

Working Group Name: General Aviation (GA) International Authorization and Tabletop Exercises Working Group (GIATE WG)

Initial OSWG Agenda Date: March 7, 2018

Sponsors: The working group is sponsored by the National Business Aviation Association (NBAA), FAA Flight Standards Service, Flight Technologies and Procedures Division, and the FAA Operations Specification Working Group (OSWG).

Participants: The working group is co-chaired by industry (NBAA) and FAA Flight Technologies and Procedures Division.

The FAA supports the working group with representation from Flight Standards Service, Air Transportation (AFS-200), Flight Technologies and Procedures (AFS-400), and General Aviation and Commercial Operations Divisions (AFS-800), as well as inspectors that have direct experience with issuing authorizations.

Industry participants include Part 91 operators, Part 135 operators, training providers, and representatives from associations.

A full roster of the working group is available in Appendix A.

Issue Statement: For 14 CFR part 91 operators and part 135 certificate holders applying to receive special authorizations for international operations, the experience can vary widely depending on where the operator is based and which FAA Special Areas of Operation (SAO) specialist is approving the application or manual. The current process can take nearly a year for operators to get an approval.

References:

- Advisory Circular 91-70B Oceanic and Remote Continental Airspace Operations
- FAA Order 8900.1 Volume 3, Chapter 18, Section 3
- FAA Order 8900.1 Volume 3, Chapter 18, Section 4
- FAA Order 8900.1 Volume 3, Chapter 29, Section 5 Paragraph 3-2379 B 4
- FAA Order 8900.1 Volume 4, Chapter 12, Section 1
- OpSpec/MSpec/LOA A056 Datalink Communication;
- OpSpec/MSpec B036 Oceanic and Remote Continental Navigation Using Multiple Long-Range Navigation Systems (M-LRNS);
- OpSpec/MSpec B037/LOA Operations in Central East Pacific (CEP) Airspace;
- OpSpec/MSpec B038/LOA North Pacific (NOPAC) Operations; and
- OpSpec/MSpec B039/LOA Operations in North Atlantic High Level Airspace.

Intended Outcome: A revision to current guidance will create a risk-based evaluation system, resulting in a more consistent, fair, and expedited approval process. The revisions to FAA Order 8900.1 and AC 91-70B will clearly define:

- Which special authorizations require a tabletop exercise for approval for part 91 operators.
- What can be expected during a tabletop exercise.
- Which special authorizations require a review of international operations procedures.
- What should be contained in an international operations manual.

Related Activities: The group should review results and lessons learned from the Letter of Authorization (LOA) Process Improvement Working Group.

Schedule of Activities: The first meeting occurred via tele-conference in January 2018. The first face-to-face meeting occurred March 2018. Subsequent meetings have been via tele conference in May 2018, July 2018, August 2018, and October 2018. The group will complete its work by June 2019.

Current Progress:

Work began with a discussion of the current process for evaluating and approving LOA applications for B036, B039 and B054. This included a review of current guidance and LOAs. A discussion of pitfalls, as viewed by both operators and inspectors, followed.

The group largely agreed on most issues and proposed the following recommendations.

COMMUNICATION DELAYS

Once an operator drops off an LOA application package, inspectors are given 30 days to act upon it. This means it can take up to 30 days for an inspector to put the application into the electronic system. Since applications to fly in remote oceanic airspace must be evaluated by the Flight Technologies and Procedures Division, another 30 days is allotted for the Special Areas of Operations (SAO) inspector to review and return to the principal inspector, followed by up to 30 additional days for the inspector to return to the operator with any requested corrections or changes. The result of this is that a fully compliant operator may need to wait three months for approval of their application. Further, if any changes are needed, the process will begin again, and an operator will be fortunate to receive approval in less than six months.

Potential Solutions:

The GIATE WG recommends FAA expedite the rollout of the Operations Approval Portal System, or OAPS, and make it available to Part 91 operators as soon as possible.

Web-based Operations Safety System (WebOPSS) is the current electronic special authorization tracking and approval system, but this tracking is only accessible to FAA personnel. Operators that desire use of the electronic submission system must go to Oklahoma City for training, and very few Part 91 operators complete the training due to lack of awareness, the relatively small number of special authorizations typically requested by part 91 operators, and difficulty in registering for the training.

