



SIGNAL



September 1998 Volume 7 Number 9

This Months Meeting

The agenda for this month's meeting was not known at the time of publishing.

The Board met and wrapped up lot's of business dating back to Field Day which was after our last meeting. Club members participated in numerous public service events.

One rapidly approaching event is the Septemberfest event in Groton. We will have tables there and need to have people help set up and man the displays to answer questions etc. This is where the majority of our ham class has come from so we hope to be able to attract enough candidates to get back on track with the classes.

Last Month's Meeting

We had no formal meeting last month. We did however have a family cookout at the KD1LE/N1PBL QTH on August 22nd. The cookout/pool party was poorly attended so we will probably not do that again.

The Power Of Hail

Did you ever hear of a hail storm that did a million \$ in damage and wonder how hail could cause so much damage? Well here are some interesting numbers from the Rob Macedo's SKYWARN Newsletter that might explain how that could happen.

Hail Size (in)	Velocity (mph)	Energy (ft-lbs)
1/2	34	0.009
3/4	42	0.044
1	50	1.43
1.5	61	7.35
2	71	23.7

Large pieces of hail may fall at speeds approaching 100 MPH! This clearly shows that while small hail may hurt, large hail is dangerous if you are unprotected.

Public Service

Members participated in a number of events over the summer months like the Fourth of July Parade and Road Race in Pepperell, The Parker School Road Race at Devens, The Harvard Bike Race, The Longsjo Classic Bike Race in Fitchburg.

We did our August cleanup Sunday the 16th. Thanks to the following members who participated; Herm KE1EC, Ian NZ1B, Stan KD1LE, Pat N1VAW, Ben KB1FJ, Ralph KD1SM.

I plan to do the next cleanup the Sunday after the meeting and will be looking for volunteers at the meeting. Stan

Field Day Memories



The picture above is one of our club members on a Field Day a long long time ago. A valuable prize will be awarded **at the meeting** to a person who can identify this person. **You must bring the newsletter** with the information filled out.

Who? _____

For those who have an interest in boat anchors can you name the receiver on the right?

Can you name the 2 meter transceiver?

NVARC FoxBox

The FoxBox went back in the field after Field Day. For the weekend of July 18th it was in the field from Tuesday to Wednesday. We keep making changes and improving our systems. This was the longest the fox has lasted on a set of batteries, almost 7 days. This was our original design goal.

For the weekend of July 18th congratulations to Ralph KD1SM, Charlie WN1E, Barry WA1HFN, John (Grizz) from Pepperell who is not a Ham and found it with his scanner after he saw Charlie and Barry hunting, and Bob W1XP.

The NVARC FoxBox and the MMRA Box were out at the Boxboro Convention. There was a Fox Hunting session early each day and after the Sunday session Ralph KD1SM and Stan KD1LE held a hands-on training session around the grounds. The NVARC FoxBox was found by the following hams at Boxboro; N1NOM Eddie, N1QPR Bill, N1VJE Shelly, KT1X Dave, N1ZCB Paul, KD1SM Ralph, KB1DEF Andrew, W!MJ Elliot, N1XOU Joseph, N1VTI Paul, KC1BT Allan, N1PHE Richard, N7QFW Joel, N1KXD Dennis, N7QVD Lynne, W1SJ Mitchell, N1SXL Leonard, KB1CKB Fay, NF1A Art, W1XP Bob, K1BG Bruce, KA1VOU Wolf. Congratulations to all the hunters.

The FoxBox is generally out each weekend from about Thursday through Tuesday. There are three places we are putting information when it is out. There will be an APRS bulletin that will say it is out and give the area. A message will be put up on PEPMBX with the same information. Also the 145.45 Fitchburg Repeater will, on the hour, transmit at the end of the ID string an "FOX!" message meaning "fox out"

The FoxBox transmits on a frequency of 145.63 with a PL of 146.2 for thirty five seconds then takes a five minute rest. The fox is on the air from 8 A.M. to 9 P.M.

We welcome all hunters and only ask that if you find it you sign in on the 'log' which is in a plastic bag under the fox, and don't tell anyone where it is/was until we bring it in. Since people will be hunting on different schedules we wouldn't want to take away anyone's fun.

