

# THE COMMUNICATOR

Newsletter of the TAMIAMI AMATEUR RADIO CLUB Incorporated 30 November 1984 – Venice, Florida Mailing Address: 1419 E. Manasota Beach Rd., Englewood, FL 34223-6341

## -- MARCH 2005 --

#### -- PRESIDENT'S MESSAGE --

It was sure good to see the turnout at last month's meeting.

Mark your calendars for the DATE and TIME of this month's meeting, which will be our Annual Auction. We have rounded up some real good items that no one should be without. Remember to bid often and higher to get the best deals. If you snooze, you lose! The activities start early at 6:30 PM and everyone should have their auction items unloaded and ready by 6:30 PM.

I saw several of our members at the great Orlando Hamcation, and I hope everybody picked up some goodies that they could not do without.

The weatherman has been good to us lately for antenna projects, and I hope all your outdoor projects are getting done before it gets too warm.

The Peter I Island DXpedition was cancelled because of changes in the contractors for the ship and helicopter services at the last minute. I just got my confirmation back from the ARRL putting me back on top of the heap. DX has been good lately, with 15, 17 and 20 meters all being open even into the evening hours. I've been able to work 6F1IHR (Mexico), V31MR (Belize), 5Z4DZ (Kenya), VP8LP (Falkland Is.), LA5STA (Norway), 5N8NDP (Nigeria), S79CQ (Seychelles), ZD8ZA (Ascension Is.), 3G0YM (Chile), T77EB (San Marino), A35RK (Tonga), FR3/DK5CD, (Reunion Is.), A61Q (United Arab Emirates), 7Q7RS (Malawi), 9K50KAC (Kuwait), VK0MT (Macquarie Is.), and others.

If you can volunteer for a standby at the Sarasota County Fair, and put our TACR banner out in front of the people, then contact Jim Frey-W8ISZ. We could use the publicity with the county.

Look for everyone at the Auction. VY 73, Eddie-K4JP

#### -- MARCH MEETING --

Hey, Hey, Hey!!! It's ANNUAL AUCTION NIGHT, 10 March 2005, and the doors will be open before **6:30 PM**, such that we can get all that choice merchandise organized for our auctioneers to review for auction. It costs \$2.00 to buy an auction number,

and that \$2.00 will be credited to your account when you bid on any of the extraordinary items that are sure to be offered. All proceeds from the auction go to the benefit of the TARC Treasury. While we usually always have our fair share of humor at our regular meetings, the ANNUAL AUCTION is a real gut buster in the laughs department. So, Y'all Come On Out and enjoy the sights, sounds, and friendship that are a part of the ANNUAL TARC AUCTION!!

#### - REGIONAL HAMFESTS -

- 05 Mar Englewood ARS and Peace River Radio Ass'n "Charlotte County Hamfest" at Charlotte County Fairgrounds, El Jobean Rd (SR 776) 2.4 mi. W of US 41. TI: 147.255; Info: George-KA4JKY, 941-697-3445.
- 12 Mar Hamfest at Egypt Shrine Bldg., 4050 Dana Shores Blvd, Tampa. TI: 147.345; Info: Larry-W4LGP, 813-948-6500
- 19 Mar Martin County ARA Hamfest at Martin County Fairgrounds, 2616 SE Dixie Hwy, Stuart. TI: 147.06 (100 Hz); Info: Peter-W1MNY, 772-288-1048.
- 26 Mar Gulf Coast ARC Hamfest at Ridgewood High School, 7650 Orchid Lake Rd, New Port Richey. TI: 146.67; Info: Rick-AG4JN, 727-849-4159.

(From March 2005 *QST* and Web site of KB4VOL, <u>http://bellsouthpwp.net/k/b/kb4vol</u>)

#### -- TARC DUES ARE DUE -

Just a reminder that we are now into the third month of 2005 and, if you haven't paid your dues for this year, you are behind in your financial support of our club. Our Treasurer will be glad to receive your dues payment at our meetings or via mail to:

Peter Pesa – N4RD

29 Waterford Drive

Englewood, FL 34223

Dues are still \$15.00 for individual membership and \$18.50 for a family membership. Your continued financial support of the TARC is appreciated, as you help our club achieve it goals.



