University of Michigan Amateur Radio Club

W8UM / W8AXZ

Department of Electrical Engineering & Computer Science Building
1301 Beal Avenue
Ann Arbor, Michigan 48109

Contact: **W8UMBoard@umich.edu**





Notable Individuals with Links to the University of Michigan ARC

John Kraus (W8JK), W8AXZ Club Treasurer
Hiram Percy Maxim (W1AW), Created the ARRL following the Easter Day Floods of 1913
John Reinartz (1QP), aided in the development of the Greenland Expedition receiving equipment
Anthony "Tony" England (W0ORE), 1st astronaut to use SSTV from space
Irvin Hoff, (K8DKC) designed the FSK Demodulator
Vic Poor (W5SMM), co-developer of the Intel 8008 & AMTOR, PACTOR, WINLINK
Richard Davidson (K9RD) Herb Brier Award 2005

Dudley Nichols (8IM), Radio Operator; 1913 Easter Day Floods & Academy Award Winner; 1936

Cleveland Abbe, inaugurated a relay system of telegraphic weather reporting (1869)
1st Director of the National Weather Service
"America's First Weatherman"
Established the four U.S. Time Zones

Jack Burchfield, (K4JU) Co-Founder of TenTec Corp.
Albert Kahn (K4FW) Co-Founder of TenTec & Electro Voice
E. King Stodola (W2AXO) Pioneer in Earth-Moon-Earth Signals
Wes Schum, (W9DYV) Central Electronics
Jonathan Schmidt (W8BZB) co-developer of the Intel 8008
Joseph Hertzberg (8CYI) RCA Corporation
H. Richard Crane (W8CWN) Inventor, Race Track Synchrotron & National Medal of Science Award by President Reagan
Mark Harrington, Founder, American Meteorological Journal (1884)
Chief, U.S. Weather Bureau (1891)

Amos E. Dolbear: (undergraduate and honorary doctorate degrees)
1876 patent for the "magneto-electric telephone"
1879 patent for the "static telephone"
1885 patent for a "wireless telegraphy system"

Samuel F. B. Morse, awarded 1st Place for his telephone (1876 Philadelphia Exposition) by UM Professor James C. Watson & later aided by UM President Tappan in obtaining his Telegraph Patent (1868; President Tappan's "My Dear Julie" letter)

Alexander G. Bell, awarded 1st Place for his telephone by UM Professor James C. Watson (1876 Philadelphia Exposition)

Amateur Radio Club "Silent" Movie Links:

1926 Greenland Expedition https://bentley.mivideo.it.umich.edu/media/1_97jnbxsd (showing first portable operation from Arctic Greenland)

1957 University High Radio Class GarrisonMovie jp.mp4 (High School amateur radio class on campus & the Washtenaw County Civil Defense Bus)

University of Michigan Station Trustee's & Associated Callsigns

1860	The Detroit Observatory (Franz Brunnow & Cleveland Abbe)
1898	The Department of Physics (R. D. Parker, Augustus Trowbridge & Karl Guethe)
1913	Felix J. Watts (8XA)
1919	Porter H. Evans (8AXZ)
1935	Merton G. Wellington (W8AXZ)
1939	Major Robert N. Kunz (W8AXZ)
1947	Jack Kline (W8AXZ)
1947	Major Vollrath, Dept of Military Science & Tactics (WU9 / W8AXZ)
1946	University of Michigan Radio Club (W8ZUP)
1946	West Quad Radio Club (W8ZSQ)
1955	South Quad Radio Club (W8PGW)
1957	University High School (W8EHZ)
1957	East Quad Radio Club (K8GRE)
1962	University of Michigan (K8TIG)
1974	Richard K. Brown (W8AXZ)
1975	Engineering Department (W8LVN)
1977	James Phillips (W8UM)
1978	John Ackerman (W8UM)
1985	Mark Travaglini (W8UM)
2019	Michael Fluegemann (W8AXZ)

