W8UM: University of Michigan ARC

W8UM ARC Student Officers; 2016-2017

President:	Stuart Carlson, W8SRC
V-President:	Peter Shultz, W2PKS
Secretary:	Jeff Gazdacko, KE8BLW
Treasurer:	Vacant
W8UM Trustee:	Mark Travaglini, WD8DPA
Faculty Advisor:	Amir Mortazawi, PhD., AC8YB

W8UM Meeting Dates (3rd Thursday)

September 15, 2016	BBB Room 1690
October 20, 2016	EECS Room 1005
November 17, 2016	EECS Room 1005
December 15, 2016	No Mtg., Exam Week
January 19, 2017	EECS Room 1003
February 16, 2017	**EECS Room 1003**
March 16, 2017	EECS Room 1003 **Club Elections**
April 20, 2017	No Mtg., Exam Week
May – August	No scheduled meetings

Club Events & Dates

Northfest	September 5, 2016
Festifall	September 9, 2016
EECS Family Night:	Friday, October 14, 2016 6pm
ARRL License Testing	2nd Saturday of each month
ARRL School Club Round-Up	Week of October 17-21, 2016
ARRL Phone Sweeps	November 19-21, 2016
KB6NU 1-day Tech Class	Saturday, January 21,2017 (EECS # 1200)
ARRL School Club Round-Up:	Week of Feb 13-17, 2017
Mi QSO Party	April 15-16, 2017
UMSI Maker Fest; North Quad	April XX, 2017
ARRL Field Day	Saturday, June 23-24, 2017

W8UM Sunday Night Net (8 pm Ann Arbor time): 145.23 mHZ, PL 100 HZ (-600 kHZ)
Temporarily on 146.96 (ARROW Freq.) or via EchoLink Node 301158 (W8UM-R)

W8UM Amateur Radio Club Meeting Agenda for Thursday, February 16, 2017
Time / Location: 6:30 pm. Room 1003 of the EECS Bldg., 1301 Beal Ave.

Presenter: Amir Mortazawi, PhD., AC8YB

Topic: Highly Efficient Coupling Factor Independent Resonant Based Wireless Power Transmission System

Abstract: Wireless power transmission (WPT) is an emerging technology that employs time-varying electromagnetic fields for contactless electrical power transmission. WPT technologies have a significant commercial potential ranging from RFID tags, bio-implants, charging of consumer electronic devices and electric vehicles, to name a few. The most common method of wireless power transfer is based on strongly coupled magnetic resonance (SCMR) method. The SCMR method allows high efficiency WPT over a considerable distance. However, SCMR based systems suffer from significant efficiency degradation due to coupling factor variation between the transmitter and receiver due distance or alignment changes. A new design method for resonance based WPT that is highly tolerant to range variation and misalignment will be presented. Such a method can be implemented using completely passive RF circuit configuration. Theoretical and experimental results for the new WPT circuit will be presented. A near-constant efficiency of higher than 80% is achieved over a wide range of power transmission distances, exhibiting significant performance enhancement as compared to conventional designs.

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

Treasurer's Report:

Balance (01/19/2017):	$	4557.94
Revenues: (Jan)	$	70.00
Donations (cash):	$	
Expenses: (Jan)	$	146.16
Balance (02/05/2017):	$	4481.78

Station Manager's Report:

Radio's:	TS590/FT1000D/IC910/IC746/APRS/FT8800		
Antenna's:	**80M**, G5RV, Satellite, **SteppIR**, Vert, Disc		
QSO's (mo):	Dec 49	Jan 69	
QSO's (yr):	2015	2016	2017
QSO's (#)	3178	2596	118

4. Prior Business:
   a. Hallicrafters SX-28A restoration project; Steve Sostrom, et al.
   b. W8UM Repeater; in-operable due to Dennison / Weiser Hall construction – **Expected Completion Date, June 2017.**
   c. Temporary EchoLink node, via the ARROW repeater, for the Sunday Net.
   d. ARRL Test Sessions; 2nd Saturday of each month at the Washtenaw County Red Cross Bldg. Contact the AAROW Comm.
   e. SteppIR non-functional until further notice, unable to tune. Loss of coax continuity at 81" from shack.
   f. Michigan Union Tower removal to take place during Spring 2017 due to Union roof maintenance. (Moving & Trucking; John, 647-3319)

5. New Business
   a. W8UM Logbook #39 (2012 – 2017) is filled / members signing during mtg.
   b. KB6NU 1-Day Class; 37/40 (92.5% passing)
   c. Students interested in becoming a 2017-2018 W8UM club officer; President, V-President, Treasurer. Email: W8UMBoard@umich.edu with your name / contact info. Elections in March 2017.

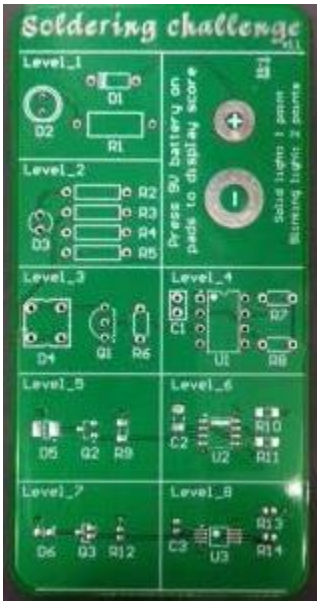
   d. Sunday Night Net; Net Control Op:

01/23/2017:	Stuart Carlson, W8SRC
01/30/2017:	Ed Vielmetti, W8EMV
02/05/2017:	Ed Vielmetti, W8EMV
02/12/2017:	Stuart Carlson, W8SRC

c. New Member Station Orientation (Jan - Feb 2017):

Tyler Dence	KE8FVU
Koishi Anderson	KE8FVV

d. Solder instruction class w/ Dave Boprie (WS8P)



a) solder boards have arrived, components expected soon

b) introductory class size will be limited to 10 individuals

c) there will be a $10 cost for W8UM members, Club will contribute the balance ($30/unit)

d) class date TBD, tentative March 2017

e. School-Club Round-up; electronic logging programs, specific to SCR, are on the HF computers

f. Livonia Swap; Sunday, February 19, 2017. Contact the Board, before Saturday, if you have items to sell.

g. Michigan QSO Contest: Saturday, April 15, 2017

h. Looking for any pre-1965 UM QSL cards. Not found at Bentley Historical Museum.

i. UM 200-year Anniversary; please assist in documenting “wireless” radio while at the University at Michigan. **Form Attached**

j. Regenerative Receiver kits and parts; the club has some partial / complete kits to give away at this Feb mtg. (FREE)

k. W8PGW (ARROW Communications); monthly meeting location has been moved to Space Research, UM North Campus.

l. Club Officers: Room Reservation for Fall 2017 “W8UM Mass Meeting” *** Student Sponsored Agreement completion ***

6. Attendance (Jan 2017): 29 Students: 8 Alumni: 6 Faculty/Staff: 13 Non-UM: 2

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W8UM ARC President or Designee

W8UM: University of Michigan ARC

W8UM Meeting Location: Electrical Engineering & Computer Science Building, Room 1003

Address: 1301 Beal Ave.
ZIP: 48109

