



COMMONWEALTH OF VIRGINIA

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Lt. Colonel Tracy S. Russillo
Deputy Superintendent

November 18, 2019

**TO: The Honorable Thomas K. Norment, Jr.
Co-Chairman of the Senate Finance Committee**

**The Honorable Emmett W. Hanger, Jr.
Co-Chairman of the Senate Finance Committee**

**The Honorable S. Chris Jones
Chairman of the House Appropriations Committee**

Pursuant to Item R of the 2019 Virginia Acts of Assembly, Appropriation Act, page 476, item 420, I am respectfully submitting herewith a report on the steps necessary to contract with insurance providers for reimbursement of expenses related to the provision of Med-flight services and the estimated annual revenue.

Respectfully,

Gary T. Settle

Superintendent

GTS/MDH/

Enclosure

November 18, 2019

DECISION MEMORANDUM

TO: The Honorable Ralph S. Northam, M.D.
Governor

THRU: The Honorable Clark Mercer
Chief of Staff

The Honorable Brian Moran
Secretary of Public Safety and Homeland Security

FROM: Colonel Gary T. Settle
Superintendent-Virginia State Police


SUBJECT: Virginia State Police Med-Flight


PURPOSE: To determine the feasibility of charging for Med-Flight Services and estimation of annual revenue.


BACKGROUND: This report is submitted pursuant to Item R of the 2019 Virginia Acts of Assembly, Appropriation Act, page 476, item 420, which states: "The Department shall study the steps necessary to contract with insurance providers for reimbursement of expenses related to the provision of Med-flight services and report on those steps and the estimated annual revenue to the Department of Planning and Budget and the Chairmen of the House Appropriations and the Senate Finance Committees by November 30, 2019."

JUSTIFICATION: The Virginia State Police Med-Flight Unit currently operates under Part 91 of the FAR and does not charge hospitals, patients, or insurance companies for this service. Because Part 91 operators do not fly for profit, the FAA allows different standards since there is no incentive to risk flight safety for financial reasons. Under Part 135 of the FAR, operators are referred to as 'fly for hire.' They are more strictly monitored by the FAA because they need to fly passengers in order to earn income. The FAA does not want Part 135 operators cutting corners and putting profit in front of training and maintenance.

RECOMMENDATION: The Virginia State Police does not recommend pursuit of a Part 135 Designation. Operating the VSP Med-Flight program pursuant to Part 91 (FAR) allows the Department the flexibility to maintain an agile aviation program that can fulfill the med-flight mission as well as the general law enforcement responsibilities of the aviation unit. VSP does not have the staffing, funding, or capacity to move towards a Part 135 designation. Additionally, such an attempt would likely be met with significant resistance from private air ambulance companies.

Recommend Recommend with Modification Deny
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Brian J. Moran Date 11/20/19

Recommend Recommend with Modification Deny
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Clark Mercer Date 12/16/19

Recommend Recommend with Modification Deny
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Ralph Northam, M.E. Date 12/16/19

***FAA Private Medical Helicopter Service Designation versus Air Charter Designation
(Federal Aviation Regulations Part 91 vs. Part 135)***

This report is submitted pursuant to Item R of the 2019 Virginia Acts of Assembly, Appropriation Act, page 476, item 420, which states: "The Department shall study the steps necessary to contract with insurance providers for reimbursement of expenses related to the provision of Med-flight services and report on those steps and the estimated annual revenue to the Department of Planning and Budget and the Chairmen of the House Appropriations and the Senate Finance Committees by November 30, 2019."

Formally established January 1, 1984, the Virginia State Police (VSP) Aviation Unit's primary mission is to provide aircraft for search, rescue, general law enforcement missions, and medical evacuation/transportation. VSP currently conducts aviation operations via three Aviation Bases located in Chesterfield County, Lynchburg, and Abingdon. VSP Med-Flight operates from the Chesterfield and Abingdon bases. VSP receives specific funding to operate Med-Flight as authorized in §46.2-694 of the Code of Virginia. For FY 2019 and FY2020, authorized funding was \$3,098,098 per year.



