University of Michigan Amateur Radio Club: W8UM & W8AXZ

8UM Student Officers; 2022 - 2023

President:	Kim Zwolshen	KE8QKU
V-President:	Kaleo Roberts	KE8TBP
Publicists:	Maggie Li	KI5YMO
	Mick Gordinier	KE8VWA
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	ROOM 1012 & ZOOM
January 19, 2023	ROOM 1012 & ZOOM
February 16, 2023	ROOM 1012 & ZOOM
March 16, 2023	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, 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, February 16, 2023

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

PIZZA will be provided!

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

Link to Join ID: 8906493338

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

The Explorer 1 turns 65. How the first American satellite helped to create NASA

01.02.2023

On February 1, 1958, the Juno I rocket was launched from the Cape Canaveral Spaceport. It put *Explorer 1* into orbit. This device went down in history as the first American artificial Earth satellite. Commemorating the 65th anniversary of this event, we would like to tell you how the United States entered the space race and why it was *Explorer 1* that became the first American satellite.



Plaque that memorializes the radio reception of Explorer I at the former Ann Arbor residence of Irv Hoff. Hoff was an innovator in AX.25 and RTTY. Government messages to US Embassy's were communicated from Washington, DC via his residence.

University of Michigan Amateur Radio Club: W8UM & W8AXZ

Guest Speaker: **Fred Lloyd AA7BQ**

Topic: **Developer of QRZ.COM**

Introduction: **Maria Arce; UM Knight-Wallace Journalism Fellow**
Natural Disaster Preparedness in Puerto Rico

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

Treasurer's Report:

Balance (01/05/2022):	$	8143.56
Revenues (equip. sales):	$	157.50
Donations (Item 5a):	$	515.00
Less Expenses: (Item 5b):	$	25.00
Balance (02/05/2022):	$	8791.06

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:	Kenwood TS-590 / Yaesu FT-1000D / TenTec Orion IC-746 / IC-910 / APRS / FT-8800
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
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 w/ 40M

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 Monetary Contributions / Financial Support Received:
      1. Don Winsor (Pizza Purchases)
      2. John Palmisano
      3. Roger Shultz
      4. Paul Grubbs
      5. Jason Debord
      6. Jan Arcuri-Otis
      7. Doug Cox

   b. Club Purchases / Expenses: **$ 25.00**
      1. Pizza / Beverages $ 0.00
      2. Festifall / WinterFest Registration $ 25.00

3. ARCOM controller $ 500.00 (ARDC Grant purchase)

c. Equipment Donors:

1. Jim Tedesco
2. Steve Sostrom
3. Dan Carpus
4. Fred Becchetti

d. Donated Equipment / Radios Received:

1. Kenwood TS-930 S/AT	HeathKit SB-610 Oscilloscpe	HeathKit SB-600 Power Supply
2. Kenwood SP-900 Speaker	HeathKit SB-102 Transceiver	Spectronics Frequency Display
3. 200' LMR-400	Collins Phone Patch	Collins 30L-1 Antenna Tuner
4. Tripp 50A Pwr. Supply	Collins PM-2 Power Supply	Collins KWM-2 Receiver
5. Collins DL-1 Dummy Load	Collins SM-3 Microphone	Collins SB-610 Oscilloscope
6. Collins KWM-2 Receiver	Collins PP3990 Power Supply	Collection of books on Tesla

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

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. **Swaps Livonia ARC; SATURDAY, February 18, 2023. NEW LOCATION & Day**

11. **Club Participation: W8UM Members will be assisting at the Science Olympiad 02/18/2023. Project- 2.4 GHz Antenna**

12. **ARRL Hamvention May 19-21, 2023: The Collegiate Amateur Radio Program (CARP) is looking for volunteers to man the ARRL Booth during Hamvention. All EXPENSES will be paid by the ARRL. You must be a student, aged 21 or older. Contact W8UM for further info.**