A new electronic system called OAPS is being developed to allow operators to track progress as inspectors evaluate an application. OAPS also records the background, data and/or decision-making that may result in an operations approval and authorization through WebOPSS. In addition, OAPS has the abilities for workflow assignments, workflow tracking, bundling procedures for a single approval, or fast-tracking approvals. The system is currently planned to be made available to Part 121 operators, then Part 135 operators, followed by Part 91 operators.

The GIATE WG also recommends FAA add guidance to the Order 8900.1 that directs inspectors to set up a conference call between the operator, the principal inspector and the SAO inspector. A phone call would put all three parties on the same page and facilitate communications directly between the SAO and operator, without eliminating the principal inspector from the communication loop.

UNCLEAR GUIDANCE:

Current guidance is conflicting and does not specify when an operator applying for an LOA should expect a Tabletop Exercise. Order 8900.1 Volume 3, Chapter 25, Section 5, Par 3-2379(B)(4) definitively says that "tabletop exercises are not required for Part 91 operators." Whereas Order 8900.1 Volume 4, Chapter 12, Section 1, Par 4-1299(D) indicates tabletop exercises may be conducted on Part 91 operators. While it is understood that tabletops are common for B036 today, the only guidance in Order 8900.1, Volume 3, Chapter 18, which describes each LOA, referencing a tabletop is B037 – Operations in Central East Pacific (CEP Airspace).

Potential Solutions:

The GAITE WG recommends revising the guidance in Order 8900.1 to provide a clear and consistent message for when a Part 91 operator should expect a tabletop exercise. The guidance should clearly indicate which LOA approvals may require this extra level of scrutiny. Any LOAs listed in Volume 3, Chapter 18 that do not indicate a need for a tabletop exercise to prove operational capability should be exempt from such requirements.

INCONSISTENT TABLETOP EVALUATIONS:

No clear guidance exists to indicate when an operator should undergo a tabletop exercise. As a result, operators with different levels of experience see drastically different results when submitting LOA applications. Some very experienced operators have recently been asked to go through a tabletop exercise, while brand new operators have been quickly granted LOAs. This disparity creates frustration among the operating community, and it is only compounded by the lengthy delays.

Potential Solutions:

The GIATE WG recommends the FAA develop a risk matrix that SAO inspectors can use to objectively evaluate LOA applications. See Appendix B for a sample Part 91 International Operations Risk Assessment.

A risk matrix will provide clear, objective, transparent criteria against which an LOA application can be evaluated. This ensures operators of all experience levels will know what to expect when submitting their application. By embracing transparency and making this matrix available to the public, operators will be able to evaluate their own application and have a reasonable expectation of the application result. Through self-evaluation, operators that desire to avoid a tabletop exercise will be able to see the areas in which they have high-risk and implement-appropriate mitigations, facilitating an overall increase in safety.

A matrix will expedite the evaluation process for inspectors and ensure consistency across operators. The risk matrix should provide objective criteria against which safety and risk can be evaluated, including:

- Communication, navigation and surveillance equipment installed on the aircraft,
- complexity of the airspace in which the operator is seeking authorization to fly,
- operator experience,
- previous experience or oceanic errors,
- procedures, and
- training.

PREPARING FOR TABLETOP EXERCISES:

Operators who have been told they will need to sit through a tabletop exercise have voiced concerns that they are not given indication on how to prepare or what to expect during the evaluation. Some also voice concerns about the personnel specifically chosen by SAO inspectors for the evaluation. It should be a goal of both parties that tabletop exercises are consistent from one operator to the next, and that participants are given the opportunity to adequately and informedly prepare.

Potential Solutions:

The GIATE WG recommends FAA make available to applicants nonregulatory guidance documents that outline reasonable expectations for a tabletop exercise.

GAITE WG discussions revealed that some SAO inspectors have guidance documents already prepared. The first document explains which resources an operator should have available for the event, including personnel. See Appendix C for a sample Tabletop Exercise Pre-Briefing Guide.

The second document outlines the topics to be covered during a tabletop exercise. These topics largely parallel AC 91-70B, Appendix G. See Appendix D for a sample Tabletop Discussion Guide.

DELAYED USE OF NEW AIRCRAFT:

Business aircraft operators report to principals who may not be familiar with aviation regulations. When these principals purchase a multimillion-dollar aircraft, they expect to be able to use that asset as a fully capable business tool. Unfortunately, limitations in the LOA process preclude operators from operating across the North Atlantic at optimal altitudes or from using all onboard equipment, such as CPDL, in a timely manner after aircraft acquisition. To facilitate full use of the aircraft upon delivery, many operators wish to submit LOA applications before the aircraft is delivered. With no guidance currently existing that explains when an operator can begin applying for LOAs, this can create a conflict with inspector interests. It is recognized that LOA approval delays are in part due to inspector workload. It is also recognized that many aircraft transactions begin with honest intentions, but do not come to fruition. If inspectors are evaluating LOA applications for aircraft transactions that ultimately do not occur, this only further adds to both inspector workload and approval delays for operators who do have an aircraft.

