Chapter 38 of the Society of Broadcast Engineers
SBE
EL PASO - LAS CRUCES - JUAREZ

JULY 2011

PO Box 3561 El Paso, TX 79923-3561 www.kint98.com

NEWS

From Wikipedia, the free encyclopedia

Broadcast engineering

WHAT IN THE WORLD IS THIS?

BROADCAST ENGINEERING is the field of electrical engineering, and now to some extent computer engineering and information technology, which deals with radio and television broadcasting. Audio engineering and RF engineering are also essential parts of broadcast engineering, being their own subsets of electrical engineering.

Broadcast engineering involves both the studio end and the transmitter end (the entire airchain), as well as remote broadcasts. Every station has a broadcast engineer, though one may now serve an entire station group in a city, or be a contract engineer who essentially freelances his services to several stations (often in small media markets) as needed.

DUTIES

Modern duties of a broadcast engineer include maintaining broadcast automation systems for the studio and automatic transmission systems for the transmitter plant. There are also important duties regarding radio towers, which must be maintained with proper lighting and painting. Occasionally a station's engineer must deal with complaints of RF interference, particularly after a station has made changes to its transmission facilities.

TITLES

Broadcast engineers may have varying titles depending on their level of expertise and field specialty. Some widely used titles include:

Broadcast design engineer
Broadcast systems engineer
Broadcast IT engineer
Broadcast IT systems engineer
Broadcast network engineer
Broadcast maintenance engineer
Video broadcast engineer
TV studio broadcast engineer
Outside broadcast engineer
Remote broadcast engineer

QUALIFICATIONS

Broadcast engineers may need to possess some or all of the following degrees, depending on the broadcast technical environment. If one of the formal qualifications is not present, a related degree or equivalent professional experience is desirable.

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OUR SUSTAINING MEMBERS:

KTSM-TV

KVIA-TV

KRWG-TV

KBNA-AM/FM & KAMA-AM

KHEY-AM/FM, KPRR-FM & KTSM-AM/FM

KLAQ-FM, KISS-FM & KROD-AM

KPAS-FM-
ALGIE A. FELDER CSBE

KINT98.COM
INTERNET RADIO NETWORK

BURST COMMUNICATIONS INC.- THOM JOHNSON

GIESLER BROADCASTING SUPPLY INC.
DAN GEISLER

ENTRAVISION COMMUNICATIONS

PANASONIC-JIM McGowan

SCMS, INC.-

TNT BROADCAST AND TELECOMMUNICATIONS CONTRACTORS,INC.-
PAUL TERRY

KSCE-TV

RF Specialties of Texas
Dan Sessler.

KCOS-TV

TIME WARNER CABLE

KELP-AM
ARNOLD McClatchy

HUNTLEIGH TECHNOLOGY GROUP

Degree in electrical engineering
Degree in electronic engineering
Degree in telecommunications engineering
Degree in computer engineering
Degree in management information system
Degree in broadcast technology

KNOWLEDGE

Broadcast engineers are generally required to have knowledge in the following areas, from conventional video broadcast systems to modern Information Technology:

- CONVENTIONAL BROADCAST

Audio/Video instrumentation measurement
Baseband video – standard / hi -def
Broadcast studio acoustics
Television studios - broadcast video cameras and camera lenses
Production switchers (video mixer)
Audio mixer

BROADCAST IT

-Video compression - DV25, MPEG, DVB or ATSC (or ISBD)
-Digital server playout technologies. - VDCP, Louth, Harris, control protocols
-Broadcast automation.
-Disk storage - RAID/NAS/SAN technologies
-Archives - Tape archives or grid storage technologies
-Computer networking
-Operating systems - Microsoft Windows/ Mac OS/ Linux/ RTOS
-Post production - video capture and non-linear editing systems (NLEs).

RF

-RF satellite uplinking - High-powered amplifiers (HPA)

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TBD

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Owen Smith

Scholarship Committee: Rick Vilardell

Web Site Committee: Norbert Miles

Sustaining Membership:TBD

Program Chairman: Enrique Lopez

Newsletter: Antonio Castro

EAS Chairman: Ron Haney

Executive Committee:
Antonio Castro
Enrique Lopez
Marvin Haney

EL PASO,TX CHAPTER 38 MEETING MINUTE

DATE 06/14/2011 LOCATION: Rancher's Grill

MEETING CALLED TO ORDER: 12:40 PM, BY ANTONIO CASTRO, THERE WERE 8 MEMBERS IN ATTENDANCE.

REPORT OF THE SECRETARY: MINUTES ACCEPTED AS POSTED IN THE NEWSLETER BY GLENN LEFFLER

REPORT OF THE TREASURER: CURRENT BALANCE OF $ 7,655.89, . ACCEPTED BY NORBERT MILES.