13. **FIELD DAY 2023: Approval has been received for the use of the Washtenaw County Fairgrounds on Ann Arbor-Saline Road for Field Day 2023 (weather permitting)**
    a. W8UM will have 3-4 stations on the air for your use
    b. Setup will begin shortly after 8:00 am on Saturday
    c. Teardown will begin just after 9:00 pm on the same day. Note, this is a 1-day only participation in Field Day
    d. Dr. Pat Seitzer (Astronomy) will have on display a telescope, with sun filters, to view the Sun
    e. More info as we near the June date

14. Detroit Yacht Club Presentation: Dr. Sandvig (Communications) will be presenting on Marine HF Communications. If interested in assisting with the demonstration, contact W8UM

15. **Request from UM Knight Wallace Journalism Fellow: IF Interested in assisting, Contact W8UM**

    As a fellow at the Knight Wallace House Center for Journalists, I'm working on a project to help small newsrooms to develop or enhance their emergency plans to cover natural disasters.

    In Puerto Rico, where I'm based, radio amateurs played a key role when Hurricane Maria hit us. I was wondering if I could meet with you to talk about radio amateurs and emergency communications.

    The Knight-Wallace Journalism Fellowships, named after investigative journalist and U-M alum Mike Wallace, offers accomplished journalists an academic year of study and collaborative learning at the University of Michigan.

16. **W8UM History Project:** The second (of two) classroom lecture on Morse's Telegraph at the University of Michigan (1848).
    Article is attached

17. **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)

18. **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

    b. 208 VAC / 30A Outlet installation for the 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 funds submitted (10/28/2022)
iv. Installation completed (12/02/2022)
v. Project Completed; 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 (2/2023)

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 (02/2023)

19. 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

20. Shack Orientation & Access Key:

1. Maria Arce
2. Sophia Wang

21. 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.	Kim Zwolshen & Kaleo Roberts	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 Koopmanis

22. W8UM Sunday Night Net; Control Ops:

01/29/2023 Pat Seitzer, WA4DSR
02/05/2023 Pat Seitzer, WA4DSR
02/12/2023 Pat Seitzer, WA4DSR
02/15/2023 Dan Romanchik, KB6NU

23. **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.

24. **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



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.**

iPhone screenshot

25. Attendance (January, 2022): Attendance: **18** ZOOM: 9 In-Person: 9 Students: 5

26. Open Discussions / Comments / Audience Announcements:

27. Monthly Presentation: Described Above.

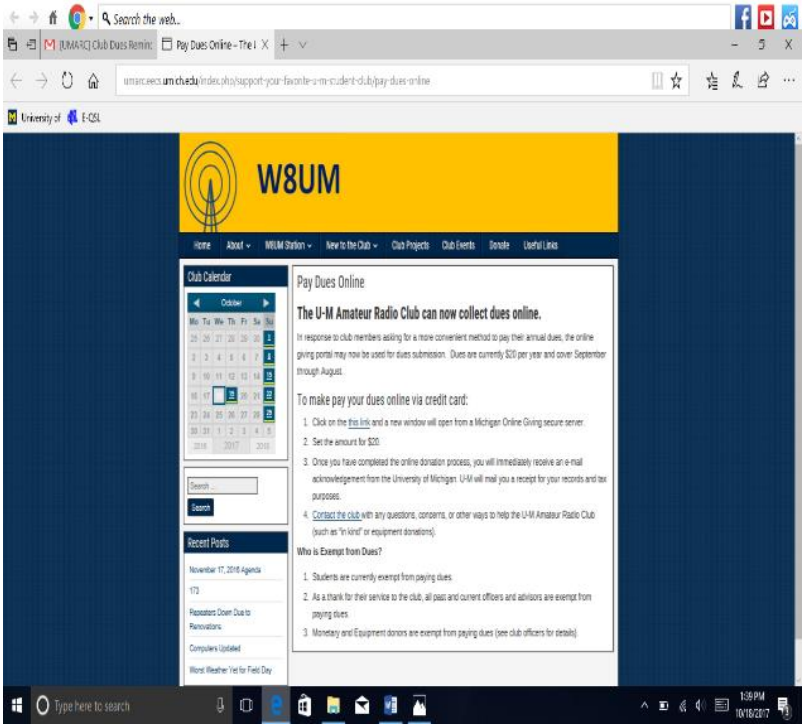
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W8UM President or Designee

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

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

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.