8XA	Experimental License (1913)
WU9	Signal Corps
8AXZ & NU8AXZ	Signal Corps
8BEK & NU8BEK	R. O. T. C.
1XL	1st Greenland Expedition (1926)
NX1XL	2nd Greenland Expedition (1927)
W8AXZ	University of Michigan
W8AXH	(possible mis-type in the Michigan Daily)
W7KDZ	Camp Davis Station, Wyoming
W8ZUP	University Radio Club
W8ZSQ	West Quad Dormitory Club
ZS4BL	Lamont-Hussey Observatory, South Africa
K8GRE	East Quad Dormitory Club
W8PGW	South Quad Dormitory Club
K8TIG	Electrical Engineering Department
W8LVN	Engineering Department
W8EHZ	University High School Radio Club
W8UM	University of Michigan ARC
W8AXZ	re-assigned; University of Michigan ARC

Chief Radio Operators / Club Presidents

1860	The Detroit Observatory	Professors Franz Brunnow & Cleveland Abbe
1898	Department of Physics	Professors R. D. Parker, Augustus Trowbridge & Karl Guethe

1913	8XA	B. N. Burglund
1915	8XA	D. A. Nichols 8IM
1917	**WWI**	**War imposed inactive**
1919	W8AXZ	UNKNOWN
1921	W8AXZ	Franklin Johnston
1923	W8AXZ	UNKNOWN
1925	W8AXZ	Franklin Johnson
1927	W8AXZ	UNKNOWN
1929	W8AXZ	Walter Nelson
1931	W8AXZ	Fred Albertson W8DOE
1933	W8AXZ	Elton Wenzel W8BJP
1935	W8AXZ	Benjamin (Ben) Bailey
1937	W8AXZ	Albert Stroherer
1939	W8AXZ	Roden Rogers W8EPC
1941	**World War II**	**Club Inactive**
1943	**World War II**	**Club Inactive**
1945	**World War II**	**Club Inactive**
1946	W8ZSQ	Ward Cornelius
1947	W8ZSQ	Bruce Weinert
1948	W8ZSQ	Corky Eberwein
1950	W8ZSQ	Keith Heiss
1952	W8ZSQ	Leonard Holder
1954	W8PGW	Marshall Batt W8FBV
1955	W8PGW	Barry MacRae
1957	K8GRE	UNKNOWN
1959	K8GRE	UNKNOWN
1961	Inactive	UNKNOWN
1964	K8TIG	Tom Russell
1966	W8UM	Thomas Russell W8FAW
1968	W8UM	Gary Chatters WA9ZZZ
1970	W8UM	UNKNOWN
1971	W8UM	Patrick Barkey N9RV
1973	W8UM	Lawrence Koziel K8MU
1975	W8UM	Patrick Barkey WA8YVR / N9RV
1977	W8UM	David Turner
1979	W8UM	John Ackerman N8UR
1981	W8UM	Mark Travaglini WD8DPA

