to be flown. (ICAO Rule 3.6.2, Annex 2, Adherence to Flight Plan.)
- 3) The pilot inserted incorrect waypoints in the navigation system in violation of § 91.13, Careless or reckless operation. (ICAO Annex 2, Chapter 3, 3.1.1., Negligent or Reckless Operation of Aircraft; 3.6.1, Air traffic control clearances; and 3.6.2, Adherence to flight plan.)
- 4) An emergency was declared, prior to or immediately after the emergency and/or weather event (subparagraph 7-81D).

- 5) Whether the pilot filed an ASAP report.

7-88 TASK COMPLETION.

A. Extent of Investigation. If the ASI receives an Oceanic Error Report without FAA Form 8020-17, determine the extent of investigation required. In some cases this may only require an informational PTRS entry, using activity code 1725, Investigating/Occurrences, or it may entail completing an EIR.

B. ATQA Steps. If the ASI receives an Oceanic Error Report that includes Form 8020-17, complete FAA Form 8020-18 or 8020-19 as required and submit it into the ATQA database.

NOTE: Ensure you have included a cause for the error in item 18 on Form 8020-18 or a reason for the reclassification in item 6 on Form 8020-19. See Volume 7, Chapter 1, Section 2, paragraph 7-36B3), AFS Investigation.

C. PTRS Steps. If the ASI receives an Oceanic Error Report that includes Form 8020-17, complete a PTRS entry using appropriate activity code:

- 1) Activity code 1712, Investigating/Incident Other, or
- 2) Activity code 1725, Investigating/Occurrences.

7-89 TASK OUTCOMES. Completion of this task may result in one or more of the following:

- No action or reclassification of the incident or occurrence;
- Administrative action against an airman or certificate holder;
- Remedial training or counseling of an airman or a change to a certificate holder's training program;
- Enforcement action against an airman or certificate holder;
- An Airworthiness or Avionics inspector may need to inspect the aircraft to determine if defective equipment that caused the error has been repaired or replaced, and to determine if the pilot made a malfunction report as required by § 91.187, Operation under instrument flight rules (IFR) in controlled airspace: Malfunction reports; and
- Air Transportation Oversight System (ATOS) outcomes could include use of a Constructed Dynamic Observation Report (ConDOR), a risk management process (RMP), surveillance area targeting (SAT), retargeting, or requiring additional surveillance.

7-90 CONTACTS.

A. Contact Your Regional (AXX-220) SAO Specialist. These contacts are listed in the FAA NAT Resource Guide for U.S. Operators document at: http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs470/media/NAT.pdf. Select "Contact Us," then "SAO contacts."

B. Headquarters. AFS-470, (202) 267-8806; AFS-400, 9-AWA-AVS-AFS-400-Flight-Technologies-Procedures-Division@faa.gov; AFS-220, (202) 267-8166, 9-AFS-200- Correspondence@faa.gov; and AFS-800, 9-AFS-800-Correspondence@faa.gov.

C. Military. AJR-01, 9-awa-dod-mil-reps@faa.gov, (202) 267-9427.

7-91 RESOURCES.

A. Job Aids. Figures 7-1 and 7-2 are to help in the investigation of an oceanic error.

B. Error Flow Chart. Figure 7-3 provides a flowchart of the investigation of oceanic errors.

Figure 7-1. Oceanic Navigation Error Report/Oceanic Altitude Deviation Report

Complete the following for Gross Navigation, Height, or Time Errors			
Item:			Complete
Contact AXX-220 SAO Specialist – see subparagraph 7-90A.			
Request ATC/ARINC voice tapes or transcripts of the incident if not already provided – this must be done within 15 days of the incident or the tapes may not be available.			
Request controller reports and results of ATC investigation.			
Log information concerning all aircraft involved in the event of a loss of separation.			
Review the operator’s OpSpecs, MSpecs, or LOAs for current authorizations to operate in the oceanic SAO (See Figure 7-2).			
Form 8020-18, Investigation of Pilot Deviation Report (ATQA).			
Items 1 – 9: self-explanatory.			
Item 10: mark “I” and specify OCEANIC.			
Items 11 – 16: self-explanatory.			
Item 17: if not recorded elsewhere, enter the following: ATC cleared route or track. Observed position (lat/long) and distance off assigned route or track. Type and number of units of long-range equipment in use.			
Item 18: Enter a description and cause of the error. NOTE: The cause is very important for analysis purposes.			
Pilot(s) comments:			
Did ATC advise the pilot(s) of occurrence?	Yes	No	
Did pilot file an ASAP report?	Yes	No	
If Enforcement Action is warranted: Conduct the investigation per current edition of FAA Order 2150.3.			
If Enforcement Action is NOT warranted or was an ATC error: Complete Form 8020-19, Reclassification of Aviation Incident Report.			
Complete PTRS (see paragraph 7-88).			

