

The AARCOVER

Bulletin of the Austin Amateur Radio Club
May 1991



MEETING

Field Day committees will be formed by the Activities Manager Gary Pickens, WX5Z. Be ready to choose your tasks for this important club activity.

Field Day rules can be found in the May, 1991 issue of QST on page 92. Information packets [for those wanting to operate independently of the Club group] may be obtained by writing the ARRL Headquarters at 225 Main St., Newington, CT 06111; sending them a 9 x 12 inch SASE with 4 units of first class postage; ask for the Official Field Day Entry Package. If you require more than one dupe sheet, ask for the number you require and send one additional unit of first class postage for each two additional dupe sheets requested.

Program: Tom Comstock, N5TC, will speak on the ARRL organization, operation and volunteers. Questions will be answered if time permits.



News Flash!!! The Fall Manchaca Swapfest is scheduled for October 12, 1991. Same time, same [fire] station.



As usual, no smoking at the club meeting.

LONG DISTANCE TELEPHONE CALLS

Airfone, Inc. offers in-flight telephone service on many commercial airliners. Signals between aircraft and the network of ground stations are SSB. The Austin ground station operates on 32 separate channels, spaced 6 kHz apart, with the lowest Austin frequency being 944.204 MHz.

SCOUT-O-RAMA 1991

On Saturday, April 20 (Yes, the same day as Manchaca), the Austin Amateur Radio Club booth at Scout-O-Rama 1991 was a huge success. Boy Scouts, Cub Scouts, Explorers, and adult Scouters, family and visitors stopped by all day long, asking questions, picking up brochures, signing up for more information, and joining in on 2 meter packet and 10 meter SSB QSO's.



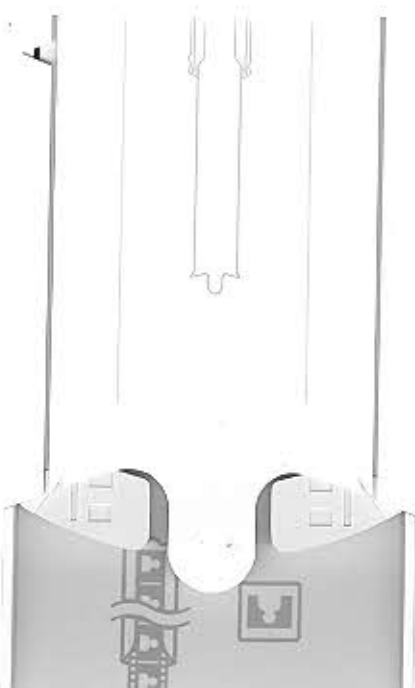
The demonstration featured an information table with brochures, various books on amateur radio, and QSL samples. Station facilities consisted of a 2 meter FM station, a meter FM Packet station, and HF station with all mode capability. All three stations were constantly in use throughout the day. During one 10 meter QSO, Hal, AD5L made contact with another Boy Scout event in Rhode Island! Everyone had fun and the club received considerable positive exposure.

Mike, AA5JP, and Freddie Kellam, KB5IXT, and Dave Effland, N5RNE set up the booth, with Rick Herndon, K5FNJ answering questions and handling all the visitors during the setup and the first shift.

All the operators rotated between operating and answering questions and providing information. Operators manning the booth were Ben Thornton, WD5HLS, Mike Kellam, AA5JP, Hal Miles, AD5L, Jon Penner, N5MHI, and Dave Effland, N5RNE.

Special thanks to Dave Effland who brought his packet station, J.R. Adams, KB5MER, who provided our 2 meter antenna, and Miles Abernathy, N5KOB who made a special press run to provide club information sheets.

de Mike Kellam, AA5JP



HAM-COM 91

The 14th annual Ham-Com amateur radio convention is scheduled for June 7th thru 9th, in Arlington (between Dallas and Ft. Worth). In addition to a great swapfest, there will be programs about antennas, 10-10, the VEC system, packet for beginners and experienced, amateur satellites, teaching young people about ham radio, build-your-own radar, digital signal processing, MARS, AMTOR, AM, DX'ing, TextNet, QRP,



amateur TV, managing RFI, scanning and shortwave listening. Even ham exams on Friday, including the no-code exams.

Registration at the door is only \$9, or a dollar less if you pre-register. Flea market tables go for \$15. There will be several get-togethers and tours for non-ham wives, including the one on Saturday to the Ft. Worth stockyards (for those who are so inclined).

