

U.S. Secret Service Needs to Upgrade Its Radio Systems

(Redacted)





~~FOR OFFICIAL USE ONLY~~

DHS OIG HIGHLIGHTS

U.S. Secret Service Needs to Upgrade Its Radio Systems

January 22, 2016

Why We Did This Audit

The Department of Homeland Security commissioned two separate reviews of the U.S. Secret Service (Secret Service) because of the September 2014 White House fence jumper incident. One of the reviews noted communication failures. Our objective was to determine the adequacy of Secret Service's radio communications program.

What We Recommend

We made two recommendations for Secret Service to upgrade its existing radio communication systems and develop a strategy and timeline for continuously upgrading these systems.

For Further Information:

Contact our Office of Public Affairs at (202) 254-4100, or email us at DHS-OIG.OfficePublicAffairs@oig.dhs.gov

What We Found

Secret Service has a dual mission of protection and criminal investigations. To support its protective mission, officers carry radios, which are their first line of communication for events such as fence jumpers, suspicious packages, or protests. These radio systems are critical for day-to-day protective operations.

Secret Service needs to upgrade the radio systems used around the White House complex, the Vice President's Residence, and Foreign Diplomatic Embassies. Secret Service records show that, on average, the radios and associated infrastructure are between [REDACTED] years old and may not be working as effectively as needed. If Secret Service continues to use these outdated radio communications systems, it may negatively impact their protective operations.

Secret Service requested funding to upgrade these systems. By fiscal year 2019, Secret Service plans to invest about \$54.2 million to upgrade its radio systems in the Washington, DC, area. This amount does not include what Secret Service will need to update its other radio systems.

Secret Service Response

Secret Service acknowledged its need for updated radio equipment and concurred with our two recommendations in the report.

At the request of Secret Service, here and throughout the report, we redacted sensitive information which may reveal vulnerabilities of its radio systems.

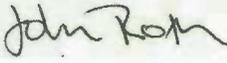


OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Washington, DC 20528 / www.oig.dhs.gov

January 22, 2016

MEMORANDUM FOR: The Honorable Joseph P. Clancy
Director
United States Secret Service

FROM: John Roth 
Inspector General

SUBJECT: *U.S. Secret Service Needs to Upgrade Its Radio Systems*

For your action is our revised final report, *U.S. Secret Service Needs to Upgrade Its Radio Systems*. We incorporated the formal comments provided by your office.

The report contains two recommendations aimed at improving Secret Service radio systems. Your office concurred with both recommendations. Based on information provided in your response to the draft report, we consider both recommendations open and resolved. Once your office has fully implemented the recommendations, please submit a formal closeout letter to us within 30 days so that we may close the recommendations. The memorandum should be accompanied by evidence of completion of agreed-upon corrective actions and of the disposition of any monetary amounts.

Consistent with our responsibility under the *Inspector General Act*, we will provide copies of our report to congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post a redacted version of the report on our website for public dissemination.

Please call me with any questions, or your staff may contact Mark Bell, Assistant Inspector General for Audits, at (202) 254-4100.



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Background

The U.S. Secret Service (Secret Service) has a dual mission of protection and criminal investigations. The major component of the protective mission is the Office of Protective Operations (OPO).

OPO is primarily responsible for the personal protection of the President, Vice President, President-elect, Vice President-elect, their immediate families, former presidents and their spouses, visiting foreign heads of state of government, major presidential and vice presidential candidates and their immediate families, former vice presidents and their spouses (for a limited period of time), and other individuals as designated by the President.

The Uniformed Division (UD), which also falls under OPO, is responsible for the protection of the White House complex; any building in which Presidential offices are located, such as the New Executive Office Building; Treasury Building and grounds; the Vice President's Residence and grounds; and foreign diplomatic missions in the Washington, DC, area. UD personnel carry out their protective responsibilities through a network of fixed security posts, as well as foot, bicycle, and vehicle patrols.

