



Chirp and Splatter

Newsletter of The University of Michigan
Amateur Radio Club – *Summer 2005*



“The Prez Says”

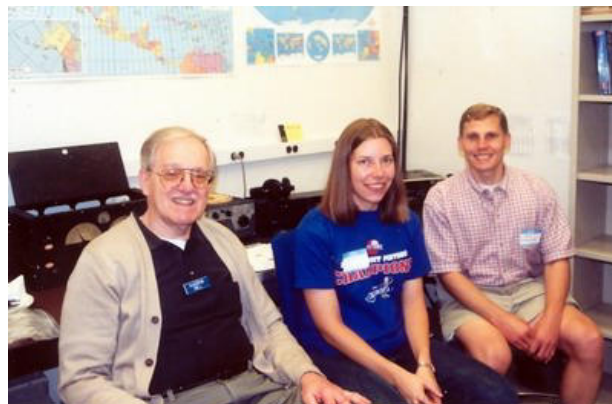
Thanks to our enthusiastic club members and supporters it has been a great year for our club and club station W8UM!

We gained 22 new club members (12 of them students, most now licensed), dedicated the new W8UM shack, and now have a well-equipped station for 80 through 10m, and 2m. In addition, the club participated in ARRL November Sweepstakes (SSB) and the Michigan QSO party, as well as Field Day with our local friends at the ARROW club. We also enjoyed a grand tour of K8CC’s contest station, a trip to the Hazel Park ARC swap meet, and sponsored or co-sponsored several Amateur Radio license and technical classes by club members. This end-of-the-year edition of *Chirp and Splatter* has information about these happenings and more.

We also have a lot to look forward to! A major fundraising campaign is underway to support the club’s many projects. Major tower and antenna construction plans are in the works along with many needed shack improvements. We’re hopeful that the 2005-06 school year will bring us a new tower and antennas for HF through VHF. Over the summer we’re also working to set up a well-equipped electronics work bench and the beginnings of an advanced satellite station.

So, thank you for an exciting year, have a relaxing summer, and get ready for another great year of Amateur Radio at Michigan.

73, Chris KA8WFC



Bill AA8RW, Lora KC8UDG, and Chris KA8WFC enjoy the surroundings in the new W8UM shack.

Station Manager’s Report

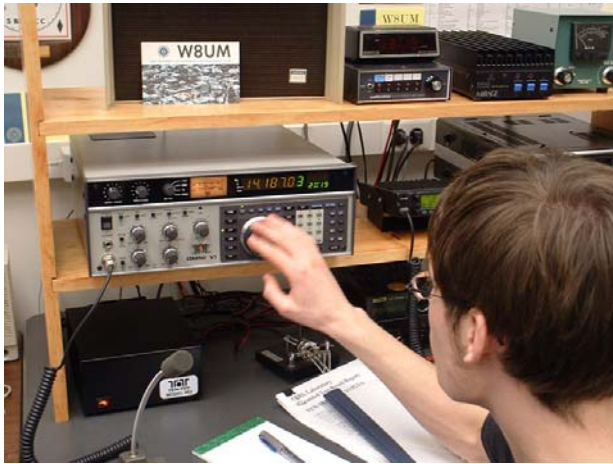
DE KG6URI Jon Suen

The W8UM station has grown greatly in the past few months. We were able to obtain half a room in the EECS building that quickly filled up. Soon we hope to fully take over the room. Currently our station has a 40/80m fan dipole, a 10/15/20m vertical as well as a VHF/UHF discone.

We received a Christmas present from EE alumnus Jack Burchfield, who is the president of Ten-Tec. As you might expect, it was a Ten-Tec rig: an Omni VI! We also have a Drake B-Line and a Drake TR-4, donated by Prof. Gilchrist, KF6ON, and Frode, KE8CS respectively. The Ten-Tec has seen heavy use as our station’s primary HF rig, while the Drakes have seen a good amount of action from members wishing to get a bit more hands-on with the radio.

Right now, we would like to add a 40-foot tower and beam to the top of the EECS building as well as expand our shack with a workbench and VHF and satellite operating

position. Our plans are to install antennas and a tower that will last for decades. We have plenty of work to do, including getting approval from various committees for the tower, as well as finding a structurally sound way to attach it to the building. Of course, this will take lots of time and money, but with our enthusiastic group, we have no doubt that this can be done!



