



Approved by the Tactical Operations Committee February 2014

NOTAM Success Criteria and Metrics

*Report of the Tactical Operations Committee in Response to Tasking from
The Federal Aviation Administration*

January 2014

NOTAM Success Criteria and Metrics

Contents

Background/Introduction	3
Executive Summary.....	3
Methodology.....	4
Success Criteria for NOTAMs from the Pilot’s Bill of Rights	4
Metrics Background	6
Metrics Results.....	7
Recommendations	10
Moving Forward.....	10
Appendix A: Members of the NOTAM Task Group.....	11
Appendix B: FAA Tasking Letter	12
Appendix C: Pilot’s Bill of Rights Public Law 112-153	15

Background/Introduction

The Federal Aviation Administration (FAA) is required under Section 3(c) of Public Law 112-153, also known as the 2012 Pilot's Bill of Rights ("PBoR"), to "establish a NOTAM Improvement Panel, which shall be comprised of representatives of relevant nonprofit and not-for-profit general aviation pilot groups, to advise the Administrator in carrying out the goals of the NOTAM Improvement Program." The FAA would like to build on the progress already derived from-previously established efforts to digitize NOTAMs to comply with the provisions of this law.¹

The Tactical Operations Committee (TOC) will serve as the NOTAM Improvement Panel to further assist the Administration in crafting specific goals and priorities to meet the law's intent and make needed enhancements to the NOTAM program. In this capacity, the TOC is relying on the NOTAM Task Group (TG) to provide specific recommendations on issues related to the NOTAM program.

The work of the panel will yield an increasing amount of standardized digital NOTAMs that can be more easily filtered, sorted, and prioritized. This should result in a significant reduction in the volume of NOTAMs pilots must currently review and allow pilots to focus only on those NOTAMs relevant to their flight plan/path. As a result, pilots will be more confident in the quality and accuracy of this focused NOTAM information, and the safety of the National Airspace System (NAS) will be improved.

During the fall of 2013, the NOTAM Task Group completed Task #1 which focused on establishing the NOTAM Improvement Panel and reviewing and responding to recent and planned NOTAM modernization efforts. A report was provided and approved during the November 2013 TOC meeting.

The current document summarizes the TG's response on Task #2. This task focuses on providing input and recommendations for success criteria and compliance metrics.

Executive Summary

Given the value placed on metrics and reporting by the Pilot's Bill of Rights and the subsequent Tasking Request by the FAA, the NOTAM Task Group conducted a detailed review of the characteristics that the NOTAM Task Group had originally used to define the concept of NOTAM improvement. Doing so ensured that all aspects of the NOTAM improvement effort would ultimately find representation in one or more metric. Once completed, the Task Group set about creating recommendations that were subject to two fundamental requirements:

1. Broad enough to encompass all aspects of the NOTAM improvement effort.
2. Basic enough to fit within current technologies and limitations of staff resources.

While the Task Group discussed various sophisticated measurement recommendations, most were discarded in favor of more basic (and more quickly adaptable) options. This point of view does not preclude the integration of new and more specific measurement initiatives as the program develops and

¹ Letter from Elizabeth L. Ray (Vice President, Mission Support Services) to Margaret Jenny (RTCA President) dated July 10, 2013.

more is known about the interaction between the FAA and its NOTAM customers. The Task Group extends an offer to remain engaged with the FAA as the Working Group of the TOC/NOTAM Improvement Panel, supporting future NOTAM improvement developments (see Moving Forward section).

Methodology

Task #2 for the NOTAM Task Group requested the group's perspective on two issues:

1. Success criteria the FAA needs to follow to comply with the Pilot's Bill of Rights regarding NOTAMs.
2. Recommendation of metrics to ensure continued compliance and reporting to outside entities.

The Task Group addressed the first item above in Task #1. During Task #1, the group responded to specific FAA questions relating to capabilities under consideration in the NOTAM Modernization Effort. The Task Group's documented responses to these questions constitute a definition of success for the NOTAM effort.

However, as the language of Task #2 specifies success criteria to comply with the Pilot's Bill of Rights, the Task Group did examine the language of the Bill with a focus on definition of success criteria for NOTAMs. Success criteria identified from the Pilot's Bill of Rights aligned well with the Task Group's success criteria for NOTAMs identified during Task #1. This examination and the Task Group's resulting definition of success criteria is detailed in the section titled "Success Criteria for NOTAMs from the Pilot's Bill of Rights."

