



**United States Department of State
and the Broadcasting Board of Governors
Office of Inspector General**

Office of Inspections

**Inspection of
International Broadcasting Bureau
Botswana Transmitting Station**

Report Number ISP-IB-11-52A, June 2011

~~Important Notice~~

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PURPOSE, SCOPE AND METHODOLOGY OF THE INSPECTION

This inspection was conducted in accordance with the Quality Standards for Inspections, as issued by the President's Council on Integrity and Efficiency, and the Inspector's Handbook, as issued by the Office of Inspector General for the U.S. Department of State (Department) and the Broadcasting Board of Governors (BBG).

PURPOSE AND SCOPE

The Office of Inspections provides the Secretary of State, the Chairman of the BBG, and Congress with systematic and independent evaluations of the operations of the Department and the BBG. Inspections cover three broad areas, consistent with Section 209 of the Foreign Service Act of 1980:

- **Policy Implementation:** whether policy goals and objectives are being effectively achieved; whether U.S. interests are being accurately and effectively represented; and whether all elements of an office or mission are being adequately coordinated.
- In accordance with the U.S. International Broadcasting Act of 1994 (P.L. 103-236) Section 304(a) (3) (B), OIG is prohibited from evaluating the content of BBG broadcasting entities. The section, entitled "Respect for Journalistic Integrity of Broadcasters," states that "The Inspector General shall respect the journalistic integrity of the broadcasters covered by this title and may not evaluate the philosophical or political perspectives reflected in the content of broadcasts."
- **Resource Management:** whether resources are being used and managed with maximum efficiency, effectiveness, and economy and whether financial transactions and accounts are properly conducted, maintained, and reported.
- **Management Controls:** whether the administration of activities and operations meets the requirements of applicable laws and regulations; whether internal management controls have been instituted to ensure quality of performance and reduce the likelihood of mismanagement; whether instance of fraud, waste, or abuse exist; and whether adequate steps for detection, correction, and prevention have been taken.

METHODOLOGY

In conducting this inspection, the inspectors: reviewed pertinent records; as appropriate, circulated, reviewed, and compiled the results of survey instruments; conducted on-site interviews; and reviewed the substance of the report and its findings and recommendations with offices, individuals, organizations, and activities affected by this review.



United States Department of State
and the Broadcasting Board of Governors

Office of Inspector General

PREFACE

This report was prepared by the Office of Inspector General (OIG) pursuant to the Inspector General Act of 1978, as amended, and Section 209 of the Foreign Service Act of 1980, as amended. It is one of a series of audit, inspection, investigative, and special reports prepared by OIG periodically as part of its responsibility to promote effective management, accountability and positive change in the Department of State and the Broadcasting Board of Governors.

This report is the result of an assessment of the strengths and weaknesses of the office, post, or function under review. It is based on interviews with employees and officials of relevant agencies and institutions, direct observation, and a review of applicable documents.

The recommendations therein have been developed on the basis of the best knowledge available to the OIG and, as appropriate, have been discussed in draft with those responsible for implementation. It is my hope that these recommendations will result in more effective, efficient, and/or economical operations.

I express my appreciation to all of those who contributed to the preparation of this report.

A handwritten signature in black ink, appearing to read "H.W. Geisel".

Harold W. Geisel
Deputy Inspector General

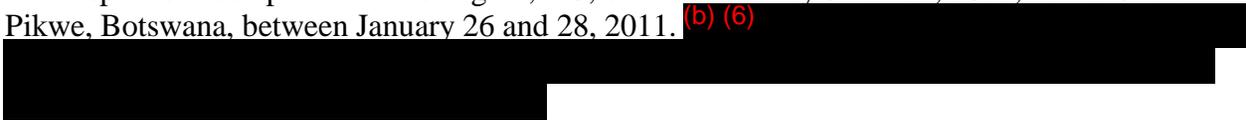
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Key Judgments

- The Botswana Transmitting Station (BTS) is well run. The station manager has improved station operations and cut costs. He has renovated and repaired station facilities, and implemented energy-saving initiatives to offset increased energy costs.
- The International Broadcasting Bureau (IBB) needs to complete the development and implementation of a cybersecurity policy at the BTS.
- The station's overall security posture is good, although the station manager needs to implement procedural and physical security improvements at both transmitter compounds to solidify the program.
- The station needs to strengthen management controls to ensure that inventory is accurate and procurement meets standards.

The inspection took place in Washington, DC, between January 3 and 24, 2011, and in Selebi-Pikwe, Botswana, between January 26 and 28, 2011. (b) (6)



Context

The BTS is part of a worldwide communications network operated by the IBB, the division of the Broadcasting Board of Governors (BBG) that provides engineering and other support services to the Voice of America (VOA) and a number of other U.S. Government-supported broadcasting entities. The BTS is responsible for transmitting VOA-produced news reports and radio shows to regional audiences in Mozambique, Namibia, Angola, Zimbabwe, Somalia, Ethiopia, South Africa, and Zambia, as well as Botswana itself.