Location is the Arlington Convention Center, close to Six Flags. Lots of Austinites go to Ham-Com every year, so if you'd like a ride just ask around at the meeting.

MANCHACA REPORT

Several hundred people gathered at the Manchaca fire hall on a cool and clear Saturday morning. The usual Manchaca rain fell a day or two early, resulting in a damp parking area, but no need for umbrellas during the swapfest. There were 68 tailgaters and 41 rented tables.

If you have not attended one of these, you might want to plan for the next one in October. (If you have attended before, you won't need reminding.) A number of the regular "dealers" told this reporter that while they often sell more goods at other swap fests, this one is the most enjoyable because of the people they meet.

DOWN TO EARTH ADVICE

It is possible to have a nice big wire going from your equipment to ground, and still have big time RF on your chassis. How? Well, if that wire happens to be a quarter wave, or an odd multiple thereof, it will "transform" that "short-to-ground" into an "open-to-ground". In fact, such a "ground" will actually make a nice "antenna". Conversely, an "open to ground" that is a quarter wave will miraculously transform itself into a "short to ground" as far as that particular RF frequency is concerned. This is how radials and "artificial grounds" work.

Other lengths besides 1/4 wave also exhibit this behavior to a lesser extent. The best lengths to use are either a half wave, or ZERO length. (zero is better) "Electrical grounds" are more concerned with 60 Hz energy. A quarter wave at 60 Hz is a VERY LONG WIRE, so wavelength effects are not a concern. So if you depend on the third pin in your linecord to ground your rig, you will probably spray RF all over the house!

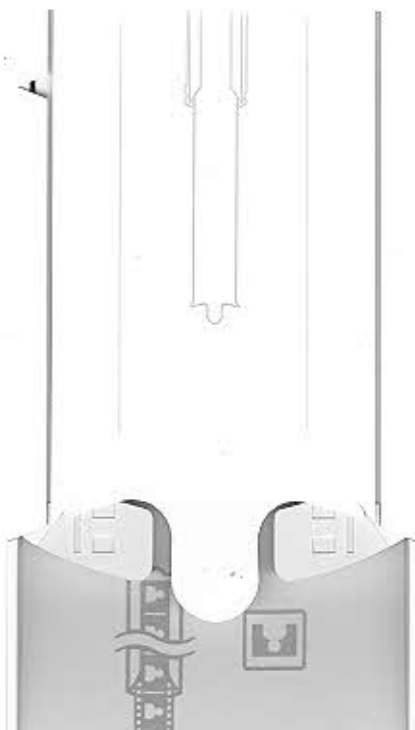
What I have, is an eight-foot industrial ground rod, buried about three inches from my house. Six inches above the ground there is a hole in the house wall, through which a number six wire goes. The rig is on the other side of that wall. Total wire length is about four feet. Even this might be a problem at 10 meters, but it's the best I can do.

de Jerry Kaidor, KF6VB

MOST EMBARRASSING MOMENTS

Here is an anecdote that originally appeared in QST: This fellow hears a weak CW signal, really rough—about a 143. He's punching in filters, copying what looks like broken English, and sending "7P?? ZA?? DE N4UVH N4UVH PSE OM K". So this goes on back and forth for about a half hour. Finally, there's a big POP and an acrid smell wafting in from the kitchen. Turns out his refrigerator was on the blink and was moaning RFI from its deathbed!

de Doug, N4UVH



MINUTES

Meeting for April 9, 1991: The meeting was called to order at 8:00 PM by our President, Mike Kellam, AA5JP.

VISITORS: We had a number of visitors which included Joe Carbine with no call; Art Dunlap, no call; Leon Blaze, KB4BGD; Roger Merrill, WA5IMB and our guest speaker; Robert Baron, KA5WSS; Zeke Emmett, no call yet; and George Freeman, WB5VZL, one of our area's most avid DXers.

OFFICER REPORTS: A correction was made in last month's minutes. They were accepted as corrected.

Mason, N5RYL, Editor says write, write, write. He has extra AARCOVERS.

Amado, N5PCP, noted that we have a balance of \$2842.68 in the checking account. We just paid the insurance for the club's radio equipment.

Activities Manager Gary Pickens, WX5Z, reminded one and all that the Manchaca swapfest will be on Saturday, April 20th. Park in the lot on the east side of the fire hall. The gates are scheduled to open at 7:00 AM (Secretary's comment: HA!). Gary also reminded us that there is a computer swap meet at the Manchaca fire hall on Saturday, April 27th.

