Who's On First? A Note on the Transistor Radio

Lou Costello wanted to know the answer to the question "who's on first" for the St. Louis baseball team, but Bud Abbot demonstrated how hard it is to answer such a question (see the Sketch by Bud Abbot and Lou Costello). The same problems of terminology and definition occur in the history of technology. Nick Lyons in The Sony Vision, (N.Y., 1976) claimed that Sony pioneered the "world's first pocket-size all-transistor radio" in March 1957 (page 54). However, Akio Morita in *Made in Japan*, (N.Y., 1986) wrote that although it was the "world's smallest" it was not the first. "The introduction of this proud achievement was tinged with disappointment that our first transistorized radio was not the very first one on the market" (page 71). That honor belonged to an American company in Indianapolis called I.D.E.A. that announced the production of the Regency TR-1 on October 18, 1954. Michael Schiffer in The Portable Radio in American Life, (Tucson, 1991) wrote that this was "the world's first shirt-pocket portable radio--with transistors" (page 176). The Regency may have been the first commercial transistor radio but Paul Davis has described his development of the first working transistor radio at Texas Instruments in May 1954 (see the Southwestern Historical Quarterly, 1993, pages 56-80). In Germany, Robert Denk may have produced a transistor radio in February of 1948.

The germanium transistor was first demonstrated privately at Bell Labs Dec. 23, 1947, by William Shockley and his team. However, production problems delayed its practical use. Until it was perfected, the invention was kept secret for 7 months and no patents were filed until 1948; the first public announcement was June 30, 1948 (Braun and Macdonald, p. 33). Raytheon was first to mass-produce transistors in 1952 and the first to produce a commercial product with transistors, the hearing aid. Amateurs used transistors to design experimental radio circuits as early as 1950 and Western Electric engineers made a wrist radio in 1952 with 4 transistors as a gift for Dick Tracy creator Chester Gould (Schiffer page 174). The Regency claimed in its advertisements that it was the "world's first pocket radio" but Schiffer has chronicled the earlier history of pre-transistor portable radios, such as the Operadio 2 in 1923, the "first stand-alone portable" (page 72), the Zenith Companion in 1924, the "first boom-box advertised nationally" (page 75), and the Belmont Boulevard in 1945, the "world's first commercial shirt-pocket radio" (page 162) using the subminiature tubes developed by Norman Krim at Raytheon in 1939.



Regency transistor radio of 1954, from Smithsonian Information Age exhibit

The Regency may have been first, but it failed to earn a profit and disappeared after a few years. Its importance was that it was a showcase for a new technology. Other U.S. companies introduced dozens of transistor radio models and by 1959 almost half of the 10 million radios made and sold in the U.S. were the portable transistor type. Philco introduced the first transistor TV in January 1959 (Schiffer page 193). Tom Watson, Jr., at IBM gave Regency radios to his engineers and told them to put transistors in computers. Texas Instruments would earn millions in the 1960's supplying IBM with computer transistors.

Sony was not first, but its transistor radio was the most successful. The TR-63 of 1957 cracked open the U.S. market and launched the new industry of consumer microelectronics (Schiffer page 209). Using cheap labor, creative marketing and technological innovation, Sony would dominate the world consumer electronic market into the 1980's.



Sony transistor radio of 1955 with green case, from Smithsonian Information Age exhibit

My thanks to <u>Don Adamson</u> and <u>Aldo Andreani</u> for suggestions on the transistor radio. See also
• <u>Transistor Radios</u> from Bob Davidson. For additional references, see the Suggested Readings on the <u>Recording Technology History</u> page.

© 1999 by Steven E. Schoenherr. All rights reserved.

The photos on this page are used with permission of the Smithsonian National Museum of American History.

Return to Recording Technology History Notes | this page revised 8/16/1999