The station is located on a 1,300-acre site at Moepeng Hill, about 12 miles from the mining town of Selebi-Phikwe in Botswana's Central Province and about 250 miles from Gaborone. Two U.S. direct-hire and 18 local employees work at the station. The station has an annual budget under \$2 million and is one of the smallest stations IBB operates. Like other transmitting stations, BTS is relatively isolated. However, it benefits from easy access to Gaborone and South Africa, a reliable and relatively inexpensive supply of electricity, and good relations with the local community.

The BTS began as a simple relay station in September 1981, operating from a base in the town of Selebi-Phikwe. In 1991, it moved to its present, larger location at Moepeng Hill and became a full-fledged transmitting station. Currently, the BTS operates four shortwave transmitters and one 600-kW, mediumwave transmitter. These allow for high power, mediumwave broadcasts for the VOA (in English and Portuguese) to southern Africa and low power, shortwave broadcasts (in a variety of local languages) to other places in sub-Saharan Africa and Somalia.

The lease on the Moepeng Hill facility expires in 2016; negotiations on the renewal terms are expected to begin sometime in 2014. BTS management believes the Government of Botswana will not oppose renewing the lease, even though at one time it faced pressure from the Government of Zimbabwe to limit VOA broadcasts to that country. The more pertinent question now is the future of shortwave broadcasting.

Radio remains a major medium of communication in Africa, so even as the worldwide audience for shortwave broadcasts shrinks and the BBG seeks to expand use of other communications outlets, the BTS will continue to play an important role in providing VOA-produced news and features to audiences in Africa.

Executive Direction

The BTS is well run. The station manager, an experienced Foreign Service officer, has worked with the VOA (with minor interruptions) since 1991. He has served in various capacities at IBB transmitting or relay stations in Thailand, Greece, Kuwait, and Sri Lanka, as well as in Greenville, North Carolina. A Civil Service employee on excursion assists him and serves as the transmitter plant supervisor. The station manager considers the transmitter plant supervisor as his deputy, and has provided him with multiple opportunities for learning on the job and increasing his already considerable skills.

The station manager has both improved station operations and contained costs. Since arriving at the BTS 3 years ago, he has tightened some management controls and undertaken multiple renovation and repair projects. He has instituted a number of energy-savings initiatives, effectively offsetting a 30 percent rise in local electricity costs that Botswana Power Corporation instituted in May, 2010. He also determined that a proposed project to replace the station's temporary operations and maintenance facility was not an efficient use of space or resources and convinced Washington to halt the estimated \$700,000 project, and instead renovate existing structures at a total cost of about \$40,000.

Both the station manager and the transmitter plant supervisor have good relationships with the embassy and are in regular contact with multiple offices. Station management praised the embassy's regional security, financial management, and general services offices. The station manager attends country team meetings once a month and sits on several embassy committees, including the eligible family member hiring committee, budget committee, emergency action committee, and joint awards committee. He attends some meetings via phone, but others require an overnight stay in Gaborone. The Ambassador has visited the station multiple times during the current manager's tenure, and the deputy chief of mission has visited once. The assistant regional security officer makes quarterly visits to the station.

The security and emergency preparedness programs are generally in good condition; the station's safety plan and emergency action plan were both updated in November 2010. The station manager is aware that further improvements are needed. A long awaited IBB security upgrade project planned for February 2011 will address several of these needs.

Morale among the local staff varies. The station manager has hosted picnics and other social events, including a "Family Day," when local employees brought family members onto the BTS compound for the first time. The local employees expressed their appreciation for his efforts. (b) (5)

[REDACTED] Local staff also is concerned about the future of shortwave broadcasting and, by extension, the future of the transmitting station.

Early in his tenure, the station manager held regular meetings with senior local staff, including the radio technicians, at which the staff could discuss station business and voice concerns. During the past year, those meetings have become much less frequent. The station

manager told the OIG team that he intends to reinstitute formal meetings as a way to address staff concerns.

Informal Recommendation 1: The Botswana Transmitting Station should hold regular meetings with local staff to disseminate information and address staff concerns.

Mission and Program Implementation

The BTS delivers mediumwave and shortwave broadcasts to sub-Saharan Africa, using content the VOA prepares in Washington and delivers to the station via satellite. In line with the VOA charter, the broadcasts are meant to provide listeners with a consistently reliable and authoritative source of news, a balanced and comprehensive projection of American thought and institutions, and a presentation of U.S. policies via editorials clearly identified as representing the views of the U.S. Government.

The station's mediumwave English and Portuguese broadcasts are directed to southern Africa; the shortwave broadcasts, in Afan-Oromo, Amharic, English, French, Hausa, Kinyarwanda/Kurundi, Kurdish, Ndebele, Portuguese, Shona, Somali, Swahili, and Tigrigna are directed to sub-Saharan Africa and Somalia. The station is on the air 12.5 hours a day, from 5:00 a.m. to 9:30 a.m. and from 4:00 p.m. to midnight, 7 days a week.

The station has an exceptionally high transmitter availability percentage, an average of 99.79 percent for the last 3 months of 2010. It is equipped with emergency generators that allow the BTS to maintain operations in case of commercial power failure.

