University of Michigan Amateur Radio Club: W8UM & W8AXZ

W8UM Student Officers; 2022 - 2023

President:	Kim Zwolshen	KE8QKU
V-President:	Kaleo Roberts	KE8TBP
Publicist:	Maggi Li	
Website:	Justin Hyun	

W8UM Trustee: Mark Travaglini, WD8DPA
W8AXZ Trustee: Michael Fluegemann, KE8AQW
Faculty Advisor: Amir Mortazawi, PhD., AC8YB

W8UM Meeting Dates

September 02, 2022	Student Open House
September 15, 2022	ROOM 1012 & ZOOM
October 20, 2022	ROOM 1012 & ZOOM
November 17, 2022	ROOM 1012 & ZOOM
December 15, 2022	ZOOM
January 19, 2023	ZOOM
February 16, 2023	ZOOM
March 16, 2023	ZOOM
April – August	**Summer Break – No Mtgs.**

Officer Nominations: February Meeting
Club Officer Elections: March Meeting

W8UM Club Events & Dates

Northfest	Monday, September 2, 2022
Festifall	Tuesday, August 30, 2022
ECE Open House	Monday, September (5-7:30 pm)
KB6NU 1-Day Class	Saturday, October 8, 2022
Collegiate QSO	Saturday, October 1, 2022
ARRL School Club	Week of October 17-21, 2022
ARRL CW Sweeps	November 5-7, 2022
ARRL Phone Sweeps	November 19-21, 2022
KB6NU 1-Day Class	Saturday, January TBD, 2023
NA QSO Party (CW)	January 14, 2023 2nd Full wknd in January
NA QSO Party (SSB)	January 22, 2022 3rd Full wknd in January
(North America Collegiate Championship)	
Winter Field Day	Last Weekend in January 28, 2023
ARRL School Club	Week of February 13-17, 2023
Mi QSO Party	April 3, 2023
ARRL Field Day	Saturday, June 24-25, 2023
One Helluva Ride	Saturday, July xx, 2023

W8UM Sunday Night Net (8 pm Ann Arbor time): 145.23 MHz, PL 100 Hz (-.600 MHz) or via EchoLink Node 301158 (W8UM-R)

Amateur Radio Club **Virtual & In-Person** Meeting Agenda for:
Thursday, October 20, 2022

Meeting Time: 6:30 pm (Local Time / Eastern Time Zone)
Room 1012 EECS Bldg.



PIZZA will be provided!

Link to Join ID: 8906493338

Link: https://umich.zoom.us/j/8906493338

Yaesu FT-1000D Station Photo with the Accessory Speaker, SteppIR SDA-2000 Controller, Ameritron HF Auto-Tuner and the Ameritron selector box for the wire antenas.

Facebook: https://facebook.com/groups/329930310446470
Website: https://umarc.eecs.umich.edu
Slack: amateurradioclubw8um.slack.com
QRZ.com: W8UM
QRZ.com: W8AXZ
e-mail: W8UMBoard@umich.edu

Guest Speaker: **Jon Ackermann, N8UR.** Past-President W8UM & TAPR

Topic: **GNSS Systems**

Satellite navigation today is so routine that we usually don't even think about it. But beyond the location services in your mobile phone, GNSS systems can provide location within a few millimeters and are used to keep atomic clocks synchronized within billionths of a second. In this presentation I'll talk about how GNSS works and the kind of performance it can deliver.

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1. **President's Welcome**
2. Treasurer's Report
3. Station Manager's Report

Treasurer's Report:

Balance (09/01/2022):	$	7209.45
Revenues (equip. sales):	$	100.09
Donations (Item 5a):	$	25.00
Less Expenses: (Item 5b):	$	74.94
Balance (10/10/2022):	$	7259.80

Station Manager's Report:

EECS Location:

Radio's:	TS-590/FT-1000D/IC-910/IC-746/APRS/FT-8800
Antenna's:	
Tower:	SteppIR (6-40M), 2M Yagi, 70cm Yagi, Discone
Wires:	80M, Barker & Williamson (6-160M)
Verticals:	10-20M, 10-40M, 2M (APRS)
Satellite:	RH Circular Polarized Yagi; 2M & 70cm
Field Day:	3-Element SteppIR & 3-Element Mosley w/ 40M Circular Polarized 2M & 70cm Satellite Yagi
Tower Cam:	EECS Tower Cams: operational
Towers:	40' tilt-over Tower (in storage)
Trailer Tower:	35' Tower w/ 3-L SteppIR, Controller & Rotor
Weiser Hall:	145.23 repeater w/ EchoLink operational
Mich. Union Roof:	20' Tower & antennas removed August, 2019

