



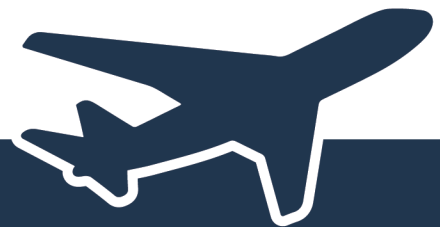
U.S. DEPARTMENT OF TRANSPORTATION  
**OFFICE OF INSPECTOR GENERAL**

**FAA Issued New Medical Requirements  
for Small Aircraft Pilots but Lacks  
Procedures and Data To Oversee the  
Program**

**FAA**

Report No. AV2020044

September 2, 2020





## FAA Issued New Medical Requirements for Small Aircraft Pilots but Lacks Procedures and Data To Oversee the Program

---

*Requested by the Chairmen of the House Committee on Transportation and Infrastructure and its Aviation Subcommittee*

Federal Aviation Administration | AV2020044 | September 2, 2020

---

### What We Looked At

The United States has the largest and most diverse general aviation community in the world. In 2017, the Federal Aviation Administration (FAA) issued a new rule, referred to as BasicMed, which implemented an alternative way for many general aviation pilots to establish medical eligibility without having to undergo the previous medical certification process. As of April 2020, more than 55,000 pilots had been registered for BasicMed. To aid in their oversight of the new BasicMed process, then Chairmen Bill Shuster of the House Committee on Transportation and Infrastructure and Frank A. LoBiondo of the Subcommittee on Aviation requested that we examine FAA's implementation of the new BasicMed requirements. Our audit objectives were to assess FAA's (1) procedures for implementing new medical requirements for certain small aircraft pilots, including identifying challenges to its implementation, and (2) plans for measuring the impact of the new BasicMed process on aviation safety.

### What We Found

FAA issued the BasicMed rule in compliance with the Act on January 11, 2017, and provided guidance and conducted outreach to stakeholders to implement the program. Under BasicMed, pilots can fly an aircraft the moment they complete the online medical course and submit other required information. However, FAA lacks an effective process to confirm pilots meet all eligibility requirements, such as whether they have a valid U.S. driver's license. FAA also does not have a process to verify that pilots' medical examinations are being performed by State-licensed physicians as required. In addition, FAA's plan to measure the safety impact of the program is limited by a lack of available data. According to FAA, it may take several more years until there is sufficient data to identify trends and evaluate the rule's safety impacts, due in part to the lengthy process for accident investigations.

### Our Recommendations

FAA concurred with our two recommendations to improve FAA's process for verifying pilot's eligibility for the BasicMed program and measuring the program's impact on aviation safety.

---

# Contents

Memorandum	1
Results in Brief	3
Background	4
FAA Issued the BasicMed Rule but Lacks Procedures To Verify Program Compliance	5
FAA’s Plan To Measure Safety Impacts of BasicMed Is Limited by Lack of Available Data	9
Conclusion	11
Recommendations	12
Agency Comments and OIG Response	12
Actions Required	12
<b>Exhibit A.</b> Scope and Methodology	13
<b>Exhibit B.</b> Organizations Visited or Contacted	15
<b>Exhibit C.</b> List of Acronyms	16
<b>Exhibit D.</b> Major Contributors to This Report	17
<b>Appendix.</b> Agency Comments	18




---

## Memorandum

Date: September 2, 2020

Subject: ACTION: FAA Issued New Medical Requirements for Small Aircraft Pilots but Lacks Procedures and Data To Oversee the Program | Report No. AV2020044

From: Matthew E. Hampton  
Assistant Inspector General for Aviation Audits 

To: Federal Aviation Administrator

---

The United States has the largest and most diverse general aviation community in the world, with more than 220,000 active aircraft, including amateur-built aircraft, rotorcraft, balloons, and highly sophisticated turbojets. Prior to May 2017, the Federal Aviation Administration (FAA) required private, recreational, and student pilots, as well as flight instructors, to obtain a third-class medical certificate<sup>1</sup> as validation that they met the Agency's medical standards. On July 15, 2016, Congress enacted the FAA Extension, Safety, and Security Act of 2016 (the Act),<sup>2</sup> which established an alternate pilot physical examination and education requirement. On January 11, 2017, FAA issued a new rule,<sup>3</sup> referred to as BasicMed, which implemented the alternative way to establish medical eligibility to be a pilot in command of certain powered aircraft with specific operating restrictions.<sup>4</sup> As of April 2020, more than 55,000 pilots had been registered for BasicMed.

