### **AV** Technician

Walk In Be early, dress appropriately for the day (show, set up, strike).

Set Up BreakoutProperly and safely set up a tripod screen or Fast-Fold style screen (Deluxe, Da-Lite styles), including<br/>proper leg height. Attach a dress kit or bottom skirt to either style neatly and correctly.

Properly set up a projector on a Saf-Loc stand and safely power the projector. Align the projector appropriately to the screen without keystoning or focus issues. The projected image should fill all fabric of the screen without spilling onto the border. Know the menu options in order to set the projector for either front or rear projection.

Set up multiple inputs into a small-scale video switcher (IE, Folsom Presentation Pro, Folsom Image Pro, Barco PDS 902, Barco DCS 200, etc). Ensure all inputs are scaled correctly for proper display through the projector. Input devices can vary from desktop or laptop computers to mobile devices of any sort.

AV Techs must know the difference between standard and high resolution cabling and signal flow.

Properly set up desktop computers with mouse, keyboard, and both local and external displays using a distribution amplifier (DA).

Set up computer inputs for audio playback in addition to video display.

Neatly and appropriately set up speakers on stands, with audio inputs set to the proper level (IE, mic or line level).

Correctly set all microphones (wired handheld on stands, wireless lavalier or handheld, lectern styles) to operate at an appropriate volume for the room without feedback or distortion. Certain microphones to be set at correct level (IE, mic or line) and phantom power utilized when necessary.

AV Technicians must have a working knowledge of basic wireless frequency adjustments. Wireless microphones must be set appropriately to avoid frequecies "stepping" on each other even if set in different rooms.

Must be able to correctly and efficiently trouble-shoot a system set up.

Must have the ability to work at times with minimal direct supervision.

All rooms must be set with cables neatly taped down with appropriate safety tape used over aisles or doorways. All cables must be run at 90 degree angles and neatly along walls when possible.

Proper labelling of both the video switcher and audio mixer is necessary. Labels must be neat and legible.

Neatly set and dress the tech table.

When operating a room, an AV Tech must remain attentive to the presentation at hand. Reading a book, newspaper or magazine is not appropriate. Neither is using a mobile device (smartphone, tablet, eletronic readers, laptops, etc). Falling asleep on the job is completely unacceptable. Should any of the aforementioned behaviors occur, management of both Freeman AV and IATSE 15 will be notified; the technician may be cut from the show if the behavior does not cease. In extreme cases, the technician may be given a letter of no rehire.

Set up Exhibit The same guidelines above apply to work on the exhibit floor.

Booths

AV technicians must know how to properly and safely set a monitor on a dual post stand. Moving safely and attentively through an exhibit hall is always necessary. Technicians must know how to use a walkie-talkie style radio for communication between the Coordinator and themselves. AV techs must be able to efficiently deliver and set up booths without direct supervision.

The ability to work under pressure and tight deadlines is necessary.

Customer Service AV Technicians are often the first people a presenter will encounter on show days. They must demonstrate exceptional customer service, even under stressful conditions. Showcasing courtesy and a helpful, friendly attitude to every client in a breakout room, exhibit booth or hallway. Appropriate dress and hygiene is required for this position.

An AV Tech should know when to stop and ask for help in any situation they may need it.