4. Prior Business / News:
   a. ARRL Test Sessions; 2nd Saturday of each month. Contact ARROW Comm.,
   b. Volunteers wanted for positions at W8UM: Website, Social Media…
   c. Open Shack Nights / SWL Open House: anyone interest in leading / organizing / scheduling?
   d. Peach Mountain Observatory Restoration: update / interest list created
   e. Any interest in initiating a SDR Research Participation Group?
   f. Any interest in taking the lead on a MOTUS Research Group (UHF Bird Tracking Program)?
   g. **W8UM WSPR Beacon**: Beacon is on the air; 10-40M. View weak signal (0.02w) band propagation from Ann Arbor**.** **http://wspr.rocks/?action=fetch&balloons=hide&rxCall=&txCall=W8UM&count=500&mode=All&band=all&hours=4&unique=false&advanced=**
   h. W1AW / ARRL Headquarters: if visiting Connecticut and wish to operate from W1AW, please contact Bob, NQ1R@arrl.net, to arrange.

5. W8UM / W8AXZ Contributions / Expenses / Donations:
   a. Generous Monetary Contributions / Financial Support Received:
      1. Faye Ogasawara

   b. Club Purchases / Expenses: **$ 74.94**

1. Pizza / Beverages	$	74.94
2. Fall / WinterFest Registration	$	0.00

   c. Equipment Donors: Donors in the News
      1. John Lawser, WA2SZQ Lawser family scholarship supports EECS wolverines (umich.edu)
      2. **Henry Horldt, W8TNZ, age 96, operated from W8UM**, 10/1/2022. https://www.ltu.edu/elearning/teaching_awards.asp

   d. Donated Equipment / Radios Received:
      1. None



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6. **Support W8UM / W8AXZ Activities**: Food, Radio Repairs, Upgrades, Purchases, Tower & Antenna Maintenance
   Financial Support / Donations Accepted from all (non-students) individuals with an amateur radio call sign.
   Students are Free.
   Credit Cards & Payroll Deduction accepted via the W8UM website below:
   http://umarc.eecs.umich.edu/index.php/support-your-favorite-u-m-student-club/pay-dues-online/

7. **Covid-19: Student Organizations Rules for In-Person Events / W8UM Shack.** **EFF 05/2022:** The following safety measures apply for all in-person gatherings, activities, events, programs, practices, rehearsals, competitions, and/or meetings hosted by recognized student organizations (RSOs).
   - **Indoor campus events must adhere to UMich Public Safety Rules.**
   - **All Masking & Social distancing have been eliminated.**
   - ~~**Must download & complete the ResponsiBLUE Screening App and obtain a "Passed" for entry on campus.**~~
   - **Must be Vacinated & Boosted**

8. **Scholarships available to UMich Students:**
   - **a.** ARRL Scholarship: Link: **www.arrl.org/scholarship-application**
   - **b.** Foundation for Amateur Radio (FAR): Link: **https://www.farweb.org**
   - **c.** Amateur Radio Digital Communications (ARDC): Link: **https://www/ampr.org/giving/**
   - d. Ford Motor Company Heritage Scholarship**:** Link: **https://www.fhnus.org/heritage-scholarship-michigan**

9. **W8UM Radio Repair & Restoration Group:**
   a. **Current Projects**;
      i. Dismantling of the Damaged SteppIR antenna (09/03-09/14/2022; completed)
      ii. Next Project; Testing of the Ten-Tec Orion. Replacement battery ordered (10/01/2022)
      iii. Missing screw and ball bearing were retrieved from inside a donated Hy-Gain Tail Twister rotator (9/17/2022).
      iv. The former Michigan Union satellite tower was repainted (09/20/2022). Plans are to utilize this tower for the HAB and 10M cross-band repeater antennas
      v. Re-aligned the SteppIR antenna to the correct azimuth (Tower Climb 10/15/2022; completed)
      vi. M2 Rotator examined, will need replacement due to gear slippage (Tower Climb 10/15/2022)

   b. Please contact W8UM.Radio.Restoration.Group@umich.edu for "exact" dates / times of future restoration meetings and projects.
   c. W8UM has both a Hickok & EICO tube testers available for use & over 1200 tubes, assorted radio knobs & capacitors available to Members