To support the protective mission, officers carry radios, which are their first line of communication for events such as fence jumpers, suspicious packages, or protests. These radio systems are critical for day-to-day protective operations. Currently, the Secret Service has about [REDACTED] radios to support its protective mission.

Secret Service's Joint Operations Center (JOC) directs operations at the White House Complex and coordinates response to critical incidents. The JOC is responsible for activities such as monitoring all alarms, surveillance cameras, and appropriate radio frequencies; coordinating all operations; and monitoring the location of the people Secret Service protects.

Secret Service's Information Resources Management Division (shown in Appendix B) is responsible for operating and maintaining its radio communications.

Results of Audit

Secret Service needs to upgrade the radio systems used around the White House complex, the Vice President's Residence, and Foreign Diplomatic Embassies. Secret Service records show that, on average, the radios and associated infrastructure are between [REDACTED] years old and may not be working as effectively as needed. If Secret Service continues to use these



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
 Department of Homeland Security

outdated radio communications systems, it may negatively impact their protective operations.

In our testing, we noted inherent radio limitations, and unclear transmissions, which could lead to a communication breakdown during an emergency. Additionally, we also reviewed Secret Service’s Radio Trouble Log, which documented technical issues that interrupted the radio systems and communications during an 11-month period.

By fiscal year (FY) 2019, Secret Service plans to invest about \$54.2 million to upgrade its radio systems in the Washington, DC, area. This amount does not include what Secret Service will need to update its other radio systems.

Radio Tests in Washington, DC

We observed 186 radio tests with officers from the JOC, fixed security posts, and roaming patrols at the White House complex, the Vice President’s Residence, and at embassies in Washington, DC. Of the 186 radio tests, 6 (3 percent) of the radio transmissions were unsuccessful. In one case, the mobile radio in a vehicle manned by an officer from the emergency response team did not work. However, the officer had a handheld radio that did work properly. In another case, an officer’s radio did not work and Secret Service replaced the radio. Table 1 shows the results of the radio tests we observed.

Table 1: Location, Number, and Success Rate of Radio Tests

Location	Number of Tests	Number of Successful Tests	Percent
White House Complex	98	95	97
Vice President’s Residence	27	27	100
Foreign Embassies	61	58	95
Total	186	180	97

Source: Office of Inspector General (OIG) observations of radio tests in the Washington, DC, area.

In addition to observing radio checks, we reviewed Secret Service’s radio test logs that showed the results of its tests. Similar to our results, the logs showed officers could communicate using the radios. However, we also reviewed Secret Service’s Radio Trouble Log that showed more than 100 instances, during an 11-month period, where technical issues interrupted the radio systems and communications. [REDACTED]



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Additional Observations

The tests we observed during normal day-to-day operations were generally successful. However, we noted issues that could lead to a breakdown in communication during an emergency. For instance, it took some officers several attempts to communicate because they either had to wait for air time or were “stepping on”¹ concurrent transmissions. This is an inherent limitation in radio systems. In some cases, the transmissions at the JOC sounded “garbled” to us, but the dispatcher responded the transmission was “loud and clear.” Additionally, we observed instances where nearby radios were “garbled,” or did not receive the transmission, even though the JOC and the officer were able to communicate.

Although the focus of our audit was on the radios, we also observed Secret Service testing its [REDACTED] system, which allows officers to [REDACTED]
[REDACTED]
[REDACTED] Secret Service tests its [REDACTED] system [REDACTED] times a year. We observed one of these tests; two posts did not work because of mechanical issues, but Secret Service repaired them immediately. In other instances, officers did not activate the [REDACTED] system properly.

Plan to Upgrade the Radio Systems

By FY 2019, Secret Service plans to invest about \$54.2 million to update its radio systems in the Washington, DC, area because they are old and, in some cases, past their useful life. According to the Secret Services’ inventory, the radios and associated infrastructure are, on average, [REDACTED] years old. According to the radio manufacturer, radios have a recommended useful life cycle of 7 years. In addition, manufacturers no longer make several of the major system components of the White House and Washington, DC, radio networks. As a result, making repairs to the radio infrastructure is difficult.