The following two sections, "Metrics Background" and "Metrics Results," focus on detailed development of metrics. The section titled "Metrics Background" provides the Task Group's general perspective on metrics. Topics covered include the concept of use for metrics, criteria for metrics development and a brief review of the actual process the Task Group went through. "Metrics Results" presents the full set of metrics developed.

Success Criteria for NOTAMs from the Pilot's Bill of Rights

The Task Group examined the language of the PBoR to identify success criteria for NOTAMs. The language of the Bill is presented below. In Section 3(a)(2) Improvements and Section 3(b) Goals of the Program, text relating to success criteria for NOTAMs were identified and highlighted.

49 USC 44701 note.	SEC. 3. NOTICES TO AIRMEN.
	(a) IN GENERAL.—
	(1) DEFINITION.—In this section, the term “NOTAM” means Notices to Airmen.
Deadline.	(2) IMPROVEMENTS.—Not later than 180 days after the date of the enactment of this Act, the Administrator of the Federal Aviation Administration shall begin a Notice to Airmen Improvement Program (in this section referred to as the “NOTAM Improvement Program”)—
	(A) to improve the system of providing airmen with pertinent and timely information regarding the national airspace system;
	(B) to archive, in a public central location, all NOTAMs, including the original content and form of the notices, the original date of publication, and any amendments to such notices with the date of each amendment; and
	(C) to apply filters so that pilots can prioritize critical flight safety information from other airspace system information.
	(b) GOALS OF PROGRAM.—The goals of the NOTAM Improvement Program are—
	(1) to decrease the overwhelming volume of NOTAMs an airman receives when retrieving airman information prior to a flight in the national airspace system;
	(2) make the NOTAMs more specific and relevant to the airman’s route and in a format that is more useable to the airman;
	(3) to provide a full set of NOTAM results in addition to specific information requested by airmen;
	(4) to provide a document that is easily searchable; and
	(5) to provide a filtering mechanism similar to that provided by the Department of Defense Notices to Airmen.
Establishment.	(c) ADVICE FROM PRIVATE SECTOR GROUPS.—The Administrator shall establish a NOTAM Improvement Panel, which shall be comprised of representatives of relevant nonprofit and not-for-profit general aviation pilot groups, to advise the Administrator in carrying out the goals of the NOTAM Improvement Program under this section.
Deadline.	(d) PHASE-IN AND COMPLETION.—The improvements required by this section shall be phased in as quickly as practicable and shall be completed not later than the date that is 1 year after the date of the enactment of this Act.

Figure 1: PBoR language specific to NOTAMs and Analysis of Success Criteria

Based on this analysis of the language of the Bill, the following list of success criteria were identified for NOTAMs:

- In useable format
- Pertinent / specific / relevant
- Timely
- Filterable
- Can be prioritized for flight safety info
- Searchable
- Decreased in volume
- Archived

Relationship of Success Criteria to Task #1

As noted earlier, there is strong linkage between the criteria drawn from the PBoR and the response of the NOTAM Task Group to Task #1. The Task Group specifically referred to nearly all of these issues previously, with the exception of “Timely” and “Decreased in volume.” The Task Group is enhancing its previous set of success criteria with these two additional ones drawn from the PBoR.

Metrics Background

Concept of Use for Metrics

The language of the tasking indicates the Task Group should develop metrics “to ensure continued compliance and to enable reporting to outside entities.” This suggests two levels of use for the metrics. The first level relates to ensuring compliance of the NOTAM Modernization Effort with the language of the Pilot’s Bill of Rights. This level of metrics is a lower level, detailed set of metrics that address performance on the PBoR success criteria that were discussed earlier. The second level of metrics is a higher level set for reporting to outside entities. In this case, reporting outside of the NOTAM Modernization Effort necessitates a more condensed and summary view. Hence, the Task Group views this second level of metrics as being one or two metrics that provide a high-level summary of modernization status.

Relevant Criteria in Considering Metrics

The Task Group considered the following criteria when developing metrics

- Direct link to success criteria – measure to understand performance on success criteria
- Something that can be measured and has clear levels of measurement
- Data is available
- Unambiguous metrics
- Well understood by the stakeholder community
- Not cost prohibitive to collect

Generally speaking, the Task Group looked to provide the FAA with a practical set of metrics upon which the FAA could actually gather data and provide measurements. A full set of metrics options are included with some additional recommendations included below.