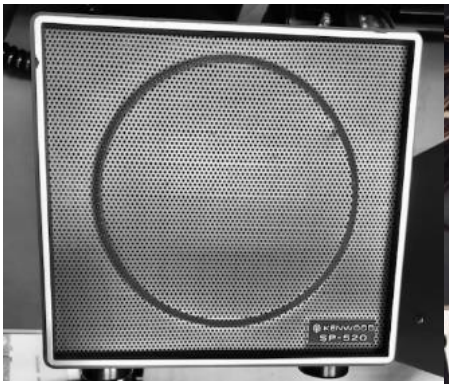
10. Items for Sale: (Suggested pricing- Scanner $20, TS-520 Spkr $45, VFO $80, TS-520 Transceiver $100, Meter $5, Speaker 10" ($15) or Best Offers. Contact W8UMBoard@umich.edu







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MAKE AN OFFER on these! Long-wire antenna set (wire & coax), pair Ten-Tec HT's, Center Insulator kit, LDG 4:1 UNUN, MFJ CW tutor, knife switches, 5' copper ground rod ($15)















9. **W8UM History Project:** Notable Names & Events in UM Telegraphy History (attached)

10. **Requests for W8UM Assistance from Other UM Clubs.** **We will put you in contact with the club if interested in assisting.**
    a. Participation in the 2024 Solar Eclipse Doppler Exp. (HamSci)
    b. Assistance in aviary migration tracking (NatSci / MOTUS)
    c. Assistance in hacking drone frequencies (Sophia P.)
    d. Assistance in teaching a CW class (Christian S.)
    e. Assistance with CubeSat project using WSPR/FT8 on HF bands (Rajiv G.)
    f. Assistance with establishing AuxCOMM / ECOMM on campus. (Mathew A.)

11. **Fox Hunt:** well-attended event!
12. **1-day Tech Class:** 11/12 students obtained their Tech License

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13. **ARRL 2023 Calendar:** Photos of club members are included in this calendar. (Kim, Kaleo & Michael)
14. **New Student Volunteers:**
    1. Maggi Li has accepted the role as W8UM Publicist!
    2. Justin Hyun has accepted the role as W8UM Webmaster!

15. **High-Altitude Balloon Tracking Program**:
    a. Aerospace HAB launch & tracking to occur during the final weeks of each semester. Contact W8UM for additional info. W8UM.APRS.Balloon.Tracking.Group@umich.edu
    b. HAB Tracking manuscript in final preparation for submission
    c. HAB Tracking rotor, mast, antennas and tower repaired

16. **Amateur Radio Communications Grant**, Projects Update;
    a Repairs to the 10M Cross-Band Repeater in Weiser Hall;
        i. Antennas ordered (10/15/2022)
    b. Outlet installation for the Ameritron AL-82 / Ten-Tec Titan amplifiers;
        i. Work Request submitted (10/05/2022)
        ii. Site review & estimate scheduled (10/18/2022)
    c. Digitizing historical articles relating to the development of wireless telegraphy at the Univ. of Michigan
        i. Not begun
    e. Improvements to the high-altitude balloon antenna array;
        i. Selector Box ordered (10/15/2022)

17. **W8UM Shack Access**: If interested in obtaining a "Shack Access Code", that provides you with unlimited room access, please contact W8UM at W8UMBoard@umich.edu

18. **Shack Orientation & Access Key:**
    a. Gavin Li
    b. Henry Horldt (Donor)
    c. Trisha Murray (Donor)

19. **W8UM / W8AXZ Invited Speakers for the 2022-2023 school year:**

		Past Speakers; 2021-2022
Sept.	Kaleo Roberts, KE8TBP	Fred Lloyd, AA7BQ
Oct.	John Ackermann, N8UR	Bob Heil, K9EID
Nov.	TBA	Kristen McIntyre, K6WX
Dec.	Tony Milluzzi, KD8RTT	ICOM Corp.
Jan.	Kristina Collins, KD8OXT	Bob Bruninga, WB4APR SK / Lynn Deffenbaugh
Feb.	Fred Lloyd, AA7BQ	Tony England, W0ORE
Mar.	TBA	University Lowbrow Astronomer Jeff Kopmanis

20. **W8UM Sunday Night Net; Control Ops:**

09/18/2022	Stuart Carlson, W8SRC
09/25/2022	Dan Romanchick, KB6NU
10/02/2022	Don Winsor, AC8TO
10/09/2022	Pat Seitzer, WA4DSR
10/16/2022	Pat Seitzer, WA4DSR

21. **Members / Alumni:** If you plan to visit Ann Arbor and would like to tour or operate from W8UM please contact W8UM in advance at W8UMBoard@umich.edu to arrange.

22. **UMich ARC Sunday Night Net 8pm local time**: if outside of Ann Arbor, sign-on to EchoLink using the Android, i-Phone or computer apps. Net is open to ALL licensed individuals.

