



**COVID-19 & REMOTE OPERATIONS:
PRIORITIZING
YOUR NEEDS**



13 WTHR 



YEARS OLD.
PRIORITIZING YOUR NEEDS
NOT FULL
DR. KATASHA BOYLER,
CHAIRPERSON AFTER
WHAT HAPPENED THIS
DID IT BECOME
VERY APPARENT WE

Responding to COVID-19 and Remote Operations

REQUIRED A THOROUGH NEEDS ANALYSIS WITHOUT TIME TO DO A NEEDS ANALYSIS

Safety of our team members and building are the top priority

GOAL: Get as many people out of the building as quickly and effectively as possible

STARTED WITH: Who can't leave?

- Master Control
- Director
- Booth Producer

How do we make it possible for *everyone* else to work remotely?



WHERE WE STARTED

Prioritize operational needs then presentation needs

ANCHORS/REPORTERS/WEATHER:

- Started simple with TVU Anywhere on cell phones and Skype on laptops
- As talent allowed, dedicated setup built in their home

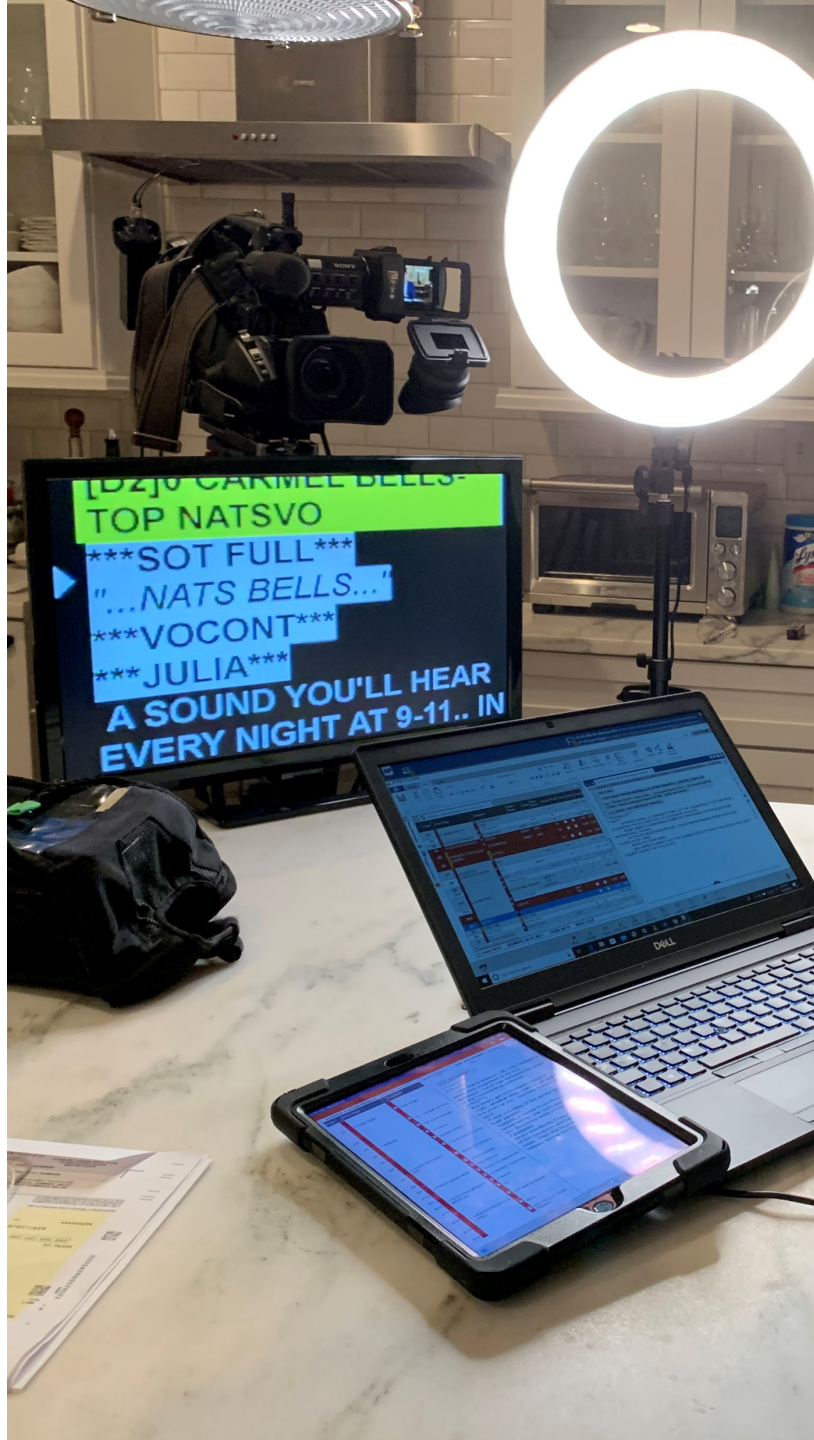
PRODUCTION:

- Director stays in building, utilizing automated control room
- Assistant Director codes from home, especially on longer shows (morning/evening blocks)

EDITORS/ASSIGNMENT DESK/SUPPORT:

- Sent desktop and laptop computers home for editing
- Setup Google Voice numbers for call forwarding and hunt groups

How do we make sure anchors have what they need?