To aid in their oversight of the new BasicMed process, the Chairmen of the House Committee on Transportation and Infrastructure and its Aviation Subcommittee requested that we examine FAA's implementation of the new BasicMed

---

<sup>1</sup> In most cases, a first-class medical certificate is required for operations requiring an airline transport pilot certificate. At minimum, a second-class medical certificate is required for operations requiring a commercial pilot certificate. Airmen exercising sport pilot privileges in a light sport aircraft may operate with a medical certificate or driver's license. Persons operating gliders and balloons are not required to hold a medical certificate.

<sup>2</sup> Pub. L. No. 114-190 (2016), Section 2307, Medical Certification of Certain Small Aircraft Pilots.

<sup>3</sup> Alternative Pilot Physical Examination and Education Requirements, effective May 1, 2017.

<sup>4</sup> The aircraft must be authorized by FAA to carry not more than six occupants and with a maximum certified takeoff weight of no more than 6,000 pounds. The aircraft must operate at or below 18,000 feet and not exceed an air speed of 250 knots (288 mph) for the entire flight.

requirements.<sup>5</sup> In addition, they requested that we identify any lessons learned from FAA's implementation of this provision and the impact of the new BasicMed process on general aviation safety. Accordingly, our objectives were to assess (1) FAA's procedures for implementing new medical requirements for certain small aircraft pilots, including identifying challenges to its implementation, and (2) FAA's plans for measuring the impact of the new BasicMed process on aviation safety.

We conducted this audit in accordance with generally accepted Government auditing standards. Exhibit A details our scope and methodology, and exhibit B lists the organizations we visited or contacted. For a list of the acronyms used in the report, see exhibit C.

We appreciate the courtesies and cooperation of FAA representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-0500 or Marshall Jackson, Program Director, at (202) 366-4274.

cc: The Secretary  
DOT Audit Liaison, M-1  
FAA Audit Liaison, AAE-100

---

<sup>5</sup> Then Chairmen Bill Shuster of the U.S. House of Representatives Committee on Transportation and Infrastructure and Frank A. LoBiondo of the Subcommittee on Aviation requested this audit on November 21, 2017.

---

## Results in Brief

### **FAA issued the BasicMed rule but lacks procedures to effectively verify program compliance.**

FAA issued the BasicMed rule in compliance with the Act on January 11, 2017, and provided guidance and conducted outreach to stakeholders to implement the program. Under BasicMed, pilots can fly an aircraft the moment they complete the online medical course and submit other required information. However, FAA lacks a process to confirm pilots meet all eligibility requirements, such as whether they have a valid U.S. driver's license, at the time of registration. When pilots register for BasicMed, they authorize FAA to conduct a driving record check with the National Highway Traffic Safety Administration's (NHTSA) National Driver Register (NDR). However, FAA's record check is limited. Specifically, FAA only reviews pilots' driving records for violations for driving under the influence (DUI), driving while intoxicated (DWI), and substance abuse. FAA does not check over 100 other possible violations that could result in a suspended or revoked driver's license, such as violations resulting in fatal accidents and reckless driving. This is because FAA has not developed policies and procedures specific to BasicMed but instead uses the existing process for medical certification, which does not require a valid driver's license. FAA also does not have a process to verify that pilots' medical examinations are being performed by State-licensed physicians, a key requirement of BasicMed eligibility. According to FAA officials, this is because verifying physicians' credentials was not included in the Act, and they have no plan to do so. Yet, a one-time study requested in March 2019 by FAA's Office of Aerospace Medicine revealed that 3 percent of pilots' medical examinations were performed by medical providers who did not appear to qualify as State-licensed physicians.<sup>6</sup> As a result of these issues, FAA cannot have reasonable assurance that pilots meet BasicMed eligibility requirements.