Ralph KD1SM/Stan KD1LE

Amateur Licensing Changes

As you will know from reading QST and copying ARRL bulletins, for the past two years the League has been surveying the Amateur Radio community to solicit input on possible changes to the Amateur Radio Service licensing structure. The League observed that many Amateurs felt the current six license classes were more than were needed.

The League's Board of Directors established a license restructuring recommendation committee and charged it with evaluating the survey input and producing a proposal for simplification of the amateur licensing.

In July this committee released its recommendation to the ARRL Board, which the Board endorsed and forwarded to the Amateur community for comment. Part of the urgency in releasing this proposal was the news that the FCC was about to release its own proposal for changes to the Amateur Radio Service licensing. The League wanted to make its proposal public prior to the release of the FCC's NPRM to stimulate the maximum number of comments.

The FCC did release its own — and much simpler — Notice of Proposed Rule Making (NPRM) for trimming the number of Amateur license classes in the end of July.

The two proposals share the common feature that the total number of license classes will be reduced to just four and no current licensees will lose any privileges. However, whereas the ARRL proposal touches all current license classes in one way or another, including changes to the CW requirements, the FCC proposal makes no changes to the General and higher classes.

Here is a side-by-side summary of the most significant parts of the two proposals:

Number and Names of License Classes

ARRL: 4; Class D, Class C, Class B, Class A (lowest to highest).

FCC: 4; Technician, General, Advanced, Extra (lowest to highest).

HF Privileges

ARRL: Class D none
Class C all bands, CW+Phone
Class B all bands, CW+Phone
Class A all bands, CW+Phone

FCC: Technician none (no change)
General no change
Advanced no change
Extra no change

HF Bands

ARRL: On 15, 40, and 80 meters the lower edge of each phone subband moves down, increasing the size of the subband. The change is 50KHz on 15 and 80 and 25KHz on 40. Class C has the current General allocation with this subband change, Class B has the current Advanced allocation with this subband change, and Class A has the current Extra allocation with this subband change.

FCC: No change to current allocations.

CW Testing Requirement

ARRL: Class D none
Class C 5 wpm
Class B 12 wpm
Class A 12 wpm

FCC: Technician none
General 13 wpm (no change)
Advanced 13 wpm (no change)
Extra 20 wpm (no change)

Grandfathering

ARRL: Technician rename to Class D
Novice change to Class C
TechPlus change to Class C
General change to Class C
Advanced change to Class B
Extra change to Class A

FCC: Current Novice license holders keep the Novice designation and can continue to renew it. Current TechPlus license holders get Technician licenses but maintain their HF privileges. No new Novice or TechPlus licenses are granted.

While the ARRL proposed reducing the CW requirements for the higher classes, the FCC proposal includes no changes to the CW testing. The FCC specifically asks for further recommendations on the CW requirements during the comment period and the comment period has been made longer to accommo-

date this request. In its NPRM, the FCC clearly indicates that it would like the Amateur community to consider whether the CW testing requirements "remain relevant to today's communication practices".

The FCC's NPRM includes some other changes to the Amateur regulations, including the ARRL request that Volunteer Examiners not be permitted to administer a test that they have not themselves passed.

The initial FCC comment period ends on December 1. The ARRL is asking for comments on its proposal by the end of October so that it can file its own comments and revised proposal by the December 1 date. Following the December 1 deadline, Amateurs will have an additional six weeks — ending January 15, 1999 — to submit further comments to the FCC on the comments sent during the first period.

In response to questions at the Boxboro Convention on August 28, Vince Kajunski of the FCC's Boston Field Office said that the FCC was now required to review all regulations every two years, including the Amateur regulations. Therefore we should expect that any changes as a result of this NPRM might take effect as early as mid- 1999.