Process for Development of Metrics

During Task Group deliberations on metrics, it became clear that there were two very different categories of users envisioned for the future NOTAM system. Simultaneous consideration of both user types confounded the deliberations on metrics. Some users are expected to utilize the FAA-provided basic system for gathering, filtering and searching NOTAMs. Other users are expected to utilize third party software tools that access the raw data provided by the Federal NOTAM System (FNS) and provide their own capabilities for NOTAM data management and integration with other operational systems.

To depict different user types, the Task Group developed the following simple model of the Future NOTAM System based on the FNS Concept of Operations presented to the TOC in July 2013.

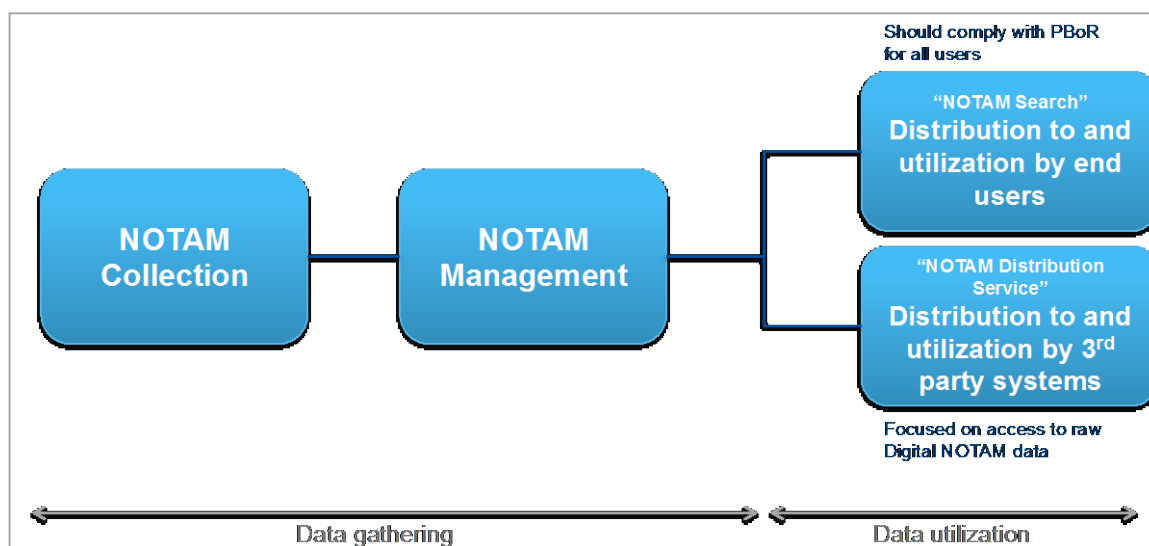


Figure 2: Model of the Future NOTAM System²

In addition to different user types, the Task Group observed two macro aspects of NOTAM modernization: improving Data Gathering (collection and management) and improving Data Utilization (distribution and interface capabilities). It appeared to the Task Group that the steps associated with Data Gathering were primarily FAA-focused objectives, while Data Utilization was more the NAS User's focus.

The Task Group then developed metrics at each step of this model by considering the types of metrics that would capture the overall success criteria and relate to each step in the model.

Metrics Results

In each subsection below, recommended metrics are discussed. The first four sections – NOTAM Collection, NOTAM Management, End Users and Third Party Systems – relate to metrics that are used to evaluate performance on all success criteria from the PBoR. The final section – High Level Summary for Outside Reporting – presents summary-level metrics that address the metric use for reporting progress on NOTAM Modernization outside of the NOTAMs community.

NOTAM Collection

Metric Idea(s)	Link to Success Criteria
<ul style="list-style-type: none"> Total number of NOTAMs Percent NOTAMs that are available as digital NOTAMs Percent NOTAMs that originated digitally Percent NOTAMs that were transformed to digital <p>Note: digital NOTAM is defined as machine-readable containing all 4D characteristics. "Available" as digital is the sum of NOTAMs entered digitally or transformed to digital.</p>	Useable format Filterable Pertinent Searchable Timely Can be prioritized

² While the graphic depicts the *Future* NOTAM System, the Task Group notes that some capabilities of this future system are already operational. For example, some aspects of NOTAM search and filtering functionality are in place.