Helicopter emergency medical service agencies are prohibited from charging for transportation flights of patients while operating under Part 91 (Private Designation) of the Federal Aviation Regulations (FAR). In order to charge for this service, agencies must be certified under Part 135 (Air Charter Designation) of the FAR. Obtaining a Part 135 certificate is complex, time consuming, and costly undertaking. Part 135 of the FAR is much more restrictive than Part 91 because aircraft operators fly for hire and profit.

The Virginia State Police Med-Flight Unit currently operates under Part 91 of the FAR and does not charge hospitals, patients, or insurance companies for this service. Because Part 91 operators do not fly for profit, the FAA allows different standards since there is no incentive to risk flight safety for financial reasons. The primary advantages of operating under this section compared to Part 135 are:

- No regulation of pilot hours worked or required down time between shifts, other than what is set in agency policy. (VSP Med-Flight pilots currently work 24 hour shifts.)
- Maintenance is conducted based on the specific aircraft manufacturer's recommendations, and the structure of the maintenance crew (size of the staff and chain of command) is determined by the specific needs of the agency.

- Parts needed for repairs and routine maintenance can be maintained and accessed by the mechanics working on the aircraft. Certain parts may be used after their manufacturer expiration provided they are deemed safe.
- Program oversight requirements are not nearly as stringent, due to the non-profit status of operations.

To charge for Med-Flight services, VSP must operate under Part 135 of the FAR. These operations are referred to as 'fly for hire.' They are more strictly monitored by the FAA because they need to fly passengers in order to earn income. The FAA does not want Part 135 operators cutting corners and putting profit in front of training and maintenance. There are many additional requirements to become Part 135 compliant, too many to fully document in this report. Some of the most challenging include:

- Each pilot would be limited to a 12 hour shift and they would not be allowed to exceed a total of 14 hours worked. In addition, at least 10 hours of uninterrupted rest (off duty and not on call) is required between shifts.
 - ✓ In order to comply with this requirement, VSP would need to hire 6 additional Med-Flight pilots and each pilot would be restricted to only flying helicopter EMS flights during their shift. They would not be permitted to fly any other types of missions (law enforcement, missing persons, search and rescue, etc.). A separate flight crew would be needed to handle those types of missions.
 - ✓ Currently, VSP pilots must have 500 flight hours to be certified to fly med-flight missions. Under Part 135, minimum flight hours would increase to 1000 hours. This would create several problems. First, not all current VSP pilots have 1000 hours, which means they would no longer be able to fly med-flight missions. Additional pilots would have to be hired. With a nationwide shortage of experienced pilots, this increase would make finding six qualified pilots exceptionally difficult and expensive.
- Numerous full time positions would have to be created in order to fulfill Part 135 mandates. These include:
 - ✓ A full time auditor and record keeper dedicated to the Aviation Unit. (Cost: See below)
 - ✓ A full time storekeeper, dedicated to parts inventory control and issuance. (Mechanics may not access the parts supply or check out their own parts). (Cost: See below)
 - ✓ VSP would be required to have one full time mechanic for each aircraft used for medical flights. VSP currently has three full time aircraft

mechanics positions and one part time. Additional full time mechanics would be required. (Cost: See below)

- ✓ A full time director of operations is required. (Cost: See below)
- ✓ A chief pilot position would need to be created. Currently, the Aviation Unit First Sergeant is considered the chief pilot. Under Part 135, none of the Aviation Unit members would be qualified to meet the experience requirements for chief pilot. (Cost: See below)
- ✓ Part 135 requires a dedicated chief inspector. The chief inspector cannot perform maintenance and must answer directly to the director of maintenance. (Cost: See below)

➤ Other costs due to Part 135 mandates include:

- ✓ All Med-Flight aircraft must be equipped with flight data monitoring systems and cockpit voice recorders. VSP aviation does not currently have this equipment. (Cost \$60,000.00)
- ✓ HAZMAT Training Program. (Cost: not available)
- ✓ The agency would be required to expand its current system used to track all aviation parts, and to promptly dispose of expired parts. (Cost: not available)
- ✓ Some of the flight crew rest quarters are not in compliance with Part 135. Rest quarters would have to be moved to a different location or require significant renovation to the current facilities. (Cost: not available)
- ✓ VSP Aviation would be required to have an automated "punch system" in which the pilots work hours would be tracked electronically by a 3rd party vendor. (Cost: not available)

Impact of additional full time positions mandated by Part 135

Position Required	Number	Financial Impact per Year
Director of Operations	1	\$133,500.00

Chief Maintenance Inspector	1	\$117,485.00
Chief Pilot	1	\$145,160.00
Auditor	1	\$99,098.00
Aviation Parts Storekeeper	1	\$86,043.00
Pilots	6	\$770,860.00
Aircraft Mechanics	3	\$324,106.00
Totals	14	\$1,676,252.00

The challenges noted herein are just some of the additional Part 135 requirements. Additional expenses would also be required in order to comply with Part 135. For instance, a consultant would be required to work through the process to ensure compliance. New office space would be needed to house the new positions. In addition, should the state police be able to obtain a Part 135 certificate and begin charging for services, additional positions would be required for billing and collections. According to program records, Med-Flight transported 756 patients in 2017 and 763 in 2018. Total flights were 1,449 and 1,596 respectively. Many flights do not result in a patient transport for various reasons and these flights would not be reimbursable through fees. Further, every patient that is transported does not have insurance coverage and/or the ability to pay a helicopter EMS bill.

While preparing this information, the Virginia State Police consulted with other agencies about charging for medical helicopter transport. Only one agency was identified which has attempted to comply with Part 135, the Maryland State Police (MSP). After a helicopter crash in 2008, MSP began pursuing a Part 135 certificate in 2009. Untold man hours were spent on this process over nearly a decade. Excessive costs (including those for a private consultant from Florida) and the results of a comprehensive billing study forced MSP to stop pursuing a Part 135 certificate earlier this year.

Revenue

Determining potential revenue from charging for med-flight services is very complicated. A report titled Understanding Air Ambulance Insurance Coverage by The National Association of Insurance Commissioners states "The average air ambulance trip is 52 miles and costs between \$12,000 to \$25,000 per flight."¹ The report goes on to state "Depending on the severity of the medical condition, the number and type of medical staff on board can vary, further impacting the flight price."² An article in the Washington Post stated "The cost of a medical ride in a helicopter or airplane climbed about 60 percent from 2012-2016, to a median of \$39,000."³ Another report citing information

¹ <https://airmed.com/Blog/June-2017/This-is-How-Much-Air-Medical-Transport-Costs>

² IBID

³ https://www.washingtonpost.com/business/economy/why-the-flight-to-the-hospital-is-more-costly-than-ever/2019/07/01/9dd66736-99dc-11e9-916d-9c61607d8190_story.html

obtained from the Government Accountability Office, states "...the average charge for a medical helicopter flight increased from \$14,000 in 2010 to \$30,000 in 2014. For one air ambulance company, Air Methods, the average charge increased from \$13,000 in 2007 to \$49,000 in 2016."⁴

Further complicating the task of projecting revenue are the challenges involving insurance companies. If a patient requires med-flight because of a serious motor vehicle crash, automobile insurance will likely pay. If the med-flight was the result of a medical emergency, health insurance should pay. Each company has its own policies on acceptable charges. Frequently, there is a series of negotiations that occur between insurance providers and med-flight companies before a final fee is settled on. This information is not available for this report. Of course, many people do not have any insurance. This creates another set of problems related to cost negotiation and collection.

Conclusion

Operating the VSP Med-Flight program pursuant to Part 91 (FAR) allows the Department the flexibility to maintain an agile aviation program that can fulfill the med-flight mission as well as the general law enforcement responsibilities of the aviation unit. VSP does not have the staffing, funding, or capacity to move towards a Part 135 designation. Additionally, such an attempt would likely be met with significant resistance from private air ambulance companies.

⁴ <https://www.advisory.com/daily-briefing/2018/06/14/air-ambulances>