

Audit Report

Maryland Emergency Medical System Operations Fund

January 2017



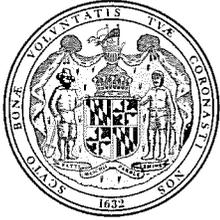
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DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY

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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

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January 31, 2017

Senator Edward J. Kasemeyer, Chairman
Senate Budget and Taxation Committee
Miller Senate Office Building, 3 West Wing
11 Bladen Street
Annapolis, MD 21401

Delegate Maggie McIntosh, Chairman
House Appropriations Committee
House Office Building, Room 121
6 Bladen Street
Annapolis, MD 21401

Dear Senator Kasemeyer and Delegate McIntosh:

We conducted an audit of certain aspects of the Maryland Emergency Medical System Operations Fund (MEMSOF) as required by the April 2016 *Joint Chairmen's Report (JCR)*, page 66.

MEMSOF was established by State law to help fund the State's emergency medical services related to five different operations through surcharges on motor vehicle registrations and certain driver moving violations. During fiscal year 2015, MEMSOF revenues and expenditures totaled approximately \$73.8 million and \$66.8 million, respectively.

The objectives of the audit, as clarified by subsequent correspondence from the Joint Chairmen, were generally to

1. Determine the existing processes, and whether statutory requirements were met, for compiling agency budgets supported by MEMSOF, developing an out-year forecast for MEMSOF, and reconciling MEMSOF at year-end;

2. Compare actual fiscal year 2015 expenditures for the Department of State Police – Aviation Command with the projected expenditures prepared by the Department of Legislative Services – Office of Policy Analysis (hereinafter referred to as DLS) and identify any reasons for variances; and
3. Review the fiscal year 2015 budget closeout transactions for MEMSOF, in order to ascertain the appropriate beginning balance for the Fund in fiscal year 2016.

The overall results of our audit were as follows:

MEMSOF Budgeting, Forecasting, and Reconciling

MEMSOF is used primarily to finance the operations of five entities. These entities' proposed budgets are generally based on budget targets set by the Department of Budget and Management – Office of Budget Analysis (hereinafter referred to as DBM) and statutory funding mandates. The relevant statutory requirements pertaining to MEMSOF budget preparation, approval, and reporting were fulfilled for the fiscal year 2017 budget.

DBM's annual MEMSOF forecasts (which cover an eight-year period) use information furnished by certain agencies and growth rates DBM derives based on historical data. Although DBM's methodology for projecting MEMSOF revenues and expenditures and for determining the resulting fund balance appears reasonable, its failure to adhere to that methodology adversely affected the forecast results prepared for the fiscal year 2017 budget. Specifically, DBM used incorrect or incomplete data in performing its forecast and did not use the proper beginning fund balance.

There is no year-end reconciliation of the MEMSOF primarily because there is no administering agency established in State law or otherwise to substantiate the year-end fund balance by accounting for all revenue and expenditure transactions.

Comparison of Fiscal Year 2015 Projected and Actual Expenditures for Aviation Command

Actual fiscal year 2015 Aviation Command expenditures (\$28.4 million) exceeded the DLS forecast (\$27.7 million) by \$0.7 million, primarily due to higher than expected overtime costs.

Fiscal Year 2015 Budget Closeout and Fund Balance

The budget closeout transactions pertaining to MEMSOF activity appeared proper. We determined that the MEMSOF budgetary basis fund balance at June 30, 2015, which is the beginning fund balance for fiscal year 2016, to be \$24.1

million. This amount is higher than the amount originally reported by DBM (\$15.0 million) in the fiscal year 2017 *Maryland Budget Highlights* publication. DBM's balance was understated primarily because unspent MEMSOF funds residing at two agencies were not considered.

OLA Overall Observations

The General Assembly may wish to designate an administering State agency for MEMSOF to help ensure accountability over MEMSOF financial activity and the return of unspent funds from the applicable agencies at year-end.

We wish to acknowledge the cooperation extended to us during the course of this audit by the agencies involved with the operations of MEMSOF.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "T J Barnickel III". The signature is written in a cursive style with a large initial "T" and "J".

Thomas J. Barnickel III, CPA
Legislative Auditor

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Background Information

Maryland Emergency Medical System Operations Fund

Overview

The Maryland Emergency Medical System Operations Fund (MEMSOF) was established by Chapter 269 of the Laws of Maryland 1992 to help fund certain operations of the State's emergency medical services system. Two entities collect MEMSOF funds and five entities use MEMSOF funds as noted in Table 1.

Table 1
Maryland Emergency Medical System Operations Fund
Fiscal Year 2015 Fund Activity

Balance as of July 1, 2014 (excluding outstanding encumbrances of \$1,988,296)	\$18,458,644
Revenues	
Motor Vehicle Administration	69,682,153
Judiciary	4,023,711
Interest earnings	56,952
Total	\$73,762,816
Expenditures	
Department of State Police - Aviation Command	\$28,225,737
- Information Technology	980,626
Maryland Institute for Emergency Medical Services Systems	14,594,938
Senator William H. Amoss Fire, Rescue, and Ambulance Fund	11,700,000
Maryland Fire and Rescue Institute	8,076,992
R Adams Cowley Shock Trauma Center	3,200,000
Total	\$66,778,293
Balance as of June 30, 2015 (excluding outstanding encumbrances of \$1,323,501)	\$25,443,167

Source: Prepared by OLA using State budget and accounting records using the modified accrual basis of accounting

Other entities involved in MEMSOF operations are specified in Table 2.