NOTAM Management

Metric Idea(s)	Link to Success Criteria
<ul style="list-style-type: none">• Are NOTAMs archived and available according to the recommendations of Task #1? (Y/N)• Satisfaction measure of how easy it is to access archived NOTAMs	Archived

End Users

Metric Idea(s)	Link to Success Criteria
<ul style="list-style-type: none">• Is the filtering function (for Class, Dates/Times, Procedures, Altitude, Flight Level, Route, Keyword, Q codes, etc.) made available in FAA interface? (Y/N)• Satisfaction measure of how easy it is to filter NOTAMs• Satisfaction measure of how accurate filtered NOTAM data are	Filterable
<ul style="list-style-type: none">• Satisfaction measure of how relevant the filters are (with input option for user to indicate what additional filter(s) would be useful to filter pertinent information)	Pertinent
<ul style="list-style-type: none">• Average or median latency between NOTAM entry and receipt of NOTAM by a user• Satisfaction measure of how timely the NOTAM data are	Timely
<ul style="list-style-type: none">• Satisfaction measure of how useable the NOTAM data from the interface are for the end user	Useable
<ul style="list-style-type: none">• Is the prioritization function made available in FAA interface (Y/N)• Satisfaction measure of how easy it is to prioritize NOTAMs based on user criteria (with input option for user to indicate what additional prioritization criteria would be useful)	Can be prioritized
<ul style="list-style-type: none">• Is the search function made available in FAA interface (Y/N)• Satisfaction measure of how easy it is to search NOTAMs based on user criteria (with input option for user to indicate what additional search criteria would be useful)	Searchable
<ul style="list-style-type: none">• Agree / disagree scaled measure with statement that NOTAM system provides me with only relevant NOTAMs• Agree / disagree scaled measure with statement that NOTAM system provides me a complete set of NOTAMs (i.e., nothing missing)	Decreased volume

Third Party Systems

Metric Idea(s)	Link to Success Criteria
<ul style="list-style-type: none">• Can 3rd parties access and use the data? (Y/N)• Satisfaction measure of how easy or difficult it is to use the data• Number of parties that access the data	Useable
<ul style="list-style-type: none">• Average / median latency from time data are requested by 3rd	Timely

party to time data is provided to 3rd party	
• Average / median time to address any reported data anomalies	
• Number of errors reported in the data per month	Pertinent

The set of metrics above generally organize into three categories:

- Measurements of the data in the NOTAM system (% digital, latencies)
- Binary assessments of whether certain capabilities exist
- Satisfaction measurements from users

Additionally, the set of metrics above completely addresses all success criteria identified from the PBoR.

High Level Summary for Outside Reporting

The list of metrics above provides a menu of options from which to select a short list of metrics for high-level outside reporting.

First, the **percent of NOTAMs available as digital NOTAMs** is the root from which multiple other capabilities grow. When a NOTAM is available digitally, it can be filtered, sorted, prioritized and timeliness is enhanced. Transitioning to most or all NOTAMs in digital format is essentially a prerequisite to a highly successful Future NOTAM System. So, the Task Group recommends this metric for high level reporting.

Second, there are a number of areas of functionality associated with the NOTAM data that are implicit in the success criteria of the PBoR. For example, there must be capabilities in the FAA interface to filter, prioritize and search NOTAMs. All NOTAMs must be archived, and the FAA must make raw NOTAM data accessible to 3rd parties for development of private solutions for NOTAM data management and integration. A second measure for high level reporting is a **binary measure of whether the FAA has created all of the functionality required** given the language of the PBoR.

Finally, a number of metrics mentioned above relate to user satisfaction of how easy it is to access data from the FAA interface, how relevant the data are and how timely. The Task Group recommends a **synthetic measure of user satisfaction** created by averaging all satisfaction measures recommended above.

Recommendations

The Task Group makes the following recommendations. The Task Group recommends that those metrics collected in this effort be made available to the public at a frequency of not less than once per quarter.