**Figure 7-1. Oceanic Navigation Error Report/Oceanic Altitude Deviation Report
(Continued)****NOTES:**

SAO specialists coordinate with the appropriate FAA office and will assist the aviation safety inspector (ASI) in determining the cause and responsibility for oceanic errors.

If the oceanic error report comes from an FAA air traffic control (ATC) facility, it will include an Oceanic Error Report (FAA Form 7110-82) and may include FAA Form 8020-17, Preliminary Pilot Deviation.

If the report comes from a monitoring agency, the data may be very limited. The following steps will ensure each Oceanic Error Report is handled appropriately.

Gross Navigation Error (GNE)

A GNE is a deviation of 25 nautical miles (NM) or more from the aircraft's cleared route. ATC will also report aircraft that deviate from a clearance, require ATC intervention to prevent a GNE, or that cause a loss of separation with another aircraft, regardless of the distance.

Height Error

An oceanic height error occurs when an aircraft is observed or reports an altitude 300 feet or more from its assigned altitude.

Time Error

ICAO Annex 2 was amended in 2012 and now specifies a more stringent tolerance:

“if the time estimate for the next applicable reporting point, flight information region boundary or destination aerodrome, whichever comes first, is found to be in error in excess of 2 minutes from that notified to air traffic services, or such other period of time as is prescribed by the appropriate ATS authority or on the basis of air navigation regional agreements, a revised estimated time shall be notified as soon as possible to the appropriate air traffic services unit.”

Failure to adhere to this estimated time of arrival (ETA) amendment procedure may jeopardize planned separation between aircraft, resulting in a time error. See also ICAO Document 7030, Regional Supplementary Procedures and North Atlantic (NAT) Doc 007, North Atlantic Operations and Airspace Manual, Chapter 5. Tolerance for U.S. airspace is found in the AIM, Chapter 5.

Figure 7-2. Operator Authorization Check Job Aid

Item:	Complete
Contact AXX-220 SAO Specialist for any questions concerning the validity of an OpSpec/MSpec/LOA – see contacts list in paragraph 7-90.	
Was an appropriate OpSpec/MSpec/LOA issued to this operator?	
Has the ownership or responsible person changed since the issuance of the OpSpec/MSpec/LOA?	
Has make/model/series of aircraft changed for this operator?	
Has any communication/navigation/surveillance (CNS) equipment been installed or removed since issuance of the OpSpec/MSpec/LOA?	
Have any altimeters been installed or removed since issuance of the	
Did the crew experience any communication, navigation or altimeter equipment malfunction?	
Did Pilot in Command (PIC) attend an international training course (Paragraph 7-87A5)?	
If an Enforcement Investigation is warranted: Conduct the investigation per FAA Order 2150.3. Complete FAA Form 8020-18 (ATQA), Investigation of Pilot Deviation Report. In Block 10, Type of Operation, mark “I” and specify Oceanic. In Block 18, it is very important to report the cause of the error.	
If an Enforcement Investigation is NOT warranted: Complete FAA Form 8020-19, Reclassification of Aviation Incident Report in ATQA.	
Complete PTRS including steps in paragraph 7-88.	

Figure 7-2. Operator Authorization Check Job Aid (Continued)**NOTES:**

When air traffic control (ATC) questions whether an aircraft operator is authorized to fly in the oceanic SAO, it will request an operator authorization check.

Parts 121, 125, 129, and 135 operators are issued OpSpecs that contain their SAO authorizations.