Table 2 MEMSOF Roles and Responsibilities	
Agency	Roles and Responsibilities
Department of Budget and Management (DBM)	Prepares out-year forecast projecting fund revenues and expenditures and provides budgeting targets for agencies requesting MEMSOF funds
State Emergency Medical Services Board	In accordance with State law, compiles an annual budget proposal that takes into account estimated MEMSOF income and annual budget requests from agencies receiving the funds, except for the Amoss Fund, which is legally excluded from Board oversight
Comptroller of Maryland – General Accounting Division	Transfers MEMSOF funds from Motor Vehicle Administration’s revenue account to receiving agencies monthly in accordance with approved budgets
Department of Legislative Services – Office of Policy Analysis	Prepares an analysis of MEMSOF which includes DBM and its own out-year forecast

MEMSOF Revenues

Motor Vehicle Administration

The main source of MEMSOF revenues is a motor vehicle registration surcharge assessed by the Motor Vehicle Administration (MVA) as specified in the Transportation Article, Section 13-954 of the Annotated Code of Maryland. The surcharge was established by Chapter 269, Laws of Maryland 1992, as an \$8 annual fee and was increased to \$11 in fiscal year 2001 and to \$14.50 effective June 1, 2013. Surcharge revenues are collected by and recorded on the records of MVA.

The 2013 increase in fees was intended to sustain the long-term viability of MEMSOF and fund the upgrade and maintenance of the Maryland Institute for Emergency Medical Services Systems communication system, an increase in the base salary for Aviation Command pilots and maintenance staff, the hiring of 20 additional pilots to improve safety of flight operations, an increase in the annual operating subsidy to the R Adams Cowley Shock Trauma Center (STC), the

purchase of high temperature tiles for the Maryland Fire and Rescue Institute (MFRI), an increase in the salary of MFRI field instructors, and an increase in the Amoss Fund appropriation.

Judiciary

MEMSOF also receives funding from a \$7.50 surcharge on certain driver moving violation fines collected by and recorded on the records of the Judiciary, as specified in the Courts and Judicial Proceedings Article, Section 7-301 of the Annotated Code of Maryland. The surcharge was established by Chapter 397, Laws of Maryland 2011 which provided that MEMSOF would begin receiving surcharge revenues only after annual distributions had been made to the Charles W. Riley Firefighter and Ambulance and Rescue Squad Member Scholarship, the Maryland State Firemen's Association Widows' and Orphans' Fund, the Maryland State Firemen's Association, and the Volunteer Company Assistance Fund (VCAF). The law further limited distributions to the VCAF to a total of \$20 million. MEMSOF began receiving surcharge revenue in 2014 when VCAF reached its \$20 million funding target. The surcharge revenues are transferred by the Judiciary to MEMSOF and recorded on MVA's records at the end of each fiscal year.

MEMSOF Expenditures

State law provides that MEMSOF shall be used to provide funding for the following components of Maryland's Emergency Medical Services (EMS) program:

Department of State Police – Aviation Command

MEMSOF supports the medically oriented activities of the Department of State Police – Aviation Command. Aviation Command has both medically oriented and non-medically oriented functions (law enforcement and homeland security). DSP allocates Aviation Command costs to MEMSOF based on the ratio of medically oriented functions to non-medically oriented functions. Since fiscal year 2003, Aviation Command costs have been allocated 80 percent to MEMSOF (medically oriented) and 20 percent to General Funds (non-medically oriented). Additional MEMSOF funds were appropriated during fiscal years 2013 through 2015 to the Information Technology Unit of the Department of State Police for costs related to a new statewide radio system, which will benefit the Aviation Command.

Maryland Institute for Emergency Medical Services Systems

The Maryland Institute for Emergency Medical Services Systems is responsible for coordinating the delivery of Statewide emergency medical services, licensing

and certifying emergency medical service providers, providing emergency medical service research and education, maintaining a Statewide communication system, and regulating and licensing commercial ambulances.

Senator William H. Amoss Fire, Rescue, and Ambulance Fund

Title 8, Subtitle 1 of the Public Safety Article of the Annotated Code of Maryland established the Senator William H. Amoss Fire, Rescue, and Ambulance Fund (Amoss Fund) for grants to local jurisdictions for the purchase of fire and rescue equipment and building rehabilitation. The Maryland Emergency Management Agency (MEMA) under the Military Department administers these grants. Funds from MEMSOF are provided to the Amoss Fund for MEMA to provide grants in accordance with the Public Safety Article.

Maryland Fire and Rescue Institute

The Maryland Fire and Rescue Institute (MFRI) is the State's fire and emergency service training agency responsible for the majority of basic level pre-hospital training and education for EMS providers. MEMSOF funds are appropriated to MFRI as part of the University of Maryland, College Park budget.