1. The Task Group agrees with the FAA that future success of the NOTAM improvement effort relies heavily on the conversion of all NOTAMs to digital format and encourages the FAA to continue to collect and share metrics describing progress made towards an ultimate goal of 100%.
2. In addition to the "Feedback" feature already envisioned for the FNS website, a survey selection should also be designed to elicit feedback from users as to what features are most valuable and that this information be organized and reviewed periodically. This data should be used to develop a metric reflecting customer satisfaction.
3. The Task Group recommends that the various filtering and sorting options selected by users of the FNS website be recorded and reviewed periodically to gain insight into those features that are most popular so as to assist in making decisions about where to allocate resources for future developments and improvements.
4. As the TOC serves as the NOTAM Improvement Panel, the Task Group should be used as an ongoing resource for the FAA in support of future NOTAM improvement efforts.

Moving Forward

With the acceptance by the TOC of this report, the NOTAM Task Group will have completed those efforts to which it was assigned. The Task Group offers its ongoing support of the FAA's NOTAM improvement efforts in the following ways:

- Address any issues or questions from FAA response to Task 1 document
- Identification of the right sequence of NOTAM categories to focus on for digitization efforts
- Identification of the appropriate outreach, training, education or requirements to industry to improve NOTAM digitization towards 100%
- Evaluation of early iterations of the FAA-provided interface on NOTAMs
- Periodic review of metrics related to the NOTAM Modernization Effort

Appendix A: Members of the NOTAM Task Group

Kal Bala	RTCA, Inc.	Bob Lamond	National Business Aviation Association
Chris Baum	Air Line Pilots Association		
Ernie Bilotto	Federal Aviation Administration	Christopher Langone	ARINC Incorporated
Mark Cardwell	FedEx Express (Co-Chair)	Jeffrey Miller	International Air Transport Association
Andy Cebula	RTCA, Inc.	Jim Mills	U.S. Air Force
Adam Gerhardt	TASC, Inc.	Trin Mitra	RTCA, Inc.
Matt Griffin	Airports Council International – North America	David Newton	Southwest Airlines
		Steve Serur	Air Line Pilots Association
Steve Habicht	Federal Aviation Administration	Glenn Sigley	Federal Aviation Administration
		Ashish Solanki	Maryland Aviation Administration
Shaelynn Hales	CNA		
Kathlyn Hoekstra	Federal Aviation Administration	Edwin Solley	Southwest Airlines
		Harold Summers	Helicopter International Association
Jack Hurley	Delta Air Lines, Inc.		
Ezra Jalleta	The MITRE Corporation	Brandi Teel	RTCA, Inc.
Christian Kast	United Parcel Service	Robert Utley	National Air Traffic Controllers Association
Des Keany	American Airlines, Inc.		
Tom Kramer	Aircraft Owners and Pilots Association (Co-Chair)	David von Rinteln	Hewlett Packard
		Michael Williams	Hewlett Packard

Appendix B: FAA Tasking Letter



U.S. Department
of Transportation
**Federal Aviation
Administration**

Mission Support Services
800 Independence Avenue, SW.
Washington, DC 20591

JUL 10 2013

Ms. Margaret T. Jenny
President
RTCA, Inc.
1150 15th Street, NW
Suite 910
Washington, DC 20036

Dear Ms. Jenny:

The Federal Aviation Administration (FAA) is required under Section 3(c) of Public Law 112-153, also known as the 2012 Pilot's Bill of Rights, to "establish a NOTAM Improvement Panel, which shall be comprised of representatives of relevant nonprofit and not-for profit general aviation pilot groups, to advise the Administrator in carrying out the goals of the NOTAM Improvement Program." The FAA would like to build on the progress already made with "digital NOTAMs" to comply with the provisions of this law. We believe having the Tactical Operations Committee (TOC) serve as the NOTAM Improvement Panel will further assist the Agency in crafting specific goals and priorities to meet the law's intent and make needed enhancements to the NOTAM program.

We believe the work of the panel will yield an increasing amount of standardized digital NOTAMs that can be more easily filtered, sorted, and prioritized. This result should yield significant reductions in the volume of NOTAMs pilots must currently review and allow pilots to focus only on those NOTAMs relevant to their flight plan/path. As a result, pilots will be more confident in the quality and accuracy of this focused NOTAM information and the safety of the NAS will be improved.

We request the Tactical Operations Committee complete the following tasks:

Task 1 – Establish the NOTAM Improvement Panel as a chartered function of the TOC and review recent and planned future NOTAM modernization efforts of the FAA

We will provide documentation as needed as well as subject matter expertise to assist the TOC and task groups in its deliberations.

