University of Michigan Amateur Radio Club: W8UM & W8AXZ

W8UM Student Officers; 2023 - 2024

President:	Maggie Li	KI5YMO
V-President:	Mick Gordinier	KE8VWA
Treasurer:	Kaleo Roberts	KE8TBP
Publicists:	Vacant	
Website:	Justin Hyun	

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

W8UM Meeting Dates

September 02, 2023	Student Open House
September 21, 2023	ROOM 1012 & ZOOM
October 19, 2023	ROOM 1012 & ZOOM
November 16, 2023	ROOM 1012 & ZOOM
December 21, 2023	Winter Break
January 18, 2024	ROOM 1012 & ZOOM
February 15, 2024	ROOM 1012 & ZOOM
March 21, 2024	ROOM 1012 & ZOOM
April – August	**Summer Break – No Mtgs.**

Officer Nominations: February Meeting
Club Officer Elections: March Meeting

W8UM Club Events & Dates

Northfest	Monday, September 2, 2023
Festifall	Tuesday, August 30, 2023
ECE Open House	Friday, September 29, 2023 (5-7:30 pm)
KB6NU 1-Day Class	Saturday, September 30, 2023
Collegiate QSO	Saturday, October 7-9, 2023
ARRL School Club	Week of October 16-20, 2023
ARRL CW Sweeps	November 4-6, 2023
ARRL Phone Sweeps	November 18-20, 2023
KB6NU 1-Day Class	Saturday, January TBD, 2024
NA QSO Party (CW)	January 13, 2024 2nd Full wknd in January
NA QSO Party (SSB)	January 19, 2023 3rd Full wknd in January
(North America Collegiate Championship)	
Winter Field Day	Last Weekend in January 27, 2024
ARRL School Club	Week of February 12-16, 2024
Mi QSO Party	April 15, 2023
ARRL Field Day	Saturday, June 28-29, 2024
One Helluva Ride	Saturday, July xx, 2024

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, September 21, 2023

Meeting Time: 6:30 pm
(Local Time / Eastern Time Zone)

Room 1012 EECS Bldg.

PIZZA will be provided!



Meeting ZOOM Link: https://umich.zoom.us/j/92280761617

Meeting ID: 922 8076 161



Fox Hunt build session and Fox Hunt (4/15/2023)

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

University of Michigan Amateur Radio Club: W8UM & W8AXZ

Guest Speaker 1: Michael Kalter, W8CI. Great Lakes Division Director Candidate

Guest Speaker 2: Joe Burkhead. 2024 ARDF Orienteering Event

Guest Speakers 3: Maggie LI & Mick Gordinier. Club Activities

---

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

Treasurer's Report:

Balance (03/05/2023):	$	14069.38
Revenues (equip. sales):	$	0.00
Donations (Item 5a):	$	330.00
Less Expenses: (Item 5b):	$	3431.34
Balance (09/05/2023):	$	10968.04

W8UM Repeaters

Weiser Hall: 145.230 MHz w/ EchoLink
29.640 MHz (in-progress
444.075 MHz PL 82.5

Station Manager's Report:

EECS Location:

Radio's: **Yaesu FTDX 5000 / Flex 6400**
IC-746 / IC-910 / APRS / FT-8800 / TS-590
Main Tower: SteppIR (6-40M), 2M Yagi, 70cm Yagi, Discone
Wires: 80M, Barker & Williamson (6-160M)
Verticals: 10-20M, 10-40M, 2M (APRS), 10M
Tower Cams: operational
Amplifiers: Ameritron AL-82 / ACOM 2000A / TenTec HF & 6M
Satellite Tower: RH Circular Polarized Yagi; 2M & 70cm
Trailer Tower: 35' Tower w/ 3-L SteppIR, Controller & Rotor
Storage: 40' tilt-over Tower / 3-Element Mosley
HAB Program: 137 MHz / 440 MHZ Antenna Array
UM Biological Station: (Pellston, MI.): in-progress