REPORT OF THE CERTIFICATION COMMITTEE: GLENN LEFFLER HAVING PROBLEMS WITH HIS RE-CERTIFICATION. WE WILL CALL MEGAN CLAPPE

REPORT OF THE MEMBERSHIP COMMITTEE: ATTENDING MEMBERS WILL INVITE AT LEAST ONE PROSPECT

REPORT OF THE FREQUENCY COORDINATOR COMMITTEE: NO REPORT

REPORT OF THE SCHOLARSHIP COMMITTEE: VOTED UNANIMOUSLY FOR ALEXANDER BARRON AS THE RECIPIENT FOR THIS YEAR.. NEXT MONTH WILL PRESENT THE CHECK.

REPORT OF THE WEB SITE COMMITTEE : 551 HITS, NOW WE HAVE A CHAT ROOM. WILL REMOVE DEAD LINE FOR SCHOOLARSHIP.

REPORT OF THE EAS CHAIRMAN : NO RESPONSE FROM THE CHAIRMAN RON HANEY.

REPORT OF THE PROGRAM COMMITTEE: NO PRESENTATION THIS TIME.. RF SPECIALTIES OF TEXAS FOR JULY.

UNFINISHED BUSINESS: PAUL TERRY HAS NO REPORT

NEW BUSINESS OR ANY ITEMS FOR THE CHAPTER INTEREST: NONE

NEXT MEETING DATE AND LOCATION: JULY 12, 2011, LOCATION : CLEARCHANNEL RADIO STUDIO. @ 6:30PM

MEEETING ADJOURNED: 1:08 PM .

NOTES FROM THE EDITOR:

Enjoy the article pulled from WIKIPEDIA, it is of relevant information for our group 2010 . You can always check by your self the content

NOTES FROM THE SECRETARY:

It WAS sent via regular mail a very friendly remainder to those members and sustaining members that had not covered the 2011 dues. Watch for the mail !! ONLY 7 MEMBERS !!

JULY PROGRAM

Our July meeting will be held at the CLEARCHANNEL RADIO STUDIO where we are going to present the scholarship check to the student **Alexander Barron.**

And for the MAIN EVENT, we are proud to present:

RF Specialties of Texas, own by our long time friend Dan Sessler.

They represent among many other equipment: Nautel AM & FM transmitters and Linear TV transmitters.

Do not miss this opportunity to say hello and check out the presentation

The invitation is for Tuesday the 12 of July, 2011 at 6:30 PM @

CLEARCHANNEL RADIO STUDIO

4045 n. Mesa, El Paso, Texas

We want to start early in order to cover all aspects of the meeting, so please be there on time.

PIZZA and drinks will be offered !!

RF satellite uplinking – High-powered amplifiers (HPA)
RF communications satellite downlinking – Band detection, carrier detection and IRD tuning, etc.

RF transmitter maintenance - IOT UHF transmitters, solid state VHF transmitters, antennas, transmission line, high power filters, digital modulators

- HEALTH AND SAFETY

Occupational safety and health
Fire suppression systems like FM 200.
Basic structural engineering
RF hazard mitigation

Above mentioned requirements vary from station to station

DIGITAL ENGINEERING

The conversion to digital broadcasting means broadcast engineers must now be well-versed in digital television and digital radio, in addition to analogue principles. New equipment from the transmitter to the radio antenna to the receiver may be encountered by engineers new to the field. Furthermore, modern techniques place a greater demand on an engineer's expertise, such as sharing broadcast towers or radio antennas among different stations (diplexing).

Digital audio and digital video have revolutionized broadcast engineering in many respects.[4] Broadcast studios and control rooms are now already digital in large part, using non-linear editing and digital signal processing for what used to take a great deal of time or money, if it was even possible at all. Mixing consoles for both audio and video are continuing to become more digital in the 2000s, as is the computer storage used to keep digital media libraries. Effects processing and TV graphics can now be realized much more easily and professionally as well.

Other devices used in broadcast engineering are telephone hybrids, broadcast delays, and dead air alarms

ENGINEERING SERVICES

Broadcast stations often call upon outside engineering services for certain needs. For example, because structural engineering is generally not a direct part of broadcast engineering, tower companies usually design broadcast towers.

Other companies specialize in both broadcast engineering and broadcast law, which are both essential when making an application to a national broadcasting authority for a construction permit or broadcast license. This is especially critical in North America, where stations bear the entire burden of proving that their proposed facilities will not cause interference and are the best use ot the radio spectrum. Such companies now have special software that can map projected radio propagation and terrain shielding, as well as lawyers that will defend the applications before the U.S. Federal Communications Commission, Canadian Radio-television and Telecommunications Commission (CRTC), or the equivalent authorities in some other countries.

ORGANIZATIONS

In the United States, many broadcast engineers belong to the Society of Broadcast Engineers (SBE). Some may also belong to the Society of Motion Picture and Television Engineers (SMPTE),[1] or to organizations of related fields, such as the Audio Engineering Society or Institute of Electrical and Electronics Engineers (IEEE)) - IEEE Broadcast Technology Society (BTS).

For public radio, the Association of Public Radio Engineers was created in late May 2006.