

Central Texas IEEE Section 75th Anniversary

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Austin, Texas

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Region 5 IEEE Director



Background: IEEE History

- Telegraph was first important practical application of electricity (1844)
- Basic patent on telephone issued to Bell (1876)
- In 1884 a group of 71 electrical practitioners formed the AIEE
- Edison and others introduced incandescent lamps and electric power generation and distribution systems (late 1800's)
- Radio developed by Marconi and others (early 1900's)
- Radio broadcasting began in early 1920's.
- IRE formed in 1927.
- WW-II and space age drove many innovations (radar, television, computers, semiconductors)
- ~~IRE and AIEE merged to form AIEE in 1963~~



Central Texas played leadership role in application of electricity and electronics technology over the years

- Austin Dam (1893) first U.S. hydro-electric generator
- Electric streetcars in late 1800's in Austin and San Antonio
- Electric power in San Antonio and Austin in late 1800's
- UT's engineering programs drove technology growth
- Radio broadcasting came to San Antonio in 1922 (WOAI)
- Several radio experimenters (hams) in Central Texas in 1930's
- AIEE Section formed on May 23, 1930.
- Leader in electrification of rural areas (first REA lines)
- Central Texas continues as leader in technology (industry, military, university)



University of Texas played key role in driving technology in Central Texas

- EE program dates back to late 1800's
- Program and growth paralleled other major U.S. universities
 - faculty mostly MS degrees
 - focus on electric power until post WW-II
- Accredited by ECPD in 1936
- Aspiring radio engineers took courses outside EE curriculum (physics and advanced mathematics)
- Program followed fast pace of new developments after WW-II
- Highly respected research university today
- Among largest IEEE Student Branches in world.



WOAI radio: a San Antonio landmark

- First broadcast on September 25, 1922 (500 watts, 360-485 meters)
- Proprietor Mr. G. A. C. Halff built station so he could provide free radios.
- By 1930 power had increased to 50kW
- Clear channel signal that is familiar to many people who have never visited Texas
- B-26 bomber struck tower in 1956, back on air within one month
- Pioneer in radio broadcasting, still a leader in AM radio today



Rural Electrification in Central Texas

- Less than 5% of rural Texas was electrified by mid 1930's
- Electric windmills and a few gasoline driven generators provided electricity for a few farms and ranches in 1930's
- Rayburn-Norris bill gave impetus to rural electrification
- One of the first REA lines supplied electrical power to Barrett (near Austin) in 1936
- REA contributed much to economic development of Texas and other areas throughout the United States



History of Central Texas IEEE Section

- AIEE Section formed May 23, 1930
- First chair - Dean W. Flowers (1930-31)
- Early chairs - J.E. Woods (1931-32), I.A. Uhr (1932-33), V.H. Braunig (1933-34), R.J. Foley (1934-35)
- IRE formed in 1947
- First chair - C.L. Jeffers (1947-50)
- Early chairs - William J. Hamm (1950-52), Alfred H. LaGrone (1952-53), John Ohman (1953-54), C.M. Crain (1954-55)
- Merged to become Central Texas Section in 1963
- First chair - Robert M. Jolly (1963-64)
- Early chairs - Alfred H. LaGrone (1964-65), Calvin R. Graf (1965-66), W.R. Penn (1966-67), W.E. Cory (1967-68)



**Congratulations
to all members and
dedicated volunteers of the
Central Texas
IEEE Section
on your
75th anniversary!**



Acknowledgments

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