The plan for the new radios includes key features such as joint use of [REDACTED] [REDACTED] for voice communications within the Secret Service and for interoperability with law enforcement partners. The investment does not include funds that Secret Service may need to upgrade radio systems at its [REDACTED]. Table 2 shows the amounts and years of the planned investment.

¹ When two, or more, officers try to transmit at the same time, the transmissions compete for air time and can mix, sound incoherent, or may not be heard. Generally, officers have to wait their turn before transmitting.



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
 Department of Homeland Security

Table 2: Amounts, by Fiscal Year, Secret Service Plans to Invest in Radio Systems in Washington, DC (dollars in millions)

FY	Amount
2015 (Plan and Design)	\$.5
2016 (Build Phase 1)*	\$ 16.8
2017 (Build Phase 2)*	\$ 27.7
2018 (Sustain)*	\$ 4.59
2019 (Sustain)*	\$ 4.6
Total	\$54.19

* Secret Service deferred these phases for one year (FYs 2015 –16) because it did not receive funding in time to implement planned actions.

Source: Secret Service investment plan

Conclusion

We identified issues that could inhibit communications in an emergency. In addition, the systems are old and have been failing. According to Secret Service, not upgrading these radio systems could significantly impact the effectiveness of Secret Service’s protective operations. In the case of radio communications, a single missed transmission or delay could result in a national incident. Secret Service must ensure that its communications programs work effectively. We think it is wise that Secret Service is planning to upgrade its radio communications systems. Secret Service’s top priority, protecting the President and other high-ranking national officials, allows no room for error and this means its technology cannot fail.

Recommendations

Recommendation 1: We recommend that the Director of Secret Service ensure that the Information Resources Management Division receives the resources needed to upgrade radios and related infrastructure.

Recommendation 2: We recommend that the Director of Secret Service require the Information Resources Management Division develop a strategy and timeline to continuously upgrade radio communication systems.

Secret Service Comments and OIG Analysis

Secret Service concurred with our recommendations and provided comments to the draft report. We have included a copy of their management comments in their entirety in appendix A. Secret Service also provided technical comments to our report which we incorporated as appropriate. A summary of Secret Service responses and our analysis follows.



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Response to Recommendation #1. Concur. Secret Service stated it will upgrade the current radio infrastructure by first completing a comprehensive survey followed by two phases of radio infrastructure upgrades discussed below:

- March 31, 2016: Survey completion.
- December 31, 2016: Phase I of radio infrastructure upgrades that includes replacing hand-held radios and upgrading radios sites.
- December 31, 2017: Phase II of the radio infrastructure upgrades includes upgrading all remaining radio sites and corresponding radio infrastructure.

OIG Analysis: The Secret Service concurred with our recommendation. The recommendation is resolved but will remain open until the Secret Service ensures that the Information Resources Management Division receives the funding needed to upgrade radios and related infrastructure.

Response to Recommendation #2. Concur. The Secret Service stated it will develop a sustainment strategy and timeline for continuous upgrades and maintenance for the radio infrastructure and system. The estimated completion date is March 31, 2016.

OIG Analysis: The Secret Service planned corrective actions satisfy the intent of the recommendation. We consider this recommendation resolved and open until the Secret Service provides documentation that corrective actions are complete.

Objective, Scope, and Methodology

DHS Office of Inspector General (OIG) was established by the *Homeland Security Act of 2002* (Public Law 107-296) by amendment to the *Inspector General Act of 1978*.

Our audit objective was to determine the adequacy of Secret Service's radio communications program. To answer our objective, we:

- interviewed officials at Secret Service in Washington, DC, to gain an understanding of their radio communications program;
- obtained relevant criteria, policies, and other guidance related to the radio program as well as budget and strategic planning documents;
- obtained and reviewed the Protective Mission Panel and the Deputy Secretary reports to identify radio issues;



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

- analyzed the universe of radios from the USSS inventory system;
- conducted site visits to the JOC, the White House Complex, the Vice President's Residence, and select embassies in Washington, DC, to observe radio communications. We also observed Secret Service's test of its emergency [REDACTED] system; and
- interviewed UD Officers and Special Agents (assigned to UD) to determine their concerns about radio communications.

