Introduction

Here we are at the starting gate and while we prance around we need to answer the question of why we are writing this? It's not easy to explain why I am writing this. I was there at the start of television broadcasting south of the Mason-Dixon Line. Reading historical reports of the industry's growth I found errors and omissions that should be brought to public attention.

I was also concerned that the guys in trenches were overlooked in favor of those who had established recognition in New York television, network radio or nationwide stage or screen. There was little about expansion in Washington D. C. , as it evolved into the major origination center of the future. The "country folk" down there were worth reporting about and should be given an equitable share of the credits for development. That's my motivation. During this trip amazing things have happened.

Helping me over a 20 year period have been wonderful friends. I've had co-authors. Some stayed for a page, others for more. Those who’ve helped the most seemed destined to shorter life spans. Most credit for this project should go to my brilliant lifetime friend Gus Berle, writer, author of many books, publisher and writer's agent. Gus had edited and ok’d four chapters of this and had two more books planned after this one was published. He had chest pains in New Orleans and made the mistake of driving himself to the emergency room. It was the last thing he did.

Gus’s death was such a shock to me I set aside this project. I did nothing for awhile until I met Jack Kleinberg, a student of human overpopulation. I bought Ray Pilkie’s 95-slide population lecture from Jack and began traveling the state. In the next ten years I gave 116 lectures and workshops in Florida. Most of that time I also was a member of the governing board of the Florida Sierra Club. This book was shelved until last year (2008)

I have meetings with Les Arries, Junior, on tape but as we were getting into serious recall, he was taken from us by a brain tumor.

WTTG Studios

The WTTG studios were in the Harrington Hotel at the corner of 11th and E Streets, N.W. . The White House was about a half mile west and the hot dog stand where J. Willard Marriott started the Marriott Corporation was about the same distance to the east. The burgeoning Television station was being born out of the hotel’s converted ballroom on the mezzanine. Out of this space was the production studio, a prop-room, construction room, control room, film room, projection room, announce booth, transmitter area, toilets and dressing room. Dressing for a show needed to be scheduled because there was only one. On the front side of mezzanine were the business, production, sales and executive offices for the General Manager, Program Director and Commercial manager (the sales manager), and the Chief Engineer and all the production staff. They actually assigned me a desk and facing me they assigned another desk to the film director who was soon to be introduced. We were like sardines in a can but it seemed to work.

There was also a door in that area which key was needed to open. I was told never to enter or ask for that key.
The hall from the production area was met near the west side by a stairway that went down to
the station entrance one flight down. At the base of the stair was another room for secretaries and
telephone operator. And the entrance on 11th Street, N.W. ; from the outside it looked like a store front
with a glass window.

There was only one stairway. There was no elevator. Most of the ungainly or heavy equipment was
brought up through the hotel ground floor and elevators. There was a large double sized door from the
hotel hall to the prop room area. Except for the cleanup people this was not an entrance. Up on the roof
there was a microwave unit to accept remote signals and another to transmit our program
transmissions to our antenna about 5 miles away in Arlington, Virginia.

On about my third day on the job, Roger Coelos, the program director brought a feisty looking young
fellow around and introduced him as Jules Huber (his given name was Darling) I figured he was a fugitive
from somewhere. It turned out to be New York. Jules was to be our film director.

Although he had never seen one before, like they do in the service, they showed him two packing crates
and handed him an instruction book so he could put together our two Bell & Howell projectors. Now
Jules liked to cuss a little and he got a lot of practice during that project.

Dr. Goldsmith and Dr. Willie Sayer were the overseeing construction leaders from the main office in
Passaic, New Jersey. Working with them were a dozen other engineers. Two or three were out in the
studio working along troughs in the floor. It was necessary to use the ballroom floor as a sub-layer in
order to run lines in the channels to assure there would be no interference that would distort the audio
and video signals from the various lights and intercoms, monitors and other appliances.