A list of the VOA programming transmitted by the broadcasts, shown by the type of transmission, language, and target areas, appears on the next page.

Botswana Transmitter Station Schedule
Winter Broadcast Schedule
(October 31, 2010 – March 26, 2011)

Transmitter	Program Language	Target Area
BOT 1 100 kW SW	English	Sub-Saharan Africa (Anglophone)
	Swahili	East Africa
	Kinyarwanda	Central Africa
	Hausa	Niger, Nigeria, West Africa
	French	Sub-Saharan Africa
BOT 2 100 kW SW	English	Sub-Saharan Africa
	French	Sub-Saharan Africa
	Hausa	Nigeria, Niger, West Africa
	Portuguese	Angola, Guinea-Bissau, Cape Verde and Sao Tome, Principe
BOT 3 100 kW SW	English	Sub-Saharan Africa
	Swahili	East Africa
	Afan-Oromo	East Africa
	Somali	East Africa
	Kurdish	Turkey, Iraq
	Kinyarwanda/Kurundi	Central Africa
	French	Sub-Saharan Africa
BOT 4 100 kW SW	English	Southern Africa
	Ndebele and Shona	Zimbabwe
BOT A 600 kW MW	English	Southeastern Africa
	Ndebele and Shona	Zimbabwe

Resource Management

Resource Profile

The BTS has the following assets, per the IBB's official 2012 budget request. Budget figures include staff salaries.

FY 2010 budget (actual)	\$1,765,357
FY 2011 budget (estimated)	\$1,970,834
Capital assets	\$28,528,670
Staff	

21 local staff authorized (18 on board)
3 U.S. direct-hires authorized (2 on board)

Capitalized Value of BTS Assets

(Source: Network Support Branch of the IBB's Office of Technology, Services and Innovation)

Capitalized Property	Value (\$)
Land	2,500,000.00
Buildings	2,156,237.42
Structures and Facilities	216,980.48
Satellite Interconnect System	90,000.00
Antennas	17,044,000
Receivers	3,500
Communications Equipment	16,000
Power Plant and Electrical Power Equipment	1,057,575.23
Transmitters	4,630,000.00
Audio and Speech Equipment	27,550.00
Record and Playback Equipment	526.90
Test Equipment	86,841.07
Firefighting/Safety Equipment	16,450.00
Office Equipment and Furniture	5,267.97
Buildings and Grounds Maintenance Equipment	196,004.42
Vehicles--passenger	328,937.58
Vehicles--non-passenger	133,611.47
ADP Equipment (LAN Associated)	18,543.13
Photo Equipment	644.00
Total	28,528,669.67

Human Resources

Embassy Gaborone is responsible for overall human resource management at the BTS, but day-to-day responsibilities fall to the station's highly capable administrative specialist. She works with supervisors and employees to verify that position descriptions are accurate and that evaluations are done on schedule.

Local employees are generally satisfied with their grades and salaries, but expressed concern about job security and the future of the BTS. They are aware that a number of IBB stations have been closed recently. The OIG's last inspection¹ detailed a recruiting and retention problem. Although there has been some staff turnover for retirement, health, and poor performance reasons, there have been few voluntary departures, and the station manager believes that retention is no longer an issue. Recruitment for administrative staff is not difficult. An advertisement for an administrative clerk resulted in 300 applications. Some technical employees have been with the station for 15 years or more.

Shuttle Service

Based on crime and safety issues, the transmitting station's physical isolation and the lack of public or other transportation, the BTS provides a shuttle to transport personnel between the station and static stops in Selebi-Phikwe, where most local employees live. The shuttle service is timed to coincide with the shifts that station personnel work: 3:30 a.m. to 12:00 noon, 7:30 a.m. to 4:00 p.m., and 3:30 p.m. to 12:00 midnight. The unusual work hours give the station coverage during broadcast hours: 5:00 a.m. to 9:30 a.m. and 4:00 p.m. to midnight, 7 days a week. The shuttle service provides the staff with safe transportation and enables them to work during the early and late hours that correspond with the station's broadcast hours.