Office of Audits major contributors to this report are: Donald Bumgardner, Director; Sean Pettersen, Audit Manager; Priscilla Cast, Auditor-in-Charge; Peter Christopher, Auditor-in-Charge; Michael Brunelle, Program Analyst; James Diaz, Program Analyst; Toni Johnson, Auditor; Holly Snow, Program Analyst; Kevin Dolloson, Communications Analyst; Jeanette Hyatt and Virginia Feliciano, Independent Referencers.

We conducted this performance audit between April and August 2015 pursuant to the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards. 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 upon our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Appendix A Secret Service Comments to the Draft Report



U.S. Department of Homeland Security
UNITED STATES SECRET SERVICE
Washington, D.C. 20223

November 20, 2015

MEMORANDUM FOR: John Roth
Inspector General
Department of Homeland Security

FROM: Joseph P. Clancy *JPC*
Director
United States Secret Service

SUBJECT: OIG Draft Report: "U.S. Secret Service Needs to Upgrade its Radio Systems" (Project No. 15-103-AUD-USSS)

Thank you for the opportunity to review and comment on the draft report. The U.S. Secret Service (USSS) appreciates the work of the Office of Inspector General (OIG) in planning and conducting its review and issuing this report.

USSS is pleased to note OIG's recognition of our radio communication system's effectiveness, functioning at 97 percent in OIG testing, despite being well past its manufacturer recommended life-cycle. Given the effects of sequestration and increasingly tight budgets, we are proud of our ability to work effectively with what we have, while readily acknowledging the need for updated equipment.

The draft report contained two recommendations with which the USSS concurs. Specifically, OIG recommended that the Director of Secret Service:

Recommendation 1: Ensure that the Information Resources Management Division receives the staffing and funding needed to upgrade radios and related infrastructure.

Response: Concur. The Chief of the Office of Technical Development and Mission Support, in conjunction with the Special Agent in Charge of the Information Resources Management Division, will be responsible for implementing the recommendation to upgrade the current radio infrastructure. The initial stage of the radio project involves conducting a comprehensive survey of the radio coverage area, assets needed at each radio site and recommendations on the conceptual design of the upgraded radio infrastructure. The estimated completion date of the survey is March 31, 2016. Phase I of the project will include replacing hand held radios for the Uniformed Division and upgrading individual radio sites with an estimated completion date of December 31, 2016. Phase II of the project will consist of completing all remaining radio site upgrades and the corresponding radio infrastructure. Estimated Completion Date (ECD): December 31, 2017.



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

- 2 -

Recommendation 2: Require the Information Resources Management Division develop a strategy and timeline to continuously upgrade radio communication systems.