1914	8XA	D. A. Nichols 8IM
1916	8XA	UNKNOWN
1918	**WWI**	**War imposed inactive**
1920	W8AXZ	Franklin Johnston
1922	W8AXZ	Franklin Johnston
1924	W8AXZ	UNKNOWN
1926	W8AXZ	Robert Swain
1928	W8AXZ	Ellis B. Merry, W8KI
1930	W8AXZ	Fred C. Everett W8AEZ
1932	W8AXZ	C. W. Adams W8AOS
1934	W8AXZ	Benjamin (Ben) Bailey
1936	W8AXZ	Robert Austin W8DVB
1938	W8AXZ	Kenneth Levin W8OMI
1940	W8AXZ	R.K. Brown W8GSZ
1942	**World War II**	**Club Inactive**
1944	**World War II**	**Club Inactive**
1946	W8ZUP	Frank Abrams KL7BV
1947	W8ZUP	Donald Perkins W8WZA
1948	W8ZUP	Fred Dupslaff W8DCN
1949	W8ZSQ	Bruce Weinert
1951	W8ZSQ	Robert Wimmer
1953	**Korean War**	**Club Inactive**
1955	W8ZSQ	George Jones
1956	W8PGW	Bruce Bevelheimer
1958	K8GRE	UNKNOWN
1960	Inactive	UNKNOWN
1962	Inactive	UNKNOWN
1965	K8TIG	William (Bill) Myers
1967	W8UM	Steve Culp K8QKY
1969	W8UM	UNKNOWN
1970	W8PGW	James Henderson
1972	W8UM	James Kraemer WB8OSN
1974	W8UM	John Tedescu WB8EIC
1976	W8UM	UNKNOWN
1978	W8UM	Frederick Bartolomei (aka Fred Bart)
1980	W8UM	John Ackerman N8UR
1982	W8UM	Mark Travaglini WD8DPA

1983	W8UM	Gordon Good KC8ES	1984	W8UM	Al Plant KM8I
1985	W8UM	Steve Sponseller N8DKJ	1986	W8UM	Steve Sponseller N8DKJ
1987	W8UM	E. Joe Tillo II WD8DDX	**1988**	W8UM	UNKNOWN
1989	W8UM	UNKNOWN	**1990**	W8UM	UNKNOWN
1991	W8UM	UNKNOWN	**1992**	W8UM	UNKNOWN
1993	W8UM	Greg DeMaggio	1994	W8UM	Greg DeMaggio
1995	W8UM	Adam Thodey	**1996**	W8UM	UNKNOWN
1997	W8UM	UNKNOWN	**1998**	W8UM	UNKNOWN
1999	W8UM	UNKNOWN	**2000**	W8UM	UNKNOWN
2001	W8UM	UNKNOWN	2002	W8UM	Chris Gailbraith W1XG
2003	W8UM	Richard French KD8APA	2004	W8UM	Jonathan Suen
2005	W8UM	Lora Schulwitz KC8UDG	2006	W8UM	Rex Brown KC8ZSA
2007	W8UM	Rex Brown KC8ZSA	2008	W8UM	Rex Brown KC8ZSA
2009	W8UM	Jonathan White	2010	W8UM	Justin Paupore KD8PHY
2011	W8UM	Justin Paupore KD8PHY	2012	W8UM	Chunpeng Wang BG6CCQ / KD8MLS

** **2013**: **Centennial Anniversary of "Wireless" Telegraphy at the University of Michigan** **

2013	W8UM	Jameson Eisele KD8PIJ	2014	W8UM	Jameson Eisele KD8PIJ
2015	W8UM	Justin Paupore AC8PK	2016	W8UM	Stuart Carlson W8SRC
2017	W8UM	Kit Ng N9KIT	2018	W8UM	Kit Ng N9KIT & Rachel Norris KD0QYA
2019	W8UM	Kit Ng N9KIT	2020	W8UM	Michael Fluegemann KE8AQW