Financial Management

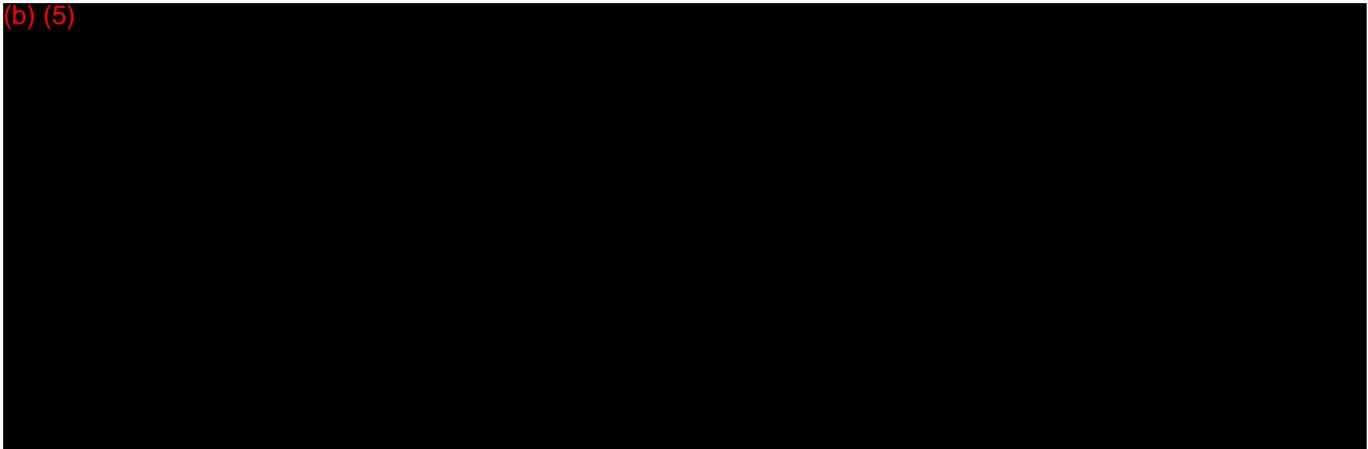
The administrative specialist is a highly skilled user of the Consolidated Overseas Accountability Support Toolbox system, which provides her with details of the station's financial operations. Budget and funds control are in good order. The operating budget for 2010 was \$1,605,000; the 2011 request was \$1,655,000. The administrative specialist verifies funds availability, and the station manager approves purchases. Unliquidated obligations are reviewed regularly; expenditures do not exceed funds available.

The station ensures that the value added tax, currently 12 percent, is reimbursed. Value added tax refunds usually are allocated to energy costs, the station's highest expenditure.

¹ Office of Inspector General Report of Inspection, The International Broadcasting Bureau's Botswana Transmitting Station, Report Number ISP-IB-05-63, August 2005.

Cashier Operations

The BTS cash advance is (b) (5). In June 2008, the Paris-based Financial Support and Training Office sent a cashier monitor to BTS to conduct a mandatory 5-year review. Since then, the Paris-based cashier monitors remain in regular contact with the BTS cashier and alternate cashier, who provide BTS with cashing services. The station manager conducts monthly cash counts. The OIG team observed a cash count the station manager conducted for each of the two cashiers; the accounts balanced.



Purchasing

The purchasing agent has not had training for her present position. A file labeled “blanket purchase agreements” did not actually include blanket purchase agreements; rather, it contained purchase orders for recurring services, which are more properly done with blanket purchase agreements. Blanket purchase agreements provide a cost-effective method to solicit competition and find reliable vendors. Overseas procurements have been conducted through the U.S. General Services Administration schedule contracts. The purchasing agent has a (b) (5) limit on her purchase card. Invoices appear to be correct, and vouchers are certified and paid correctly.

Recommendation 1: The Broadcasting Board of Governors should provide the Botswana Transmitting Station with training on procurement requirements and the procedures for using blanket purchase agreements. (Action: BBG)

Property Management

The transmitting station uses IBB’s expendable inventory system, the Supply Information Processing system. The expendable inventory’s paper value is \$21,300, but the records show inaccurate totals. The recently hired inventory clerk is concerned about her responsibilities for entering receiving and withdrawal data into the inventory system. The clerk and her supervisor, the facilities manager, both believe they need more training to ensure that the system accurately reflects all the station’s expendable supplies. The OIG team agrees that the staff needs more systematic and rigorous training.

Recommendation 2: The Broadcasting Board of Governors should provide the Botswana Transmitting Station property management staff with formal training in the Supply Information Processing System (Action: BBG)

The station uses IBB's property information processing system to inventory its nonexpendable property. The administrative section has photographs of the items in the inventory, with their associated bar codes. The IBB conducted a full review of its nonexpendable inventory and submitted its annual property certification in April 2010. All items were accounted for, although there were some documentation errors (which the station is correcting).

Housing

There are two leased houses in Selibi-Phiwke for the two Americans who work at the BTS. The annual cost for the station manager's house is \$13,992, and the annual cost for the transmitter plant supervisor's residence is \$18,000. IBB signed the leases. Both homes are spacious, attractive, one-story residences with three bedrooms; security is excellent. The grounds are maintained under the BTS facilities maintenance contract.

Health

Local employees receive medical care through the embassy's medical aid contract. The direct-hire staff receive health care under the station's International Cooperative Administrative Service System subscription with Embassy Gaborone. This care includes inoculations, phone and email consultations, and HEART SAVER First Aid. Additionally, a local nurse is on-call to provide limited care to the two U.S. direct-hires and the sole spouse in Selebi-Phikwe. A small medical office is located at the station manager's residence; the office contains a safe for over-the-counter medications, malaria prophylaxis, and tetanus vaccines.

Information Management and Cybersecurity

Information Management

The BTS has a small computer network, with all but one computer located on the compound. The one off-site computer is located on BTS property in the mediumwave transmitting facility, a half mile away. The local servers provide email, file access, and network printer availability. The logical network is based on Microsoft's active directory. The computers are connected by CAT-5 and fiber-optic cabling. The operating system for the workstations is Windows XP, and the file server has Microsoft Server 2003. The email server uses the Sun Microsystems operating system.