### **FAA's plan to measure safety impacts is limited by the lack of available data.**

In June 2018, FAA formed the BasicMed Reporting and Analysis Working Group and established plans to report on the changes in general aviation aircraft activity and safety issues, such as whether the risk varies between pilots operating under BasicMed compared to pilots with active medical certificates. FAA provided us with the working group's first report in October 2019, which did not draw any conclusions on the safety impact, and plans to report to Congress in 2021 as

---

<sup>6</sup> According to the BasicMed rule, FAA relies on the determination of each State as to which persons it will license as physicians. If the person holds a license as a physician issued by any State, territory, or possession, then he or she meets the requirement as a State-licensed physician.

required. However, FAA told us that it may take several more years until there is sufficient data to identify trends and evaluate the rule's safety impacts, due in part to the lengthy process for accident investigations. Moreover, FAA cannot make a meaningful comparison between the BasicMed rate of accidents and fatalities to those occurring among pilots holding a medical certificate because the Agency does not collect data on BasicMed pilots' flight hours. Without these data, FAA's ability to accurately and fully assess whether BasicMed has impacted safety may be limited.

We made recommendations to improve FAA's process for verifying pilot's eligibility for the BasicMed program and measuring the program's impact on aviation safety.

---

## Background

As part of an effort to offer greater flexibility to pilots flying for recreation and personal transportation, Congress directed FAA to "issue or revise regulations to ensure that an individual may operate as pilot in command of a covered aircraft"<sup>7</sup> without having to undergo the medical certification process. Under FAA's 2017 rule, to be eligible to fly under BasicMed, pilots must have a valid U.S. driver's license, undergo a medical examination by a State-licensed physician within the preceding 48 months, and complete an online medical self-assessment education course<sup>8</sup> in the preceding 24 calendar months. Additionally, pilots must have had a valid FAA medical certificate after July 14, 2006, that had not been revoked, suspended, or withdrawn, or must not have had the most recent application for a medical certificate denied.

In contrast, pilots flying under a third-class medical certificate must complete an online application and be examined by an FAA-designated Aviation Medical Examiner. A third-class medical certificate is valid for 5 years for pilots under age 40 and 2 years for pilots age 40 and over. It is ultimately the pilot's responsibility to ensure they are fit to fly, whether they fly under BasicMed or a medical certificate.<sup>9</sup> The following table shows further differences between BasicMed and third-class medical certification requirements.

---

<sup>7</sup> A covered aircraft means an aircraft that is authorized to carry not more than six occupants and has a maximum certificated takeoff weight of not more than 6,000 pounds.

<sup>8</sup> The Aircraft Owners and Pilots Association and the Mayo Clinic provide the BasicMed online medical self-assessment courses.

<sup>9</sup> 14 CFR Section 61.53 states that no person who holds a medical certificate may act as pilot in command while that person knows of any medical condition that would make the person unable to meet the requirements for the medical certificate. It also states a person operating without a medical certificate shall not act as pilot in command while that person knows of any medical condition that would make the person unable to operate the aircraft in a safe manner.

Table. Differences in BasicMed and Third-Class Medical Requirements

BasicMed	Third-Class Medical
Possess a current and valid driver’s license issued by a State, territory, or possession of the United States and comply with all medical requirements or restrictions associated with that license.	No equivalent requirement.
Hold or have held any medical certificate (1st, 2nd, or 3rd class) at any point after July 14, 2006. Persons without a medical certificate or with a revoked or suspended certificate must obtain a new one prior to operating under BasicMed.	Pilots must hold a valid third-class medical certificate.
Receive a comprehensive medical examination from any State-licensed physician within the past 48 months.	Persons who were under age 40 at the time of the medical examination are not required to have another medical examination for 60 calendar months; persons who were age 40 and over at the time of the medical examination for 24 calendar months. Only an FAA-designated Aviation Medical Examiner can perform the medical examination.
Complete an online medical education course in the past 24 calendar months.	No equivalent requirement.
Fly an aircraft that is authorized to carry no more than six occupants (including the pilot) and not fly for compensation or hire, with a maximum certificated takeoff weight of no more than 6,000 lbs., and with an indicated airspeed of 250 knots or less and an altitude at or below 18,000 feet mean sea level.	Flight limits depend on the type of airmen certificate (private, recreational, or student pilot) when operating an aircraft with third-class medical.