Zach KD8AAG enjoys the smooth tuning of the station's new Ten-Tec Omni-VI donated by alumnus Jack Burchfield K4JU. *Thanks Jack!*

K8CC Contesting Station Tour

DE Bruce Graham KD8APB

On January 15, 2005 the club had the pleasure of touring Dave Pruett's (K8CC) major contesting station. Talk about bulk aluminum in the sky! All but one of the antennas on his farm are homebrew and feature full-size monoband Yagi-Udas on all bands from 40m to 10m, with 3 elements on 40m, 5 on 20m, and stacked arrays on 15m and 10m, atop towers as high as 140 feet. The 140 ft tower is shunt-fed on 160m with a ground radial system. Phased verticals work DX on 75/80m and dipoles for 80m and 40m do stateside duty. VHF and higher antennas sit atop the HF arrays.

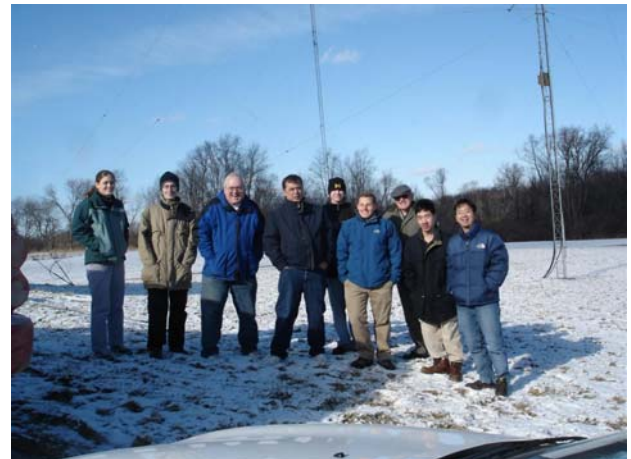
Proceeding to the basement shack there was a wall with three 19" racks containing amplifiers with big fans and glowing finals. Each band had a pair of FT-1000's, one for calling CQ and the other for finding folks

calling CQ. Each radio had an old PC running DOS and the logging software, which also controlled the radio.

You could watch an announcement come in on the computer, type the frequency, make the contact with a headset and a PTT foot switch, and move on, a very efficient process. There was also some hidden control relay magic that switched amplifiers and antennas as the radio switched bands.

This station did not go together overnight, but was clearly a labor of love.

Dave was an outstanding host, giving us a thorough tour of his antenna farm and contesting station, answering all of our questions, treating us like old friends, and even letting us operate the station for the North American QSO party. We've never heard signals quite like that before (and wouldn't you know it, stations came back to our calls right away!)



Hanging out at the K8CC antenna farm, from left to right: Amy, Zach KD8AAG, Dave K8CC, Bruce KD8APB, Richard KD8APA, Chris KA8WFC, Bill AA8RW, Jon KG6URI, and Paul (Dennis KT8X is behind the lens) *Thanks Dave!*

Contesting Events

Sweepstakes

The club is working to revive our traditional contesting habits and got off to a good start working the 2005 SSB Sweepstakes. We made over 70 contacts on 100W with the tri-band vertical and the 80/40m dipole. We

bagged Newfoundland (VO1) and the Virgin Islands.

The general class and higher members went out of their way to give the newbies a real baptism by fire. Thanks Chris KA8WFC, Dennis KT8X, Steve K8QKY and Mark WD8DPA.



Bruce KD8APB (at the microphone) makes SSB Sweepstakes QSOs while Richard KD8APA logs and Jon KG6URI looks on.

Michigan QSO Party

We had a great time grinding contacts out of the S9 background noise from the 5th floor equipment and claimed 129 contacts for a score of 6448. The bad news was W8SH made over 300 contacts, but for one of the first organized club contests and our limited equipment we are confident next year the tables will turn. The OMNI-VI was connected to the tri-band vertical for 10/15/20 operation while Bruce, KD8APB's IC-706 and AT-180 tuner was on the 40/80 dipole. One contact that stood out was KB5ZH who sent us a Texas-sized QSL. In the middle of the afternoon Jon, KG6URI called CQ on 20 m and went on an incredible run. W8UM must really be worth an extra 3 dB. With Zach KD8AAG, Lora KC8UDG, Bill AA8RW and Bruce KD8APB rotating as control operator we were able to operate the entire contest. As midnight crept closer the logging software decided to checkout and we spent the last half hour juggling a few more contacts and an uncooperative laptop. It

was probably a good thing the wager with MSU was not organized in time, but everyone who operated had a great time and hopefully gained some experience to really challenge W8SH next year. Go Blue!

U-MARC in Space!