In the absence of a system administrator, the transmitter plant supervisor handles the information management duties and creates accounts and permissions to access the network. The plant supervisor carries out all information management duties in a timely and efficient manner.

IBB headquarters provides centralized support for the BTS network, including policy, oversight, firewall and switch maintenance, and active directory support. It also manages the domain and email server.

The OIG team visited all the systems on the network, ran penetration tests and security analyzers, and verified the physical environment. The BTS server room is clean and uncluttered. Network servers are accessible from both the front and the rear. Lighting and temperature controls are sufficient. The proper fire extinguisher equipment is readily available. Server room security includes proper door locks and inside grating, secured with a padlock. The walls are slab to slab, and there are no windows.

The BBG is in the process of developing policies across a wide range of information technology functional areas, to be implemented at the BTS and other transmitting stations. In the meantime, the [National Institute of Standards and Technology Special Publication 800-53](#) (NIST SP 800-53), *Recommended Security Controls for Federal Information Systems and Organizations*, provides that cybersecurity policy, properly communicated and implemented, will keep the network secure and provide end user accountability. The lack of attention to cybersecurity opens the network to penetration.

Recommendation 3: The International Broadcasting Bureau should establish and implement cybersecurity policy for the local transmitting stations, based on Federal guidelines in National Institute of Standards and Technology Special Publication 800-53, *Recommended Security Controls for Federal Information Systems and Organizations*. (Action: IBB)

The local employee in charge of information management was let go in 2010, and not replaced. The transmitter plant supervisor, who serves as the system administrator and information security officer, is training two local employees to repair and support network systems. However, the supervisor has only basic knowledge of computer support and cybersecurity. The local employees are motivated learners, but they need more training than the supervisor can provide. The lack of trained personnel has limited the station's ability to provide security oversight and efficiently resolve system problems.

Recommendation 4: The International Broadcasting Bureau should train the American and local staff who are supporting the Botswana Transmitting Station network and performing information security duties. (Action: IBB)

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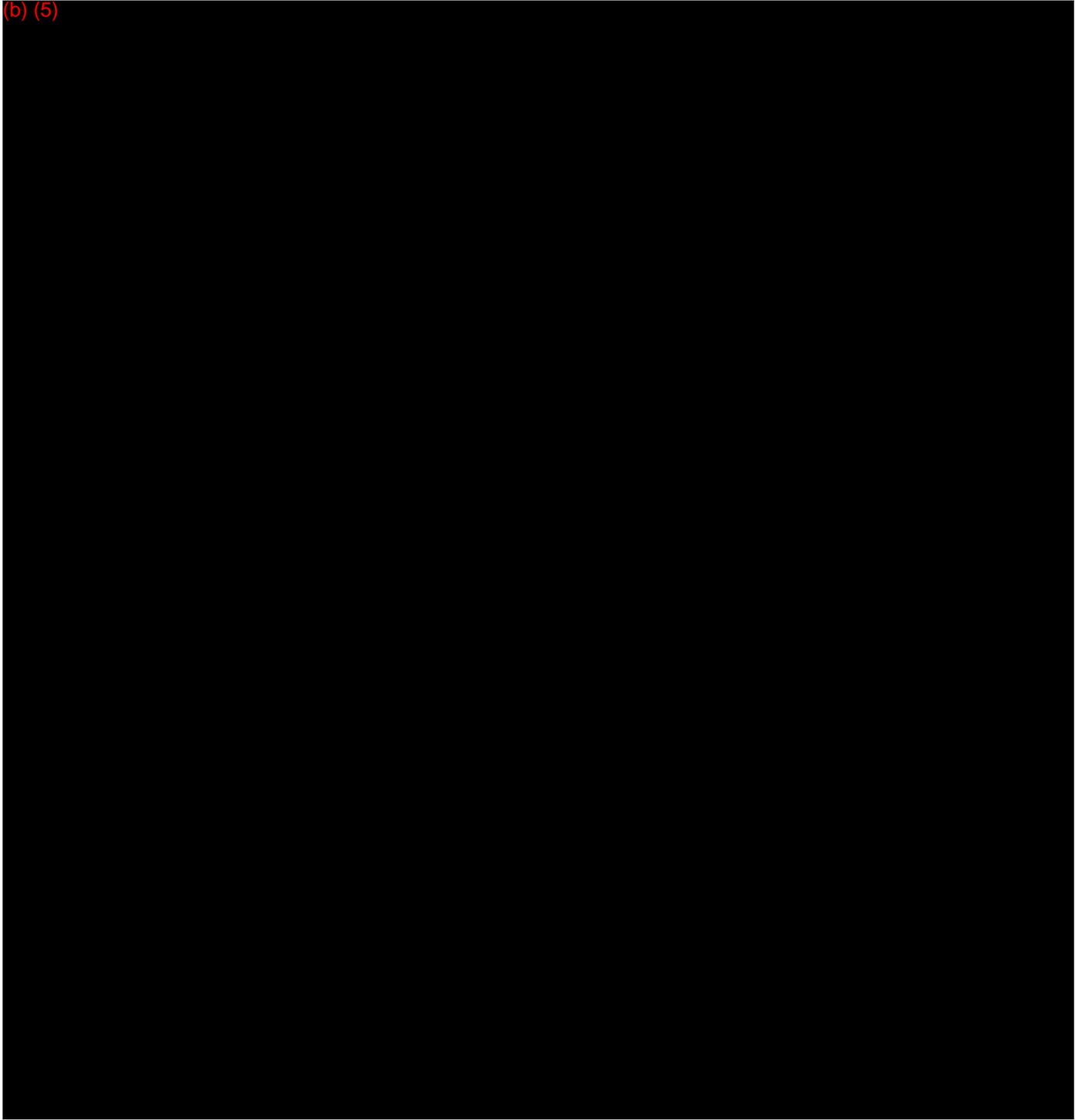
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Recommendation 6: (b) (5)