NEW MEMBERS: Four new members were elected. They were Mike Milliman, WB5VQX; Greg Morrow, KA5FBW; Ken Nordhauser, KB5OZI; and Vernon Whittington, call not yet received.

OLD BUSINESS: None

NEW BUSINESS: Mason West, N5RYL, made a motion to approve a resolution for the membership to vote on as follows:

"Whereas the Austin Amateur Radio Club has approximately 300 members among whom approximately 209 are also members of the American Radio Relay League (ARRL), and Whereas a signed agreement between the Federal Communications Commission Field Operations Bureau and the ARRL commits the ARRL to maintaining the Amateur Auxiliary, and Whereas the commitment to maintain the Amateur Auxiliary should be honored above and beyond even

the social obligations of a volunteer, and Whereas the Amateur Auxiliary provides the primary monitoring services within amateur radio, and Whereas the amateur radio operators of the Austin Amateur Radio Club recognize the urgent need for the monitoring of the amateur bands, Let it be known that a majority of the quorum present at the April 9, 1991, meeting of the Austin Amateur Radio Club voted for the following resolution: Resolved that the Austin Amateur Radio Club encourages all radio amateurs, the elected ARRL officials of South Texas, and their appointees, to foster a spirit of volunteering that creates exemplary recruitment, leadership, and participation within the Amateur Auxiliary and all programs of the ARRL within South Texas."

A short discussion of the purpose of the resolution was interrupted by a motion to table the resolution. The motion was seconded and passed by voice vote. In relation to this subject, it was announced that the club is seeking to have Tom Comstock, N5TC, speak on the ARRL organization. □

ANNOUNCEMENTS: There were two silent keys this past week, Mary Green, N5CPJ and Bill Cain, WB5DEU. We extend our sympathies to their families.

There will be W5YI VEC exams on Saturday, April 13th.

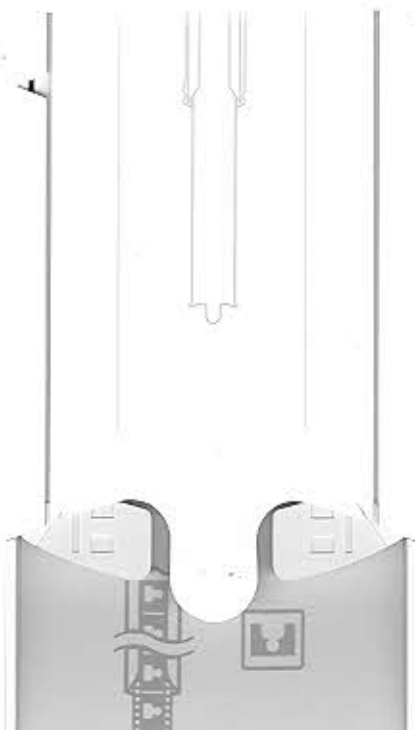
Mike, AA5JP, asked for assistance on Saturday, April 20 at the Scout-A-Rama. He will be operating a booth to demonstrate amateur radio.

Jim Coker, KB5EHP, requested assistance at the Crop Walk this Sunday, April 14th.

The 3M Club can use more assistance with the MDS Bicycle Ride from Houston. Amateurs from this area have handle the communications for health and welfare on the La Grange to Austin portion, Sunday, April 21.

Earl, W5PPQ, needs a 6BN8 and a manual for an SB-101.

PROGRAM: Vice President Stuart Rohre, K5KVH, introduced a past member of the AARC, Roger Merrill, WA5IMB. Roger recently retired from the State Department of Highways and Public Transportation where he pioneered the use of satellite positioning techniques in highway construction. Roger is now with



Through 440 I have worked many countries ... with an HT

10 METER FM FUN

Ten meter FM is a whole lot of fun, especially through repeaters...it's a whole different type of QRM and QRN that, to many people's ears, is just as much fun but without the "SSB Headache" I get after a few hours of over-used speech processing and tin voices.

Being a Tech, I haven't worked 10 FM directly, but the Worldnet repeater system here has a 10 meter node. Through 440 I have worked many countries and most states either mobile or with an HT.

I want to throw in a plug for the use of PL (CTCSS). There is an ARRL plan for 10 meter PLs based on the region where the repeater is located. This would reduce significantly the amount of QRM caused by bringing up 3 or 4 repeaters in different parts of the world and would allow much better QSOs.

de Johnathan Vait, Billerica, MA



the Applied Research Laboratory of the University of Texas where he remains involved with the use of Global Positioning Satellites. Roger presented a program and demonstration of the use of this equipment.