#### **Teleprompter Operator**

- Pre Show Some production companies will call an operator they want, to see if they are available. This is a courtesy call to assure them that they can count on you for this show. Consider it the same way as you do a call from Dispatch.
- Walk In Be early, dress right, be ready to hustle if necessary. Client may be waiting for you.
- Set Up Computers Find the road cases with your equipment. Sometimes, it's one case, sometimes three or four. Some equipment suppliers send a printer, some don't. Some shows use presidential glass some don't. Usually the Video Department will typically know where your equipment is if you can't find it. Make sure you know where you are to set up (Video). Some systems are free standing, some are laptop systems that you will need to have a table to place your equipment. Along with table, find at least 2 chairs, at least one for you and one for client. Handle your own equipment set up first. You'll need power. You'll need light. You'll need a headset and sound monitor. You don't need to demand these things get handled right away. But, make sure all the details are in place before rehearsal time gets close.
- Get Scripts The Production Company's representative (i.e. Account Executive, Producer, Stage Manager) will usually know the script status. (Is it available, is it coming at a certain time, was it supposed to be here an hour ago... etc.) When you get the script on a disc or USB memory stick, save the original onto your desktop and open it in MS Word to look at how it is formatted. (are there any issues like bullets or indents or tables that would make formatting in Telescript AV or other programs difficult?) Fix any formatting issues in Word first. Save fixed script under a different name to signify this is the version you will use in prompter program. Make sure you know what type of file is needed for prompter program. Save it as RTF for Telescript AV.
- Formatting Scripts Load script into prompter program. Open in EDIT mode. This operation can be learned at Telescript Website. The style of formatting is an operator decision. Suggestions: Always put speakers' names at beginning of their script. Bookmark each new speaker in case you rehearse out of order. Make sure underlines, bolds and italics are included in formatted script. It can help to have the Word doc. open on your back-up computer. Some speakers ask to have a particular formatting included in the script to be prompted. Cater to their desires as best you can. Sometimes is just won't work. Be diplomatic. Try to get it as close as possible to what they want. Adjust during rehearsal.
- Set Presidential When your scripts are ready and stage is clear of work (if possible) place presidential monitors at base Glass of lecturn. Sometimes lecturn has been placed too far downstage. Talk to lighting about moving upstage. Sometimes you'll be asked to consider placing monitors on the floor. Typically, you won't have poles long enough to get mirrors in place for speaker. If it's necessary to have monitors off the stage, find two empty road cases that can be covered in black and set monitors on them. (Practice setup) Discuss placement with Video Dept. (Camera postition/mirror position) Take notice of lights or glare on monitors or mirrors.

- Rehearsal Meet speaker (if possible) Position mirrors to speaker's comfort. The mirrors are YOUR responsibility. You adjust them. Don't rely on someone else to adjust them correctly. If you have to hurry back to the stage, do it. You typically won't get in trouble for being picky about adjusting mirrors for the speaker's comfort. That's your job. Compromise for multiple speakers. Explain challenges of multiple speakers. Apple box solution. Ask if they want to make changes on the fly during rehearsal or if someone will take notes and make changes later. Common change... font. Does speaker not want to wear their glasses? It will effect formatting but simply explain that you'll fix it after rehearsal. For some this is their first experience with prompter. Ask if they want your basic coaching. There will be more distractions during rehearsal than during show... pay strict attention to your speaker. If they see prompter going to fast or too slow, they will worry that it will happen during the show. Pay attention to formatting, spelling, grammar errors. Don't stop rehearsal to fix them unless told to. Some speakers will glide right over errors, some will be totally confused by them. Adjust for your speaker.
- Customer Service Sometimes you have the time and access to the speaker to be able to offer coaching suggestions. Always ask if they'd like some coaching. "I'm following you." is always a good place to start. Tell them THEY are setting the pace -- that you will keep the words on the screen until they say them. There is no need to rush. "If you go off the script or ad lib, I'll stop." "If you find yourself stumbling on words, it's because you're trying to go to fast. Slow yourself down. Take a bit longer time between sentences." "Let's add some pauses." All these are common suggestions that don't make a speaker feel defensive. If you can, let speakers know that it's better to read whole sentences on one mirror and change mirrors or monitors strictly between sentences because it's much less likely that they will lose their place when they have a line break to look for when they change. How to effectively use floor monitors. Know how to get a chance to talk to a speaker and know when to walk away. Know how to communicate through others to help speaker. Some operators can listen to headset chatter, even participate and keep scrolling properly, some can't. Some can't have ANY distractions or they lose their place or simply stop. Learn your limitations.
- StrikeSometimes, you will be asked to strike presidentials as show continues. Depends on situation.Sometimes it will need to be extremely fast... get help and instruct them. Sometimes you'll have a<br/>break or a video to give you more time. Ask if monitors need to be struck or if the mirrors could just<br/>be lowered. Client or Producer will know what they want. And time is usually the biggest issue.<br/>Typical -- strike computers while show ends or room clears. Strike presidential glass as soon as<br/>possible. If stage strike is happening fast, leave computers and strike downstage first. Be aware of<br/>stage strike -- protect mirrors.