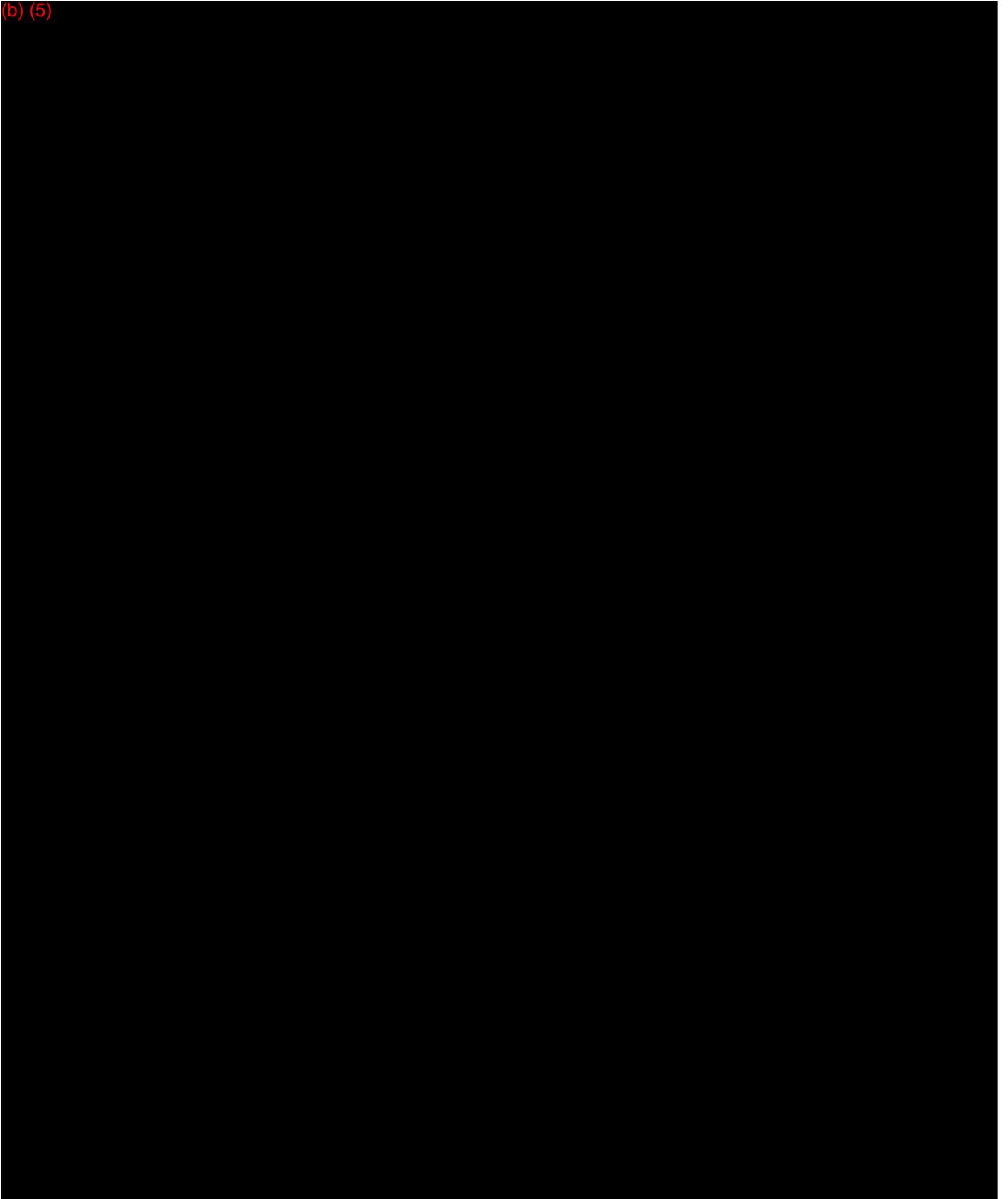
The BTS receives regular delivery of mail and packages. Local employees bring the items into the administration building, where they open them. The U.S. Postal Service details procedures for opening mail ([Publication 166](#), *U.S. Postal Inspection Service Guide to Mail Center Security*) (b) (5)

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(b) (5)



Security

The regional security office at Embassy Gaborone has responsibility for the entire U.S. mission security program in Botswana, including the BTS. The transmitter plant supervisor acts as the unit security officer, overseeing security at the station. He understands basic security requirements and holds station personnel accountable for maintaining security standards.

