SBE Chapter Engineer of the Year Nomination -- 2017

SBE Chapter 17 is pleased to nominate Steve Brown, (member number 5814) as our Chapter Engineer of the Year because of his long-standing dedication to the engineering profession and SBE.

Steve started in broadcasting in 1964. He was a Ham Radio operator and was fascinated by the 'big tubes' in a one kilowatt transmitter at the local radio station. He was also a disc jockey.

He was in the Air Force from 1968 to 1972. After leaving the Air Force he was a contract engineer in the Des Moines, IA area. In 1977, he became an engineer at WWTC in the Twin Cities. From 1979 until his retirement as chief engineer in 2004, he was at WLTE (FM) in Minneapolis. From 2004 until he hung up his test leads this past year he has been a contract engineer.

During the time period Steve was at WLTE (FM) he supervised two studio moves, he developed a customized 'black box' utilizing a Basic Stamp that permitted one button reconfiguration of ISDN equipment while simultaneously switching audio output channels. Another device he designed and built permitted a directional AM radio stations phase monitor readings of multiple towers to be read on just one channel of a remote control.

Steve Brown was one of the first engineers to utilize a helicopter to make relative field measurements of the pattern of a FM radio station. Around 1986 WLTE replaced its transmission antenna located on one of the twin towers at the Telefarm site in Shoreview. Prior to the replacement of the antenna Steve and another engineer made a set of measurements of the existing antenna. After the replacement of the antenna Steve made another set of measurements to demonstrate the changes and improvements of coverage the antenna change made.

In the 1980s a group of radio stations built a joint transmitter site on the roof of the 52 story IDS building in downtown Minneapolis. Steve, along with engineers Dan Reider, George Werl, and Mike Gorniak, researched and determined why this site was creating interference problems for other radio stations in the Twin Cities area. Steve and the other engineers spent many days making field strength readings around the Twin Cities to find the source of the problem. This group of engineers determined the problem of the interference to be 'Receiver Induced Third Order Intermodulation Effects'. The result of the study and interference problems, the stations located on the IDS building were ordered to operate at 50% power until the problem was resolved.

In the late 1980s, as a result of the interference problems at IDS, a group of stations proposed a combined antenna solution that would be installed on the Fox TV tower in Shoreview. Steve was one of the primary engineers in developing the specifications for the facility. The result is a nine FM station combined transmission facility located at Fox TV.

In 2001, Steve helped build a seven tower directional radio station in Omaha, NE. During the construction he provided much insight on the proper installation of equipment and construction techniques.

After Steve retired in the fall of 2004, he became a contract engineer. He was one of the primary contractors used by Minnesota Public Radio in the construction of its HD radio facilities. Steve was involved in building more than 20 HD stations. He has commented that this was the most fun he had as a broadcast engineer. One of the challenges involved with the construction was mixing the old and new technology at the various transmitter sites.

Steve was also involved with Classical South Florida in southern Florida. He helped moved and renovate two transmitter facilities in that area.

This list of accomplishments is by no means complete. He was involved in the construction of a radio station in Washburn, WI. There's a directional radio station west of the Twin Cities he has maintained and improved. He, along with Mike Hendrickson, discovered a design defect in RCA 10 kW transmitters that caused high levels of RF that interfered with other equipment at a transmitter site.

This past year Steve stated that he 'has hung up his test leads' and is now completely retired.

Steve has been a member of the SBE for his entire broadcast career. During the 1980s he served on the SBE National Board of Directors. He was certified as a CBRE and a CBNT. He is currently a life member of the SBE.

This nomination is supported by the following SBE Chapter 17 Executive Committee members:

Joe Conlon, CSTE – Chair & Past Secretary

Nathan Hart - Vice-Chair & Past Chair

Michael Ostlund, CBT, CBNT – Treasurer & Past Chair

Mike Hendrickson, Secretary, Past Chair and SBE National Board Member

George Werl, Jr., CPBE – Certification Coordinator

Taylor Robert Baker, CTO - Program Coordinator

Bruce Browning – Past Program Coordinator