4. Prior Business / News:
   a. ARRL Test Sessions; 2nd Saturday of each month. Contact ARROW Comm.,
   b. Open Shack Nights / SWL Open House: anyone interest in leading / organizing / scheduling?
   c. Peach Mountain Observatory Restoration: update / interest list created
   d. Any interest in taking the lead on a MOTUS Research Group (UHF Bird Tracking Program)?
   e. **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=**
   f. 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 Contributions / Financial Support Received:
      1. Larry Tusoni
      2. Steve Sostrom
      3. Frank Maynard
      4. Telepost Inc. (Larry Phipps)
      5. Jason DeBord
      6. Steve Shock
      7. Paul Grubbs

b. Club Purchases / Expenses: **$ 3581.01 6/1/2023**

1.	Pizza / Beverages	$ 77.27
2.	Festifall / WinterFest Registration	$ --
3.	Antenna Build Equip.	$ 72.40
4.	Telepost LP-700 Monitor w/ coupler	$ 693.75
5.	FLEX 6400 SDR Transceiver	$2737.59
6.	R&L; Rotor Control wire (ARDC Grant)	$ 94.80
7.	R&L; 2M/440 vertical antenna (Grant)	$ 159.95
8.	R&L; 440 MHz Yagi (Grant)	$ 129.00
9.	R&L; Quadrafilar 137 MHz (Grant)	$ 299.00
10.	R&L; Discone (Grant)	$ 50.00

c. Equipment Donors:

1. Fred Becchetti
2. Ovide Pomerleau
3. Kurt Metzger
4. Steve Culp

d. Donated Equipment / Radios Received:

1. Butternut Antenna
2. Alpha-Delta
3. GPS Receiver w/ antenna
4. WWV antenna / receiver
5. PTS Freq. Synthesizer; .01-160 MHz
6. Austrom Crystal Freq Standard
7. Rockland Programmable Freq. Synthesizer; .001-2.0 MHZ
8. HP 500 MHz Universal counter
9. Austron Standby Power Supply
10. Yaesu FTDX 5000
11. ACOM 2000A Auto-Tune HF Amplifier
12. 5-Band Hex-Beam Antenna
13. 40’ Tilt-Over Tower w/ electric winch
14. Amplified Speakers for Flex 6400
15. Yaesu SM-5000 Station Monitor

5. 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:

https://umarc.eecs.umich.edu/index.php/support-your-favorite-u-m-student-club/donate-online/

6. 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 Vaccinated & 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. Testing of TenTec Amplifiers; Titan 425D and a prototype 6M (12/20/2022)
ii. 6M Amplifier tested to 45w Drive / 1000w Out (1/12/2023)
iii. Titan 425D failed testing (1/15/2023)
iv. TenTec power supply repaired (failed resistor; 2/8/2023)
v. Further testing and repairs to the Titan 425D Amplifier. (03/07/2023). Amp tested to 600W/20W Drive
vi. Work to begin on repairs to the Titan Band Selector & Relays switches
vii. RR & Restoration Group Article accepted for publication in QST. Publication date late 2023.
viii. 425D Amplifier tested to 1000W out/ 30W drive. (Operational; 03/2023)
ix. TenTec Power Mite 3 (Completed 5/3/2023; Tx/Rx switch not wired)
x. Capacitors relaced on Two-Fer AM Transceiver (5/25/2023)
xi. W8UM Repair article appears in the October, 2023 issue of QST

b. Please contact W8UM.Radio.Restoration.Group@umich.edu for "exact" dates / times of future restoration meetings and projects.

i. Next Project: 1. Two-Fer, 2. Re-wire ACOM 2000A for 220v (completed 9/10/2023)

c. W8UM has both a Hickok & EICO tube testers available for use & over 1200 tubes, assorted radio knobs & capacitors available to Members

10. SK's

a. Larry Jones: W8LUJ, Past Chair Dept of Physics. http://www-personal.umich.edu/~lwjones/Index.html
b. Jack Burchfield; W4JU, Co-founder of TenTec Corp. https://www.knoxnews.com/obituaries/kns059649

11. W8UM Officers for 2023-2024:



Maggie Li, W8UM President, is a junior in the UM School of Nursing. Inspired by her father's interest in radio, Maggie enrolled in the 1-Day Technician Class and successfully obtained her license. She immediately became an active participant in the club's activities. "You don't need any experience to feel welcomed in this club and there are so many opportunities to learn and get experience in so many different things". In my free time, I like to read and crochet.

c

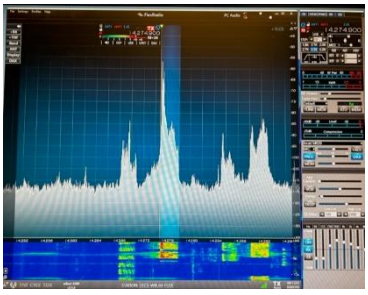


Mick Gordinier, Vice-President, is a junior majoring in Computer Science and Computer Engineering. I joined W8UM because of my interest in electrical engineering and wanted to learn more about amateur radio. Not only have club activities peaked my interest further, but the amateur radio community is amazing! In my free time, I am also the president of the UM Habitat for Humanity where we build housing for families in need.