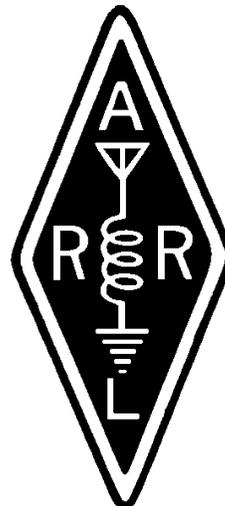
Full details of both the ARRL and the FCC proposals are available from the ARRL Web site at <http://www.arrl.org>. To get filing instructions for e-mail comments, send an e-mail to ecfs@fcc.gov, and include the following words in the body of the message, "get form <your e-mail address>." Additional instructions for filing comments electronically are contained in the NPRM. Ralph KD1SM

ARRL News and Newsletter

ARRL BOARD ANNOUNCES AWARD WINNERS

Antone "Tony" Duarte, N1XRS, of Dartmouth, Massachusetts, is the 1997 Hiram Percy Maxim Memorial Award winner. Duarte, 16, was named during the Board's meeting July 16-18 in Rocky Hill, Connecticut. The Maxim Award goes annually to an amateur

under age 21 who has demonstrated exemplary ham radio contributions and accomplishments. Duarte was nominated by Eastern Massachusetts Section Manager Lawrence Ober, W1MW, who received a dozen letters supporting the nomination.



Nominators cited Tony's active ARES and SKYWARN participation and his extensive record of public service contributions, as well as his technical skill and his leadership role, especially among younger hams. "Tony has been a real inspiration in my pursuits of using Amateur Radio for emergency communication," said Acushnet (Massachusetts) Emergency Management Director Jerry Bergeron, N1OFD, in supporting Tony's nomination. Said M. L. Baron of NOAA's West Island Weather Station: "Tony has shown his dedication through several major weather events; other spotters should be as faithful as he." A member of the Southeastern Massachusetts Amateur Radio Association, Tony studies electronics at New Bedford Vocational Technical High School. The Hiram Percy Maxim Memorial Award carries a \$1000 stipend, an engraved plaque, and a trip to an ARRL convention for a formal award presentation.

The ARRL Board also named Stephan M. Anderman, K2SMA, of Hamburg, New Jersey, as the recipient of the Philip J. McGan Silver Antenna Award. The McGan award goes to an amateur who has done the most in the previous year to promote Amateur Radio. It's named for journalist Philip J. McGan, WA2MGQ (SK), the first chairman of the ARRL Public Relations Committee. Active in Amateur Radio for more than 30 years, Anderman's public relations accomplishments range from being published in several newspapers to his three-plus years as host of a popular public access television show. Anderman is actively involved in public speaking on behalf of Amateur Radio, and for the second year in a row, is credited with securing Amateur Radio Month proclamations from New York State Governor George Pataki. "I am very impressed with all of his achievements," says Anderman nominator Martin Gartenberg, WA2YYX. "It is people like Stephan that make this wonderful hobby what it is today."

Anderman handled public information duties in Eastern New York for more than six years and was appointed an ARRL Public Information Coordinator (PIC) in 1996. He has also held several leadership positions in various local clubs, and at the section and division levels. Anderman is the host of the ham radio program "This Week in Amateur Radio" and editor of "The Hudson Loop," the Hudson Division newsletter. The Board also expressed its thanks to all amateurs engaged in public relations efforts on behalf of the hobby.

Named by the Board to receive the ARRL Doug DeMaw, W1FB, Technical Excellence Award were Eileen Lau, KE6VWU; Kai-Wai Chiu, KF6GHS; Jeff

Qin, KF6GHY; John Davis, KF6EDB; Kent Potter, KC6OKH; and David Rutledge, KN6EK, all of the California Institute of Technology. The group was recognized for its technical accomplishments outlined in the article, "High-Efficiency Class-E Power Amplifiers" in the May and June 1997 issues of QST.

The Board selected Frank McNally, KF0WF, of Colorado Springs, Colorado, as the recipient of the Herb S. Brier Instructor of the Year Award for 1997, and Robert Lavin, K6BOB, of Calabasas, California, as the recipient of the Professional Educator of the Year Award for 1997.