University of Michigan Amateur Radio Club: W8UM & W8AXZ



nshot

Download the FREE EchoLink app to connect to the W8UM repeater (145.230 MHz).

1. Call-sign verification may take minutes to several days
2. Search for W8UM and save to Favorites
3. Press Connect
4. Tap Transmit, on your iphone/android, to talk & Tap the screen to stop TX
5. Disconnect from the W8UM Repeater by tapping END
6. **Follow the same process to connect to repeaters throughout the world.**

23. Attendance (September, 2022): Attendance: **21** ZOOM: 8 In-Person: 13 Students: 10

24. Open Discussions / Comments / Audience Announcements:

25. Monthly Presentation: Described Above.

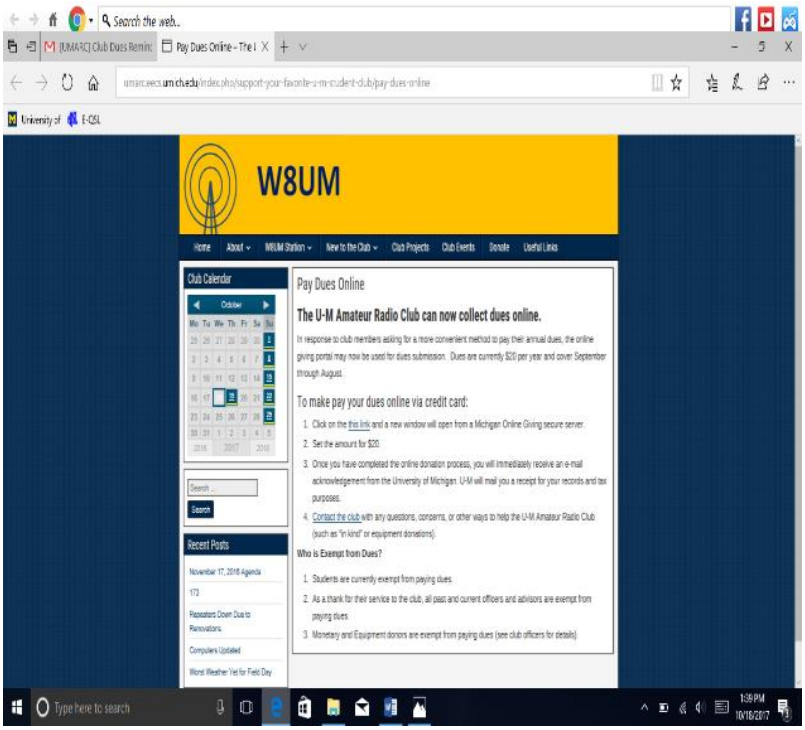
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W8UM President or Designee

To make a monetary donation to support W8UM, please use the link below.

http://umarc.eecs.umich.edu/index.php/support-your-favorite-u-m-student-club/pay-dues-online/a

University of Michigan Amateur Radio Club: W8UM & W8AXZ



W8UM Meeting Location: Room 1012 **First Floor Classroom**

Electrical Engineering & Computer Science Building

Address: 1301 Beal Ave.

ZIP: 48109



Engineering Campus Visitor & Employee Parking Lots

Hayward Street: Lot NC 20

FREE to Visitors after 5 pm weekdays & weekends or anytime with a UM Parking Pass.

FREE to Retiree's after 3:30 pm with Retiree Parking Pass

*** **Barrier Free Access** thru the DOW Bldg into the 3rd Floor EECS Bldg.

University of Michigan Amateur Radio Club: W8UM & W8AXZ

Hayward Street: Lot NC 48

FREE to Visitors after 5 pm weekdays & weekends or anytime with a UM Parking Pass.
VISITOR parking is $1.80 / hour (coin or credit card) before 5 pm
FREE to Retiree's after 3:30 pm with Retiree Parking Pass
*** NOT Barrier Free Access to EECS

Murfin Street / Walgreen Drama Center: Lot NC 27

FREE to Visitors after 8 pm weekdays & Sunday only or anytime with a UM Parking
VISITOR parking is $1.80 / hour (coin or credit card) before 8 pm
FREE to Alumni / Retiree's after 3:30 pm with Retiree Parking Pass
*** **Barrier Free Access** thru the courtyard to the EECS Bldg.

Beal Street: Lot NC 60 **GATED Parking Lot**

FREE to Visitors after 5 pm weekdays & weekends or anytime with UM Parking Pass
FREE to Alumni / Retiree's after 3:30 pm with Retiree Parking Pass
*** **Barrier Free Access** along the East Side of EECS Bldg.