

**Position Description**  
**IS Technical Services Professional**  
**Educational Communications Board**

**Position Number:**  
**Classification Number:**  
**Incumbent:**

### **Position Summary**

This position provides technical support, maintenance, operation, and training for computer-based, television-broadcast systems and devices at the Operations Center (OC) of the Wisconsin Educational Communications Board (ECB), which serves as the Master Control center for the PBS Wisconsin statewide TV network. This position shall learn and further develop complex skill proficiency in a variety of systems-maintenance scenarios, and shall be integral in the planning and execution of new technologies and workflows within the broadcast environment.

Work is performed under limited progressing to general supervision of the ECB Operations Center Manager. This position represents ECB in a professional and cordial manner while supporting organizational goals and relationships.

### **Goals and Worker Activities**

40% A. Plan, install, configure, test, modify, and troubleshoot computer-based devices and systems attached to the OC's broadcast LAN, so as to ensure continuous, uninterrupted playout of PBS Wisconsin's television services.

A1. Plan, install, configure, test, modify, and troubleshoot complex, computer-based broadcast systems and devices. Examples of such systems include video servers, data archive systems, broadcast automation software, routing switchers, KVMs, broadcast encoders, web stream encoders, shared disk arrays, and compliance loggers.

A2. Research, develop, and recommend specifications for future implementation of new and replacement technical systems and devices as required by evolving technologies and standards. Plan for the purchase and integration of, or transition to, such technology.

A3. Make network adjustments to ensure the availability, accountability, and security of all attached systems and devices for optimal reliability and continuous operation.

A4. Routinely update server operating systems, device firmware, and security software. Clone hard drives and store as emergency backups for critical systems.

A5. Provide after-hours emergency telephone consultation and response for critical on-air operations. Serve as primary technical contact when the Operations Manager is not available.

A6. When necessary, perform emergency repairs or workarounds.

A7. Confer with vendors and industry experts, and attend industry conferences, so as to gain knowledge of current and emerging technologies, trends, and workflows in the broadcast and IT industries.

30% B. Provide technical and operational advice and support for the file-based acquisition, distribution, and layout of PBS Wisconsin program media.

B1. Develop and oversee media-asset management workflows, including file transfers, media transcodes, archiving, and file integrity checks, including provisions for closed captioning and other ancillary data.

B2. Work with University of Wisconsin staff to facilitate and improve two-way media-file transfers, including IP network connectivity through respective firewalls.

B3. Consult with vendor support technicians, integrators, and Internet resources to troubleshoot system failures and improve upon operational flaws.

B4. Provide guidance and direction to agency management concerning emerging computer-based technologies and file-based workflows.

B5. Develop systems contingency plans and disaster recovery procedures.

15% C. Professionally perform operational shifts covering the duties of Master Control, Ingest, and Transmission Control.

C1. Monitor and correct, when necessary, all inbound and outbound delivery systems and media (audio, video, data) to maintain FCC compliance and the highest engineering standards.

C2. Manage multi-channel operations with meticulous attention to detail, assuring a consistent and smooth transition between all program materials.

C3. Maintain constructive communications with Traffic, Maintenance, and other Operations personnel to report and resolve problems. Complete necessary discrepancy reports and notifications.

C4. Oversee and maintain integrity of server-based media assets. Conduct technical checks of programs and interstitial material to ensure all assets are broadcast-quality.

C5. Schedule or reschedule server recordings and file transfers using automation and/or traffic software.

C6. Properly append daily playlists into the broadcast automation system. Make any necessary corrections for missing or incorrect material, and report such issues to the proper department.

C7. Utilize remote alarm-and-control equipment associated with all assigned transmitters and the ECB interconnect. Monitor transmission levels and signal quality in order to comply with FCC regulations and the highest engineering standards.

C8. Monitor all outgoing television transmission signals, as well as off-air signals, to ensure consistent video and audio quality, closed-captioning compliance, lip sync, etc. Monitor off-air radio signals to ensure consistent audio quality and correct content.

C9. Engage with ECB site engineers and agency clients, by telephone and e-mail, to report and resolve technical issues, relay crucial information, and ensure consistent performance of ECB's broadcast mission.

C10. Monitor, log and report all required tower-light statuses to maintain FCC/FAA compliance.

10% D. Provide ongoing, essential staff training and technical documentation.

D1. Provide staff training – both individual and all-staff – in the operation, configuration, troubleshooting, and recovery of computer-based systems and devices.

D2. Author, update, and disseminate technical procedures, drawings, and documentation regarding OC broadcast systems, devices, and workflows.

D3. Document all device configurations, IP setups, version updates, and cable assignments in accordance with OC standards.

D4. Assist in the development of a wiki-based documentation system.

D5. Investigate and track operational discrepancies, and provide training and workflow improvement so as to prevent similar discrepancies.

5% E. Other duties as assigned.

E1. Order parts, drives, cables, etc., as necessary to repair or maintain servers and other computer-based devices.

E2. Assist ECB's BIT and Field divisions with technical services.

E3. Provide backup support as needed for employee desktop PCs and applications.

### **Knowledge, Skills and Abilities Required**

1. Knowledge of modern television master control workflows and technologies.
2. Knowledge designing signal flows and workflows through the integration of multiple broadcast systems.
3. Knowledge of IT and networking systems, standards, analysis, and programming.
4. Knowledge of current LAN/WAN architectures, client/server technology, distributed database and data communications technology, and network security best practices.
5. Knowledge of audio and video operating standards.
6. Ability to perform complicated tasks under time pressure and with extreme attention to detail.
7. Ability to teach and refine complex systems and tasks.
8. Effective, clear, and accurate written and verbal communications.
9. Strong customer service skills.
10. Knowledge of and skill in complex computer applications including databases, spreadsheets, word processing, presentation, and email.
11. Ability to create and edit technical drawings using Microsoft Visio.
12. Ability to work with minimal supervision and direction, and to provide effective training and direction to staff.
13. Ability to lift and carry equipment weighing 40 pounds or more.
14. Ability to climb, reach, bend, and kneel to move, install, and maintain equipment.
15. Ability to perform work to professional standards of safety, quality, reliability, and appearance.
16. Project management skills within a technical environment.

### **Special Requirements:**

- This position requires a variable work schedule including occasional nights and weekends.
- This position requires occasional on-call status.
- This position requires the ability to work under limited supervision and direction, and to provide effective training and direction to staff.