Others were on ladder placing light of all kinds, Kliegs and incandescent, on the grids hanging from
metal rods from the ballroom, soon to be studio, ceiling that covered the studio. Someone else was
working of banks of twenty and thirty 150 watt spotlights on vertical dollies movable to any part of the
studio.

Two large cameras on dollies were also there. Because of bulk and weight, each camera had two
operators, one to shoot pictures and the other to handle the two inch cables. I was told that the
cameras were Iconoscope video cameras manufactured by DuMont. Each of our cameras had a rotating
lens turret with 35, 90 and 120 millimeter lenses. This could be altered if needed. When we first went on
the air we did not have the luxury of zoom. The cameramen were the zooms, move in or out from a
subject to get the desired effect. We needed all those banks of light because the camera needed plenty
of it.

One of the problems with this earlier camera was we called “raster burn”. During use cameramen had to
keep these units tilting up or down or panning side to side. Just a slight movement was enough but if
you didn’t do it the cameras would show a ghost of whatever subject it had been shooting. Off the air
lens covers were kept in place and on the air it was necessary to alternate camera shots more than a
director wanted to in order to keep the “ghost” of a previous camera shot overlaying the current one.

One of the most vital pieces of equipment was the home-made boom mike that was mounted on a piece
of tubing about 15 feet long with an omnidirectional mike on a swivel.

Also important in those days were easels. We couldn’t generate script or special effects but we could do
some primitive use of them by shooting mounted information lettering or photographs on placards.
Each camera had an easel nearby, placed so all the cameraman had to do was pan over and frame the information in his viewfinder. At times placards where plain black and could be used, when super imposed, to design special effects such as a keyhole, circle, diamond, geometric form, split-screen effect or blockout when the director wanted part of the information on both cameras. The printed information placard as well as any other printed information. The director could use the titles full up or blend them or superimpose them with information or shots on other video sources or cameras. Using two easels and two cameras the director could lap the information from one placard to the other so as one source dissolves the other come up. The other usable video sources at WTTG were the two projector pickups in the projection room that Huber was putting together.

Plans called for the control room to take up about half the wall space with the customary window on the long side, the north side of the ballroom, now almost a finished studio. It was about the size of a large master bedroom.

The projection room was behind that so you had to pass it when entering the control roll. My first exposure to it was when Sayre and Goldsmith were installing the transmitter. One day it wasn’t pleasing Willie so he just gave it a big kick and got the desired result.

On the left side of the control room, covering the entire wall, were the heart, lungs and digest system of the electronics with 12 inch monitor in each of four sections. In the last compartment were huge vacuum tubes, transmitter tubes, I was told. There were two and they were perhaps 5 feet vertically with perhaps a diameter of a foot. There were coolers continuously humming on this section. On the east wall were the console monitors for the signals from the studio and the projection room.

All of these monitor signals were repeated on 7 inch monitors on the console of the switching panel where the director selected the visual source he needed. At the directors right was the audio operator and turntables were the recorded audio originated. One of the engineers was Vic Guidice, the selected audio operator.

The week after I started Les, Senior called everyone out front to introduce WTTG’s new general manager, Walter Compton. He was a well known radio newscaster for Mutual, doing their most significant assignments. Walter was a native of Charleston, South Carolina and a graduate of Roanoke College. He came to Washington with John Daley and sportscaster Russ Hodges, both had graduated from college with Walter. All three were at the gate of national reputations on the air but Walter was the first to command an executive desk.

Working with at WTTG Les, Jr. was always a pleasure. He was affable intelligent and able to get things done without pressures.

There was always a smile.

During the final days of preparation for our FCC license to broadcast Les did all of the test announcing. He said that even though he knew no one but the assembled engineers were listening, he still felt some “power behind the mike.”

