Training Day 3 Report:

7 June 2024

The third day of training at Doordarshan News, Doordarshan Bhawan, provided an immersive experience in the Production Control Room (PCR) during a live news bulletin. The dedication and precision required to manage a live broadcast were evident as the team coordinated various technical and production elements seamlessly.

Production Control Room (PCR) Operations:

The PCR is the nerve center of live television broadcasts, and this session offered a detailed look into its operation. Here's a comprehensive overview of the components and functions within the PCR at Doordarshan News, Doordarshan Bhawan, New Delhi:

1. Large Screen Displays:

- **FS1, FS2 (Full Screen 1, Full Screen 2):** Monitors showing full-screen outputs from different video sources.
- **ME1, ME2 (Mix Effects 1, Mix Effects 2):** Screens displaying mixed video effects and transitions managed by the video switcher.
- **DD News TCR (Transmission Control Room):** Shows a live preview of the final broadcast output.
- **AS1, AS2 (Auxiliary Screens 1, Auxiliary Screens 2):** Additional screens for monitoring auxiliary feeds and content.
- **CASPER1, CASPER2 (Character Generator, Graphics):** Displays from the character generator system used for graphics, titles, and other visual elements.
- **GFX (Graphics):** Monitors specifically for graphics overlays and animations used during the broadcast.

2. Roles and Responsibilities in the PCR:

- **Producer**:
  - Oversees the entire broadcast, making real-time decisions to ensure the smooth flow of the show.
  - Uses MOS (Media Object Server) protocol to take different shots and sequences from the ENPS (Electronic News Production System) servers.
  - Finalizes the scheduling and rundown of the broadcast, ensuring all elements are in place.
  - Establishes direct communication with the studio news anchor, providing guidance and instructions as needed.

- Graphics and Video Editors:

- Prepare and manage visual content, including lower thirds, full-screen graphics, and video clips.
- Use software like CasperCG Client to manage and trigger real-time graphics and video playouts, ensuring that all graphical elements are correctly timed and integrated into the broadcast.

- Sound Engineers:

- Operate sound systems like Studer Vista 1 and Yamaha MG16XU to manage audio levels, ensuring clear and balanced sound for the broadcast.

- Technical Director:

- Uses the vision mixer to switch between camera feeds, video clips, and graphics based on the producer's directions.
- Manages transitions and visual effects using ME1 and ME2 feeds.

- Teleprompter Operator:

- Teleprompter:

A teleprompter is a device that displays scrolling text for news readers (anchors) to read on air. It allows anchors to maintain eye contact with the camera while reading scripts.

- In the PCR, the teleprompter operator is responsible for controlling and providing text to the teleprompter system. They type live news updates into the system, which are then read by the news reader during the broadcast.

- Maintenance Team:

- The PCR includes a maintenance team responsible for addressing technical issues. If rare errors occur on server systems like ENPS, the maintenance team performs the necessary adjustments and repairs to ensure continuous operation.

3. Key Systems in the PCR:

- ENPS (Electronic News Production System):

- While ENPS is located in a separate server room, it is integral to the broadcast process. The PCR uses MOS addresses to access and synchronize video, audio, and graphics from ENPS servers. This ensures that all elements are coordinated and timed perfectly for the broadcast.

- CasperCG Client:

- Software used by graphics and video editors to control the CasperCG server, which manages real-time graphics rendering and video playout. It allows the team to trigger graphics and videos during the broadcast, integrating them seamlessly with the live feed.

- Studer Vista 1 and Yamaha MG16XU:
- High-quality sound systems used to manage and control audio feeds, ensuring the best audio quality for live broadcasts.

- **Watchout:**
- Watchout is a multi-display production and playback software that allows for the synchronization of multiple screens and video sources. It is used in the PCR to manage complex visual displays and ensure that all video outputs are perfectly synchronized.

- PCRL (PCR Software):
- Custom-developed software tailored to the specific needs of the PCR, enabling better control over broadcast elements and integration with other systems.

4. Live Coverage Management:

- The PCR team manages real-time events and live feeds, making quick decisions to handle any unexpected issues or breaking news.
- Coordination between various systems and roles is crucial to maintain the integrity and flow of the broadcast.

Observations and Key Takeaways

- Precision and Coordination: The PCR team demonstrated high levels of precision and coordination, essential for managing the complexities of a live broadcast.

- Technological Integration: Advanced systems like ENPS, integrated with MOS protocols, and tools like CasperCG Client, Watchout, and customized software from Quantel and GV play a critical role in synchronizing all broadcast elements.

- Team Dedication: The dedication and focus of the PCR team were evident, ensuring that every aspect of the live news bulletin was handled meticulously.

- Real-time Script Management: The teleprompter operator plays a crucial role in updating and providing text for the news reader, ensuring that the broadcast runs smoothly.

- Technical Support: The presence of a maintenance team ensures that any technical issues are swiftly addressed, minimizing disruptions during the broadcast.

Conclusion

The third day of training highlighted the intricate and dynamic environment of the PCR at Doordarshan News. Understanding the roles, systems, and coordination required to produce a live news broadcast is crucial for anyone involved in television production. The knowledge gained from this session underscores the importance of teamwork, technological integration, and real-time decision-making in delivering high-quality live broadcasts.