- To ensure needed stakeholders are identified and participate in any task groups formed.
- To examine and make recommendations/comments on recent and planned /future NOTAM modernization activities underway at FAA.

- To assess the interoperability of FAA NOTAM improvement efforts with the United States Department of Defense (DoD) and international stakeholders to provide feedback and recommendations on any actions needed.

FAA requests completion of this task by October 2013.

Task 2 – Provide input and recommendations for success criteria and compliance metrics

As stated in Section 3(b) of Public Law 112-153, the goals of the NOTAM Improvement Program are:

- (1) To decrease the overwhelming volume of NOTAMs an airman receives when retrieving airman information prior to a flight in the national airspace system.
- (2) To make the NOTAMs more specific and relevant to the airman's route and in a format that is more useable to the airman.
- (3) To provide a full set of NOTAM results in addition to specific information requested by airmen.
- (4) To provide a document that is easily searchable.
- (5) To provide a filtering mechanism similar to that provided by the DoD Notices to Airmen.

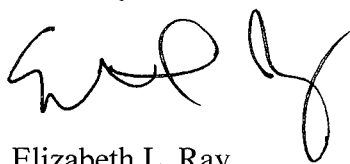
The FAA and industry stakeholders need to understand what criteria need to be established to ensure compliance under the law and there needs to be common metrics to easily ascertain whether FAA is successful in achieving the above listed goals. We request that the TOC:

- Recommend the criteria that the FAA needs to follow to successfully comply with the Pilot's Bill of Rights with regards to NOTAMs.
- Recommend one or more metrics for success to ensure continued compliance and to enable reporting to outside entities.

We request the TOC provide an interim report on this tasking in October 2013 with completion of this task in January 2014.

We believe there could be additional opportunities to involve the TOC in taskings to make improvements to the FAA's NOTAM system but initial efforts will focus on those related to the mandates in the Pilot's Bill of Rights.

Sincerely,



Elizabeth L. Ray
Vice President, Mission Support Services
Air Traffic Organization

Appendix C: Pilot's Bill of Rights Public Law 112-153

Public Law 112–153
112th Congress

An Act

To amend title 49, United States Code, to provide rights for pilots, and for other purposes.

Aug. 3, 2012
[S. 1335]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Pilot’s Bill of Rights”.

Pilot’s Bill of Rights.
49 USC 40101 note.

SEC. 2. FEDERAL AVIATION ADMINISTRATION ENFORCEMENT PROCEEDINGS AND ELIMINATION OF DEFERENCE.

49 USC 44703 note.

(a) IN GENERAL.—Any proceeding conducted under subpart C, D, or F of part 821 of title 49, Code of Federal Regulations, relating to denial, amendment, modification, suspension, or revocation of an airman certificate, shall be conducted, to the extent practicable, in accordance with the Federal Rules of Civil Procedure and the Federal Rules of Evidence.

(b) ACCESS TO INFORMATION.—

(1) IN GENERAL.—Except as provided under paragraph (3), the Administrator of the Federal Aviation Administration (referred to in this section as the “Administrator”) shall provide timely, written notification to an individual who is the subject of an investigation relating to the approval, denial, suspension, modification, or revocation of an airman certificate under chapter 447 of title 49, United States Code.

Notification.

(2) INFORMATION REQUIRED.—The notification required under paragraph (1) shall inform the individual—

(A) of the nature of the investigation;

(B) that an oral or written response to a Letter of Investigation from the Administrator is not required;

(C) that no action or adverse inference can be taken against the individual for declining to respond to a Letter of Investigation from the Administrator;

(D) that any response to a Letter of Investigation from the Administrator or to an inquiry made by a representative of the Administrator by the individual may be used as evidence against the individual;

(E) that the releasable portions of the Administrator’s investigative report will be available to the individual; and

(F) that the individual is entitled to access or otherwise obtain air traffic data described in paragraph (4).

(3) EXCEPTION.—The Administrator may delay timely notification under paragraph (1) if the Administrator determines that such notification may threaten the integrity of the investigation.

(4) ACCESS TO AIR TRAFFIC DATA.—

(A) FAA AIR TRAFFIC DATA.—The Administrator shall provide an individual described in paragraph (1) with timely access to any air traffic data in the possession of the Federal Aviation Administration that would facilitate the individual's ability to productively participate in a proceeding relating to an investigation described in such paragraph.