#### **Graphics Operator**

Pre Show Some production companies will call an operator they want, to see if they are available. This is a courtesy call to assure them that they can count on you for this show. Consider it the same way as you do a call from Dispatch. Microsoft Ability to quickly edit font, sizing and resizing. PowerPoint and Apple Keynote Proficiency to edit a presentation to the correct format (either 4:3 or 16:9) while maintaining the integrity of the client's logos, photos, videos and backgrounds. Must be able to add and/or edit backgrounds and presentation formatting. Proficiency in spelling and grammar is necessary. Must have the ability to correct spelling and grammatical errors. Using spell check is okay, but the operator must know common acronyms and abbreviations. Must be able to maintain the correct aspect ratio of the clients embedded photos and videos while resizing. The operator must be able to embed new photos, videos and audio clips to play correctly using the trigger the client requests (IE, mouse click, automatically after slide advance, after a certain amount of time, etc). Ability to add and edit transitions, ensuring the presentation will be run with the correct transition trigger (IE, by mouse click, after a certain amount of time, etc). Ability to add and edit built in effects. Proficiency in layout and design aesthetics. Proficiency with outboard equipment commonly used to advance presentations, such as wireless remote devices. Proficiency with all short cut keys. Must be able to recognize when the black out key is struck. Many remote devices will have a black out button which is easy to press in a nervous presenter's hand; often the Graphics operator will have to release the blackout for the show to continue. Understanding of other graphics programs, including PlayBack Pro. Proficiency editing presetations to the clients request. For example, pairing a presentation down from an hour long speech to a ten minute speech using client direction and built in editing mehtods such as "Hide Slide" in PowerPoint. Above all, a Graphics operator must display exemplary customer service skills. This position often Customer Service requires direct interaction with the speakers on stage as well as their assistants/handlers. Dressing appropriately and practicing good personal hygiene are also required for this position.

A Graphics operator is often under stress and short deadlines. An operator must be able to handle stressful situations in a calm, balanced manner.

### **Camera Operator**

- Set Up Fluid-Head Show proper use of spreaders or dolly wheels. Center the camera on camera riser (if applicable). Level the tripod head correctly. Attach the tripod arms correctly and lock them down. Balance the camera on the shoe for proper front / back balancing. Adjust drag for smooth panning and tilting. Know what Back Focus is and how to acheive and maintain it over the course of the event.
- Set Up Camera Assure proper lens fitment with bayonet connector and power connection is correct on standard or sports / long lens (including lens support bracket when necessary). Mount and plug in studio kit monitor. Adjust monitor settings as needed. Mount and connect zoom and focus controls, without cross threading connectors. Ensure filter wheel is on correct setting for shooting conditions and correct this when necessary. Attach camera control cable to camera correctly without damaging the connector on the camera or the end of cable. Attach camera control cable to camera control cable to camera control unit, seated properly without damage to the cable or the CCU. Patch in Clear Comm intercom system / headset (if applicable). Power on camera. Ability to manually iris and zoom when shooting in a hand held / ENG configuration. Hook up camera to recording deck for direct recording (if applicable).
- Operate the Camera Frame accepted standard shots with proper headroom and leadroom. Able to keep subject in frame and focused at all times while live and in preview. Able to do live moves zooming in and out, panning left or right, and tilting up or down smoothly without jumpiness in the shot. Ability to understand and execute directions from EIC / TD.

# Tape Operator

Experience with the following gear:	Know how to properly setup and operate DVD Recorders (Sony, JVC), DVcam decks (Sony DSR 1500 and 1800s), Aja KiPro decks and IoHD Encoders, Mac Book Pros and Grass Valley (GVG) Turbo 2 machines. Must be reasonably fluent and have experience with the following software: Aja Utilites, VTR exchange (IoHD), DT Labs Playback Pro, Quicktime Pro (QT7), Mpeg Streamclip, Windows Media player, VLC. Have working knowledge of video codecs and necessary transcoding/toubleshooting skills to solve potential playback or record scenarios. Knowledge of Timecode and how to implement it on one or multiple similtanious records is also necessary.
Set Up Playback/Record	Setup up Playback Pro laptops or GVG Turbo 2 units to output the requested resolution to the switcher and ensure proper audio level for the audio sends to FOH. Configure record decks to see proper incoming video signal at the requested/optimal resolution and determine proper audio levels from FOH sends.
Operating Playback/Records	Communicate effectively with PM, TD or client to ensure the video content is in the proper format and in the correct order for event playback. Conduct test records to confirm the correct resolution, proper audio level, time alignment and timecode reception. Spot check records during the event with headphones as permitted. Be able to trouble shoot signal path effectively if there is loss of signal and correct it quickly. Transfer and check all files to HDD, burn and finalize DVDs, Label all tapes/discs and drives neatly and legibly.
Customer Service	A Tape operator must display exemplary customer service skills. This position sometimes requires direct interaction with the speakers on stage as well as their assistants/handlers. Dressing appropriately and practicing good personal hygiene are required for this position.