McNally has taught classes of all ages for six years and has about a 90% pass rate. He has designed a CD containing his Novice and Technician slide set and curriculum, which he uses in his classes. Lavin teaches social studies at the George E. Hale Middle School in Woodland Hills, California. Amateur Radio is part of the school's curriculum. He also organized the school radio club station, KF6ODM. Both award winners expressed the belief that getting younger people into Amateur Radio was the key to the hobby's future.

Two clubs sponsored awards this year. The Lake County Amateur Radio Club of Griffith, Indiana, is a cosponsor for the ARRL Herb S. Brier Award. The Lambda Amateur Radio Club, an international organization headquartered in Philadelphia, Pennsylvania, is a cosponsor of the 1997 ARRL Professional Educator of the Year. There were no nominees for the 1997 ARRL Professional Instructor of the Year or the 1997 ARRL Excellence in Recruiting awards.

LEAGUE REITERATES STANCE ON LMCC PETITION

The ARRL has called upon the Land Mobile Communications Council (LMCC) to withdraw its request for reallocation of segments of the 420 to 450 MHz band to the Private Mobile Radio Service. Such a move would permit the FCC to focus its attention on portions of the LMCC petition that "might have more merit," the ARRL said. The League's suggestion is contained in reply comments filed July 16 with the FCC in response to the LMCC's petition for rulemaking, RM-9267, filed earlier this year. Amateur Radio shares the 70 cm band on a secondary basis with the federal government. The LMCC seeks immediate reallocation of the segments 420 to 430 and 440 to 450 MHz from the federal government to the PMRS.

Alternatively, the League asked that the FCC dismiss those portions of the LMCC petition dealing with the

420 to 450 MHz band as "plainly not deserving of further consideration."

The League said that comments from Amateur Radio operators--the vast majority of those filed in response to the LMCC petition--establish that the LMCC proposal for a PMRS allocation in the 70 cm band "was ill-conceived." Hams told the FCC that the band is heavily used and vital to amateur public service activities. The League noted among other commenters "a complete absence of support" for the 420 to 450 MHz proposal in particular. Some commenters were altogether silent on the 420 to 450 MHz reallocation issue, while one LMCC member, the Association of Public Safety Communications Officials-International (APCO), opposed any reallocation in the band.

The League urged the FCC to pay close heed to the comments of the National Telecommunications and Information Administration. The NTIA said national security and other federal interests would preclude sharing on the band. Those comments, the League noted, were "clearly protective of its own use of the 420-450 MHz band, and that of the Amateur Service as well."

The League said the LMCC has failed to justify a 420 to 450 MHz reallocation. Comments filed so far, the ARRL said, disprove both the LMCC's "rank speculation" about possible federal reductions in the use of 420 to 450 MHz as well as its representations about amateur use of the band. "The record that has been developed shows that there is no compatibility between incumbent Federal and amateur facilities and new PMRS facilities," the League said. But the ARRL said it has no quarrel with the LMCC to the extent that it seeks to open discussion on the general issue of PMRS allocation needs.

A complete copy of the League's reply comments is available on the ARRLWeb page at <http://www.arrl.org/news/bandthreat/RM-9267/arrl-reply.pdf>.

MIR UPDATE: RUSSIAN ONLY SPOKEN ON R0MIR

Now that US astronaut Andy Thomas, KD5CHF, is back on terra firma, hams hoping for some Amateur Radio communication with the orbiting outpost had better bone up on their Russian. Thomas was the last US astronaut to live aboard Mir, now slated for an earlier-than-expected deorbiting.

The remaining crew members aboard Mir are Russian cosmonauts Talgat Musabayev, RO3FT, and

Nikolai Budarin, RV3FB, who speak only Russian. "Any message addressed as personal to R0MIR will not be understood by any of the crew members unless it is in Russian," advised MIREX President Dave Larsen, N6CO.

Larsen said MIREX has again opened up the R0MIR-1 digital system for third-party traffic (ie, store-and-forward messages). "This means that you will be able to address messages to other radio amateurs," he explained, but asked hams to use good judgment in posting messages to R0MIR-1.

"Please use this medium if you have no other e-mail or packet/bbs systems available," he said. Messages must be addressed to a valid amateur call sign. The system uses a Kantronics KPC-9612. Commands are similar to most PBBS and BBS systems.