I was so impressed with Les that I talked my wife into arranging a blind date with her friend the gorgeous outgoing Washington socialite, Elizabeth Logan. We decided to spice the evening by telling each of them, individually, that the other person had one huge cross to bear; hearing impairment. She conveyed the message to Libby and I told Les.
The early part of the evening was a riot, with each of them shouting at each other. We held fast, never telling them of our self-amusement trick. They eventually realized something was not quite balanced and we all had a great laugh.

Years later I heard Les recalling the event at a meeting.

As General Manager Les made a great success t of WTTG. Recently discussing the subject, I called him a “programming genius.”

“Hell I’m no genius, all I did was buy some afternoon movies”.

**The Unions**

Several unions were involved with early broadcasting in Washington. DuMont had contracts with IATSE, The International Alliance of Theatrical and Stage Employees of the United States and Canada, covering stagehands hanging curtains, flats, sets, lights and non-supervisory engineers at WTTG who worked with wires, cables, soldering irons, cameras, monitors, projectors and switches.

Union agent, Dick O’Neal a plump, typically Irish icon came down from New York every few weeks to see to union matters. While only a few staff members were glad to see Dick’s chubby red face and portly carriage poking around, most of his visits were cordial and business-like. The WTTG front echelon handled him with respect and if he had any complaints, the front office, strangely, seemed able to anticipate them prior to his visits.

Because of the vision of the station designer Dr. Thomas T. Goldsmith, Jr., WTTG had a different production set up than others. In most stations producers and directors were not union members because they operated in creative, production or executive capacities. There was a producer who guided a director who instructed a technical director how to picture the programming.

This was usually done on an intercom basis just as the WTTG set-up functioned. The TD was the hands-on person who asked the camerapersons for what the director requested and then lapped, faded or superimposed camera information by punching buttons or moving levers. Expressions that could be heard in the process were:

“clip to”

“fade to black”

“super one over two”

“pan right”

“pan left”

“tilt up”

“tilt down”

“center it”

“sharpen it”
“soften it”
“hold it”

and other expressions.

Dr. Goldsmith and his crew at WTTG played a little one-upmanship. By eliminating the middleman they established the “producer-director”, the combination of director and technical director. Producer-directors manned the video console and punched their own buttons. Because of that we were required to join IATSE. At other stations a producer or a director could not physically do the camera switching. That was the responsibility of the TD, who no doubt was union also.

There were times when someone would do it all. Produce and direct his or her own creation. This person was called a “writer-producer—director” This was not written in stone. In the early days very little was. However, after the FCC licensed WTTG as a bona fide, commercial station, in fact the first such TV station south of the Mason-Dixon Line, the person who worked the switching panels WAS a member of the union. That did seem to be written in stone.

Each week, for the network, WTTG originated Elder Lightfoot Solomon Michaux, the Happy am I Preacher and his Choir. CBS had been sending him AM coast to coast every Sunday morning for years. From our studio in the Harrington Hotel we sent him to the DuMont Television Network every Thursday evening. I was assigned the show and the Elder and I became co-producers. He brought the rehearsed and gowned choir and I supplied mirrors to give us additional camera angles, spotlights for special effects and props. I also plotted the floor positions and selected the camera shots. I was co-producer-director of that show. Elder was co-producer.

The mirrors came in handy to beef up the show and no one watching knew we were using them. At one time we nearly doubled the size of the choir. We showed spectacular angles. Our two cameramen, Dave Milligan and Neal Edwards soon got in the game and competed for “unusual” shots. Overhead shots were rare in those days, By angling a mirror up and behind the Elder and tilting up, we could shoot past his face and shoulder to almost read his Bible on the lectern he was using. Of course the print was backwards but I’ll bet nobody noticed it.

From the front office would come a nice little note like “Nice camera movement tonight” or some other validation.

Except for the talent, everybody working on the show had a stake in the union.

Union dues were reasonable and the advantages providing job security were very good.

The Elder never knew exactly what I did on the show. One day he told me he had brought me the very first copy of an album the choir was about to release. His assistant brought it to him and he signed it to me with appreciation. The Elder gave the album back to his assistant and quickly left the building. The assistant handed the album to me and said, “That’ll be$4.50, please.”