R Adams Cowley Shock Trauma Center

The R Adams Cowley Shock Trauma Center (STC), operated by the University of Maryland Medical System, is the core element of the State's EMS system and serves as the State's Primary Adult Resource Center for the treatment of trauma. MEMSOF funds are provided as an operating subsidy to STC through the Maryland Health Care Commission, a unit of the Department of Health and Mental Hygiene.

MEMSOF Fund Balance

State law provides that MEMSOF is a continuing, non-lapsing fund, which is not subject to the reversion requirements of the State Finance and Procurement Article, Section 7-302 of the Annotated Code of Maryland. In addition, the aforementioned law provides that interest and earnings on MEMSOF are to be separately accounted for and credited to the MEMSOF. All interest earned on the MEMSOF balance as reflected on MVA's records is credited to MEMSOF monthly by Office of the State Treasurer.

MEMSOF Reporting

Each year, as required by the State Finance and Procurement Article 7-121 of the Annotated Code of Maryland, DBM prepares a summary of MEMSOF activity describing the proposed expenditures in its annual *Maryland Budget Highlights*

publication. DBM also prepares a forecast of MEMSOF activity, which reflects financial activity covering an eight-year period. The Department of Legislative Services – Office of Policy Analysis (DLS) also provides a summary of MEMSOF activity along with its forecast of future MEMSOF revenues and expenditures in the annual *DLS Analysis of the Maryland Executive Budget*.

Audit Scope, Objectives, and Methodology

Scope

We conducted an audit of certain aspects of the Maryland Emergency Medical System Operations Fund (MEMSOF). This audit was conducted as required by the April 2016 *Joint Chairmen's Report (JCR)*, page 66. The JCR stated that the committees were concerned about the accounting errors identified during the formulation of the fiscal year 2017 MEMSOF forecast. The committees directed the Office of Legislative Audits to conduct a financial audit of the MEMSOF in order to ensure that the fund is being properly maintained. A subsequent letter from the Joint Chairmen, dated May 6, 2016, clarified the legislative concerns and focused the scope of our audit.

Objectives

The objectives of this audit were to

1. Determine the existing processes for (a) compiling agency budgets supported by MEMSOF, (b) developing an out-year forecast for MEMSOF, and (c) reconciling MEMSOF at year-end, including identification of which individual and/or agency has responsibility for each step and determining whether the current practices are adhering to statutory requirements;
2. Prepare a comparison of actual fiscal year 2015 expenditures for the Aviation Command (the first year forecasted and the most recent completed fiscal year at the time of our analysis) with the projected expenditures at the time of the motor vehicle registration fee increase during the 2013 Legislative Session and determine any reasons for variances; and
3. Review the fiscal year 2015 budget closeout transactions for MEMSOF, in order to ascertain the appropriate beginning balance for the Fund in fiscal year 2016.

Methodology

To accomplish our objectives, we interviewed employees at all agencies involved with MEMSOF to gain an understanding of each agency's role. In addition, we reviewed State accounting and budgeting records to identify MEMSOF revenue and expenditures. We also reviewed State laws and regulations applicable to the Fund. Additional efforts related to each specific objective are included in the respective sections of this report.

Our audit was conducted in accordance with generally accepted government auditing standards except for requirements related to organizational

independence. The objectives of this audit required the Office of Legislative Audits (OLA) to consult with the Department of Legislative Services – Office of Policy Analysis (DLS) and to compare certain Aviation Command expenditures to projected expenditures as determined by DLS. Although OLA is a unit within DLS, OLA was directed to conduct this audit by the Maryland General Assembly. OLA obtained clarification of the scope of certain portions (objectives 1 and 3) of this audit from DLS and objective 2 required OLA to audit certain work performed by DLS. After obtaining clarification of the scope of the audit, we do not believe that OLA’s association with DLS impaired our conclusions in relation to the audit objectives.

Generally accepted government auditing 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.

Fieldwork and Agency Response

We conducted our fieldwork during the period from June 2016 to September 2016. The findings and observations were discussed primarily with the Department of Budget and Management (objective 1 and 3) and the Department of Legislative Services (objective 2). We met with representatives of the State agencies audited and provided them with the findings and observations noted during the audit. These individuals generally concurred with the findings and observations. Since there were no recommendations to State agencies, a written response was not obtained.

Findings and Observations

Objective 1 – Budgeting, Forecasting, and Reconciliation

Objective and Methodology

Our objective for the budgeting, forecasting, and reconciliation process was to determine the existing processes for (a) compiling agency budgets supported by the Maryland Emergency Medical System Operations Fund (MEMSOF), (b) developing an out-year forecast for MEMSOF, and (c) reconciling MEMSOF at year-end. For each step, we identified which individual and/or agency has responsibility and determined whether the current practices are adhering to statutory requirements.