Focused on necessary items first:

- Camera
- Transmission
- Lighting
- Teleprompter
- NRCS access

Anchor KISS setup:

- Turn on camera
- Turn on TVU backpack
 - Handles transmission and return video (in this case prompter)
- Sign in to VPN for NRCS access

Weather KISS setup:

- Make Skype call to station



THE BIGGEST HURDLE: FILE TRANSFERS

Editing from home AKA: How will that work?!

- Experimented with Remote Desktop Protocol and TeamViewer
 - Too much latency for news editing, inability to do fine editing quickly
 - Works for promotion and sales bag-and-tags
- Focused on employees with access to +200 Mbps connections
 - Cautious about those with cable modems, looked for fiber connectivity
- Pull video from station network over VPN
- Send back to station as MP4 to be transcoded for playout
 - Either automatically (Bitcentral Precis) or using RDP

NOW FOCUS ON THE VIEWER

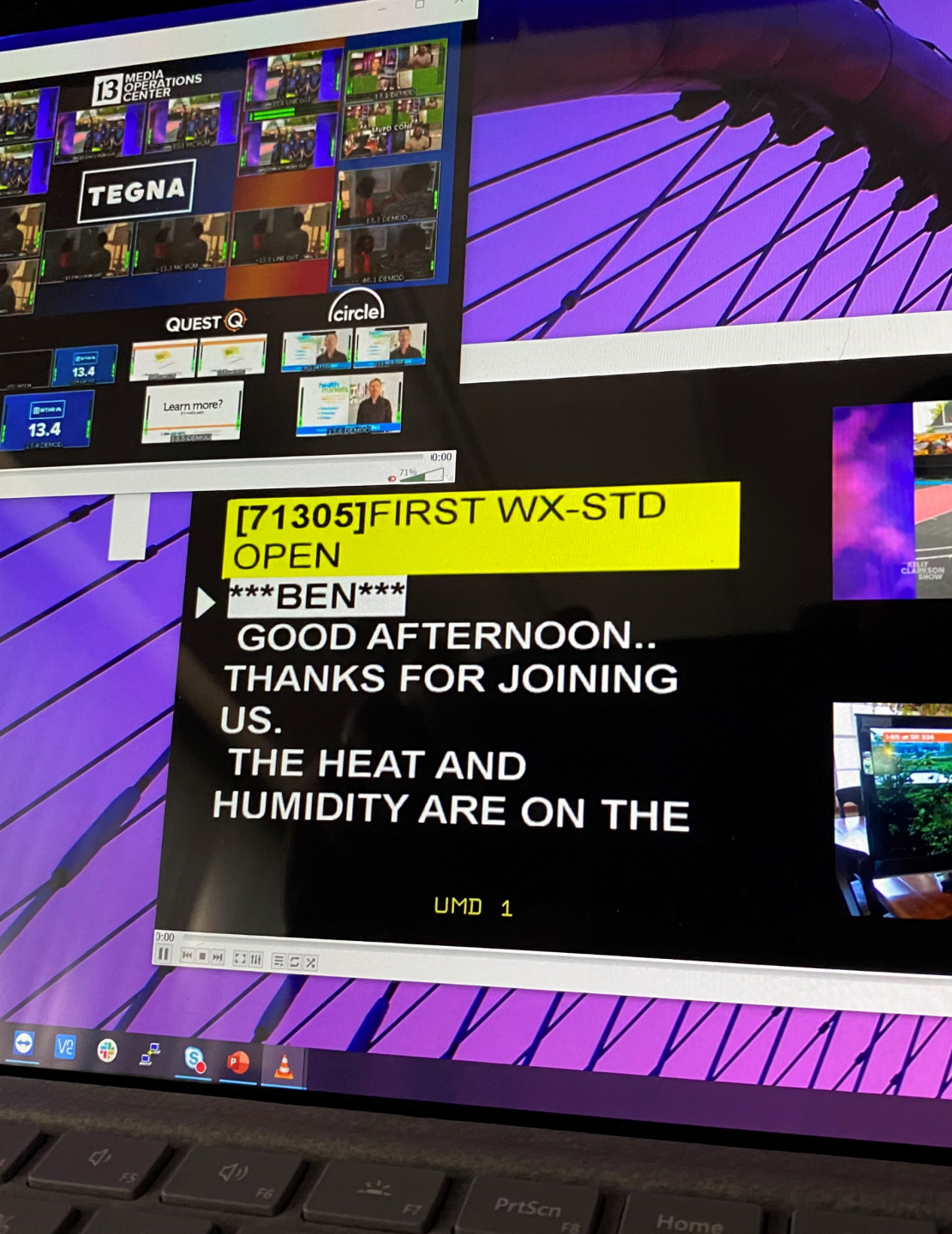
What will impact the viewer's experience?

Fullscreen weather graphics get boring

Doublebox of graphics and weathercaster doesn't work for all talent

- Chuck Lofton uses TeamViewer to build his weather graphics in a Baron Lynx system
- Hooked up HDMI from his laptop to a 36" TV
- Weather graphics in monitor are just a second TeamViewer session
- Allows Chuck to turn and interact with his graphics





DON'T STOP MAKING IT BETTER

Look for ways to improve, but don't force what's not needed

- ✓ H.265 streams built in-house using ffmpeg and Blackmagic Decklink Duo cards provide high-quality, low-latency streams to remote crews
- ✗ Dedicated H.265 streaming boxes purchased for producers to see multiviews at home
- ✓ Remote router control allows digital desk to manage framesyncs and streaming destinations from home, without calling Master Control
- ✗ Remove all producers from building and booth from home
- ✓ VoIP vendor offers soft phone option to enable better call tracking for desk team working at home



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