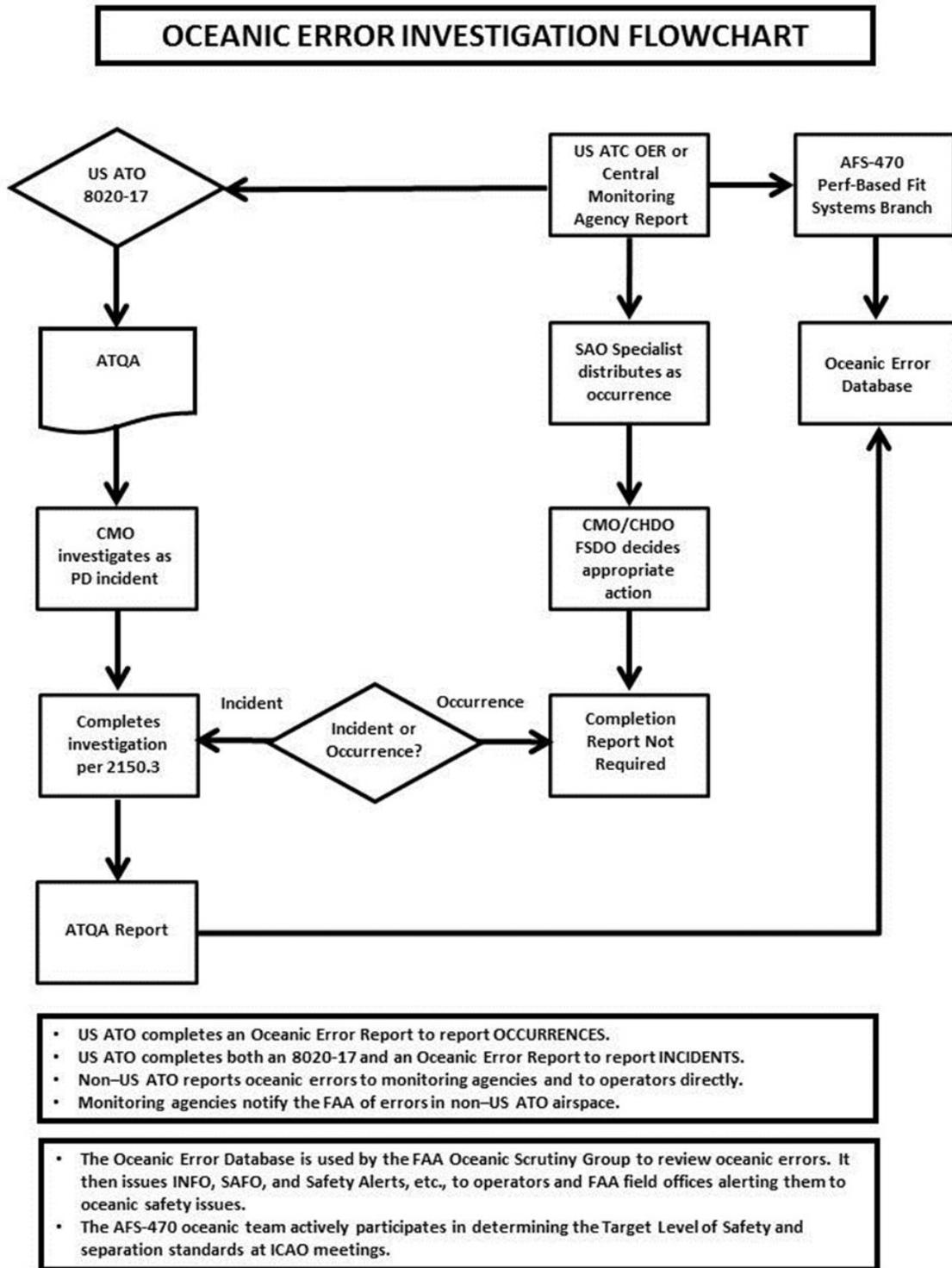
Part 91 subpart K Fractional Ownership operators are issued management specifications (MSpecs) for SAOs.

Part 91 operators are issued letters of authorization (LOA). (LOAs are issued through the WebOPSS system, <https://webopss.faa.gov/>.)

Unauthorized operation in a SAO is a violation of § 91.703, Operations of Civil Aircraft of U.S. registry outside of the United States. Inspectors should include as much detail as possible when completing Figure 7-2, as this information may become an Item of Proof in an enforcement investigation.

Though the operator authorization check is not a deviation investigation; if the operator does not have an authorization, then the check can become an enforcement action.

Figure 7-3. Oceanic Error Flowchart



RESERVED. Paragraphs 7-92 through 7-105.