Significant Events in Telegraphy at the University of Michigan

1832 Faculty at the University of the City of New York (NYU) include: Samuel F. B. Morse, Leonard Gale & Henry Tappan with his student Alfred Vail
1852 Henry Philip Tappan becomes the University of Michigan **First** President
1854 Franz Brunnow appointed as Director of the Detroit Observatory
1857 **First** telegraphic cable is laid across the Detroit River
Franz Brunnow marries Rebecca Lloyd Tappan (daughter of Henry Tappan)
1858 Franz Brunnow investigates how to telegraph the time from the Detroit Observatory to Detroit
1861 Students begin to operate the campus telegraph station
The Detroit Observatory purchases 3 telegraph sets
1864 The **First** time & weather reports are sent from the Detroit Observatory to the City of Detroit
1868 Professor Alexander Winchell's **First** classroom lecture on "Morse's Telegraphy"
1868 President Henry Tappan's "**My Dear Julia**" letter provides evidence in defense of Samuel Morse's claim to have invented the electro-magnetic telegraph
1869 Cleveland Abbe **inaugurates** the relay of "Telegraphic Weather Reports"
1870 Cleveland Abbe becomes the **First** Director of the National Weather Service
1876 Philadelphia Exhibition; Professor James Craig Watson; Examiner:
UM Professor James Watson awards **First Place** to Samuel Morse's Telegraph (1876 Philadelphia Exhibition)
UM Professor James Watson awards **First Place** to Alexander Graham Bell's Telephone (1876 Philadelphia Exhibition)
A. E. Dolbear published The Art of Projecting"
1878 Professor James C. Watson pens his letter, in defense of Bell, in the journal Nature; The Telephone
1879 Cleveland Abbe recommended 4 time zones across the United States
1881 Amos E. Dolbear patents the "magneto-electric telephone"
1882 A. E. Dolbear publishes "On the Development of a New Telephonic System"
1884 Mark Harrington is founder of the *American Meteorological Journal*
"Telegraph without wires" S. J. M Bear
1885 Amos E. Dolbear, UM student, receives his patent for "wireless" telegraphy
1891 Mark Harrington becomes the **First** Chief of the U. S. Weather Bureau
1897 Amos E. Dolbear publishes "The Cricket as a Thermometer" (Dolbear's Law)
1898 The UM Physics Department **First** successful demonstration of wireless telegraphy (Augustus Terowbridge)
1899 Professors Augustus Trowbridge & Karl Eugene Guethe paper describing the Coherer
1902 Dr. Karl E. Guethe writes "The Speaking Arc & Wireless Telephony"
1903 UM Student, Floyd Mattice, transmits, by telegraph, the **First** play-by-play of a football game from Minnesota (Minnesota v Michigan; Little Brown Jug)
1905 Weather observations sent to the U. S. Weather bureau by telegraphy
1907 The Detroit Observatory becomes a station for the U. S. Weather Bureau
First class in wireless radio at the university taught by Professor R. D. Parker
1912 Engineering Department announcement of a 5kw transmitter with antenna
1913 UM receives their **First** radio license; Experimental License; 8XA
First recorded logbook entry (8XA; 11/13/1913)
Dr. R. D. Parker & B. N. Burglund develop the 15 kw spark-gap transmitter

B. N. Burglund (6FO), UM student hears a "frantic call" from Fremont, Ohio (Herbert V. Akerberg; future Vice-President, CBS). Then hears a call from Dudley Nichols, Wapakoneta, Ohio

First relay of emergency messages, during the Great Midwest Floods, originating from the University of Michigan wireless station

1914 **Formation** of the American Radio Relay League. Hiram Percy Maxim suggests the need for an informal system of relaying messages

1915 Lusitania sinking; received message. A string of attacks on merchant ships followed.

1915 **First** Checkers match with OSU via "wireless" telegraph

1917 Radio Operators leave the University to join the war effort

1917 Entry of United States into World War One; 4/7/1917 Operation of 8XA stopped due to WWI

1917 – 1919 World War I; Radio use restricted

1919 **W8AXZ** Station is re-established

1921 **WU9**; Signal Corp.; 10/4/1921 re-application after modifications to 8XA

1922 Radio Communications Course / Advanced Electricity classes become a part of the curriculum

1922 Ray E. Hall provides his schematics to Thomas Edison to improve his recording devices

1926 P. C. Oscanyan publishes "Radio Phenomena Recorded by The University of Michigan Greenland Expedition, 1926"

First portable, wireless, telegraphy operation during Professor Hobb's Greenland Expedition. Radio operators are Hans Schneider & P. C. Oscanyan. Both would provide radio reporting to the pilots of both the Greater Rockford and the Untin Bowler, and major news agency's, on their initial attempts to establish trans-Atlantic air travel. Both later assisted in the rescue of these pilots who became lost.