Potential Solution:

The GIATE WG recommends FAA begin accepting and processing LOA applications once the Technical Acceptance, or Predelivery Acceptance Certificate, has been signed by both parties, with the goal of facilitating timely approval of LOA applications.

APPENDIX A - GA International Authorizations and Tabletop Exercises Working Group Roster

Participant Name	Position	Organization	Email Address
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APPENDIX B – Sample Part 91 International Operations Risk Assessment

Operator:

Risk	Score	Does it apply?	Sub Total
Current LOA(s)			
No previous international LOAs (B036, B054, or B039)	10	Y / N	
Adding a new type of aircraft (i.e. Falcon 2000 to G650)	5	Y / N	
Adding similar aircraft (i.e. G450 to G550)	2	Y / N	
Adding same type of aircraft	0	Y / N	
Procedures			
No written procedures	10	Y / N	
Procedures more than 2 years old	5	Y / N	
Current procedures with no bulletin subscription/service	2	Y / N	
Current procedures with bulletin subscription/service	1	Y / N	
International Training			
No training	10	Y / N	
Training more than two years old	8	Y / N	
Training completed online only less than two years old with syllabus provided	5	Y / N	
Training completed in person less than two years old with syllabus provided	1	Y / N	
LOA(s) requested			
B036 and B039 together or B036 standalone	7	Y / N	
B054 and B039	5	Y / N	
B054 Standalone	3	Y / N	
Industry Certifications			
Industry Certification (i.e. IS-BAO)	-3	Y / N	
Equipage			
No HF	7	Y / N	
Single HF/Dual VHF with no SATVOICE and/or CPDLC	3	Y / N	
Multi HF or Single HF with SATVOICE and/or CPDLC	1	Y / N	
Triple FMS Installation	-1	Y / N	
Oceanic Errors and Pilot Deviations			
Operator w/ Previous Oceanic Errors	10	Y / N	
Pilot w/ Oceanic error in last 2 years	8	Y / N	
Domestic pilot deviation in last 2 years	5	Y / N	
Pilot w/ Oceanic error more than 2 years old	5	Y / N	
Domestic pilot deviation more than 2 years old	3	Y / N	
No oceanic errors or pilot deviations	0	Y / N	
Pilots with Part 91/135 oceanic experience in last 2 years	-3	Y / N	
Pilots with Part 121 oceanic experience in last 2 years	-1	Y / N	
			Total:

If total score is 28 or greater, tabletop conducted.

If total score is between 20 and 27, tabletop conducted with manager concurrence*.

*Could be due to difficult application or other risk factors not captured with this tool.

*If total score is 19 or less, no tabletop conducted. LOA issued upon completion of review.

APPENDIX C - Sample Tabletop Exercise Pre-Briefing Guide

Operator: _____ Designator: _____ FSDO: _____
Attendees: SAO POI PMI PAI FAA Other: _____ Operator: _____

Part 91 Validation Testing Pre-Briefing

1. Introductions
2. Authorizations sought: B036 B054 B039 Other
3. Location: _____
4. Date: _____ Time: _____
5. Plan a flight from _____ to _____ departing _____ at _____ local. Please provide complete flight plan package by _____. Need to include Computer Flight Plan, Weather, NOTAMs, and Form 7233-4

(International Flight Plan). Email to _____, _____, and _____.
This flight plan package will be the basis for the tabletop discussion. Ensure that the fuel breakdown on the flight plan package is per ICAO Annex 6 Part II.

6. Please have the flight plotted on a plotting chart. Send a picture of the completed plotting chart with the flight plan package from item 5 if validation will be conducted virtually.
7. Rough plan for tabletop:
 - a. Oral discussion 3-4 hours with breaks
 - i. Discussion of generic Oceanic and Remote Continental Navigation Procedures/Information
 - ii. Discussion of _____, _____,
8. *Perfection is not the expectation. Knowledgeable crewmembers and safe operation is.*
9. Test is based on NAT Ops Bulletin 14-001 (sample oceanic checklist) and subjects in Appendix G of AC 91-70B.
10. Know your procedures, this is an open book test to some extent.
11. If your procedures require you to do something a certain way, we expect to see it that way.
 - a. Flight planning/Flight Plan Package
 - b. FMS loading
 - c. Normal and abnormal operations
12. Bring NAT and Pacific charts and any manuals/documents you may need.