Respectfully submitted by Joe Canfield N5HPC, AARC Secretary.

CAMERA AMATEUR

At the April 16th meeting of the Austin Amateur Television Club, the technical committee reported that things are going well with the ATV repeater although it has not been moved back to the repeater site yet. A sync stretcher and receive video processor were added to the repeater resulting in a much improved picture. The committee is still looking for a 35-50 amp 12 volt power supply (transformer type) to replace the switching supply currently being used.



Bob, W8ZSX, reported that we had two members in attendance at the 3M Skywarn Class last month where he gave an overview of the club. He talked with a few members of the 3M club and found out they are interested in assembling an ATV repeater. They sounded enthusiastic about both clubs working together on the project.

The selection of a frequency for a second ATV repeater was discussed and the 1296 MHz band seemed most appropriate with possible links to the current 439 MHz repeater.

Frank, W5VDS, commented that the 1989 and newer ARRL Handbooks have good introductory articles on ATV.

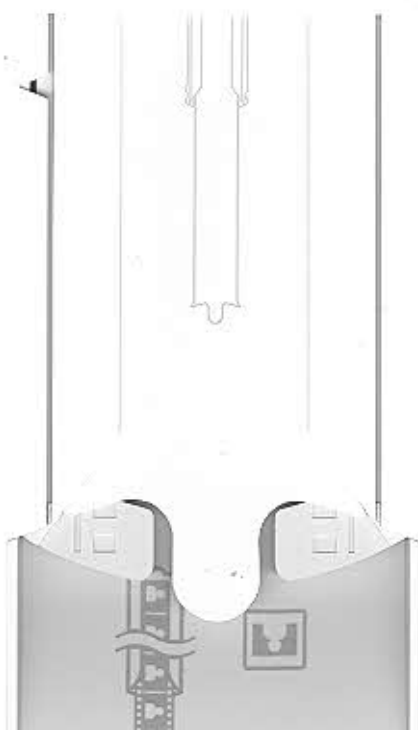
Frank also described his activities related to the recent STS-37 Space Shuttle. The Johnson Space Center Radio Club called him the night before their scheduled ATV uplink test. The amplifier they had planned on using for the uplink had failed. They drove out to Frank's, picked up his amp and took it to East Texas that night. They needed considerable power for the test since the shuttle receive antenna was mounted inside and pointing out the window. The setup is described in the current AMSAT bulletin and included a Watchman, VTR and down-converter.

Frank brought along a truck full of circularly polarized microwave antenna's that he had constructed over the past few weeks. He described how they were constructed and worked.

For ATV info, contact W8ZSX, WA8PLR or N5MHI.

Next ATV Meeting: May 21st, 7:30 PM, Sirfoin Stockade 8828 Research.

... de N5MHI, Jon Penner



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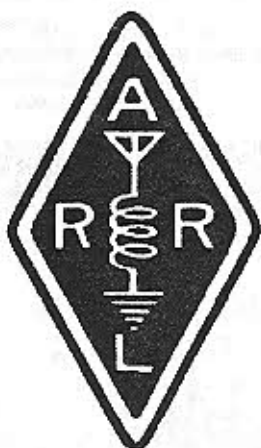
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Next ATV Meeting: May 21st, 7:30 PM, Sirloin Stockade 8828 Research.

... de N5MHI, Jon Penner

A POEM

Are you an active member
The kind that would be missed
Or are you just contented
With your name on the list

Do you attend the meetings
And mingle with the crowd
Or do you just stay at home
And gripe both long and loud

Or do you take an active part
To help the club along
Or are you just satisfied
To be the kind that just belongs

Do you ever go to visit
A member who is sick
Or leave the work to just a few
And talk about the clique

There is quite a program schedule
That means success if done
And it can be accomplished
With the help of every one

So attend the meetings regularly
And help with both hand and heart
Don't be just a member
But take an active part

Now, think it over carefully
Am I right or wrong
Are YOU an active member
Or do you just belong?

(anonymous, with modifications by James, KB5AWM)

THE AARCOVER:

Monthly Newsletter of the Austin Amateur Radio Club

Officers

Mike Kellam, AA5JP, President 836-7688, 919
Stuart Rohre, K5KVH, V. President 255-3932, 918
Amado Ramirez, N5PCP, Treasurer 280-1879, 916
Joe Canfield, N5HPC, Secretary 258-4761, 917
Gary Pickens, WX5Z, Activity Mgr 454-3230, 915

Committees

Ed Golla, K3AHS, Technical 255-4818, 111
Joe Fisher, K5EJL, Emerg Coord'tor .. 926-4689, 119
Joe Fisher, K5EJL, W5KA Trustee 926-4689, 119
Rick Herndon, K5FNI, Editor 454-1670, 914
Pete Jordahl, K5GM, Labels & Roster 454-7889, 913

Numbers after the call signs are phone number and
autodial number on the 146.78 MHz repeater.