13. **Detroit Yacht Club Presentation: "Radio Communications for Mariners", presented by W8UM Members Christian Sandvig KB0ATY and Ul Balis (N4IYL)**

14. W8UM Club Purchases;
    a. LP-700 SWR/Watt Meter from Telepost, Inc.
    b. FLEX 6400 SDR

15. New Additions to W8UM Shack (Summer, 2023): FLEX 6400 & Yaesu FTDX-5000





16. **FIELD DAY 2023: 19 visitors signed the log while 11 made contacts on the GOTA station. Sunspots were viewed with the telescopes set-up by WA4DSR.**

17. **NorthFest 2023:** Approximately 45 students showed interest in joining W8UM at this years event.

18. ARENA (Amateur Radio Emergency Newsroom Alliance): This is an initiative created by 2022-2023 UM Knight-Wallace Fellow,Journalist, Maria Arce. Maria was a frequent attendee at our W8UM meetings during her year at UM. Article Link: https://rjionline.org/news/when-the-internet-and-the-power-are-out-newsrooms-might-need-a-hamd/

19. UM Biological Station, Pellston, MI.: W8UM is in progress of establishing a remote station at this northern Michigan research location.

20. Available Shack Items List: Contact W8UM for info.

Regency UHF Repeater
Motorola Radius R100 Repeater 450-470 MHz
Data transfer switch

Heathkit TC-3 Tube Checker
Heathkit HM-102 SWR/PWR Meter
Heathkit SB-600 Pwr Supply / Spkr

Radio Shack 3A/13.8 vdc pwr supply (new)
Fluke digital multimeter
VANCU Coax switch
Yaesu FT 23R 2M HT
LDG 200w RU 4:1 UNUN
Radio Shack scanner antenna
Kenwood DC-26 DC-DC converter
TenTec Omni VI Transceiver
Mosley TA-33 Yagi; 10-20M
Mirage 2M amplifier
Vintage knobs, tubes
Insulators; plastic and ceramic
Motorola speaker
Copper pipe

Heathkit SB-634 Station console
Heathkit SB-102 Transceiver
Heathkit SB-614 Station Monitor
Heathkit HD-19 Phone Patch
Heathkit SB-630 Station Console
Heathkit SB-610 Station Monitor
Kenwood SM-220 Station Monitor
TenTec Model 234 Speech Processor

Tilt-Over vert mast clamp
HTDX10- RadioShack 10M transceiver
HeathKit SB-200 amp (wired for 120v)
Copper ground rod (approx. 4')
Yaesu FT-1000D 200w transceiver w/ desk mic

21. **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. Ameritron Selector Box arrived (12/20/2022)
    c. Inquiries received from news organizations and an independent writer about the Chinese high-altitude balloons; 02/2023
    d. Coax & Control wires pulled to roof (04/2023)
    e. Operational (04/2023)
    f. Receiving Stations assisting W8UM

22. **Amateur Radio Digital Communications Grant Update (ARDC)**;
    a Repairs to the 10M Cross-Band Repeater;
        i. Antenna building; 220, 440, 28 MHz antennas
        ii. Weiser Hall: 10M antenna installation completed (11/02/2022)
        iii. Weiser Hall: Hardline installation completed (11/2022)
        iv. Weiser Hall: 220 MHz & 440 MHz installation completed (12/02/2022)
        v. EECS Bldg: 29 MHz antenna install completed (12/2022)
        vi. EECS Bldg: Combiner & 220MHz yagi on back-order (01/2023)
        vii. Combiner & 220 MHz Yagi (arrived, 01/12/2022)
        viii. Arcom Controller (arrived, 01/18/2022)
        ix. Programming repeater controller; 02/2023
        x. Repeater Controller programming completed (02/22/2023)
        xi. Coax cables pulled at both Weiser & EECS locations (04/2023)
        xii. Coax Project Completed (04/2023)
        xiii. ARDC ZOOM Conference Call (4/25/2023)
        xiv. 29 MHZ Crystals ordered (4/2023)
        xv. Crystals (x2) Received from QRP Labs 5/2023
        xvi. Repairs to the 220 MHZ cross-link radios (7/2023)
        xvii. Work Continues 9/2023

    b. 208 VAC / 30A Outlet installation for Ameritron AL-82 / Ten-Tec Titan amplifiers
        i. Work Request submitted (10/05/2022)
        ii. Site review & estimate completed 10/18/2022; $2177.00
        iii. ECE request for Grant funds submitted (10/28/2022)
        iv. Installation completed (12/02/2022)
        v. Project Completed; 12/08/2022

    c. Digitizing historical articles relating to the development of wireless telegraphy at the Univ. of Michigan
        i. Meeting with the School of Information
        ii. Organization of Files begun (01/12/2022)
        iii. Document scanning begun; 1/21/2023
        iv. Project Completed; 2/21/2023. Approximately 7,000 pages scanned.