To accomplish this objective

1. We reviewed the relevant sections of the Annotated Code of Maryland for any statutory requirements over the compilation of agency budgets for MEMSOF, the development of an out-year forecast for MEMSOF, and the reconciliation of MEMSOF at year-end.
2. We interviewed staff involved in the MEMSOF fiscal year 2017 budget compilation process at the Department of Budget and Management – Office of Budget Analysis (hereinafter referred to as DBM), Department of State Police (DSP) headquarters, Aviation Command at Martin State Airport, Maryland Institute for Emergency Medical Services Systems (MIEMSS), Emergency Medical Services (EMS) Board, Maryland Health Care Commission (MHCC), R Adams Cowley Shock Trauma Center (STC), Maryland Fire and Rescue Institute (MFRI), University of Maryland College Park (UMCP), and Maryland Emergency Management Agency (MEMA) under the Military Department for the Senator William H. Amoss Fire, Rescue, and Ambulance Fund (Amoss Fund).
3. We reviewed DBM Budget Submission Requirements available online for the 2017 budget year and interviewed DBM staff to obtain an understanding of requirements for the budget compilation and submission process. We also obtained budget submission documentation and other supporting documentation for fiscal year 2017 from each agency with a MEMSOF appropriation.
4. We interviewed employees at DBM, Motor Vehicle Administration (MVA), Judiciary, and Comptroller of Maryland's General Accounting Division (GAD) regarding the out-year (that is, fiscal years 2018 – 2022) forecasting for MEMSOF.
5. We inquired of all the aforementioned agencies regarding the reconciliation of MEMSOF at year-end.

Overall Findings

MEMSOF is used primarily to finance the operations of five entities. These entities' proposed budgets are generally based on budget targets set by DBM or statutory funding mandates. The relevant statutory requirements pertaining to MEMSOF budget preparation, approval, and reporting were fulfilled for the fiscal year 2017 budget.

DBM's annual MEMSOF forecast (which covers an eight-year period) uses information furnished by certain agencies and growth rates it derived based on historical data. Although DBM's stated methodology for projecting MEMSOF revenues and expenditures and for determining the resulting fund balance appears reasonable, its failure to adhere to the methodology adversely affected the forecast results prepared for the fiscal year 2017 budget. Specifically, DBM used incorrect or incomplete data in performing its forecast and did not use the proper beginning fund balance.

There is no year-end reconciliation of MEMSOF primarily because there is no administering agency established in State law or no statutory requirement to substantiate the year-end fund balance by accounting for all revenue and expenditure transactions.

Detailed Comments and Observations

Objective 1a - Budgeting

The Education Article, Section 13-508 of the Annotated Code of Maryland requires the EMS Board to review and approve the proposed budgets derived from MEMSOF for MIEMSS, STC, MFRI, and Aviation Command. Once approved, the budgets are submitted by the respective agencies to DBM for review and approval. The Amoss Fund budget is set by law and is submitted to DBM directly as part of MEMA under the Military Department budget submission. State Finance and Procurement Article, Section 7-121 of the Annotated Code of Maryland further requires that DBM, in its annual submission of the proposed budget, provide, for informational purposes, a budget presentation that includes a description of the proposed expenditures under MEMSOF for the aforementioned agencies.

- **Department of Budget and Management**

DBM oversees the budget preparation and submission process but does not require agencies to follow any set methodology in the preparation of their budgets, including those receiving MEMSOF funds. DBM provides a target budget for agencies to use when developing their budget submissions.

Agencies submit their budget requests at the sub-object level (regular earnings, overtime earnings, etc.) through the Hands-On Budget Office system, DBM's budget software. The DBM budget analysts review the submissions and provide the final budget submissions to DBM management. Based on DBM recommendations, the Governor's budget bill is prepared and submitted to the Legislature for review and voting during the session. DBM also prepares a summary of proposed MEMSOF expenditures, which is included in the annual *Maryland Budget Highlights* in accordance with State law.

- **Emergency Medical Services Board**

The EMS Board reviews and approves the MEMSOF budget requests for Aviation Command, MIEMSS, MFRI, and the STC in accordance with State law. These entities meet with the EMS Board's Finance Sub-committee and the EMS Board as a whole to discuss their budget requests. Once approved, the EMS Board submits an approval letter to DBM along with the budget request documentation provided by the agencies. DBM takes into account the EMS Board recommendation when preparing the Statewide budget.

- **Department of State Police – Aviation Command**

The Aviation Command receives a MEMSOF budget target from DBM. We were advised by Aviation Command management that it uses the average expenditures for the three prior years when compiling the budget. Specifically, they look at historical costs and adjust the budget for known changes or upcoming events. For example, they increased the budget request for the expected increase in helicopter maintenance costs in fiscal years 2016 through 2018 because the warranties on the new helicopter fleet were to expire. As previously noted, DSP designates funding for the anticipated expenditures of the Aviation Command as 80 percent from MEMSOF (special funds) and 20 percent from State general funds.

In accordance with State law, Aviation Command submits its MEMSOF budget request to the EMS Board for approval prior to submission to DBM. The full budget request for both MEMSOF and general funds is then submitted to DBM by DSP as part of its budget request.

- **Maryland Institute for Emergency Medical Services Systems**

MIEMSS receives a MEMSOF budget target from DBM. MIEMSS prepares its request based on the previous year's appropriation and most recent

completed fiscal year expenditures. MIEMSS submits its MEMSOF budget request to the EMS Board for approval prior to submission to DBM.