What are these students doing? Why, they are communicating via the AO-51 Amateur Radio Satellite! Jon KG6URI is calling stations on his handheld 144/440 MHz FM transceiver while Richard KD8APA positions the directional antenna and tracks the low Earth orbit (LEO) "bird" as it passes over Ann Arbor. Club members Zach KD8AAG, Matt KC8SHW, Noah KC8TKP, and Chris KA8WFC offer logging, tracking data, and moral support. Stations were heard from New York to Mexico as the satellite passed. There is lots of talk about satellite work now and hopefully we'll have a satellite station set up in the shack in the near future.



The first U-MARC satellite contact. (Left to right: Matt KC8SHW, Richard KD8APA, Jon KG6URI, Zach KD8AAG, Noah KC8TKP)

Dayton

DE Jon Suen KG6URI

On Friday, May 20, Chris KA8WFC and I headed down to Dayton, Ohio for the 2005 Dayton Hamvention. It was my first trip to the ham radio Mecca, and Chris' first in recent memory. Due to school commitments, we arrived late Friday night. Former club

president, Mark WD8DPA, had found us a floor to sleep on. Early Saturday morning, we were ready to go.

The first time I saw the Hamvention flea market, I was in awe. It took me several hours just to skim the aisles. I was also impressed by the assortment of manufacturers and their equipment on display. Going off a tip we received on 146.52 MHz on the way to Dayton, we were on hand for the introduction of a new Icom mobile rig. Chris was impressed by SGC's new class E solid-state amplifier and even got to speak with the designer.

I ended up purchasing several antennas and a new rig for my mobile setup. The most impressive aspect of Dayton was the fraternal spirit. I met friends of friends, heard stories from all parts of radio and engineering. It seemed everybody knew everybody else, and had plenty of stories to share. I heard stories about test equipment, sunspot cycles, working DX, and Michigan repeaters 30 years ago, just to name a few.

We left on Sunday, tired, but with plenty of stories, some new gear, and a longing for next year's Dayton Hamvention.

Hazel Park ARC Swap and Shop Trip

By 5:20 am on Sunday January 16th we were on the road to the Hazel Park Ham Swap to trade in old equipment and duplicate QST's from the 1920's through the 1970's for some cold hard cash. In the process of raising just under \$400 Jon KG6URI picked up a used keyer and paddle combo on the cheap and we were able to the dump the left over freebies on an interesting fellow vendor in brown overalls (including the user manual to an old calculator!) One guy bought the entire decade of QST from 1930 to 1939 and several folks bought their birth year. Special thanks to Chris KA8WFC, Jon KG6URI, Richard KD8APA, Noah KC8TKP, Bruce KD8APB and Joe "Jumping Straight to General".

A Brief History of Amateur Radio at The University of Michigan (1913-present)

DE Richard French KD8APA

The University of Michigan Amateur Radio Club has been in the spotlight since the beginning of amateur radio. By 1913, only four years after the first amateur club was formed, the University club was given the call 8XA. One of the first college clubs in the US, three stick-to-it operators filled an entire logbook during the cold winter of 1915 vying with local amateurs for contacts, even listening to a steamer in distress 300 miles southeast of Newport. The May 7, 1915 log of 8XA includes the code copied from a news bulletin, "Lusitania sunk by submarine." Log entries soon ceased as the United States entered the first World War and the Amateur Radio Service was suspended.

After World War 1 the club was issued 8AXZ. In 1927 activities heated up as the 1928 Byrd expedition set new standards for American explorers. As Byrd put it, "...this single department received more attention than any other, for our program called for the most elaborate system of communication ever proposed in a Continent where radio conditions are notoriously bad". Five radio engineers, 24 transmitters, 31 receivers and a main base at Little America were organized to support the two expedition ships. That year the club not only handled traffic for the Byrd expedition but also for another, this time on top of the world to Mount Evans, Greenland.

From the late 1920's, into the 1930's, traffic was handled from all corners of the globe. In 1931 M.K. Jessup from the Detroit Observatory contacted the Lamont Observatory in South Africa to set up frequencies and times for future QSOs. Col. S.R. Sanderson even wrote Senator Edge in Washington requesting aid in passage of the Personnel Bill in the Senate. In 1934, after repeated letters discussing the benefits and requirements of admission, the club joined the ARRL (it seems for the cheaper "printed matter"). Finally, in 1937, The Chair of the

Student Affairs Committee judiciously recognized the University of Michigan Amateur Radio Club. Work continued at a fast pace in 1941 with Louis Hopkins' "Design of a 20 meter Radiotelephone Transmitter" as more logbooks filled with contacts from around the world. On January 31, 1947 the club was issued W8ZUP but was replaced with W8AXZ after a battle over callsigns with the FCC. Amateurs were active at Michigan all through the 50's, 60's and 70's, reconstituting in 1973, but often with transceivers for each dorm on campus.