First "cold-weather" battery testing for Burgess Battery (Arctic Greenland)

Professor Ralph Belknap's video taken during the Hobbs Expedition to Greenland (see Link Above)

1923 8XA receives first QSL card

1924 L. A. Dorff; Development of the 20M Phone

First broadcast; Michigan-Purdue basketball game 2/16/1924

1926 Station re-opened as W8AXZ, closed from 1915 – 1926.

1926 Electrical Engineering Department and Signal Corps Unit of the R.O.T.C. build a 40M transmitter; W8AXZ

1929 **First** Pole-to-Pole contact (Arctic Greenland to Antarctica; Hobb's & Byrd Expedition) with the University of Michigan station (Fred W. Albertson, (W8DOE)

1930 50w Phone transmitter added to W8AXZ

Radio sets in UM dormitories policy created; 11/24/1930

1930 John Kraus, W8JK, becomes the W8AXZ Club Secretary

1933 Carol Dick; first female radio club member

1934 Affiliation with ARRL (7/2/1934)

Inmates at Jackson State Prison ask for radio parts

1937 First Radio Interference violation W8AXZ (10/26/1937)

1939 Arrest, and later release, of Chinese Activist (1920 Alum) Me-Lung Ting via wireless communication with Chinese Government Officials

1941 Louis A. Hopkins Jr. develops 20M Phone Transmitter (Thesis)

1941 New transmitter installed; W8AXZ 4/23/1941 Code training classes offered

1947 **W8ZUP** Army Signal Corps

1947 **W8ZSQ** West Quad Radio Club; 2/22/1948

1950 **ZS4BL** Lamont – Hussey Observatory; South Africa

1955 **W8PGW** South Quad Radio Club

1957 **W8EHZ** University High School. Garnett Garrison, Prof. of Broadcasting, silent movie of University High Radio Club students

1957 **W8PGW** South Quad Radio Club 10/28-1957

1957 **K8GRE** East Quad Radio Club

1962 **K8TIG** Engineering Radio Club

1967 **W8UM** vanity call granted; University of Michigan Sesquicentennial celebration in 1967

1968 Collapse of the East Engineering tri-band Yagi & tower

1968 Albert Kahn (K4FW) and Jack Burchfield (K4JU) co-found **TenTec**

1970 Laser Technology, at the University of Michigan, is used to study the motion of mic diaphragms for the **Electro Voice** company

1975 **W8LVN**; Engineering Department Radio Club

1985 Challenger Astronaut and UM-Dearborn Dean of Engineering, Tony England (W0ORE) is the **First** to use SSTV from space

1985 Historical scientific (telegraphy & radio) items are stored in the Detroit Observatory (Collegiate Institute for Values and Science) until 1994

2006 W8UM Tower Fund Created

2006 Satellite Antenna installation completed – First Satellite Contact 3/10/2006 made by KD8APA with W8SH (MSU)

2007 SteppIR installation completed; 7/31/2007. First radio contact made by: Steve Culp (K8QKY)

2013 Centennial Anniversary of Amateur Radio on campus (1913 – 2013). Special Event operation from the Michigan Diag. April 2013

2014 W1AW/8 operation. W8UM operates as W1AW during the 100th year anniversary of W1AW, March 7, 2014.

2015 Michigan QSO Party – Event competition against Michigan State University (W8SH) for the "Old Log" Trophy

2016 Project Diana; 70th Year Anniversary EME; (1946)

2016 1-Day Tech Class (KB6NU): Over 40 participants and an 82% pass rate

2016 Radio Restoration Group created to repair and refurbish donated equipment

2019 **W8AXZ**; call re-assigned to the University of Michigan Amateur Radio Club

2020 Virtual Club Meetings begin due to the Covid-19 pandemic