Making Waves: 75 Years of Radio Technology Celebrating the U.S. National Science Foundation

1950s

1950 — President Truman signed the law creating the National Science Foundation and its governing board.

1954 — Color TVs became publicly available from RCA while NBC began regular color broadcasts.

1958 — The U.S. launched Explorer 1, the first satellite to report a major space discovery through radio.

1960s

1961 — FM radio's first official stereo broadcast in the U.S., bringing richer sound to listeners nationwide.

1963 — The Arecibo Observatory opened in Puerto Rico, advancing radio astronomy and deep-space signal research.

1969 — Over 600 million people watched live TV from the Moon, thanks to radio signals transmitted by Apollo 11.

1970s

1973 — Motorola made the first handheld mobile phone call, marking a leap in wireless communication.

1977 — Launched in 1977, NASA's Voyager probes began sending radio signals across the solar system and beyond.

1980s

1983 — Columbia led the move from ground stations to near-global satellite communications in space.

1984 — Atari's bold move to wireless game controllers was short-lived, ending after a year due to high costs and interference issues.

1988 — Motorola's MicroTAC flipped open a new chapter in mobile phones that could fit in your pocket.

1990s

1992 — 2G brought a digital leap in phones, replacing analog calls and delivering the world's first text: Merry Christmas.

1994 — Named after a Viking king, Bluetooth launched as a short-range radio link for devices to connect wirelessly.

1999 — Powered by the faster new 802.11b standard, Wi-Fi left the lab and brought wireless internet home.

2000s

2001 — XM and Sirius brought the first satellite radio to U.S. drivers, with real-time broadcasts from space.

2004 — Spirit and Opportunity Mars rovers used relay radios to an orbiter, staying light and pioneering a new way to talk to Earth.

2007 — Apple launched the iPhone and made Wi-Fi, Bluetooth, and cellular radios core to the user experience like no phone before it.

2010s

2010 — 4G LTE improved cellular radio speed, unlocking streaming, sharing, and real-time navigation.

2015 — The Internet of Things took off as LoRa radio linked low-power sensors tracking air, water, weather, and movement.

2019 — Apple introduced ultra-wideband radio to phones, pinpointing nearby connected objects more precisely than GPS.

2020s

2023 — AI showed it could manage the radio spectrum, helping public and private users share the crowded airwaves.

2025 — NSF 75 YEARS OF DISCOVERY & INNOVATION

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