    d. Improvements to the high-altitude balloon antenna array;

i. Selector Box ordered (10/15/2022)
ii. Antenna selector box arrived 12/20/2022
Iii. Coax & control cables to be ordered (03/2023)
iv. Vertical antenna ordered (6M/2M/440; 03/2023)
v. Control cable on back-order (04/2023)
vi. Antenna received, mounted and operational
vii. Rotor Control cable on back-order 5/01/2023
viii. Rotor Control Cable arrived (5/8/2023)
vii. Project Completed; 05/17/2023

Thanks to all that assisted in completing these projects: KB5AW, KE8SWM, KB8OIS, N4IYL, K8EV, KB8RCO, KE8AQW, KN6SXI, KE8TBP, KE8VWA, KI5YMO, AC8TO, KE8NCB, WD8DPA, W2PUT. Apologies if your call was omitted.

23. W8U**M Shack Access**: If interested in obtaining a "Shack Access Code", that provides you with unlimited room access, please contact W8UM at W8UMBoard@umich.edu

24. Shack Orientation & Access Key:

1. Paul Grubbs
2. Tommy Tunks

25. W8UM Sunday Night Net; Control Ops:

08/27/2023 Pat Seitzer, WA4DSR
09/03/2023 Pat Seitzer, WA4DSR
09/10/2023 Stuart Carlson, W8SRC
09/17/2023 Pat Seitzer, WA4DSR

26. **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.

27. **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.



iPhone screenshot

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.**

28. Attendance (March, 2023): Attendance: **22** ZOOM: 8 In-Person: 14 Students: 9

29. Open Discussions / Comments / Audience Announcements:

30. Monthly Presentation: Described Above.

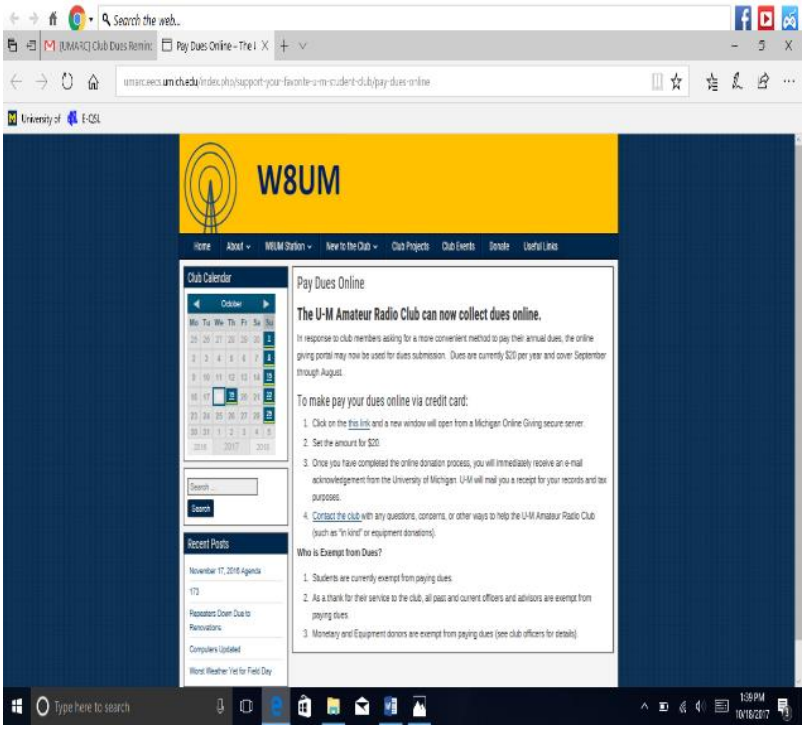
University of Michigan Amateur Radio Club: W8UM & W8AXZ

_____

W8UM President or Designee

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

https://umarc.eecs.umich.edu/index.php/support-your-favorite-u-m-student-club/donate-online/



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

Electrical Engineering & Computer Science Building

Address: 1301 Beal Ave.

ZIP: 48109



University of Michigan Amateur Radio Club: W8UM & W8AXZ

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.

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.