## TAMIAMI AMATEUR RADIO CLUB Minutes of the Meeting 10 February 2005

President Eddie Palmer-W4JP called the meeting to order at 7:00 PM. Bob Officer-WA6WAY led the pledge of allegiance to the US flag. Visitors were Tom Keifer-K4FNW of Venice; Bob Janssen-WB0HJK of Aberdeen, SD; Konrad Owens-WA3RRS of Venice; Don Gray-WD7A of Venice; Herb Lauber-W8MAO of Sarasota; Ed Rosenberger-KC0QML of Warsaw, MO; and Ed Chadwick of Columbus, OH. Bob-WB0HJK and Don-WD7A subsequently became members of the TARC at the meeting.

**MINUTES** - Bob Davisson-KA4BOB moved to forego reading of the minutes of the 10 January meeting, as published in the February issue of *The Communicator*; seconded by Don Fontaine-N4ET, and passed.

**CORRESPONDENCE** - Secretary Jack Sproat-W4JS reported receipt of copies of e-mail communications relative to start up of the club's W4AC 2meter repeater. An e-mail from Ron Wetjen-WD4AHZ, regarding assistance at a ham radio exhibit at the Sarasota County Fair, was also offered for consideration. Eddie-K4JP and Bob-KA4BOB offered additional comments regarding volunteer participation at the County Fair.

Diana Gregory-KI4GRF announced that the 5-K Scrub Jay Run and Walk will be held 19 February at Oscar Scherer Park and that TARC members would be welcome.

**TREASURER'S REPORT** - Treasurer Peter Pesa-N4RD reported that the starting balance was \$4,079.77. There was one outstanding check in the amount of \$28.22 for printing and postage. Income was \$243.00 from membership dues and \$18.00 from the "Half Share Investment", totaling \$261.00. The current account balance is therefore \$4,312.55. Charlie Covell-AG4TT moved acceptance of the report, seconded by John Fyke-VE6AIV, and passed.

## **COMMITTEE REPORTS**

**SUNSHINE** - A request for a volunteer by Eddie-K4JP to head the Sunshine Committee yielded no results. John-VE6AIV reported visiting with Bill Rockwood-KE4ZAK, and that Bill is showing positive spirits. Bob Avrutik-N1RA reported that his wife, Marie, had undergone hip replacement surgery on Monday, and that she is doing well and will return home on Friday.

**VE TESTING -** Jack-W4JS reported that there are two candidates scheduled for the 12 February VE session.

**REPEATER/TECHNICAL** -Bob-N1RA presented a comprehensive overview of the actions taken by

an ad hoc Repeater Committee consisting of Eddie-K4JP, John-VE6AIV, Stew Haag-W4MO, Pete-N4RD, Bob-N1RA and Hermann Rieper-VE3IRX to obtain a local unused coordinated 2-meter repeater frequency and to get the new W4AC repeater up and running from the Anderson Electric site. That was accomplished and the new repeater is running with the EchoLink mode available. Bob also mentioned that steps were being taken to establish a packet gateway station in the near future.

**NET OPERATIONS -** Eddie-K4JP reminded all of our Tuesday night simplex net and our Thursday night repeater net, both at 7:30 PM.

**PUBLIC RELATIONS & SPECIAL EVENTS -**Further comments were offered by Bob-KA4BOB and Eddie-K4JP relative to the Sarasota County Fair in March.

**CLUB GRANTS & DONATIONS** -Bob Officer-WA6WAY commented that, as the trailer we received from the Red Cross is beyond our capabilities to refurbish, we have to fend for ourselves to find a suitable unit. Bob opined that it would be best if we can do this on our own, in order to avoid overview by any agency that might offer financing for a trailer.

Eddie-K4JP stated that he has assured that TARC is on the Sarasota County eligibility list for surplus material that would be appropriate for our use.

LIAISON TO SERC/ARES/RACES -Eddie-K4JP offered comments on the February ARES/RACES meeting held in the Sarasota EOC office, with talks being given by county emergency officials. The county has selected a new group of shelters which are generally windowless, therefore external antennas will probably be required on all radios.

The county will park one of its emergency communications trailers at the sheriff's office/fire station on SR 776 north of Jacaranda Blvd. for use in the South County area.

**LIAISON TO RED CROSS** - Bob-WA6WAY remarked that extensive renovations are underway at the Red Cross, such that he has no contact person at present.