(B) AIR TRAFFIC DATA DEFINED.—As used in subparagraph (A), the term “air traffic data” includes—

- (i) relevant air traffic communication tapes;
- (ii) radar information;
- (iii) air traffic controller statements;
- (iv) flight data;
- (v) investigative reports; and

(vi) any other air traffic or flight data in the Federal Aviation Administration's possession that would facilitate the individual's ability to productively participate in the proceeding.

(C) GOVERNMENT CONTRACTOR AIR TRAFFIC DATA.—

(i) IN GENERAL.—Any individual described in paragraph (1) is entitled to obtain any air traffic data that would facilitate the individual's ability to productively participate in a proceeding relating to an investigation described in such paragraph from a government contractor that provides operational services to the Federal Aviation Administration, including control towers and flight service stations.

(ii) REQUIRED INFORMATION FROM INDIVIDUAL.—The individual may obtain the information described in clause (i) by submitting a request to the Administrator that—

- (I) describes the facility at which such information is located; and
- (II) identifies the date on which such information was generated.

(iii) PROVISION OF INFORMATION TO INDIVIDUAL.—If the Administrator receives a request under this subparagraph, the Administrator shall—

- (I) request the contractor to provide the requested information; and
- (II) upon receiving such information, transmitting the information to the requesting individual in a timely manner.

(5) TIMING.—Except when the Administrator determines that an emergency exists under section 44709(c)(2) or 46105(c), the Administrator may not proceed against an individual that is the subject of an investigation described in paragraph (1) during the 30-day period beginning on the date on which the air traffic data required under paragraph (4) is made available to the individual.

(c) AMENDMENTS TO TITLE 49.—

(1) AIRMAN CERTIFICATES.—Section 44703(d)(2) of title 49, United States Code, is amended by striking “but is bound by all validly adopted interpretations of laws and regulations the Administrator carries out unless the Board finds an interpretation is arbitrary, capricious, or otherwise not according to law”.

(2) AMENDMENTS, MODIFICATIONS, SUSPENSIONS, AND REVOCATIONS OF CERTIFICATES.—Section 44709(d)(3) of such title is amended by striking “but is bound by all validly adopted interpretations of laws and regulations the Administrator carries out and of written agency policy guidance available to the public related to sanctions to be imposed under this section unless the Board finds an interpretation is arbitrary, capricious, or otherwise not according to law”.

49 USC 44709.

(3) REVOCATION OF AIRMAN CERTIFICATES FOR CONTROLLED SUBSTANCE VIOLATIONS.—Section 44710(d)(1) of such title is amended by striking “but shall be bound by all validly adopted interpretations of laws and regulations the Administrator carries out and of written agency policy guidance available to the public related to sanctions to be imposed under this section unless the Board finds an interpretation is arbitrary, capricious, or otherwise not according to law”.

49 USC 44710.

(d) APPEAL FROM CERTIFICATE ACTIONS.—

(1) IN GENERAL.—Upon a decision by the National Transportation Safety Board upholding an order or a final decision by the Administrator denying an airman certificate under section 44703(d) of title 49, United States Code, or imposing a punitive civil action or an emergency order of revocation under subsections (d) and (e) of section 44709 of such title, an individual substantially affected by an order of the Board may, at the individual’s election, file an appeal in the United States district court in which the individual resides or in which the action in question occurred, or in the United States District Court for the District of Columbia. If the individual substantially affected by an order of the Board elects not to file an appeal in a United States district court, the individual may file an appeal in an appropriate United States court of appeals.

(2) EMERGENCY ORDER PENDING JUDICIAL REVIEW.—Subsequent to a decision by the Board to uphold an Administrator’s emergency order under section 44709(e)(2) of title 49, United States Code, and absent a stay of the enforcement of that order by the Board, the emergency order of amendment, modification, suspension, or revocation of a certificate shall remain in effect, pending the exhaustion of an appeal to a Federal district court as provided in this Act.

(e) STANDARD OF REVIEW.—

(1) IN GENERAL.—In an appeal filed under subsection (d) in a United States district court, the district court shall give full independent review of a denial, suspension, or revocation ordered by the Administrator, including substantive independent and expedited review of any decision by the Administrator to make such order effective immediately.

(2) EVIDENCE.—A United States district court’s review under paragraph (1) shall include in evidence any record of the proceeding before the Administrator and any record of the proceeding before the National Transportation Safety

Board, including hearing testimony, transcripts, exhibits, decisions, and briefs submitted by the parties.