For the most part non-engineering writers, producers, directors, sound-effect people and others who did not use electronics were excused from IATSE membership. If you went into a dressing room to put on a costume or face-paint or wore make up or worked in the announce booth or appeared on camera, it was a good idea to belong to, or at least appear to be interested in AF TRA, the American Federation of Television and Radio Artists. In Washington, Evelyn Freiman was executive director of AF TRA and
most of us who made a living by radio or TV welcomed her opened arms toward stability. In Washington, we liked to think if you weren’t AF TRA, you weren’t. That’s the way it was in the early days. Since I was a producer-director, I was an IATSE member but as a writer-performer I was a member of AFTRA.

I always considered myself management, but at one IATSE election I was selected union steward. That was the time of my life I learned to believe one thing, think another and say still something else. My days as a local union leader were without rancor or progress.

There was no need to worry about progress. It all occurred before I took over.

**Special Effects**

“SPECIAL EFFECTS: artificial visual effects, either realistic or fantastic, used to create illusion in films; art work to create these illusions; the complete mechanical devices and photographs to create these illusions.”

In the early days a special effect was to bring a test pattern up on the monitor. Today original art for test patterns brings high prices in antique shops. Artificial visual effects evolved with the sensitivity of the cameras. In the beginning, when we had to pan cameras to keep image burn from occurring, special effects were almost a lost cause. We had to use flat lighting coming in from the front, the sides and the top of the sets.

At WTTG we had rolling banks of lights from a foot above the floor to eight feet high. There were 50 flood lights with 100 watt bulbs per bank on just a simple desk set-up.

We used perhaps four banks. That’s 200 lights producing 20 thousand watts and a couple hundred degrees of heat. It was so hot on sets we would work up a sweat without moving anything but our lips and blinking our eyes. After only a few minutes on camera we’d be soaked with perspiration.

We couldn’t use makeup because it would be running off before the red light went on. We kept a towel or handkerchief near at hand to wipe our brows whenever the camera was on another subject. Our only salvation was to keep sets dark until we went on the air.

The director would order. “Hit the lights — cue the performer.” Wind up would sound like “All clear - kill the lights - strike the set” Of course for a frequent show like a daily newscast the set would stay.

If my memory serves me right there were several primitive special effects used. Keep in mind that the early cameras, the Iconoscopes, required lots and lots of light. This limited special effects. We had three lenses on the turrets. 35mm, 90, and 135mm were usual. There were others of course, for special projects. We super imposed subjects, used split screens to show images on two cameras as one. The director had this power at the switching panel in the control room. The director could also superimpose images of one camera on another or fade to black, overlap images or clip fast from camera to camera when switching. In many cases the director followed scripts that told him to slow lap, fade to black, super or other procedure. In most cases the producer just relied on the artistry or judgment of the director who ad-libbed shots. I called this searching for “opportunity” shots.

Placards, plain black or with all kinds of designs cut as cookie cutters, where invaluable to early directors. They enabled us to use information from one source to join the other for the desired effect. For instance we could place on one camera a scene heavily front lighted with no background lighting
and on the other camera an unlighted placard in which is cut a design, say a keyhole. By mixing the two cameras the result would be a scene looking through a keyhole. We had all sorts of designs on hand.

If you consider titles and credits necessary, we did too. We used very few. Artists and art supplies were expensive and we operated on the edge of poverty. We used title placards and also sponsor identification. We put them on an easel with a studio helper who either dropped them or slid them as production required. In the early days you had to keep the placard camera lens capped or that burn occurring in the raster as a result of over exposure, would stay with you for what seemed to be a lifetime. Performers didn’t like the ghost image of placard information in everything they did on camera. Remember everything we did was live, on film or slide. As camera sensitivity improved some of the pressures evaporated. If I remember correctly it was only a matter of months before we were introduced to a Super DuMont camera.