Source: OIG analysis of FAA regulations

## FAA Issued the BasicMed Rule but Lacks Procedures To Verify Program Compliance

FAA issued the BasicMed rule to comply with the Act, provided guidance to pilots, and conducted outreach to internal and external stakeholders. However, the Agency has not developed procedures to confirm pilots meet eligibility requirements.



---

## FAA Issued the BasicMed Rule in Time To Comply With the Statute

In the FAA Extension, Safety, and Security Act of 2016, Congress required that FAA issue a rule no later than 180 days after the President signed it into law on July 15, 2016. FAA issued the BasicMed rule on January 11, 2017, exactly 180 days after the law was enacted.

FAA formed a rulemaking team consisting of several Agency offices to develop the new rule and implement the Act's requirements. When issuing the rule, FAA bypassed the public notice and comment period using the "good cause" exception,<sup>10</sup> which can be deployed when this period is deemed unnecessary and contrary to the public interest. As required, the Agency provided the reason for using the exception in the Federal Register, stating that notice and the opportunity to comment were not necessary because the Agency implemented the statutory language directly into the regulations without interpretation. Furthermore, delaying implementation of the rule would be contrary to the public interest on the basis that it would have delayed the new privileges Congress sought to provide.

In January 2017, FAA issued an advisory circular providing guidance to pilots and other stakeholders prior to the rule becoming effective in May 2017. FAA coordinated with the Aircraft Owners and Pilots Association to provide pilots with access to the online medical education course. FAA also conducted outreach with internal and external stakeholders, such as FAA safety inspectors, through articles in the FAA Safety Briefing magazine and presentations at general aviation events.

---

## Pilots Can Begin Flying Immediately After Registering for BasicMed, but FAA Lacks Procedures To Verify Their Eligibility

FAA's Flight Standards Service, the office that has oversight responsibility for the BasicMed program, has not developed policies and procedures specific to the BasicMed program, including procedures to verify pilots' compliance with the program's requirements. According to FAA officials, pilots are registered and can fly an aircraft under BasicMed the moment they successfully complete the online

---

<sup>10</sup> The Administrative Procedure Act requires an agency to conduct notice and comment rulemaking except when the agency for good cause finds that notice and public procedure are impracticable, unnecessary, or contrary to the public interest.

medical course and submit required information. FAA begins to verify pilots' eligibility only after they are registered under BasicMed. However, FAA's verification efforts are limited to program requirements related to having a medical certificate, rather than requirements that were developed specifically for the BasicMed program. For instance, FAA verifies that the pilot had a valid medical certificate after July 14, 2006, but does not verify that the pilot has a valid driver's license or that medical examinations are performed by medical providers that meet FAA requirements. The Agency has no plans to begin verifying these requirements.

### **FAA Does Not Verify That Registered Pilots Have a Valid Driver's License**

The BasicMed rule requires pilots to have a valid driver's license and comply with all medical requirements or restrictions associated with that license to operate an aircraft. The rule also states that individuals whose driver's license has been revoked for any reason are not eligible to use the BasicMed rule unless the driver's license is reinstated. However, FAA lacks a process to verify that pilots meet these requirements. FAA does not require pilots to provide information confirming that they hold a valid driver's license when registering for BasicMed, and FAA's current process does not verify that they do. An FAA official told us that there is no plan to add a process to verify that BasicMed pilots actually hold valid driver's licenses.

Furthermore, FAA is missing opportunities to identify ineligible pilots during its check of NHTSA's NDR. The NDR contains information reported by States on individuals whose privilege to operate a motor vehicle has been revoked, suspended, canceled, or denied. After a pilot is registered for BasicMed, FAA receives authorization to access the NDR. While the NDR will not verify that all pilots have a valid driver's license, it can be used as one tool to determine if some pilots have suspended or revoked driver's licenses. Yet according to FAA officials, the Agency uses the NDR check only to determine whether pilots who have DUI, DWI, and substance abuse violations have reported them to FAA as required.<sup>11</sup> FAA does not check more than 100 other violations in the NDR to determine whether pilots may have a suspended or revoked driver's license, such as violations resulting in fatal accidents and reckless driving. This is because FAA has not developed policies and procedures specific to BasicMed but instead uses the identical NDR check process that it uses for medical certification, which does not require a valid driver's license.