**LIAISON TO EARS** - Marty Horowitz-W4MHH reminded all of the Charlotte County Tailgate-Fest scheduled for 05 March at the Charlotte County Fairgrounds.

**LIAISON TO QCWA** - Jack-W4JS reported that there were 27 members and guests at the 02 February luncheon meeting of Suncoast Chapter 53 in Sarasota.

**CLUB HISTORIAN -** Marty-W4MHH has not received any historical material during the past month.

OLD BUSINESS - <u>Condition of Red Cross Trailer</u> - The 15 January inspection of the trailer by several See MINUTES, page 5

| -                                    |                     |       |                                 |       |       |       |       |       |       |       |
|--------------------------------------|---------------------|-------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|
| CURRENT and/or SCHEDULED DX ACTIVITY |                     |       |                                 |       |       |       |       |       |       |       |
| COUNTRY – CALL SIGN                  | ACTIVITY            | BEAR- | HF BANDS and BEST OPENING TIMES |       |       |       |       |       |       |       |
|                                      | PERIOD              | ING   | 80                              | 40    | 30    | 20    | 17    | 15    | 12    | 10    |
| Macquarie Island – VK0MT             | Now to March        | 220   | 07-11                           | 06-12 |       | 01-03 |       |       |       |       |
| Djibouti – J20FH                     | Now to March        | 61    | 23-04                           | 22-04 | 21-05 | 17-01 | 17-23 | 16-20 | 16-20 | NO    |
| Namibia – V5/SP6IXF, V5/SP7VC        | Now to 11 March     | 107   | 23-05                           | 22-06 | 21-07 | 18-22 | 19-21 | 15-16 | 18-20 | NO    |
| Burkina Faso – XT2JZ                 | Now to 11 March     | 83    | 23-07                           | 21-08 | 20-08 | 13-00 | 14-22 | 16-20 | 16-20 | NO    |
| St. Vincent – J88DR                  | Now to 14 March     | 121   | 22-12                           | 00-24 | 11-08 | 14-00 | 15-22 | 15-22 | NO    | NO    |
| Ascension Island – ZD8AD             | Now to 17 March     | 108   | 23-08                           | 21-09 | 20-05 | 13-00 | 15-22 | 16-20 | 16-20 | NO    |
| Chad – TT8KLJ                        | Now to 20 March     | 73    | 23-05                           | 22-06 | 21-08 | 16-01 | 14-22 | 16-20 | 16-20 | NO    |
| Spratly Islands – DX0K               | Now to April        | 337   | 11-12                           | 10-13 | 09-14 | 13-19 | 14-19 | 16-18 | 16-18 | NO    |
| Crozet Islands - FT5WJ ++            | Now to 01 April     | 131   |                                 |       |       | 16-17 |       |       |       |       |
| Swains Island – KH8SI                | 02 - 06 March       | 256   | 05-13                           | 04-13 | 03-14 | 22-02 | 22-00 | 19-23 | 19-22 | 19-22 |
| Mauritius – 3B8/IZ7ATN, 3B8/IZ2DPX   | 07-14 March         | 88    | 23-03                           | 22-03 | 22-03 | 18-19 | 21-22 | 17-19 | NO    | NO    |
| Kerguelen Island – FT????            | 15 March - 02 April | 144   | 00-02                           | 02-03 | 04-05 | 04-09 | NO    | NO    | NO    | NO    |
| Svalbard Island – JW/F8DVD           | 04 – 10 April       | 13    | 00-08                           | 22-11 | 11-00 | 13-21 | 13-21 | 16-22 | NO    | NO    |
| Botswana – A2???                     | 06 – 20 April       | 104   | 00-05                           | 22-06 | 21-02 | 18-19 | 18-19 | 16-18 | NO    | NO    |

**CURRENT/PENDING DX ACTIVITY & PROPAGATION FORCASTS** 

Updated 24 February, based on 23 February 2005 QRZ DX, 21 February 2005 The Weekly DX and K1XN DX Alert # 205.

Notes: ??? = Call Sign not yet known; ++ = Phone Only; \*\* = CW Only; NO = No Opening forecast; **Time in bold** = Best Band(s) for opening. Long Path bearings and opening times are <u>underlined</u>. All forecasts are calculated from *W6ELProp V.1.03* propagation software,

http://www.qsl.net/w6elprop/ by Sheldon C. Shallon-W6EL; Solar Flux and K-index vary in accordance with NOAA 27-day forecast.