- **Senator William H. Amoss Fire, Rescue, and Ambulance Fund**

The Amoss Fund is budgeted under MEMA of the Military Department. The Military Department is not required to submit the MEMSOF budget request through the EMS Board. The Department's MEMSOF budget is fixed by statute and is included as part of the overall Military Department budget submission to DBM.

- **Maryland Fire and Rescue Institute**

The MFRI prepares its budget based on the prior year's appropriation adjusted for any anticipated projects. The most recent completed fiscal year expenditures are presented to justify the amount requested. The budget request is submitted for approval to the EMS Board and describes the reason for any additional amounts requested. MFRI submits its budget directly to DBM for review and approval and the MEMSOF revenue is appropriated to MFRI as part of the UMCP budget.

- **R Adams Cowley Shock Trauma Center**

The STC budget is established at \$3.2 million per year in accordance with State law.¹ STC is not a State agency so its MEMSOF funding is appropriated within the budget of the MHCC and included in the budget target for the Department of Health and Mental Hygiene. MHCC transfers the funds quarterly to the STC. STC prepares a schedule of actual expenditures for the Operating Room standby costs, in support of the budget, which is submitted and reviewed by the EMS Board.

OLA Observations – Objective 1a

Although there is no prescribed methodology, the agencies' processes for preparing MEMSOF-related budget requests appear reasonable. The legal requirements pertaining to the MEMSOF budget preparation, approval, and reporting were fulfilled for the fiscal year 2017 budget, which was submitted during the 2016 Legislative Session.

¹ Chapter 429, Laws of Maryland 2013, effective June 1, 2013

Objective 1b - Forecasting

DBM annually prepares an out-year forecast for MEMSOF activity, although there is no specific statutory requirement to do so. The DBM forecast is included in the *Maryland Budget Highlights* publication as well as the MEMSOF section of the Department of Legislative Services (*DLS*) *Analysis of the Maryland Executive Budget*. The forecast covers an eight-year period and includes the beginning fund balance, revenues, expenditures, and ending fund balance for each year. The forecast prepared for the 2016 Legislative Session, which was used during budget committees' deliberation of the fiscal year 2017 budget, started with actual fiscal year 2015 activity, the fiscal year 2016 working budget, the fiscal year 2017 allowance, and projected activity for fiscal years 2018 through 2022 (that is, the out-years). The DBM forecast is included as Exhibit 1 in this report.

Out-Year Forecasting Methodology for Department of Budget and Management

Revenues – DBM's methodology requires the use of the Maryland Department of Transportation's annual forecasts of revenues from motor vehicle registrations, which covers a four-year period. The MDOT forecast for fiscal years 2018 through 2021 indicated annual changes ranging from a 0.5 percent decrease in fiscal year 2018 to a 2.3 percent increase in fiscal year 2021. However, DBM's forecast for those years erroneously used MDOT's prior year forecast, which resulted in an overstatement of estimated revenues for the out-years.

Judiciary revenues were forecast based on prior moving vehicle surcharge revenue according to GAD. These revenues were projected to remain stable over the forecast period.

DBM also estimates the interest earnings, which are based on its forecasted MEMSOF fund balance. The fund balance used in the calculation anticipates that all excess funds will reside in the MVA account, which has not been the case; therefore, it is likely the projected interest earnings are not accurate.

Expenditures – DBM's methodology requires the development of out-year expenditures for Aviation Command, MFRI, and MIEMSS based on the individual annualized growth rate considering the actual expenditures incurred 10 years earlier. (The appropriations for the Amoss Fund and STC are established by statute and therefore are not subject to forecasting.) The annualized growth rate for each entity was then applied to the budget allowance for the upcoming year for those entities; each year's forecast was then multiplied by the growth rate to obtain the subsequent year's forecast.

Our review disclosed that DBM did not use the correct (most current) years to calculate the growth rates for fiscal years 2018 through 2022. Instead of using the expenditure changes from fiscal years 2006 to 2015, DBM used the changes for fiscal year 2005 to 2014. This error resulted in the understatement of expenditures for the out-years because the growth rates that were used (that is, 5.2 percent for Aviation Command, 2.7 percent for MFRI, and 2.2 percent for MIEMSS) were lower than what should have been used based on DBM's methodology (that is, 6.1 percent for Aviation Command, 3.2 percent for MFRI, and 3.4 percent for MIEMSS).

Fund Balance

The eight-year period covered in DBM's forecast starts with a beginning fund balance, which it obtains annually from GAD. The forecast presented for the fiscal year 2017 budget request started with the July 1, 2014 balance, which was the actual MEMSOF fund balance at June 30, 2014 according to GAD. After considering the financial activity of each succeeding fiscal year, the forecast shows the anticipated fund balance at the end of each of those years. DBM's forecast showed that, at the end of the eight-year period (that is, as of June 30, 2022), the projected MEMSOF fund balance would be approximately \$1.4 million.