To illustrate the extent to which FAA's current NDR process may be missing opportunities to identify ineligible pilots, we requested an NDR check of the

---

<sup>11</sup> FAA regulation requires pilots to provide a written report to the Agency of each motor vehicle action involving DUI/DWI violations of Federal or State statute within 60 days of the action.

more than 50,000 pilots registered for BasicMed since the start of the program. There were 850 possible matches<sup>12</sup> of pilots who may have violations that could have resulted in a suspended or revoked driver's license. This indicates that some registered pilots may not be eligible for BasicMed.

### **FAA Does Not Verify That Medical Examinations Are Performed by State-Licensed Physicians**

BasicMed also requires pilots to be examined by a State-licensed physician and have the physician sign their comprehensive medical examination checklist. During the registration process, pilots must submit the name and State medical license number of the physician who performed their latest medical examination. However, FAA does not have a process to verify that pilots' medical examinations are being performed by State-licensed physicians.

Officials with FAA's Office of Aerospace Medicine identified this issue and in March 2019 requested a one-time study to determine whether the medical providers were State-licensed physicians and eligible to perform the examinations. The study of a random sample of 600 pilots from the Registry found that 3 percent of pilots' medical examinations appeared to have been performed by ineligible providers such as nurse practitioners and physician's assistants, which would render those pilots ineligible for BasicMed. However, FAA officials stated that the Agency has no future plans to verify physicians' information. According to these officials, this is because a process to verify physicians' credentials was not included in the Act, and they believe this action would require additional rulemaking that would be difficult to issue with the current policy of reducing regulations. However, it is unclear why verifying this information would require rulemaking as opposed to a revision of FAA's internal policy. Without verification, FAA cannot ensure that BasicMed pilots will be examined by eligible medical providers.

---

<sup>12</sup> The NDR matches on last name, first name, and date of birth and only indicates that a driving violation was reported by a State, but it does not indicate the action taken by the State and the status of pilot's driver's license. Due to similar names, birthdates, and errors, it is necessary for FAA to investigate each match to ensure it is actually the BasicMed pilot and to determine the action taken by the State.

---

# FAA's Plan To Measure Safety Impacts of BasicMed Is Limited by Lack of Available Data

FAA established a working group in June 2018 to measure and analyze the safety impacts of BasicMed. However, FAA anticipates that additional time is needed to gather sufficient and relevant data to fully assess the program.

---

## FAA Established a Working Group To Assess the Safety Impacts of BasicMed

The FAA Extension, Safety, and Security Act of 2016 requires FAA, in coordination with the National Transportation Safety Board (NTSB), to submit a report to Congress no later than July 15, 2021, that describes the effect of BasicMed and includes statistics with respect to the changes in small aircraft activity and safety incidents.

FAA formed the BasicMed Reporting and Analysis Working Group in June 2018 with members from Flight Standards Service, the Office of Aerospace Medicine, and the Office of Accident Investigation and Prevention (AVP). The working group developed a charter detailing the Agency's strategy and identifying data requirements needed to report the impact of BasicMed from the standpoint of aircraft activity and safety.

According to the charter, the working group's data analysis will address the changes in aircraft general aviation activity, such as the number of general aviation pilots registered as BasicMed, including those with a medical certificate; the number of third-class special issuance<sup>13</sup> and unrestricted medical certificates issued; and under what circumstances people who could not or would not otherwise fly are now operating under BasicMed.

Some of the potential safety issues the working group plans to explore are whether the risk is different with airmen operating under BasicMed compared to medically certificated airmen, and if changes should be made to the BasicMed list of conditions requiring a special issuance of a medical certificate. The group will also analyze the number of fatal and non-fatal accidents and incidents involving BasicMed pilots and accident/incident rates by categories, such as age, type of operation, and former special issuance holder. Additionally, the working group

---

<sup>13</sup> Pilots who do not meet FAA standards that entitle them to a medical certificate may be granted a special issuance of a medical certificate if they satisfy FAA that they can perform the duties of the class of medical certificate applied for without endangering public safety.

will identify any aspects of BasicMed revealed by its data analysis that adversely affect safety.