# -- SOLAR ACTIVITY DURING FEBRUARY --

During the first 27 days of February, the Solar Flux ranged from 76 up to 122, with a mean value of 98.1 (vs. 107.0 for February 2004 and 124.6 for February 2003). The A-index was  $\leq$  10 on 17 days during February.

# -- MARCH PROPAGATION -

During March, solar activity is expected to be at very low to low conditions. A greater than 10 MeV proton event is not expected. The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels on 07-12 March. The geomagnetic field is expected to range from quiet to minor storm levels. Coronal hole high speed wind streams are expected to produce unsettled to active levels with occasional minor storm periods on 07-08 March. Quiet to active conditions are possible on 17 March due to a weak high speed wind stream. Otherwise, expect quiet to unsettled conditions. The Solar Flux should range from 80 to 105 during the month. (From NOAA Weekly Highlights and Forecasts, 22 February 2005 and NOAA 27-Day Space Weather Outlook Table, 22 February 2005)

In general, cue to the decline of the solar cycle, the ionosphere is not able to support propagation on the higher HF bands. Even so, March is one of the optimal DX months. As the Spring Equinox approaches, the gray line begins to run straight north and south.

Ten meters will be spotty, with the most reliable propagation being along north-south lines. Fifteen meters will be much more usable than 10 or 12 meter. This band will stay open longer into the evenings, and is the band of choice during March. The 17- and 20-meter bands will remain in good shape. Both short-and long-path openings will be reliable and strong into Russia, Africa, and both the Near and Far East.

Between sunset and midnight, expect DX openings on all bands between 20 and 160 meters, with occasional openings on 15 and 17 when conditions are High or Above Normal. From midnight to sunrise, expect optimum DX openings on 20, 40, 80, and occasionally 160 meters.

Expect Above Normal conditions on 5-6, 15-16, 18-19, 23 and 29 March, and High Normal conditions on 7, 9-10, 12-14, 17, 20-22, and 24 March.

(From "Propagation", Tomas Hood-NW7US, March 2005 *CQ*)

# -- CROZET ISLAND --

Jean-Paul, FT5WJ, has been showing up around 1700-1800 GMT in the 14.275-14.278 region. However, even Europeans are scarcely hearing him, and that's not "prime time" for an opening from this area. Perhaps his station will be improved before he has to depart the island.

# -- SWAIN'S ISLAND --

According to the original DXCC2000 criteria, this island falls into the same category as Chesterfield, Ducie, the Australs and Marquesas, and had applied for IARU membership for the "American Samoa Amateur Radio Association." Then the ARRL changed that criterion. However, "WFWL" when this possible new one is on from 02-06 March. At least we should have good propagation.

(From The Weekly DX, 21 February 2005)