We determined that the actual July 1, 2014 MEMSOF fund balance DBM obtained from GAD was understated, in that it only included the funds on hand according to MVA's records (\$7.8 million). The amount excluded unexpended MEMSOF funds on the records of Aviation Command (\$5.7 million) and MIEMSS (\$3 million), resulting in an understatement of the balance by \$8.7 million after considering the effect of encumbrances. Per advice from counsel to the Maryland General Assembly, unspent MEMSOF funds at year-end should be returned to the MEMSOF account on MVA's records. Retaining the unspent and unobligated funds ultimately affected the year-end balance at June 30, 2015, based on DBM's method of preparing its presentation of MEMSOF financial activity.

We also noted that, in accordance with legislative intent, DLS' fiscal year 2017 budget analysis anticipated a one-time expenditure of MEMSOF funds totaling \$11.0 million for a MIEMSS communication system during fiscal year 2017. DBM did not include this expenditure in its forecast, which otherwise would have reduced its projected fund balance.

OLA Observations – Objective 1b

DBM’s stated forecast methodology appears reasonable, but the failure to adhere to that methodology adversely affected the forecast results. Specifically, DBM used incorrect or incomplete data in performing its forecast and did not use the proper beginning fund balance. DBM advised that the review of the MEMSOF forecast provided in the Fiscal Year 2017 *Maryland Budget Highlights* was not sufficiently comprehensive and efforts would be made to improve oversight in the future.

Objective 1c – Reconciliation

Based on our review of State law, and confirmation with legal counsel to the General Assembly of Maryland, there is no statutory provision for an individual or agency to conduct a reconciliation of MEMSOF at year end. In this regard, there is no administering agency for MEMSOF in State law. As a result, there has been no reconciliation of the MEMSOF fund at year-end.

A year-end reconciliation would substantiate the MEMSOF ending fund balance as reflected on the State’s records by accounting for all revenue and expenditure transactions recorded by the applicable agencies during the year as well as year-end accruals and encumbrances, and identifying any recording errors. This process could also be used to ensure that all unexpended funds (excluding encumbrances) are returned and credited to MEMSOF, which is currently on the records of MVA.

OLA Observations – Objective 1c

The General Assembly may wish to amend State law to designate an administering agency for MEMSOF, which would include responsibility for accounting for all transactions and performing a year-end reconciliation.

Objective 2 – Actual versus Projected Expenditures

Background

During the 2013 Legislative session, DLS prepared a MEMSOF out-year forecast for fiscal years 2015 through 2025 as part of its Fiscal 2014 Budget Overview. The forecast was done at the agency level (totals for DSP, MIEMSS, etc.) and was subsequently revised for certain anticipated expenditures resulting from legislative changes during the session that increased MEMSOF expenditures, including expenditures for the Aviation Command. Specifically, the updated forecast included a separate line item for “grade increases for pilots and techs”

and “twenty added pilots for 24/7 at DLS grade.” We were advised by DLS personnel that the revised forecast should be used for our analysis.

Objective and Methodology

Our objective was to provide reasons for any variances between the actual fiscal year 2015 expenditures for Aviation Command per the State’s accounting records and the projected expenditures prepared by DLS for that year during the 2013 session.

To accomplish this objective

1. We obtained the revised DLS out-year forecast prepared during the 2013 session, the 2014 budget allowance at the object and sub-object level from DBM, and actual expenditure data by object and sub-object for fiscal year 2015 (the first year forecasted and the most recent completed fiscal year at the time of our analysis) from the State’s accounting system.
2. We compared the DLS forecasted fiscal year 2015 expenditures to actual expenditures at the agency level to identify any variances. Actual expenditures were adjusted for any accounting errors that misstated actual MEMSOF – Aviation Command expenditures for comparison purposes.
3. We applied the annual growth rate for expenditures calculated by DLS (3.49 percent) to the 2014 budget allowance at the object level to forecast the fiscal year 2015 expenditures by object, since expenditures at the agency level do not provide sufficient information to enable a determination of the reason(s) for any variances. We confirmed the completeness of our object level forecast by comparing the sum of all object level forecasted expenditures to the DLS total agency expenditure forecast.
4. We determined the reason for variances between the forecast and actual expenditures by reviewing expenditures at the sub-object level for salaries and wages (Object 1). We adjusted the regular earnings and associated fringe benefit sub-object level projections (pension, unemployment tax, social security tax, health insurance, etc.) for the additional expenditures approved during the 2013 legislative session.
5. We interviewed employees of the DSP Office of the Superintendent and Aviation Command to determine the cause of any significant variances.

Overall Findings

Actual fiscal year 2015 Aviation Command expenditures (\$28.4 million) exceeded DLS’ forecast for that year (\$27.7 million) by \$0.7 million, which represents a 2 percent difference (see Table 3 on the next page). Most of the variance is attributable to higher than expected overtime costs and the allocation

of certain contractual service expenditures in a manner not anticipated in the approved fiscal year 2015 budget.

Detailed Comments and Observations

Comparison of Forecasted to Actual Expenditures

Our comparison shows that actual fiscal year 2015 expenditures for the Aviation Command (after making an adjustment for an accounting error that overstated expenditures by \$235,240) exceeded DLS' fiscal year 2015 expenditure forecast by approximately \$664,000, which represents a difference of 2 percent. We allocated DLS overall expenditure amounts to the object level to identify any variances at that level, which might be pertinent (see Table 3).