The Agency provided us with the working group's first of two planned reports on BasicMed findings on October 16, 2019. The report focused on the program's first 2 years—May 1, 2017, through April 30, 2019—and contained a comparative analysis of BasicMed and medically certificated pilot demographics and accident information. However, the report drew no conclusions regarding the safety impacts of the program. FAA plans to issue its next report to Congress in July 2021 to meet the statutory requirement.

---

## **It Is Too Early in the Program To Collect Sufficient Data on the Impact of BasicMed**

As noted above, FAA's working group plans to collect and analyze safety data related to BasicMed starting from the rule's implementation in 2017 up until 2021, as required by law. However, FAA officials from both AVP and the Civil Aerospace Medical Institute (CAMI) stated that 5 years of data may not be sufficient to draw conclusions on the BasicMed program's operational safety impacts.

According to an AVP official, at least 10 years of data is preferable for identifying trends. The CAMI official indicated that a report similar to FAA's Continued Operational Safety Report on Light Sport Aircraft would eventually be issued. This report contains data analysis of fatal accidents from July 2004 through September 2018 and graphical representations of a 10-year trend (fiscal years 2009–2018) of fatal accidents by aircraft fleet.<sup>14</sup> FAA stated in its first report on BasicMed findings that the Agency anticipates several more years of operational data will be necessary to assess causation in a meaningful analysis due to the lengthy accident investigative process.

Furthermore, FAA is missing a critical piece of information for a thorough analysis of BasicMed's safety impacts. Specifically, FAA lacks a reliable source for the number of flight hours for pilots exempt from medical certification requirements. FAA officials from both Flight Standards and CAMI identified this information as key to accurately determining the rate of accidents and fatalities among the BasicMed pilots per 100,000 hours and comparing it to those holding the third-class medical certificate. NTSB also identified these missing data in a September

---

<sup>14</sup> FAA, *Continued Operational Safety (COS) Report: Special Category Light-Sport Aircraft, July 2014–September 2018* (issued January 2019).

2014 safety study on pilot impairment.<sup>15</sup> The study found that it was not possible to compare the safety of medically certificated pilots with those flying under the sport pilot and light sport aircraft rule—which does not have the same medical requirements<sup>16</sup> for pilots—because there is limited information about the number and flight activity of pilots without medical certificates. This situation is now amplified by the more than 55,000 pilots who have chosen to fly under the BasicMed rule and are added to the sport pilots flying without an FAA medical certificate.

NTSB recommended that FAA require pilots who are exempt from medical certification requirements to periodically report their status as an active pilot and provide a summary of recent flight hours. After almost 4 years, NTSB closed the recommendation noting that FAA took unacceptable action. According to FAA officials, the Agency believes that the voluntary reporting of flight hours is sufficient, and any further mandate will not provide an added safety benefit. However, NTSB maintains that voluntary submission of flight hours does not meet the intent of its recommendation and would not allow FAA to accurately determine the accident risk of pilots flying without a medical certificate.

As a result of these issues, it may be several more years before FAA can collect and analyze sufficient data to accurately assess the safety impacts of BasicMed, if any.

---

## Conclusion

BasicMed has generated interest in the general aviation community with more than 55,000 pilots now registered to fly under the new rule. FAA took steps to implement BasicMed in compliance with legislative requirements. However, the lack of procedures to identify pilots who should not be flying under BasicMed and prevent them from operating aircraft raises questions about the impact of the new rule. While it is too soon to determine whether the new medical requirements have had any impact on flight safety, implementing effective procedures to prevent ineligible pilots from flying and developing methodologies to collect key safety data will be critical to successfully implementing BasicMed in the long run.

---

<sup>15</sup> NTSB, *Drug Use Trends in Aviation: Assessing the Risk of Pilot Impairment*, September 2014.

<sup>16</sup> Sport pilots can fly light-sport aircraft other than a glider or a balloon with a valid U.S. driver's license or a medical certificate.