|                               | CONTES                   | IS & ACIIV      |                          |                    |
|-------------------------------|--------------------------|-----------------|--------------------------|--------------------|
| Contest/Special Event         | Begin-End<br>Times/Dates | Bands/Modes     | QSO With                 | Exchange           |
| ARRL International DX Contest | 0000Z 05 March           | 160 – 10 Meters | Stations outside Canada  | R/S + State        |
|                               | 2400Z 06 March           | Phone Only      | and USA                  |                    |
| Spartan Sprint                | 0200Z 08 March           | 80 – 10 Meters  | Anyone, Anywhere         | R/S/T + State      |
|                               | 0400Z 08 March           | CW Only         |                          |                    |
|                               | 2200Z 05 March           | 160 - 80 Meters | Anyone, Anywhere (see    | 2-letter           |
| Open Ukraine RTTY             | 0159Z 06 March           | RTTY Only       | www.uarl.com.ua/         | regional           |
| Championship                  | 0800Z 06 March           | 40 – 10 Meters  | openrtty/ for regional   | abbreviation       |
|                               | 1159Z 06 March           | RTTY Only       | abbreviations to be used | + Serial No.       |
| RSGB Commonwealth Contest     | 1000Z 12 March           | 80 – 10 Meters  | Open to Commonwealth     | ?????              |
| (British)                     | 1000Z 13 March           | CW Only         | Stations Only            |                    |
| North American RTTY Sprint    | 0000Z 13 March           | 80 – 20 Meters  | Anyone, Anywhere         | Both calls, Serial |
| _                             | 0400Z 13 March           | RTTY Only       |                          | No., Name, QTH     |
| YLISSB QSO Party              | 0000Z 13 March           | 160 – 10 Meters | Members of Young         | R/S + State        |
| -                             | 2359Z 14 March           | Phone Only      | Ladies SSB Org.          |                    |
| Russian DX Contest            | 1200Z 19 March           | 160 – 10 Meters | Anyone, Anywhere         | R/S/(T) + Serial   |
|                               | 1200Z 20 March           | Phone & CW      |                          | Number             |
| 10-10 Mobile Contest          | 0000Z 19 March           | 10 Meters Only  | Anyone, Anywhere         | Call, Name, 10-    |
|                               | 2359Z 19 March           | Any Mode        |                          | 10 #, County       |
| CLARA and Family HF Contest   |                          | 80 – 10 Meters  | Canadian Ladies ARA      | R/S/(T), Name      |
|                               | 1700Z 19 March           | Phone           | Members and YL           | QTH                |
|                               | 1700Z 20 March           | 80 – 20 Meters  | Stations                 |                    |
|                               |                          | CW              |                          |                    |
| 9KCC Contest (Kuwait)         | 1200Z 20 March           | 15 Meters Only  | Anyone, Anywhere         | R/S/(T) + Serial   |
|                               | 1600Z 20 March           | Phone & CW      |                          | Number             |
| BARTG Sprint RTTY Contest     | 0200Z 19 March           | 80 – 10 Meters  | Anyone, Anywhere         | 3-digit Serial #,  |
| (British)                     | 0200Z 21 March           | RTTY Only       |                          | 4-digit Time       |
| CQ WW WPX Contest             | 0000Z 26 March           | 160 – 10 Meters | Anyone, Anywhere         | R/S + Serial No.   |
|                               | 2400Z 27 March           | Phone Only      |                          |                    |

# **CONTESTS & ACTIVITIES**

From March 2005 QST and March 2005 WorldRadio

## -- TARC NET SCHEDULE -

The following schedule is provided by the TARC Net Manager, Bob Murphy-WA1UHG:

| 0        | 1 2 |                  |
|----------|-----|------------------|
| 01 March | (s) | Bob-WA6WAY       |
| 03 March | (r) | Pete-N2IZD       |
| 08 March | (s) | Marty-W4MHH      |
| 10 March |     | Meeting – No Net |
| 15 March | (s) | Pete-N2IZD       |
| 17 March | (r) | Charlie-KD4FZ    |
| 22 March | (s) | Jim-W8ISZ        |
| 24 March | (r) | Jack-W4JS        |
| 29 March | (s) | Bob-WA1UHG       |
| 31 March | (r) | John-VE6AIV      |
| 05 April | (s) | Jack-W4JS        |
| 07 April | (r) | Charlie-KD4FZ    |
| 12 April | (s) | Bob-WA6WAY       |
| 14 April |     | Meeting – No Net |
| 19 April | (s) | Jim-W8ISZ        |
| 21 April | (r) | Jack-W4JS        |
| 26 April | (s) | Marty-W4MHH      |
| 28 April | (r) | Bob-WA1UHG       |
|          |     |                  |

## Note the following:

(r) = 146.805 W4AC Repeater; (s) = 146.58 Simplex Pending formal approval at the April meeting, the TARC Thursday night nets will now be held on our W4AC Repeater. This requires a 100 Hz PL tone from your 2-meter rig. If you do not have this capability, notify Pete-N4RD or Marty-W4MHH as they will purchase the required tone boards from Ramsey Electronics at a cost of  $\pm$  \$10, each.

Show your support of the TARC by checking into nets—both at 7:30 PM, local time. Also, Net Manager, Bob Murphy-WA1UHG is looking for <u>anyone</u> who would be willing to assist as a net control station for our weekly nets.