Table 3
Object Level Analysis of Aviation Command Expenditures

Object	Description	DLS Fiscal	Actual Fiscal	Variance	
		Year 2015 Forecast (as adjusted / allocated)		Year 2015 Expenditures	Dollar
1	Salaries and Wages	\$21,788,844	\$22,194,766	(\$405,922)	-2%
2	Technical And Special	23,945	27,116	(3,171)	-13%
3	Communication	49,794	59,101	(9,307)	-19%
4	Travel	180,820	97,879	82,941	46%
6	Fuel And Utilities	108,674	118,328	(9,654)	-9%
7	Motor Vehicle Operations	4,001,224	4,153,852	(152,628)	-4%
8	Contractual Services	448,764	764,445	(315,681)	-70%
9	Supplies And Materials	206,561	384,792	(178,231)	-86%
10	Equipment- Replacement	108,724	72,667	36,057	33%
11	Equipment- Additions	206,726	37,581	169,145	82%
12	Fixed Charges	604,961	482,926	122,035	20%
Totals		\$27,729,037	\$28,393,453	(\$664,416)	-2%

Source: DLS Fiscal Year 2015 forecast, including 2013 Legislative session approved changes allocated at the object level and the State's Budget Book.

Note: The actual expenditures, of \$28,393,453, shown here have been adjusted (reduced) for an accounting error of \$235,240 that overstated expenditures charged to Aviation Command. Additionally, these amounts reflect only fiscal year 2015 transactions related to the budget forecast. There was another transaction related to the fiscal year 2014 budget activity totaling \$167,717, which reduced Aviation Command expenditures on the State's accounting records for fiscal year 2015, but was added back to properly match activity for comparison purposes.

The largest object-level variances that primarily account for the overall difference of (\$664,000) related to salaries and wages (\$406,000) and contractual services (\$316,000). Regarding salaries and wages, an analysis at the sub-object level shows that overtime costs (\$2.1 million) significantly exceeded what was anticipated. Our review of budget and actual expenditure records disclosed that overtime expenditures exceeded the budget in fiscal years 2013, 2014, and 2015. Aviation Command personnel advised us that overtime costs were more than expected due to salary increases for pilots and medical personnel and because Aviation Command was operating without a full complement of pilots. Specifically, only 9 of 20 new pilot positions were filled during fiscal year 2014, with the remaining 11 being added in fiscal year 2015.

Regarding contractual services, a portion of certain internal service expenditures charged by the Department of Information Technology and DBM were allocated by DSP to Aviation Command. These expenditures were not included in the forecast because the appropriation for these expenditures was included in another DSP unit at the time the forecast was prepared.

OLA Observation – Objective 2

The DLS forecast of fiscal year 2015 Aviation Command expenditures was reasonably accurate as compared to the actual expenditures.

Objective 3 – Fiscal Year 2015 Budget Closeout and Fund Balance

Objective and Methodology

Our objective for the closeout and fund balance determination was to audit the fiscal year 2015 closing transactions for MEMSOF in order to ascertain the fiscal year 2015 ending balance and the appropriate beginning balance for the Fund in fiscal year 2016.

To accomplish this objective

1. We interviewed staff involved in the year-end closing process at GAD, MVA, DBM, the DSP headquarters, MIEMSS, MHCC, STC, MFRI, UMCP, and MEMA of the Military Department (for the Amoss Fund).
2. We reviewed the fiscal year 2015 year-end entries related to MEMSOF activity, including any encumbrances, accrued revenues, accrued expenditures, and reversions.
3. We obtained reports from the State's accounting system, which show the MEMSOF fund balance, revenues, expenditures, and encumbrances.

4. We compared fiscal year 2015 fund balances per the State's accounting records with those presented by DBM in the fiscal year 2017 *Maryland Budget Highlights* publication and identified the reason for any variances.

Overall Findings

The fiscal year 2015 year-end entries related to MEMSOF expenditures, accruals, and encumbrances that we tested appeared proper.

The MEMSOF balance, prepared on a modified accrual basis, at the beginning of fiscal year 2016 was \$25,443,167. On a budgetary basis (that is, after considering outstanding encumbrances at June 30, 2015), the available balance was \$24,119,666 million.

Detailed Comments and Observations

Year-end Entries

Department of State Police

Aviation Command had no encumbrances or accrued revenues related to MEMSOF, although DSP IT had an encumbrance of \$19,000 related to MEMSOF funds that had been appropriated to DSP IT separately from Aviation Command. There were \$1.3 million in accrued expenditures for Aviation Command payroll that were processed by GAD. Aviation Command payroll costs are allocated to MEMSOF (special funds) and general funds based on the historical 80 percent/20 percent allocation as explained earlier in this report. We reviewed the support for certain accruals to ensure that the payroll charges were for employees assigned to DSP – Aviation Command. Based on our audit, the DSP – Aviation Command fiscal 2015 year-end transactions tested appeared proper.