APPENDIX D - Sample Tabletop Discussion Guide

Part 91 Oceanic & Remote Continental Navigation Validation Testing Guide

Ref: AC 91-70B, *Oceanic & Remote Continental Airspace Operations*, Appendix G, and NAT Ops Bulletin 17-005, Sample Oceanic Checklist.

Safe operations in today's oceanic and remote continental airspace requires specific knowledge, procedures, and risk management. In an effort to accomplish this and reduce the number of oceanic errors, the FAA conducts tabletop knowledge validations of Part 91 operators seeking Letters of Authorization for those types of operations. The list below contains subject areas that may be tested during a Part 91 Oceanic & Remote Continental Navigation tabletop knowledge validation test conducted in accordance with FAA Order 8900.1, Volume 4, Chapter 12, Section 1 for operators seeking LOA B036, B039, and/or B054, as appropriate.

Operators and crewmembers should be knowledgeable in all areas of oceanic, long-range navigation as found in AC 91-70 (as amended). This guide was developed to provide operators and crewmembers with the subject areas that may be tested. It is not exclusive, nor all-inclusive. The test will be tailored to specific areas in which the operator flies, consistent with the performance of the aircraft. For example, if an operator is not seeking LOA B039 – Operations in North Atlantic High Level Airspace, North Atlantic information and procedures will not be tested. Scenario based questions will be used whenever possible.

The operator must present a complete crew for the aircraft that the operator is using to seek the authorization as required by the Limitations Section of the Airplane Flight Manual or the Type Certificate Data Sheet. The crew must possess the appropriate certificates and ratings and be current in accordance with 14 CFR § 61.58 and 61.55, as appropriate for the duty position.

The outcome expectation is that crewmembers who are tested exhibit satisfactory knowledge appropriate to the aircraft; its systems; normal, abnormal, and emergency procedures; and uses correct terminology. They will demonstrate good planning and knowledge of international and oceanic procedures. Crewmembers must have a working knowledge of their manuals, publications, and information available to them during all phases of international and oceanic operations.

If the applicant demonstrates satisfactory knowledge, it will be recommended to the principal inspector that the requested authorizations be issued. If satisfactory knowledge is not demonstrated, deficiencies will be noted and explained to the applicant so that additional training can be accomplished and a re-test will be accomplished at a later date.

1. Federal Aviation Regulations (14 CFR) applicable to international operations.
2. International Civil Aviation Organization (ICAO) Annexes.
3. ICAO Documents.
4. Aeronautical Information Publications, NOTAMs, Flight Information Region (FIR) Specific Bulletins.
5. FAA Advisory Circulars and FAA Resource Guides.
6. Operational Control
7. Communication, Navigation, and Surveillance Equipage requirements.
8. RNP Separation Standards.
9. Navigation types
10. Computer Flight Plan / Operational Flight Plan / Master Document
 - a. Development, Responsibility
 - b. Flight Plan Codes
 - c. Fuel Requirements (US vs ICAO Annex 6 Part II)
 - d. Weather
 - e. NOTAMs
 - f. Track Message

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11. Volcanic Ash
12. Space Weather
13. SAO Airspace Descriptions and routes appropriate to the authorizations sought.
14. Inflight Broadcast Procedure
15. WGS-84
16. LRNS/FMS/FMC Procedures
 - a. System Description
 - b. Loading procedures
 - c. ARINC 424
17. Reduced Vertical Separation Minimums
 - a. Description
 - b. Procedures
 - c. Equipage requirements
18. Contingency Procedures
 - a. Weather Deviation
 - b. "General" Contingency
 - c. Lost Communications – specific to authorizations sought.
 - d. Navigation System degradation/failure
 - e. RVSM
19. Oceanic Crossing
 - a. Oceanic Checklist
 - b. Master Time Source
 - c. Nav Accuracy Check
 - d. Position Report
 - e. 10-minute check/plotting
20. Strategic Lateral Offset Procedure (SLOP)
21. Altimetry
 - a. QNE/QFE/QNH
 - b. Metric
 - c. TA/TL
22. Oceanic Errors
 - a. Types
 - b. Common causes/prevention
23. SAFA Check
24. Security