## BUREAU CARD HANDLING DOWN --

During 2004, the ARRL Outgoing QSL Service shipped 1,100,535 cards to overseas bureaus—down nearly 258,000 from 2003. Poorer propagation and use of Logbook of the World are considered factors. (From *The ARRL Letter, Vol. 24, No. 05*)

#### -- ARRL TILTING AT WINDMILLS? --

The ARRL has petitioned the FCC to take its broadband over power line (BPL) Report and Order (R&O) back to the drawing board. In a Petition for Reconsideration filed 07 February, the League called on the FCC to "reconsider, rescind and restudy" its 14 October adoption of new Part 15 Rules spelling out how BPL providers may deploy the technology on HF and low VHF bands. Asserting that the R&O doesn't adequately address the BPL potential to interfere with Amateur Radio and other licensed services, the League called the FCC action "a gross policy mistake," which "represents a classic case of prejudgment" which ignored evidence already at its disposal. (From *The ARRL Letter, Vol. 24, No. 06*)

The well-intentioned remarks of the ARRL seem to display naïveté or lack of historical knowledge with regard to the machinations of the FCC. How many recall the DuMont TV Network? The article "Who Killed Captain Video; How the FCC strangled a TV pioneer" by Glenn Garvin in the March 2005 issue of *Reason* provides enlightenment. This article is a detailed review of *The Forgotten Network: DuMont and the Birth of American Television* by David Weinstein and published by Temple University.

Allen Du Mont began manufacturing TV sets in 1938, and in 1940 he set up New York City's second TV station. He created the first TV network in 1946 when he linked his pioneering station in New York and Washington, DC. That network grew and created some of the most memorable programming in television's infancy, including Jackie Gleason's *Honeymooners*, Ted Mack's *Original Amateur Hour*, Bishop Fulton J. Sheen's *Life is Worth Living* and the discombobulated *Captain Video and His Space Rangers*.

But by 1955, Du Mont's network was out of business, strangled by a FCC that was protecting its old (and generous) clients, the radio networks, which wanted to get control of the burgeoning new medium before it seriously threatened them. Du Mont was the first victim of a FCC protectionist attitude that for three decades confined Americans to a three-channel (VHF) universe.

Long a lackey of the big radio networks, NBC, its recent spin off ABC, and CBS, the FCC was open to network lobbyists like Scoop Russell and Earl Gammons who strolled Washington hallways, dispensing cash and instructions to their federal minions. Determined to extend their broadcast hegemony into the new medium of television, the networks used the FCC as their Praetorian Guard.

The killing thrust came as the result of a 1945 ruling by the FCC that only 13 channels (reduced to 12) in the VHF segment of the broadcast spectrum would be set aside for television. It is unclear if this was done through cupidity or stupidity. To avoid interference, stations in the same city were prohibited from broadcasting on adjacent channels, cutting the available channels in half. However, stations as far as 150 miles could interfere if they were on the same channel. Therefore, this effectively limited most cities to three channels, meaning one network would lose out. Almost inevitably that would be DuMont.

The FCC fought against cable TV (labeled "pay TV" by the FCC) for another 30 years, protecting its network masters against competition. It denied licenses to microwave companies that did business with local cable upstarts. Even when the outright ban was lifted, cable was blocked from the 100 biggest TV markets. It wasn't until the mid-1970s that a series of court decisions allowed cable to compete.

Without the monetary clout of the electric utility companies, the ARRL's quixotic efforts are but tilting against the windmills of the FCC.

#### MINUTES, from page 2

TARC members revealed extensive and serious damage, such that conversion to a communications trailer is impractical. Further disposition of the unit is pending.

<u>2005 Christmas Party</u> - Marty-W4MHH reported that this event will be held 10 December in the Green Room of the Boca Royale Country Club in north Englewood. A \$200 deposit has been made and the cost of the dinners will be approximately \$25 per person.

<u>TARC Web Site</u> - When queried, only about a half dozen members acknowledged they had looked at the prototype sites of Juan Hernandez-KA4OWP and John-VE6AIV. John stated he will establish a simplified URL that has no fee required, and that he is quite willing to maintain a Web site for the club.

<u>Ham Valentine Picnic</u> - John-VE6AIV reminded all of this picnic, to be held on Sunday 13 February in Lemon Bay Park, Englewood.

**NEW BUSINESS** - None

**ADJOURNMENT** - Motion to adjourn at 8:01 PM was made by Vinnie Blas-WB1V, seconded by Don-N4ET, and passed. There were 29 members and seven visitors present.

**PROGRAM** - An ARRL video, "Everything You Always Wanted to Know About Antennas....but were afraid to ask" featuring Frank Rutter-K3AW, was shown.

Jack Sproat-W4JS Secretary