The embassy's assistant regional security office visits the BTS quarterly, to inspect the guard force, provide needed training, and offer advice and assistance to the guard force and post security officer. The station manager praised the level and quality of the support provided.

(b) (5)



List of Recommendations

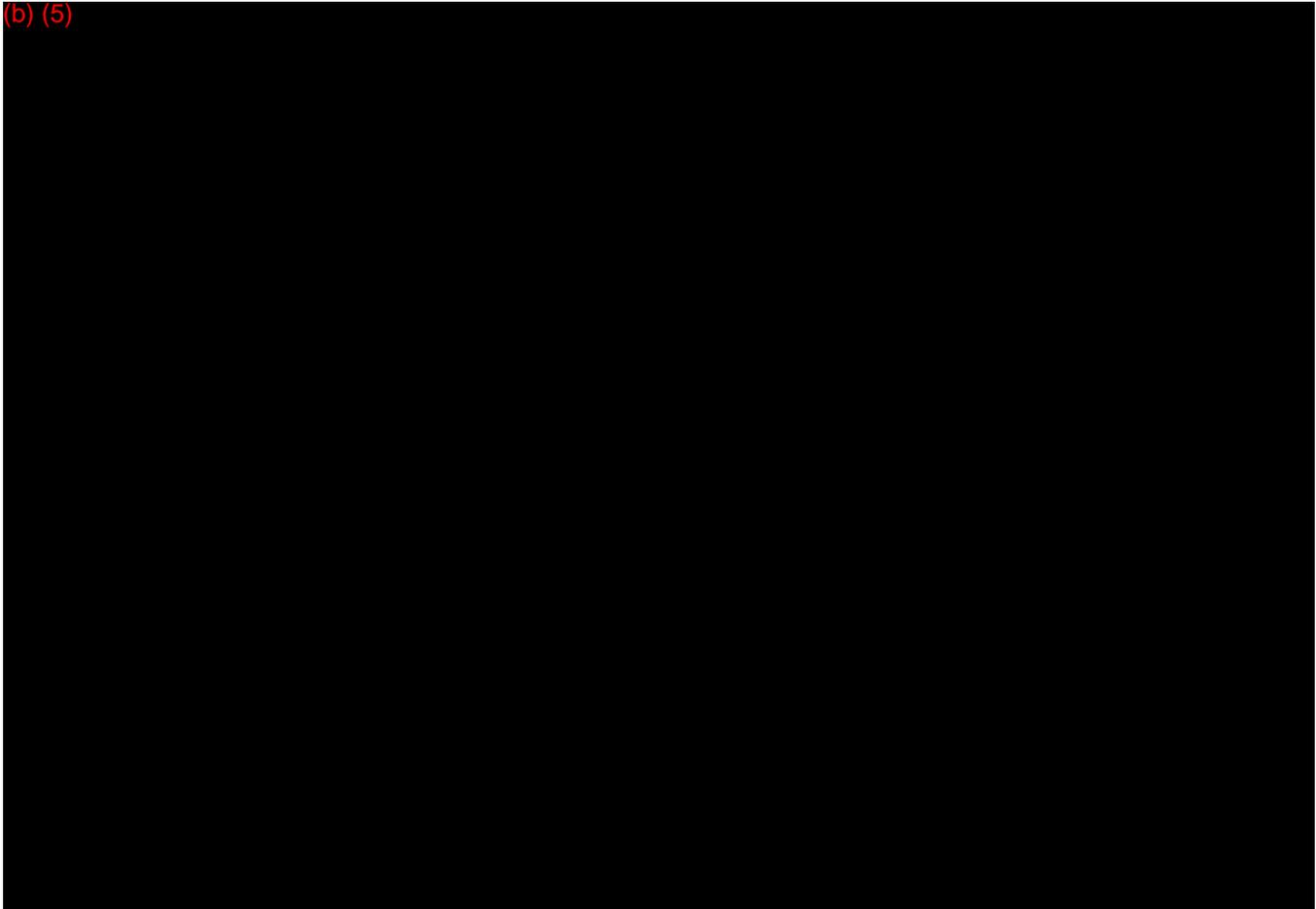
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Recommendation 2: The Broadcasting Board of Governors should provide the Botswana Transmitting Station property management staff with formal training in the Supply Information Processing System (Action: BBG)