Maryland Institute for Emergency Medical Services Systems

MIEMSS had \$1.3 million in encumbrances related to MEMSOF, no accrued revenue transactions, and \$971,000 in accrued expenditures (including \$587,000 in accrued payroll costs that were processed by GAD). We tested two non-payroll expenditures totaling \$355,000 and reviewed the support for certain payroll accruals to ensure that the charges were for MIEMSS employees. We also tested three of the MEMSOF-related encumbrances totaling \$845,000. Based on our audit, the MIEMSS fiscal 2015 year-end transactions tested appeared proper.

Other Entities

There were no year-end MEMSOF closing entries for the remaining entities receiving MEMSOF funds. Specifically, STC receives its funding through a

transfer from the MHCC and fully expends all its MEMSOF funds. MFRI is not required to revert unexpended and unencumbered funds as per advice from counsel to the Maryland General Assembly. Finally, the MEMSOF funds allocated to MEMA for the Amoss Fund are retained in the Amoss Fund and are subject to the statutory provisions governing the Amoss Fund.

Fiscal Year 2016 Beginning Fund Balance

As previously noted in the Background Information section of this report, the MEMSOF fund balance prepared on a modified accrual basis of accounting totaled \$25,443,167 as of June 30, 2015. On a budgetary basis, the MEMSOF June 30, 2015 fund balance (or the beginning balance for fiscal year 2016) was \$24,119,666, which considered outstanding encumbrances at year-end (\$1,323,501) as a reduction to the modified accrual basis fund balance. The budgetary basis of accounting is the method used by DBM for its forecasting purposes.

The difference of \$9,143,661 that existed between the aforementioned \$24,119,666 and the amount reported by DBM as of June 30, 2015 totaling \$14,976,005 in the fiscal year 2017 *Maryland Budget Highlights* publication is generally due to the following reasons:

- The failure to account for unspent MEMSOF funds from the prior fiscal year retained at the Aviation Command (\$5.7 million) and MIEMSS (\$3.0 million) resulting in an understatement of the balance by \$8.7 million after considering the effect of encumbrances. Although the beginning balance for fiscal year 2015 was based on the fund balance on MVA's records, unspent and unobligated funds had not been returned by these two agencies to the MVA's MEMSOF account. Retaining the unspent and unobligated funds ultimately affected the year-end balance at June 30, 2015, based on DBM's method of preparing its presentation of MEMSOF financial activity. Subsequent to its original publication, DBM changed the *Maryland Budget Highlights* to account for the unspent MEMSOF funds that had been held by Aviation Command and MIEMSS.
- Accounting adjustments and errors (\$0.4 million).

OLA Observations – Objective 3

The actual fund balance reported by DBM at the beginning of fiscal year 2014 agreed to the fund balance in the MEMSOF on MVA's records. However, that source did not consider all unspent and unobligated funds at other agencies that were not returned at the previous year-end. Establishing an administering agency for MEMSOF activity could help ensure entities properly return such funds at year-end.

Exhibit 1

Department of Budget and Management MEMSOF Forecast Fiscal Years 2015 - 2022

APPENDIX P MARYLAND EMERGENCY MEDICAL SYSTEM OPERATIONS FUND

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
	Actuals	Appropriation	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate
Beginning Balance (7/1)	7,795,172	14,976,005	18,256,977	18,811,138	19,236,621	17,070,121	14,288,011	8,831,609
MVA Registration Fees	69,682,153	68,958,029	70,679,204	72,793,046	72,601,485	74,517,092	74,517,092	75,411,528
Interest Income	56,952	329,039	367,011	376,710	359,473	310,477	228,907	101,639
Moving Violations Surcharge	225,908	3,879,833	3,879,833	3,879,833	3,879,833	3,879,833	3,879,833	3,879,833
Replenishments & Transfers (Citations)	3,797,803							
Current Year Revenues	73,762,815	73,166,901	74,926,048	77,049,589	76,840,790	78,707,401	78,625,832	79,392,999
MD Fire & Rescue Institute (UMCP)	8,044,322	8,161,533	8,617,441	8,850,977	9,090,957	9,337,556	9,590,959	9,851,353
MD Inst. of Emergency Medical Services	13,204,020	13,755,432	13,870,005	14,178,142	14,493,194	14,815,316	15,144,668	15,481,410
MD State Police Aviation Command	29,628,555	29,726,244	31,992,439	33,652,226	35,428,096	37,287,744	39,242,244	41,296,434
Shock Trauma Center (UMMS)	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000
Amoss Grants (MEMA)	11,700,000	13,400,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000
MIEMSS Communications Upgrade	406,300							
MIEMSS Communication Maintenance	398,785	1,642,720	1,692,001	1,742,761	1,795,044	1,848,895	1,904,362	1,961,493
Current Year Expenditures	66,581,982	69,885,929	74,371,886	76,624,106	79,007,290	81,489,512	84,082,233	86,790,690
Ending Balance (6/30)	14,976,005	18,256,977	18,811,138	19,236,621	17,070,121	14,288,011	8,831,609	1,433,919

Source: Fiscal Year 2017 Maryland Budget Highlights prepared by DBM

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