In 1967, by special request of the FCC, for the University's sesquicentennial, the club was issued the callsign W8UM. By 1976 28 logbooks had been filled under the W8UM call. Today, logbooks continue to be filled under W8UM, a call worth at least 3 dB of gain, rekindling old school rivalries and appreciating the great history of the club.

It could be said that amateurs have operated out of nearly ever building at the University, from the early days in West Engineering and meetings in Natural Science, East Physics and the Michigan Union, to later years in South and West Quads and other dorms, to today's shack in EECS.

As the tower rises and a new chapter of UM-ARC history begins we wonder how many new buildings will find place in the legacy of Amateur Radio at the University of Michigan.



Richard KD8APA and Jon KG6URI admire a piece of club—and radio—history, a UX-852 100W dissipation transmitting triode, circa 1928.



Who is this HAM? Why, it is Mark WD8DPA—past UMARC president *par excellence* as well as current member and W8UM call trustee! This photo comes from the March 1982 newsletter, and gives a view of the old South Quad shack.

Thanks to our 2004-05 Club Officers!

President – Chris Galbraith KA8WFC
 Treasurer – Bruce Graham KD8APB
 Secretary – Richard French KD8APA
 Station Manager – Jon Suen KG6URI

U. S. ARMY FIELD MESSAGE						
TIME FILED	NO.	SENT BY	TIME	RECEIVED BY	TIME	CHECK
THESE SPACES FOR SIGNAL OPERATORS ONLY						
From _____						
At _____						
Date Nov. 21 Hour 10:00 No. 1						
To Prof. Hobbs						
Kindly have KDKA handle our messages with Byrd's traffic rather than long wave stations STOP We are able to get KDKA short wave but no other stations STOP Coldest here 3 degrees below STOP Everything O.K.						
Carlson & Schneider						

A piece of traffic handled by 8AXZ during the 1928 Byrd Antarctic expedition. Prof. Hobbs was a noted polar geologist at the University.

Donations Make W8UM a top-notch Station

Since dedicating the new W8UM shack, the club has been the grateful recipient of many, many gifts. We would like to particularly thank the following club supporters (and members) whose generosity has made our shack very well-equipped.

Thank you for your support!

- **Jack Burchfield K4JU:** Ten-Tec Omni-VI station with power supply, microphone, and a complete suite of crystal filters (Jack is the President and Co-founder of Ten-Tec and a U-M EE alumnus)
- **Prof. Brian Gilchrist KF6ON:** Complete Drake “B-Line” with an R-4B, T-4XB, AC-4, and microphones
- **Bruce Graham KD8APB:** Astron RS-20 power supply and hand-crafted wooden shelving unit
- **Jack Kesterson W8PP:** Hy-Gain TH7DX Yagi-Uda antenna and Tailtwister rotator
- **Frode Maaseidvaag KE8CS:** Drake TR-4 transceiver
- **Mark Travaglini WD8DPA:** Hy-Gain 12AVQ 10/15/20m vertical antenna
- **Dennis Ward KT8X:** Ameritron RCS-8V Remote coax switch

Also, we owe **Frank N8YIY** a special thanks for storing all of the club’s stuff including our \$400 savings, for several years, as well as hosting our first club meeting of 2004-05, complete with his home-made pasta sauce and his wife’s Belgian apple pie. Frank also loaned the club his entire station for many months to get us back on the air quickly.

In addition to this equipment support, the club thanks EECS Department Chair **Prof. Dave Munson** and College of Engineering Associate Dean **Prof. Tony England WØORE** for their enormous and vital support of our club. They clearly understand how an Amateur Radio Club benefits the University, and we strive to continue the tradition of radio experimentation and community service worthy of University support.

Alumni Contacts Sought

Are you a former club member, or U-M alumni with an interest in Amateur Radio? We’d love to hear from you! We are always excited to hear stories from the club’s past and get your suggestions for club events and station improvement. We are also trying to put together a W8UM HF net for alumni. Please contact us by email or via our website! (Please see contact info below.)

73 and GO BLUE!

Chirp and Splatter is published by The University of Michigan Amateur Radio Club. The club holds monthly meetings, hosts many special events and radio courses, and operates a club station—callsign W8UM—located in the EECS building on North Campus. If you would like more information about the club or amateur radio, please contact us!

Email: w8um.info@umich.edu
On the web: www.umich.edu/~umarc

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