Address submissions to Rick Herndon, 1809 W. St.
Johns, Austin, Texas 78766. Telephone numbers are 454-
1670 (home) and 465-6338 (work).

Deadline for the June issue is mid-May. Late material
will be saved for the following month.

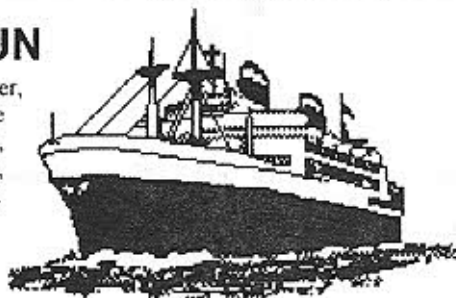
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a full page or \$10 for a half page. Members may advertise
ham-related *For Sale* or *Wanted* ads free if space is
available.

PK-232 FUN

Check for SITOR around 8700-8720 kHz, which has weather,
sometimes news headlines, and most often ship-to-shore
messages. The messages are often supply lists of foods,
wines, etc., needed to be stocked when the ship arrives in port,
so it can make a quick turnaround and head back out again.
Probably cruise ships.

de Dave Bartholome via GENie



THE FUTURE OF HAM RADIO

I think of amateur radio basically as a place where one can learn through experimentation and self study about electronics and radio. Amateur radio led me directly into my professional work in broadcasting. I would hope for an amateur radio that can lead other young people into technical careers.

...Working the world doesn't seem the big deal to today's youth...

The problem with amateur radio today, as I see it, is that not all the entrance requirements are relevant to the type of electronic communications that people are interested in today. When I was first licensed in 1964, I struggled through the code because it was one of the two major modes of communications in amateur radio. The other mode was AM. AM is mostly gone. Today the code is only one of a multitude of communications methods used in amateur radio and is hardly used at all in the VHF/UHF bands, except by a few DXers. Most of the experimentation with new modes and techniques is happening at VHF/UHF. Packet, fast scan TV, digital voice mailboxes, satellites, radio control, spread spectrum, digital video, and many other techniques are being spawned and being used at VHF/UHF/SHF. To me, this is where the excitement in amateur radio resides.

I believe that amateur radio can have a bright future with many different interests being represented. I expect that digital techniques, of which today's packet is just a forerunner, will be a major part of amateur radio just as it has become a major part of all electronics. I don't expect it to become the sum of amateur radio however, radio communication is too broad a field for one technique to dominate. I expect to see cellular techniques adapted for mobile amateur use. I expect to see an increasing interest in amateur video including slow scan, fast scan, and new high definition techniques. We have the spectrum to do some groundbreaking experimentation in leading edge techniques. What we must have is the critical mass of people who are excited by these techniques and have the motivation to experiment with them.

I believe we can no longer promote amateur radio as a way to "Work the World". With competition from cheap long distance phone networks and from cellular telephone, working the world doesn't seem the big deal to today's youth as it did to me twenty six years ago. The world no longer seems the mysterious place it did then. Television satellites have made the world a global village with routine live pictures from all over the globe available every night in our living rooms. We must present amateur radio as the place to be to play with all the exciting new toys of the electronic age. One of the most painless and effective ways to get people to learn is to get their interest in doing something up, then they will seek out ways to learn what they need to know to play. Kids who are interested in baseball can spout endless facts and statistics about the game, not because they were required to learn them for a test, but because they were curious and wanted to know. Similarly, if a kid is excited about some facet of radio, he will learn all he can about the subject, not to pass a test, but because he wants to know. I hope we can fascinate these kids with the neat new things we're doing with radio without turning them off with too much historical baggage.