Of course we had another camera chain for use when it was needed. That was the film and slide projector which also could be added to the I remember one Sunday morning when I was directing Pentagon Washington, a post World War II and Korean conflict public information program sponsored by Newsweek we needed an atomic explosion at a precise time on a precise word in the script. Of course for this special effect we used the camera chain and rehearsed the timing of the bomb explosion. We found we had three seconds of black before the action. When the cue came from the cast in the studio I called “roll film”, punched the camera chain on the air on the count of three, and BOOM there was the atomic explosion, exactly on time. That sequence brought a message of appreciation from Ernest K. Lindley who had watched the program in New York. There were other Sunday morning network programs. We did “Meet the Press” and “The Georgetown University Forum.”

With more sensitive cameras came the ability to use shades of lighting as special effects because we were no longer constrained by the need for brilliant flat lighting. To achieve unusual shots I enjoyed my courtship with full length mirrors as a production enhancement. I used them on The Art Lamb Show and Elder Michaux and his Choir.

Mirrors had to be set up so at least one camera had shots from a variety of angles without revealing how the shots were attained. With them we could give the feeling of an infinite number of choir members. We developed angles achievable only with cameras on a boom, overhead or on the floor.

Audio operator Vic Guidice had talents well beyond spinning records. He was the Sunday Morning director of Meet the Press, the with Lawrence Spivak and Martha Roundtree. Vic had a great way with people and impressed the Vice President, Richard Nixon, so much. they became personal friends. Nixon appeared on the program frequently. It’s rumored the Dick and Vic were exact physical copies of each other and for along time Vic was the beneficiary of Nixon’s castoff suits. Our Vice President only wore a suit once.

**A Little True Story**

Here’s a little true story, I thought you’d be interested in:

One night I was confronted with a situation beyond my control and I really don’t know if I handled it at all. WFTG did have an evening program schedule. The Arnold Fine Show, the Les Sands Show, Club Video and The Happy Am I Preacher and His Choir, Elder Lightfoot Solomon Micheaux. Eventually Mathew Warren came along to do the 15 minute, 11 O’clock News. He did a superior job bringing interest to a more or less one shot visual presentation with news from the UPI wire.
I recall I usually called it a day as Matt went on the air. Going down the steps from the Mezzanine to 11th Street, N.W. I usually said "good night" to the phone operator on duty and ducked out the door. On this occasion, as I was saying good night a woman came through the door and asked for Matt Warren as I looked her up and down I noticed she had a chrome pistol pointing at me. I don't know what I did, but the experience was not pleasant. I think my shoes were shaking because my legs were shaking and I think I was almost scared to death and I didn't want my potential cowardice to show:

"Where's Matt Warren?" she said,"I want to see Matt Warren".

"You can't see Matt now, he's on the air"

"I don't care, I want to see him now ...I've got to put a stop to what he's been doing to me"

"What's he doing?"

I was gradually moving around so the switchboard operator could see her gun and she would be engaging me rather than noticing the switchboard. I hoped Vickie would catch on and react.

"He's vibrating me"

"Vibrating, through the TV?"

"Through the TV and I can't stand it anymore, where's the studio, is it up these stairs?"

"He’s on the air. You can't get up there and this is no way to settle this, he's a nice guy and you can talk with him later”.

Suddenly the potential shooter was distracted because two staff members started down the stairs as two policemen came through the door. Vickie, on duty as telephone operator, had made the emergency call deftly. Matt's potential "killer" sheepishly gave the gun to the cop.

The incident was over and I must have staggered off to the Raleigh Hotel Bar.

**The Control Room**

The heart of the TV station has always been the control room.

Most CONTROL ROOMS have a BIG window looking on to the studios.

Some TV stations have control rooms far from the studios. But it works out all right because the camera monitors show what’s going on.