---

## Recommendations

To effectively implement and assess the safety impact of BasicMed, we recommend that the Federal Aviation Administrator:

1. Conduct a risk assessment of the issues related to valid driver's licenses and use of State-licensed physicians noted in this report, and implement processes to mitigate any identified risks. Include the results of this risk-assessment in the required report on the safety impact of BasicMed to Congress.
2. Develop and implement a process to collect pilot flight hours or an alternative process that allows a meaningful assessment of the safety impact of pilots operating under BasicMed compared with pilots operating with a medical certificate.

---

## Agency Comments and OIG Response

We provided FAA with our draft report on July 8, 2020, and received its response on August 5, 2020, which is included as an appendix to this report. FAA also provided technical comments, which we incorporated into this report where appropriate. In its response, FAA concurred with both of our recommendations as written and provided a completion date for implementing the recommended actions.

---

## Actions Required

We consider both recommendations to be resolved but open pending completion of FAA's planned actions.

---

## Exhibit A. Scope and Methodology

We conducted this performance audit from December 2018 through July 2020 in accordance with generally accepted Government auditing standards as prescribed by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To assess FAA's procedures for implementing BasicMed, we reviewed applicable laws, regulations, policies, and guidance. We met with Flight Standards Service and the Office of Aerospace Medicine in Washington, DC. At the Mike Monroney Aeronautical Center (MMAC) in Oklahoma City, OK, we met with FAA's Civil Aviation Registry (Registry), Airmen Certification Branch, the Deputy Director, various divisions of FAA's Civil Aerospace Medical Institute (CAMI), including Medical Certification, Medical Education, and Medical Research, and the Office of Security and Hazardous Material Safety.

We met with officials from the Registry to determine FAA's processes for verifying pilots' program eligibility. We interviewed officials with DUI/DWI Investigations Branch to determine their process for investigating BasicMed pilots with driving violations in NHTSA's NDR Problem Drivers Pointer System (PDPS) and discussed with their Security Solutions Development Branch their process for sending and retrieving pilots' records through the NDR. We also interviewed personnel with NHTSA's NDR to determine their process of matching FAA's BasicMed pilot files to the PDPS. We also met with Aircraft Owners and Pilots Association officials in Washington, DC to understand their involvement in developing the medical education course.

We coordinated with FAA and NHTSA NDR to query the PDPS with a file obtained from Registry containing 51,749 BasicMed pilots registered from May 1, 2017, through September 30, 2019. The query searched for matches to all 120 highway safety related codes for drivers' convictions and/or withdrawals defined in the American Association of Motor Vehicle Administrators Code Dictionary Manual that require a pointer record in the PDPS.

To assess the reliability of FAA's BasicMed Airmen data from May 1, 2017, through September 30, 2019, we (1) talked to Agency officials about data quality control procedures, (2) reviewed relevant documentation, and (3) electronically tested the data to identify obvious problems with completeness or accuracy. We determined the data were sufficiently reliable for the purpose of this report.



We reviewed the sampling methodology used by FAA's Office of Aerospace Medicine for its study of State-licensed physicians and obtained the file of 600 BasicMed pilots used in the study. We statistically tested the accuracy of the analysis by independently researching 88 randomly selected pilots to determine if the medical provider conducting the comprehensive medical exam held a state issued medical license. The sample size was based on an expected error rate of 3 percent, a margin of error of 3 percent, and a confidence level of 90 percent. The expected error rate was based on the error rate of the 600 BasicMed pilots. The margin of error was set to 3 percent to include zero. Based on the results of this sample, we believe the Office of Aerospace Medicine's results are sufficiently reliable for this report.

To determine FAA's plans for measuring the impact of the new BasicMed process on aviation safety, we reviewed FAA's BasicMed Reporting and Analysis Working Group Charter to determine what processes and procedures they are developing to address the safety impact of BasicMed to be reported to Congress by July 15, 2021. We also met with FAA's Office of Accident Investigation and Prevention in Washington, DC, and CAMI's Deputy Director and personnel from the Medical Research division, to discuss their research on small aircraft activity and safety incidents and accidents related to BasicMed pilots. In addition, we met with NTSB officials at their Washington, DC, headquarters to determine how they are coordinating with FAA to gather data for the report to Congress.