de Gary, KJ4ZV

PACKET PIRATES

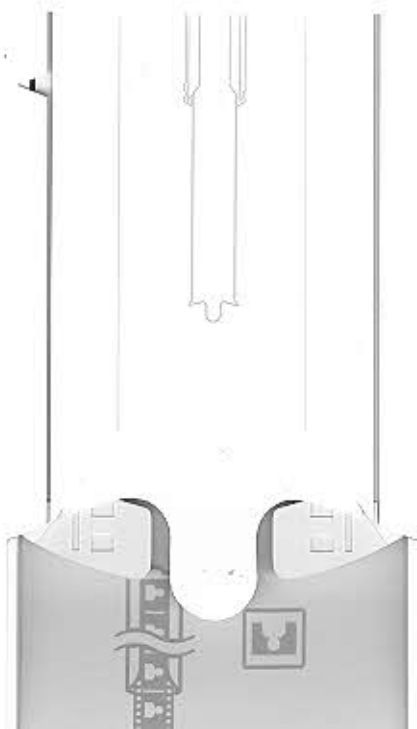
In Europe there are a number of pirate users who hang around 6.6 to 6.7 MHz using modified ham gear to work SSB, there's also some number of them doing this on packet. They make up their callsigns; they call themselves "International breakers" and I have heard numerous stations claiming to be in Britain, Ireland, France, Italy, and several of the Nordic countries.



These nets have been going for many years. They started off after WW2 using ex-government radios which could be bought dirt-cheap, or fished out of the remains of tanks, aircraft etc. that littered most of Western Europe at the time.

Also, I hear that a number of Polish hams have acquired radios etc. left behind by the retreating(?) Soviet army, and that some of these radios cover the 50 MHz band...

de Pete Lucas, G6WBJ (G6WBJ@GB7SDN.GBR.EU)



UPCOMING NATIONAL HOLIDAYS



Here is a list of upcoming holidays for various countries around the world. You might want to mention them next time you are in QSO with a DX station.

- 11 MAY Laos National Day (Constitution Day), 1947
- 14 MAY Paraguay Independence Day, 1811
- 15 MAY Austria Signing of Austrian State Treaty, 1955
- 15 MAY Israel Independence Day, 1948
- 17 MAY Norway Constitution Day, 1814
- 18 MAY Vatican City State Birthday of H.H. Pope John Paul II, 1920
- 20 MAY Saudi Arabia Independence Day, 1927
- 25 MAY Argentina National Day, 1810
- 25 MAY Jordan Independence Day, 1946
- 26 MAY Guyana Independence Day, 1966
- 27 MAY Afghanistan Independence Day, 1919
- 31 MAY Monaco Birthday of H.S.H. Prince Rainier III, 1923
- 31 MAY South Africa Republic Day, 1961
- 01 JUN Tunisia National Day, 1959
- 02 JUN Italy Anniversary of Proclamation of the Republic, 1946
- 04 JUN Tonga Independence Day, 1970
- 05 JUN Denmark Constitution Day, 1849
- 06 JUN Sweden National Day, 1809
- 10 JUN Portugal National Day, 1880



Israel



Argentina



Georgia

CALENDAR

- May 11 ATV Balloon (Houston)
 May 14 Austin Amateur Radio Club Meeting
 May 18 QCWA Meeting
 May 21 Austin ATV Club Meeting
 June 4 Austin Repeater Organization Meeting
 June 7-9 Ham-Com 91 (Arlington)
 June 22-23 Field Day

AUTOMOTIVE STAR WARS

A Texas researcher has developed a spark plug based upon Star Wars technology. It may one day lead to automobiles that cause less pollution of both the air and the airwaves.

Dr. Ronald Matthews of the University of Texas at Austin is co-inventor of the new railgun sparkplug, or "railplug." About the same size as a standard sparkplug, it blasts a plasma



arc into the engine cylinder at great velocity—up to Mach 10. This high-energy

discharge permits use of a leaner fuel-air mixture, which in turn reduces pollution and increases engine efficiency by 10 to 20%.

The voltage requirements for the new railplugs are similar to those of conventional sparkplugs, with higher current requirements. Neither pole of a railplug is at ground potential, so two-conductor balanced ignition wiring is necessary. Because balanced lines are inherently less likely to radiate radio waves than unbalanced lines, railplug-equipped cars should cause less ignition interference than today's models.

de Miles, N5KOB

VEC Q&A

Q: "I just wonder who these 'volunteer' examiners are, and if they get a cut of the course fee."

A: "I'm a VE and we don't get a dime. All the money collected goes to the VEC [Volunteer Examiner Coordinator] for expenses (paper,

postage, etc.). If you got coffee and donuts, it came from the VE's own pockets. We don't even get reimbursed for mileage. Be nice to your VEs—they are strictly volunteer. It all goes to the VEC, and can only be used to defray the costs of giving the tests. If the VEC had to eat that substantial cost, there'd be no VECs, and so no VEs."

de Jim Vienneau, WB1B