Meanwhile, Bob Bruninga, WB4APR, reports that he has modified his LIVE MIR Space Station Downlink Web page to capture messages and mail from the R0MIR Mir packet system on 145.985 MHz. Files of the last eight passes, as monitored in Maryland, are available at <http://web.usna.navy.mil/~bruninga/mirex.html>. Bruninga's page also links to a Mir locator at http://liftoff.msfc.nasa.gov/temp/Mir_loc.html.

Frank Bauer, KA3HDO, AMSAT-NA Vice President for Manned Space Programs, says the Russian Space Agency has formally announced plans to retire the Mir space station next June, six months earlier than expected. Russian space officials have chalked up the decision to continuing money woes. Safety also was a factor, Russian space officials said. Mir originally was designed for three years. It now has flown for more than a dozen in space. Some observers consider its condition shaky at best.

Russian officials have said a French and a Slovak cosmonaut would be among the last scheduled to visit Mir.

Larsen said QSLs for R0MIR contact from everywhere except Europe should come to him at PO Box 1501, Pine Grove, CA 95665.

* JI1KIT in line to be Japan's prime minister: Japan's Foreign Minister Keizo Obuchi, JI1KIT, has been elected to head Japan's Liberal Democratic Party. This puts him in line to be elected prime minister next week. Obuchi is a member of the JARL, which describes him as "an enthusiast for amateur radio." Known as "Mr. Ordinary Man," Obuchi, 61, will face

the task of wresting Japan from the grip of its worst recession since World War II.--JARL

* JOTA 1998 reminder: The 1998 Jamboree on the Air (JOTA) is October 17 and 18. You can do a community service by contacting your local Girl Scout or Boy Scout troop. Invite a few scouts to your shack or take your equipment to a local campout. JOTA brochures and exhibit kits are available from ARRL. To order, contact Jean Wolfgang, WB3IOS, at ARRL, EAD, 225 Main St, Newington, CT 06111; tel 860-594-0219; e-mail jwolfgang@arrl.org. Please order early to allow time for materials to arrive.

STRUCTURING THE RESTRUCTURING DEBATE

Love it or hate it, the ARRL's recent license restructuring plan certainly has generated considerable debate and controversy within the Amateur Radio community and gotten licensees thinking about what's good and what's not so good about the current system. ARRL Directors report they're getting lots of e-mail on both sides, and the overall trend appears to be in favor of the plan the Board released earlier this month.

Midwest Director Lew Gordon, K4VX, reports that his mail has been running better than two-to-one in favor. New England Director Tom Frenaye, K1KI, said he'd having trouble keeping up with the avalanche of comments. "I've received 166 messages from New England hams, and the count is 105-61 in favor of the proposal," he said, adding that he still has about 50 messages to answer.

Some hams have suggested the current system is just fine, and to change it will diminish the status of current licensees. ARRL Executive Vice President David Sumner, K1ZZ, has an answer for the "don't-change-anything" camp, however. "If you're flatly opposed to any change at all, I don't think that you've taken into consideration the changes that have occurred over the past seven years," he said. For example, Sumner points out that the Novice license--instituted in 1951--no longer is the route of entry to Amateur Radio for more than about 5% of the amateur population. Other than 10 meters, the Novice bands "are significantly underutilized," he observed. Sumner says amateurs can't make a case for additional bands if the present allocations aren't being used to capacity.

In recent years, most of those coming into the hobby have come in as Technicians. Nevertheless, they still must pass the Novice element, which includes ques-

tions on HF that are irrelevant to Technician ops. "This pretty much forces you to accept the fact that there must be some change," he said. "The real issue is how far should that change go, and on that, reasonable people can and will differ, and we'll be discussing that over the coming months as the process goes forward."

Sumner said nothing is cast in stone at this point, and if better ideas surface as a result of the current debate, "there will be every chance for those to be reflected in the ultimate FCC action."

