## Communications Journal — One Quarter Century

By Paul Hise

MERICAN COMMERCIAL LINES commemorates ONE QUARTER CENTURY (TWENTY FIVE YEARS) of public maritime communications and it is my twenty fifth work anniversary with American Commercial Lines. As I look back over the last twenty five vears I think of some of the marvelous people I have had the opportunity to work with on the boats and on the shore and I'm also reminded of the evolution of marine communications during this time.

January 1, 1966 American Commercial Line officials arrived at a decision to make a commitment to its own communications system. The station would be used for communications with any telephone in the United States to any boat equipped to communicate with the station. Marine... Public Coast Radio Station WFN was purchased from Warner & Tamble Radio of Memphis, Tennessee. Station WFN was located on the Jeffboat property in a twenty foot square concrete block building, between the tank farm and the Jeffboat upper river fleet-

ing area.

At this time the communications media was Medium and High frequency, two to eight megahertz, amplitude modulated (AM), using a World War II Western Electric 250 watt transmitter and six modified RCA 8050 receivers. This combination was controlled by a home brew multiple toggle switch remote console setting on a used grey U.S. Navy metal desk. A large backlite Raytheon advertisement clock provided the time. An eighteen inch window fan in the front window air-conditioned the building. Four schedules were called each day between 6 AM and 6 PM Monday through Saturday and 6 AM to 1 PM on Sunday. These schedules were for twenty to thirty boats, STEPHEN F. AUSTIN, LASALLE, RAYMOND E. SALVATI, PHILIP SPORN, SPEN-CER, PAT CALHOUN, JR., GIBRAL-TER I and TRADEWINDS to name a few. Boat orders were sent to the Station by landline teletype between schedules. During schedule time the teletype was used to record the boat traffic on line to the ACBL office. A paper teletype tape was cut for retransmission to provide multiple schedule copies for distribution to office personnel. The time between

schedules was utilized to receive boat grocery orders to be forwarded to a boat store, to complete ship to shore radio/telephone calls, maintain the equipment at the station and at times to provide electronic maintenance to boats in for repairs at the shipyard.

In early 1967 we experimented with high frequency sideband radio. Plans were developed to relocate the station to a new building and facilities. We began operation in the new facility at 1700 East Market Street in December 1967. A new 1000 watt Single Sideband Transmitter, state of the art receivers, VHF-FM transceivers, seven towers from 60 to 90 feet tall, new halfwave dipole antennas for each frequency band and a custom designed control console were the heart of the operation.

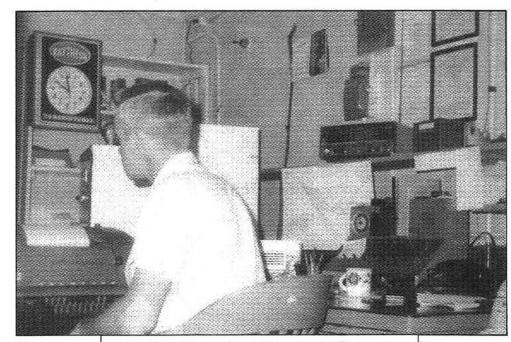
From 1968 to 1976 Sideband and VHF-FM transceiver installations were completed. A new towboat construction program was initiated using the newest electronic and navigation equipment. The first duplex analog data communications were conducted between WFN and the M/V BILL ELMER on the Mississippi River. Plans were begun to relocate the WFN transmitting facilities to a remote location west of New Albany, Indiana.

In the Fall of 1976 the new remote

transmitting site became operational. The developmental data radio system was completed and the first digital data communications were transmitted between the station and the M/V SONNY IVEY in 1980.

American Commercial Lines assumed control of Watercom in 1982 and the Waterway Communications System WATERCOM became a reality with public operations in 1986.

From the meager beginnings in 1966 of American Commercial Lines with its vacuum tube double-sideband AM radio to transistorized single sideband and VHF-FM transceivers, to the automated direct dial Watercom Radiotelephone System we have progressed to the latest communications via fiber-optic/unshielded twisted pair ACBL Information Systems Local Area Network in the offices at 1701 East Market Street. American Commercial Lines has an outstanding record for progress and is on the forefront of communication innovations. The 1990's will be the pivotal decade in communications technology. The continued discoveries in basic physics, coupled with introduction of new devices and methods will stretch communications beyond our present imagination.



Paul H. Hise began employment January 1, 1966 as radio officer, he has held the position of manager of Amcom, chief electronic engineer, manager installation and maintenance for WATERCOM and is currently manager of telecommunications for American Commercial Lines.