Most TV is originated from the same studio with different set up areas at sides and corners of studios. Up above are the entire studio area are steel lighting grids which can be easily changed as required by production. Some of the set areas are called SOUND STAGES with many outlets for microphone pickup for music or voice.

Studios should be quiet except for the programs when they are being produced.
No sound from the control room can be heard in the studio except when a speaker is activated from the director or producer. Usually the headset intercom is the way the director, producer and others communicate their wishes to the crew.

That’s what they are called, THE STUDIO CREW.

Leader of the crew is the studio manager who is responsible for everything being where it should be at the correct time and under the proper conditions. Most of the crew is connected to the director by headsets.

During production there is also a video engineer close at hand. In addition most camera operators are electronic engineers.

TV STARTED LONG AGO BUT ABOUT 80 YEARS AGO ELECTRONIC PIONEERS ACTUALLY BROADCAST MOVING IMAGES WITH WHAT THEY CALLED THE CATHODE RAY TUBE WHICH DUMONT ELECTRONICS SOLD TO THE U.S. WAR DEPARTMENT FOR THE DEFENSE OF OUR SOLDIERS DURING WORLD WAR TWO.

All during the war the DuMont Laboratories in Clifton, N. J. wanted to create television as an information and entertainment medium. Slowly progress was made and finally, some very primitive TV was broadcast.

The most serious drawback was there were no stations or cables coming into homes and there were no receivers for families to buy. Only radio was KING.

Scientist kept trying and soon they could broadcast a picture. The images were shaggy and needed a tremendous amount of light. Cameramen needed to keep cameras moving from side to side or the picture would burn into what they called the RASTER and create a GHOST-LIKE effect in your picture that would take several minutes to get rid of.

In the early days televising a STUDIO PICTURE required BRILLIANT LIGHT. Picture rows and rows of lights 4 feet wide and 8 feet high on roller polls called LIGHT BANKS with 40 FOODLIGHTS on each bank, adding up to 6,000 watts for each bank.

A news set with a desk and chair would have at least two light banks sending out 12,000 watts for 30 minutes.

So much light meant that temperatures in front of those banks of incandescent 150 watt bulbs could get up to 120 degrees and performers perspired so much they had to take towels and wipe them on the set with them to be able to dry down when the ‘camera was off of them.

FLAT LIGHTING (no shadows) was all we could work with so in the beginning everything looked the same. As cameras became more sensitive, lighting could be reduced and used as part of the camera art as LIGHTING DIRECTORS worked with different shades of black and white. There was only black and white in the early days.

Everything was in black & white.

EVERYTHING was done live in the old clays. Early on the only recording that could be done was with movie film or flat wax records. We had no tape, no cell phones, no CDs or DVDs. It was fun.

Advertisers didn’t want to pay for film so commercials and programs locally were done live.
We had the NBC, CBS, ABC, Mutual Network and the DuMont Television Network which was the pioneer of the age.

**Television Broadcasting Needs**

Many participants
- **CREATORS**
- **WRITERS**
- **EXECUTIVE PRODUCERS**
- **PRODUCERS**
- **DIRECTORS**
- **TECHNICAL DIRECTOR**
- **AUDIO/ MUSIC DIRECTORS**
- **CHORIOGRAPHERS**
- **DIRECTOR/SPECIAL EFFECTS**
- **SET DESIGNERS/CONSTRUCTORS**
- **LIGHTING DIRECTORS**
- **ACTORS**
- **MAKE UP ARTISTS/COSTUMERS**
- **STUDIO/STAGE MANAGERS**
- **STUDIO CAMERAMEN**
- **STUDIO ASSISTANTS**
- **STAGEHANDS/CARPENTERS/ELECTRICANS**

In the control rooms
- **DIRECTORS**
- **TECHNICAL DIRECTORS**
- **TAPE TECHNICIANS**
- **AUDIO SPECIALISTS**
- **FILM SPECIALISTS**
- **SPECIAL EFFECTS**

In the viewing room
- **INTERESTED PERSONS**