The ARRL has sent a copy of its restructuring proposals to the FCC in a letter, but the League has not petitioned for a rulemaking as it awaits the Commission's own ham radio restructuring proposal, still in the draft stages. There's still no definite word on when the FCC's proposal will be made public. "Things are moving along," said an FCC spokesman, who added that the Commission has begun getting comments on the ARRL's proposal. The FCC is expected to issue a Notice of Proposed Rulemaking that also will seek input from amateurs on various alternatives. The FCC spokesman suggested that hams wait until the Commission's proposal goes public before commenting on the issue.

NEW SATELLITES WORKING WELL

After just a couple of weeks in space, the two newest Amateur Radio digital satellites--TMSAT-1 and Tech-Sat-1B--are reported responding to flight commands from ground-control stations. The two micro-satellites were successfully launched July 10 from Russia's Baikonur Cosmodrome.

Chris Jackson, G7UPN/ZL2TPO, reports that the initial part of the flight software is now running on TMSAT-1, and the onboard computer system has been switched to the downlink. "Users familiar with the current digital satellites will now be able to observe TMSAT data using standard ground-station software," said Jackson. The official control station for TMSAT is HS0AM in Thailand, but Jackson is handling ground control during the initial phases.

Jackson says the satellite's call sign is TMSAT1. It transmits on 436.923 MHz. At present, it may be 3 kHz too high in frequency because the internal spacecraft temperature is quite cold. The transmitter is currently only being switched on over Bangkok during commissioning tests. Current output power is approximately 1.7 to 2 W. G7UPN requests that stations refrain from attempting to uplink to the spacecraft at this time.

The Gurwin II TechSat-1B also is reported responding well to flight commands. Shlomo Menuhin, 4X1AS, says the TechSat-1B downlink frequency was recently changed to 435.225 MHz with the satellite transmitting in telemetry mode. The satellite does not have a continuous beacon, but does transmit a 9600-baud burst every 30 seconds (for about 3 seconds). Menuhin estimates that it will take several weeks to complete initial in-orbit testing. In the meantime TechSat-1B will continue its present burst-mode transmission format. TechSat-1B will be a digital store-and-forward multi-user system. For more information, visit <http://techsat.internet-zahav.net/>.

Stations around the world continue to report receiving signals from the two new satellites.--AMSAT News Service

KF4BIA IS NEWSLINE'S YOUNG HAM OF THE YEAR

Richard Paczkowski Jr, KF4BIA, of Edgewater, Florida, has been named the 1998 Young Ham of the Year (YHOTY), according to an announcement from award administrator Bill Pasternak, WA6ITF. The award is jointly sponsored by Pasternak's Amateur Radio Newsline, Yaesu USA, and CQ magazine.

Paczkowski, 16, is active in emergency communication. He holds a Technician-class license and attends New Smyrna Beach High School. He was selected as this year's YHOTY recipient based on his four-year Amateur Radio career that has been dedicated almost exclusively to public service, including organizing communication support during the recent Florida wildfires. Paczkowski is a member of Volusia County ARES and serves as an AEC. When the wildfires began raging out of control in late June, the EC was out of town, so the job of organizing the region's hams fell to Paczkowski. During the fire emergency, he coordinated operators for Red Cross shelters in Volusia County and worked late shifts at the emergency operations center.

In a magnanimous gesture, Paczkowski has donated part of his prize--an all-expenses-paid week at Spacecamp Huntsville underwritten by CQ magazine--to the Make A Wish Foundation. The Foundation attempts to grant wishes for children with life-threatening illnesses.

Richard Paczkowski is the son of Richard Sr, KE4ZTP, and Joan Paczkowski. The father and son team studied together to obtain their ham tickets in hopes of being able to schedule contacts with Rich-

ard's uncle, Bill Paczkowski, KT4OM, in North Carolina.

Presentation of the 1998 Newsline Young Ham of the Year Award will be August 15 at the Huntsville (Alabama) Hamfest banquet. As Young Ham of the Year, Paczkowski also will receive--courtesy of Yaesu USA--an all-expenses-paid trip to the hamfest, along with a gift of Yaesu ham radio equipment. CQ magazine also will present him with a variety of products. Newsline will present a commemorative plaque, underwritten by Dave Bell, W6AQ, President of DBA Entertainment in Hollywood (and chairman of the ARRL Public Relations committee).