---

## **Exhibit B. Organizations Visited or Contacted**

---

### **Federal Aviation Administration**

Flight Standards Service, Washington, DC

Office of Accident Investigation and Prevention, Washington, DC

Office of Aerospace Medicine, Washington, DC

Office of Security and Hazardous Material, Security Solutions Development Branch, Huntsville, AL

Civil Aerospace Medical Institute, Oklahoma City, OK

Office of Security and Hazardous Material, DUI/DWI Investigation Branch, Oklahoma City, OK

Civil Aviation Registry, Airmen Certification Branch, Oklahoma City, OK

---

### **Other Organizations**

Aircraft Owners and Pilots Association, Washington, DC

National Highway Transportation Safety Administration National Driver Register, Washington, DC

National Transportation Safety Board, Washington, DC

---

## Exhibit C. List of Acronyms

AVP	Office of Accident Investigation and Prevention
FAA	Federal Aviation Administration
CAMI	Civil Aerospace Medical Institute
CFR	Code of Federal Regulations
DOT	Department of Transportation
DUI/DWI	Driving Under the Influence/Driving While Intoxicated
OIG	Office of Inspector General
NDR	National Driver Register
NHTSA	National Highway Traffic Safety Administration
PDPS	Problem Driver Pointer System

---

## Exhibit D. Major Contributors to This Report

MARSHALL JACKSON

TERRI AHURUONYE

ALFREDO ATREGENIO

LYNN DOWDS

AUDRE AZUOLAS

SETH KAUFMAN

FREDERICK SWARTZBAUGH

GEORGE ZIPF

PROGRAM DIRECTOR

PROJECT MANAGER

SENIOR AUDITOR

SENIOR AUDITOR

SENIOR TECHNICAL WRITER

DEPUTY CHIEF COUNSEL

ASSOCIATE COUNSEL

SUPERVISORY MATHEMATICAL  
STATISTICIAN

---

## Appendix. Agency Comments



# Federal Aviation Administration


---

---

## Memorandum

Date: August 5, 2020

To: Matthew E. Hampton, Assistant Inspector General for Aviation Audits

From: H. Clayton Foushee, Director, Office of Audit and Evaluation, AAE-1 

Subject: Federal Aviation Administration's (FAA) Response to Office of Inspector General (OIG) Draft Report: FAA's Implementation of Small Aircraft Pilot Medical Reform

---

---

The FAA utilizes a risk-based approach to aviation system oversight so that Agency resources are focused upon the areas of greatest risk to the general public. BasicMed implementation was based upon the fact that small, non-commercial aircraft operations represent very low risk to the general public. BasicMed also provided benefits by removing unnecessary aviation regulatory burdens. The type of small aircraft operations allowed under BasicMed exhibit a low risk profile similar to that of other non-commercial general aviation operations such as balloons, gliders, and light sport aircraft, which do not require pilot medical certificates.

The FAA established the BasicMed Reporting and Analysis Workgroup with the mission to quantitatively assess the BasicMed program. As additional operational data are compiled, the FAA is committed to re-assessing the need for enhanced oversight in a manner consistent with the FAA's risk-based approach to safety oversight.

Based upon our review of the draft report, FAA concurs with both recommendations as written. FAA plans to complete actions to implement the two recommendations by July 31, 2021.

FAA appreciates this opportunity to respond to the OIG draft report. Please contact H. Clayton Foushee at (202) 267-9000 if you have any questions or require additional information about these comments.

# U.S. DOT IG Fraud & Safety Hotline

[hotline@oig.dot.gov](mailto:hotline@oig.dot.gov) | (800) 424-9071

<https://www.oig.dot.gov/hotline>

## Our Mission

OIG conducts audits and investigations on behalf of the American public to improve the performance and integrity of DOT's programs to ensure a safe, efficient, and effective national transportation system.

**OFFICE OF INSPECTOR GENERAL**  
U.S. Department of Transportation  
1200 New Jersey Ave SE  
Washington, DC 20590



[www.oig.dot.gov](https://www.oig.dot.gov)