49 USC 44701
note.

SEC. 3. NOTICES TO AIRMEN.

(a) IN GENERAL.—

(1) DEFINITION.—In this section, the term “NOTAM” means Notices to Airmen.

Deadline.

(2) IMPROVEMENTS.—Not later than 180 days after the date of the enactment of this Act, the Administrator of the Federal Aviation Administration shall begin a Notice to Airmen Improvement Program (in this section referred to as the “NOTAM Improvement Program”)—

(A) to improve the system of providing airmen with pertinent and timely information regarding the national airspace system;

(B) to archive, in a public central location, all NOTAMs, including the original content and form of the notices, the original date of publication, and any amendments to such notices with the date of each amendment; and

(C) to apply filters so that pilots can prioritize critical flight safety information from other airspace system information.

(b) GOALS OF PROGRAM.—The goals of the NOTAM Improvement Program are—

(1) to decrease the overwhelming volume of NOTAMs an airman receives when retrieving airman information prior to a flight in the national airspace system;

(2) make the NOTAMs more specific and relevant to the airman’s route and in a format that is more useable to the airman;

(3) to provide a full set of NOTAM results in addition to specific information requested by airmen;

(4) to provide a document that is easily searchable; and

(5) to provide a filtering mechanism similar to that provided by the Department of Defense Notices to Airmen.

Establishment.

(c) ADVICE FROM PRIVATE SECTOR GROUPS.—The Administrator shall establish a NOTAM Improvement Panel, which shall be comprised of representatives of relevant nonprofit and not-for-profit general aviation pilot groups, to advise the Administrator in carrying out the goals of the NOTAM Improvement Program under this section.

Deadline.

(d) PHASE-IN AND COMPLETION.—The improvements required by this section shall be phased in as quickly as practicable and shall be completed not later than the date that is 1 year after the date of the enactment of this Act.

49 USC 44703
note.

SEC. 4. MEDICAL CERTIFICATION.

(a) ASSESSMENT.—

Deadline.

(1) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Comptroller General of the United States shall initiate an assessment of the Federal Aviation Administration’s medical certification process and the associated medical standards and forms.

(2) REPORT.—The Comptroller General shall submit a report to Congress based on the assessment required under paragraph (1) that examines—

(A) revisions to the medical application form that would provide greater clarity and guidance to applicants;

(B) the alignment of medical qualification policies with present-day qualified medical judgment and practices, as applied to an individual's medically relevant circumstances; and

(C) steps that could be taken to promote the public's understanding of the medical requirements that determine an airman's medical certificate eligibility.

(b) GOALS OF THE FEDERAL AVIATION ADMINISTRATION'S MEDICAL CERTIFICATION PROCESS.—The goals of the Federal Aviation Administration's medical certification process are—

(1) to provide questions in the medical application form that—

(A) are appropriate without being overly broad;

(B) are subject to a minimum amount of misinterpretation and mistaken responses;

(C) allow for consistent treatment and responses during the medical application process; and

(D) avoid unnecessary allegations that an individual has intentionally falsified answers on the form;

(2) to provide questions that elicit information that is relevant to making a determination of an individual's medical qualifications within the standards identified in the Administrator's regulations;

(3) to give medical standards greater meaning by ensuring the information requested aligns with present-day medical judgment and practices; and

(4) to ensure that—

(A) the application of such medical standards provides an appropriate and fair evaluation of an individual's qualifications; and

(B) the individual understands the basis for determining medical qualifications.

(c) ADVICE FROM PRIVATE SECTOR GROUPS.—The Administrator shall establish a panel, which shall be comprised of representatives of relevant nonprofit and not-for-profit general aviation pilot groups, aviation medical examiners, and other qualified medical experts, to advise the Administrator in carrying out the goals of the assessment required under this section. Establishment.

(d) FEDERAL AVIATION ADMINISTRATION RESPONSE.—Not later than 1 year after the issuance of the report by the Comptroller Deadline.

General pursuant to subsection (a)(2), the Administrator shall take appropriate actions to respond to such report.

Approved August 3, 2012.

LEGISLATIVE HISTORY—S. 1335:

CONGRESSIONAL RECORD, Vol. 158 (2012):

June 29, considered and passed Senate.

July 23, considered and passed House.