The YHOTY award goes annually to a ham 18 or younger who has provided outstanding service to the nation or his community, or the betterment of the state of the art in communications through Amateur Radio. Last year's YHOTY winner was Brian Mileshosky, N5ZGT.--thanks to Amateur Radio Newsline

NOON TIME NET HELPS FIGHT FOREST FIRE

Hams on the HF Noon Time Net (40 and 75 meters) on the West Coast were able to help forest service crews get the jump on a potentially dangerous forest fire July 19. Net member Jan Van Allen, N7WJB, reports that Clyde Little, AA7WC, in Grants Pass, Oregon, was running the 40-meter side of the net. Typically, he starts greeting potential check-ins early, before the net gets down to business at noon.

On July 19, a Sunday, a ham couple from Dublin, California, camping in the Stanislaus National Forest discovered a forest fire that had just started. John Hayward, KE6ME, and his wife, Jeanette, KF6NCA, first tried their cell phone but were out of range. John Hayward then dialed up the Noon Time Net and broke in. Little immediately had the net stand by. Fortunately, KE6ME had his GPS with him and was able to give precise coordinates for the fire. Not only that, he was able to relay the numbers of the fire service roads and highways to get to the fire site.

Little then called Dave Glisan, WB6JJR, in Fenton, California, and relayed all the pertinent information, Glisan, in turn, called the Forest Service and alerted them to the situation. The Forest Service relayed back through Glisan to Little to John Hayward, who by then had jumped into his jeep and was on his way to high ground to try his cell phone, in case contact could not be accomplished via ham radio. He need not have worried.

Van Allen says the entire procedure, including relays took less than ten minutes to get firefighters on their way to the two-acre (and growing) fire. Fire crews had the blaze under control within a short time.

The Noon Time Net meets every day on 7.268.5 MHz and 3.970 MHz, and covers the entire West Coast handling traffic, informal contacts, and--occasionally--an emergency like this.--Jan Van Allen, N7WJB

SOLAR UPDATE

Solar sage Tad Cook, K7VVV, Seattle, Washington, reports: Solar activity was a bit higher this week, with average solar flux up nearly 14 points and sunspot numbers higher by about 6 points. On July 23 the planetary A index was 37, exactly the same as a week earlier. A few days later geomagnetic indices had settled down, and after July 25 conditions were quite stable. Solar activity is still lower than most forecasters had predicted for this point in the solar cycle. Perhaps we can take some solace by comparing current conditions with those of a year ago. Average solar flux this week is about 45 points higher than the average solar flux for the same week last year. You can peruse last year's propagation bulletins at <http://www.arrl.org/w1aw/prop/1997-index.html>

For July 31 through August 2, predicted solar flux should decline to 112, 110 and 108, and planetary A index should be around 10 each day. Solar flux is



expected to bottom out just above 100 around August 9-13, then rise above 110 after mid-month and back around 120 after August 20. Look for disturbed conditions around August 17-21, with the highest A and K indices around August 19 and 20. This is due to a recurring coronal hole rotating back into a position which should affect Earth.

A good way to visualize the rotation of the sun with sunspots and coronal holes drifting across the visible solar disk is to look at the Marshall Space Weather bureau 10 day solar animation site at <http://spaceweather.com/java/solar-anim.html>

Radio telescopes have finally located the SOHO spacecraft rotating slowly near its original position. It is not far off course, and it still may be possible to establish contact and get it working again. If not, it might be feasible to put similar instruments in another proposed orbital craft called Triana, the proposed

craft that is supposed to beam a live picture of Earth back to a Web page on the Internet.

The loss of SOHO has been a big disappointment for solar observers. Things went awry when ground control turned off a gyroscope, hoping to extend the life of the instrument. When a previously unknown software error caused the craft to spin out of control, craft computers looked to the gyroscope for emergency guidance, and, due to the lack of signal, misjudged the position in relation to the sun. When this happened, solar panels turned away from the sun, and SOHO lost power. In August, particularly later in the month, we may start to see some fall conditions on HF, with higher usable frequencies during daylight. Twenty meters should be the most reliable band for long range communications, but look for occasional openings on 15 meters and transequatorial conditions on 10 and 12 meters.