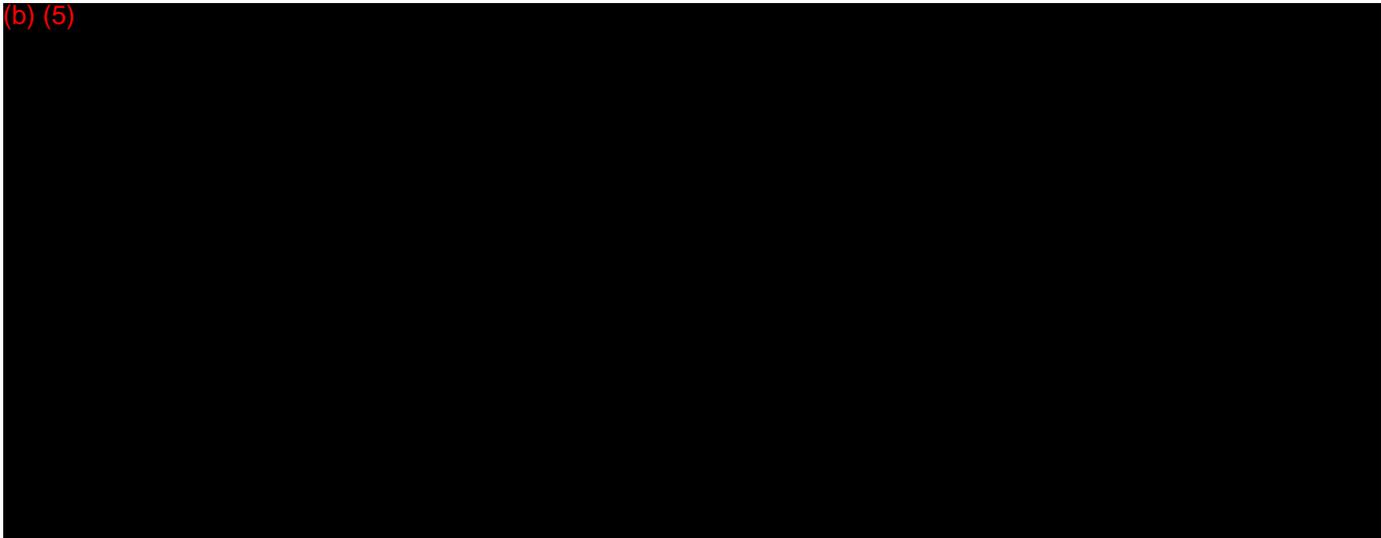
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(b) (5)



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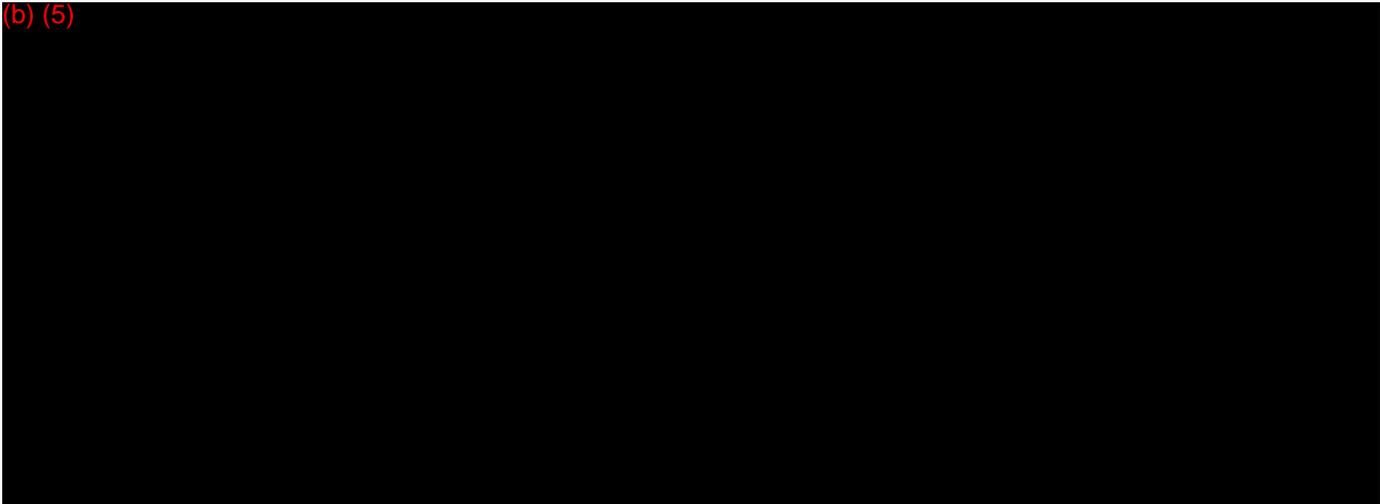


Informal Recommendations

Informal recommendations cover operational matters not requiring action by organizations outside the inspected unit and/or the parent regional bureau. Informal recommendations will not be subject to the OIG compliance process. However, any subsequent OIG inspection or on-site compliance review will assess the mission's progress in implementing the informal recommendations.

Informal Recommendation 1: The Botswana Transmitting Station should hold regular meetings with local staff to disseminate information and address staff concerns.

(b) (5)



Principal Officials

	<i>Name</i>	<i>Arrival Date</i>
Station Manager	George O. Miller	11/07
Transmitter Plant Supervisor	Gunter Erich Schwabe	12/08

Abbreviations

BBG	Broadcasting Board of Governors
BTS	Botswana Transmitting Station
Department	U.S. Department of State
IBB	International Broadcasting Bureau
VOA	Voice of America

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