Agenda Item No. (6)

To: Building and Operating Committee/Committee of the Whole
Meeting of December 18, 2025

From: Malini Brown, Senior Project Manager
Jamie Briggs, Electrical Superintendent
David Rivera, Deputy General Manager, Bridge Division
Denis J. Mulligan, General Manager

Subject: **APPROVE ACTIONS RELATIVE TO AWARD OF CONTRACT NO. 2025-B-144, *MICROWAVE UPGRADE*, TO AVIAT NETWORKS**

Recommendation

The Building and Operating Committee recommends that the Board of Directors approve actions relative to the award of Contract 2025-B-144, *Microwave Upgrade*, as follows:

1. Approve award of Contract No. 2025-B-144 *Microwave Upgrade,* to Aviat Networks (Aviat) of Houston, Texas, to upgrade the District's Microwave system for a 10-year term in a not-to-exceed amount of $1,587,578; and,

2. Authorize a contract contingency in the amount of $302,505.

Sufficient funds are available in the FY 25/26 Bridge Division Capital Budget for Project #2421 *District-wide Radio Project,* to fund this contract with Aviat and the contract contingency.

This matter will be presented the Board of Directors at its December 19, 2025, meeting for appropriate action.

Summary

The Golden Gate Bridge, Highway and Transportation District (District) has its own P25 radio system for bridge, bus, and ferry operations. The radio system supports 240 portable (handheld) radios, 280 mobile radios (in cars, buses, and ferries) and five active Dispatch centers. The District uses radios as the primary form of communication for bus dispatch, bus operators, bridge sergeant's office, bridge operations and maintenance, Ferry Division mechanics, terminal supervisors, and Vessel Masters.

An important part of the radio system is the microwave network, which provides dedicated connectivity between radio base stations (located at mountain tops and Bridge south tower) and

the radio system core (the central brain of the radio system). A microwave network provides a secure means of connecting sites rather than using public internet or commercial networks, both of which the District would have no control over design or maintenance. The microwave network has been installed and used since the early 1980s, and the existing equipment has been in service since 2009. The system includes components that are no longer manufactured, have limited support, and in some instances are physically degraded.

Upgrading the microwave network will enable the District to remove costly, non-essential sites and add new ones to support expanded radio communications, which would support the Bus Division's vision for deploying dispatch consoles at Novato and Santa Rosa.

Background

Upgrading the microwave network is an identified project within the overarching program to upgrade the District's P25 radio system. The District contracted with Mission Critical Partners, LLC (MCP), in October 2024 to conduct an in depth assessment of the District's radio system. MCP completed its assessment in May 2025 and recommended that the District pursue the following initiatives:

1) As a priority, replace the outdated Airbus core with a Tait core, leveraging the existing viable Tait base stations.
2) Replace subscriber radios (mobiles and portables), which are all out of support.
3) Update the microwave network and DC Power systems; equipment is outdated and needs replacing. As part of the update, expand the microwave network to enable the deployment of Bus dispatch radio consoles at Novato (D2) and Santa Rosa (D3), which is something Bus Division has been wanting to do for some time.
4) Conduct structural analysis of antenna towers to determine necessary upgrades.
5) Address issues with radio coverage at specific locations at the Bridge (i.e., inside the towers, the north anchorage, and the concrete bunkers).

Staff sought and received approval from the Board in August 2025 to contract with Tait Communications (Tait), 2025-B-091, *P25 Phase II Radio Upgrade,* to address initiatives 1 and 2 above.

Contracting with Aviat will address initiative 3 and initiative 4 will be addressed in conjunction with the microwave upgrade.

The District elected to utilize a cooperative agreement with participating vendors capable of meeting the technical criteria. Proposals were requested from the incumbent microwave vendor, Aviat Networks, Inc., and from Microwave Networks Inc. (MNI), both of which hold active cooperative contracts. A detailed design requirements document was provided to both vendors so that they could provide a fully scoped and costed proposal. Requirements were grouped as follows:

- System requirements – technical and project
- Site specific requirements

Both vendors were asked to respond to the stated requirements for two different network topologies. These topologies differ from the current one in the following ways:

- Option 1 adds a link from Sonoma Mountain to Bald Peak and Novato to Big Rock
- Option 2 optimizes the current topology

The decision to go with Option 1 or Option 2 will be made after contract execution and after site surveys during the design phase.

Both vendors were also invited to present the merits of their proposal to staff. Vendor proposals were evaluated on the following criteria:

- Cost
- Scope – how well each vendor proposed to meet the stated design requirements
- Ongoing maintenance and support offerings
- Implementation schedule
- Responsiveness to District specific needs
- References

When analyzing cost, equipment reliability, and support services, staff determined that there was no compelling justification for transitioning away from Aviat. Over the past 15 years, Aviat has consistently provided the District with dependable service, and there have been no major failures with their equipment. Switching to a new vendor would entail some risk, which may only be justified if there were a substantial cost advantage, which there is not. Furthermore, District support staff possess extensive experience with Aviat equipment, which will minimize the training requirements and reduce the learning curve associated with this upgrade.

The contract with Aviat includes the following equipment and services:

- Equipment and licensing
- Spare equipment
- Path surveys
- Professional Services for design, implementation, and training
- Optional equipment, which will be executed at staff's discretion
- 10 years of support and maintenance

The cost of the Option 1 network topology is higher than Option 2 because an extra link would be added. The value of this award reflects Option 1, with the understanding that, should Option 2 be selected, Aviat will be compensated less.

Given the complexity of this project, staff recommends including a contract contingency to account for unforeseen circumstances that may arise during the project and to accommodate potential price increases due to tariffs. Contingency is calculated as 20% of the overall contract value.

Fiscal Impact

In approving this item, the Board will authorize the award of a contract for the microwave upgrade to Aviat Networks in an amount of $1,587,578 consisting of $1,431,938 in capital expenses, which includes estimated costs for sales tax and freight, and $155,640 in operating expenses. In addition, this action includes an authorization for a 20% contingency of $302,505. Funding for Project #2421, *District-wide Radio Project*, was approved in the FY 25/26 Bridge Division Capital Budget in the amount of $12 million, funded fully with District funds, and there are sufficient funds in the project budget to support all the capital expenditures, including contingency, detailed in Table 1. The annual maintenance support fee of approximately $17,293 will be budgeted accordingly in future Bridge Division operating budgets.

TABLE 1: CONTRACT BUDGET

CONTRACT BUDGET	AMOUNT
Capital Expenditures (Project #2421)	
Contract	$1,356,886
Estimated Sales Tax and Freight	$75,052
Subtotal – Capital	**$1,431,938**
Operating Expenditures	
Annual Fees Yr. 2 to Yr. 10	$155,640
Subtotal – Operating	**$155,640**
TOTAL CONTRACT BUDGET (Capital & Operating Expenditures)	**$1,587,578**
20% Contract Contingency	$302,505
TOTAL	**$1,890,083**