Interesting events continued on VHF this week, with 6 and 2-meter openings from Hawaii to the West Coast. There was a report of six meter propagation from South America to Israel from PY5CC, and N5JHV worked Japan after 0030 UTC on 6 meters.

Sunspot numbers for July 23 through 29 were 129, 110, 85, 80, 109, 116, and 115, with a mean of 106.3. The 10.7-cm flux was 115.4, 125.2, 121.7, 119.1, 119.5, 121.3 and 119.5, with a mean of 120.2. Estimated planetary A indices were 37, 22, 16, 6, 6, 6, and 6, with a mean of 14.1.

* New DX reflector: Jim Kehler, KH2D, reports that with the demise of the VE7TCP reflector, he has set up an unmoderated e-mail reflector. "Anyone interested in DXing is welcome to subscribe," he says. "In the event that the old reflector doesn't find a new home, this one will stay in place." Information is available on the Mariana Islands DX Association Web site, <http://www.guam.net/pub/midxa/dx-list.html>. The MIDXA site is mirrored at <http://www.qsl.net/midxa>. The site has recently added a public service page, club photos, and MIDXA digital voice keyer software for Windows, which may be downloaded.--Jim Kehler, KH2D

\$The September Treasurer's Report \$

Welcome back from the summer, everyone. Hope you got everything done that you'd hoped to get done. Remember -- it's still another five months until the best antenna raising weather, though.

Not too many checks were waiting in the mail after the summer break. Income, including bank interest was \$39.00. Expenses were \$25.60 for postage (two mailings) and \$37.29 for Field Day.

Current fund balances:

General Fund: \$654.65

Community Fund: \$440.92

If your ARRL membership renewal is coming due soon, do yourself and your club a favor and let me send in your payment. You save 32 cents and the club gets to keep part of the money. Make your membership check out to NVARC in the full amount of your ARRL renewal and I will take care of the rest. If you haven't yet joined the ARRL, then there's no better time -- the League needs your input on the licensing restructuring proposal and it helps amplify our voice in Washington DC to count you as a League member. If you join the League through the Club then NVARC gets an even larger slice of the dues pie.

73 es happy fox hunting!
-Ralph KD1SM

NVARC QSL BUREAU

The NVARC Bureau has sent out all the cards that have been received as of June 6th.

In order to continue this service to the club members we need a volunteer to handle the cards. It's not a lot of work and some arrangement could be made to have several people merge the cards before they are sent to the ARRL Outgoing Bureau. If someone is interested in taking this on see Stan KD1LE.

CW Practice Nets

The NVARC slow speed net meets Tuesday and Thursday at 7:30 p.m. on 28.123 MHz. Except the third Thursday of the month. That being the club meeting night.

Calendar of Events

Sunday September 20 MIT

Saturday September 26 9 A.M. - 2 P.M. MEMA Safety Fair at MEMA HQ on Rte. 9

Sunday September 27 Framingham ARA Hamfest

Friday October 9-Saturday October 10 Hoss Traders at Rochester, NH.

Sunday October 11 9 A.M. - 3 P.M. The Nutmeg Hamfest & Computer Show / ARRL Connecticut Convention at Wallingford, CT.

Saturday November 7 Londonderry, NH. IRS Flea.



Nashoba Valley Amateur Radio Club

PO Box # 900

Pepperell Mass 01463-0900

Pres.: Erik Piip KA1RV

V Pres.: Den Connors KD2S

Secretary: Bob Crews K1VA

Treasurer: Ralph Swick, KD1SM

Editor: Stan Pozerski KD1LE

PIO: Earl Russell WR1Y

Meetings are held on the 3rd Thursday of the month - 7:30 p.m. - Pepperell Community Ctr. Talk-in 146.490 simplex

442.90 + 100Hz Repeater

This newsletter is published monthly. Submissions, corrections and inquiries should be directed to the newsletter editor. Articles and graphics in most IBM-PC formats are OK.

You can leave items on PEPMBX or at Packet address: KD1LE@N1FT.NH