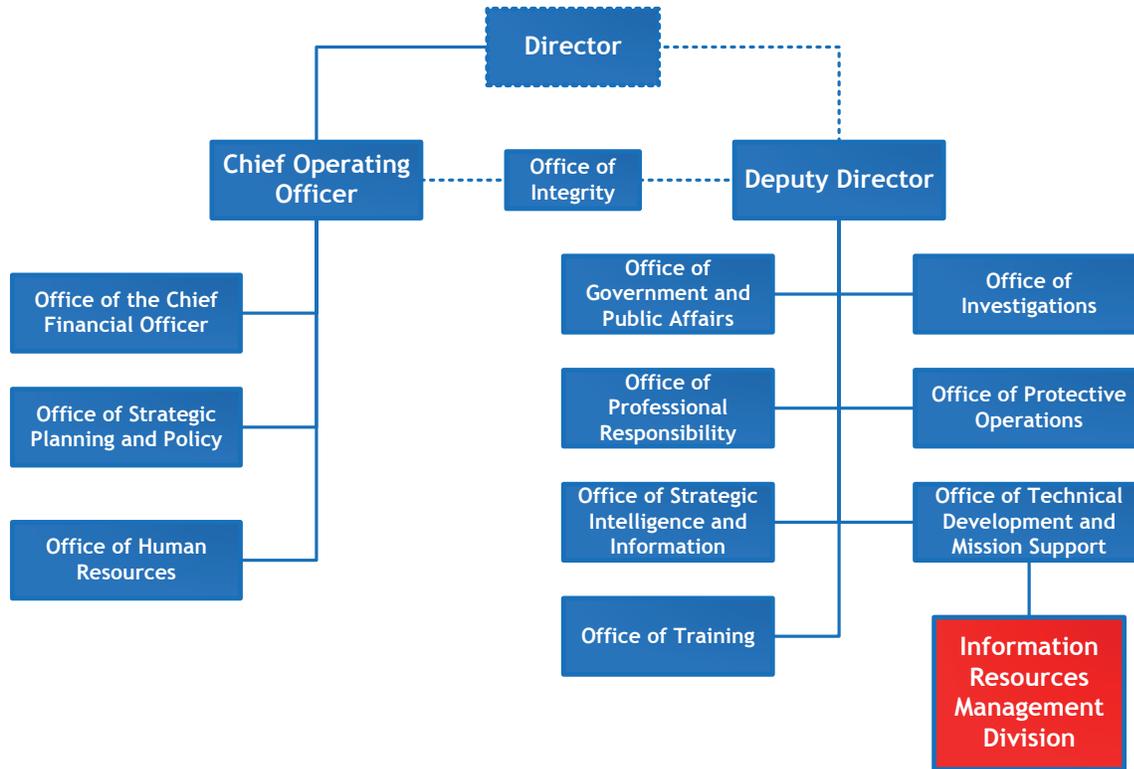
Response: Concur. The Chief of the Office of Technical Development and Mission Support, in conjunction with the Special Agent in Charge of the Information Resources Management Division, will be responsible for implementing the recommendation to develop a sustainment strategy and timeline for continuous upgrades and maintenance for the radio infrastructure and system. A complete Life Cycle Cost Estimate, to include out-year sustainment and technical refresh costs, will be developed as part of the initial stage of the radio project. ECD: March 31, 2016.

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were previously provided under separate cover. Please feel free to contact the Special Agent in Charge of the Information Resources Management Division if you have any questions. We look forward to working with you in the future.



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Appendix B
U.S. Secret Service Organization Chart



Source: Excerpt from Secret Service Organization Chart, as of May 17, 2015.



~~FOR OFFICIAL USE ONLY~~
OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Appendix C
Report Distribution

Department of Homeland Security

Secretary
Deputy Secretary
Chief of Staff
General Counsel
Executive Secretary
Director, GAO/OIG Liaison Office
Assistant Secretary for Office of Policy
Assistant Secretary for Office of Public Affairs
Assistant Secretary for Office of Legislative Affairs

Office of Management and Budget

Chief, Homeland Security Branch
DHS OIG Budget Examiner

Congress

Congressional Oversight and Appropriations Committees

ADDITIONAL INFORMATION AND COPIES

To view this and any of our other reports, please visit our website at: www.oig.dhs.gov.

For further information or questions, please contact Office of Inspector General Public Affairs at: DHS-OIG.OfficePublicAffairs@oig.dhs.gov. Follow us on Twitter at: @dhsoig.



OIG HOTLINE

To report fraud, waste, or abuse, visit our website at www.oig.dhs.gov and click on the red "Hotline" tab. If you cannot access our website, call our hotline at (800) 323-8603, fax our hotline at (202) 254-4297, or write to us at:

Department of Homeland Security
Office of Inspector General, Mail Stop 0305
Attention: Hotline
245 Murray Drive, SW
Washington, DC 20528-0305