A Tape operator is often under stress and short deadlines. An operator must be able to handle stressful situations in a calm, balanced manner.

# Projectionist

Experience with the following gear:	Know how to properly setup and operate the following: Barco models RLD W8s, R12's, HDX W18s, FLM HD20s; Christie HD10K; Panasonic models 730 and 6300s; Eiki models WUL100s, XT4's, X80s.
Set Up Projectors	Must know how properly setup the projector(s) physically for the best possible image. Obtain and meter necessary power for safe operation of the projector. Using test patterns, know how to recognize cornerstone/keystone issues and remedy them physically/optically first. Verify the existance of signal from the switcher and that it's the right resolution. Know the proper method for adjusting signal input from the file setup in the projector as needed.
Operating the projector(s)	Know how to properly double stack (flown front or ground supported rear) projectors. Must have proficiency to color match screens, sometimes across multiple brands/models of projectors. Properly edge blend and/or warp (using Barco Scenrgix, Projector Toolset or Christie Power Tools/Twist software) two or more stacks for Widescreen applications. Know how to create and operate an ethernet network to effectively communicate and adjust multiple projectors. Know how and when to change lamps and trouble shoot signal path issues as needed. Be able to identify any problems with projectors or lenses and

notify the Video Lead of problems that need to be addressed to ensure a successful event.

## Screen Switch (Advanced)

- Experience with the following gear: Know how to properly setup and operate the following: Barco Screen Pro 2 system with SP2 controller, Encore system with VPs/Large controller, Vista Systems Spyder X20. Be familiar with analog RGB routers, DVI routers and SDI routers. Be able read, understand, interpret and augment a system diagram (when provided) of signal flow for an event. Have overall undertstanding of multi-destination switching. Must know how to set up and use multiple PIPs. Ability to build, save and recal presets or command keys as required by the FOH TD/Show Caller.
- Set Up Switcher Must know how properly setup the switcher to best accommodate the needs of the show. Know the menu structure of the SP2 and Encore controller as well as navigate through them effectively. Be able to configure the Vista X20's pixel space, inputs, outputs, command and function keys and communicate with the Montage controller. Know how to save, copy, update and recall presets and recover saved system settings.
- Operating the Know how to properly read and understand communication errors and fix them as needed. switcher Must be able to properly acquire, size, and save all incoming sources. Communicate with FOH TD and/or client to confirm size and location of onscreen soucres and elements, as well as save them as presets or command keys. Be able to handle last minute changes with proficiency and agility. Must be able to follow cues given from the FOH TD/Show Caller over Clear Com.

# Video Engineer (Camera Switch/Director)

Experience with the following gear:	Know how to properly setup and operate the following: Panasonic HS 400/410 series switcher, Sony HXC series cameras, CCUs/RCPs, Hitachi SK-HD1000 series cameras, CCUs and RCPs, Tektronics wfm5000 Waveform/vectorscope.
Set Up Switcher	Must know how properly setup the switcher to best accomedate the needs of the show. Know the menu structure in order to set/change the output of the switcher as needed, and reconfigure the input assignments if needed. Must know how to use the RCPs to properly white balance the cameras as well as set the required Iris, pedestal and gain levels for all cameras. Must know how to use a Waveform/Vectorscope. Must know and understand SDI routing and signal flow through the system.
Operating the switcher	Know how to properly transition (cut/dissolve/wipe) from one source to the next in a preview/program format. Must be able to perform a downstream key and/or Luma key as well understand and utilize the PIP controls. Must communicate effectively with camera operators to produce a cohesive and fluid onscreen look to ensure the client's satisfaction. Must be able to follow cues given from the FOH TD/Show Caller over Clear Com.