



# PARKING TICKET

Plano, Texas

*"Having fun with Amateur Radio!"*

November, 1999

## OST from the President

### Greeting to you all.

What a beautiful October we have had here in North Texas. It could stay like this for some time as far as I am concerned. October elections were as predicted. All the votes were tallied and the only change was the addition of Clearance Sebesta as the club secretary. Everyone else was elected to an additional term. So a big thank you all for helping keep the club on an even keel. A special thank you to Jack Ward for his past two years as the club secretary. A fine job you did too. Your board is working on a super colossal, stupendous, meeting for February. We will need your input to help determine who, or what type of speaker we can get that will generate interest for everyone in the club and you will want to attend. We also intend to send out cards to past members and invite them to attend that meeting too. So put on your special interest caps and let me know so we can get this ball rolling. Hope to see you all at the November meeting on the 16th.

Bill KJ5ZV/AAR6CE

SORRY...

No treasurer's report this month.

## P.A.R.K. Meeting Minutes

October 19, 1999

The regularly scheduled meeting of the Plano Amateur Radio Klub was called to order by Bill Drake Park President. The meeting was held at the Harrington Library.

The chair welcomed everyone to the meeting and invited all present to join in The Pledge of Allegiance.

A round of introductions were given by call sign and all visitors were welcomed.

Eighteen members logged in and two visitors signed the visitors sheet.

President Bill Drake noted due to the Library requiring the Klub to have the building vacated by 9:00 PM, the meetings will be streamlined. He requested that members should bring any proposed corrections to the previous months Meeting Minutes and Treasurers Report, as noted in the Parking Ticket, to the meeting and have them noted. The minutes and treasurers report will no longer be voted upon during the meeting. If the minutes or treasurers report is not in the newsletter, they will be read during the meeting. No Further action was taken.

Treasurers Report was read by Bill Fell KK5PB. General Fund = Expenses \$0.00, Income \$7.50, Balance \$2019.92. Repeater Account = Expenses \$0.00, Income \$3.50, Balance \$2630.65. No additions or corrections were made. No further action was taken.

Communications Director Bill Fell noted the repeater are working well with no repairs in the last month.

Newsletter Editor Dan Kautz gave special thanks to everyone that

has been sending photos and input for the newsletter.

Activities Director Susie Hegg said the Chili Cookoff was a hit. She also noted many people have indicated this would be a great yearly activity. Keep this in mind for next year. Susie noted the Best Overall Chili Award went to Bill Fell. She also noted the Best Named Chili was ôFire in the Holeö. 7 ChiliÆs were brought for the enjoyment of everyone. Thanks to everyone that took the time to make and bring chili. Bill Drake noted that next year along with the chili, a corn roast will also take place. No further action was taken.

Public Relations Director Sheldon Fisher has offered to be the clearing house for activities for the Klub, i.e., Y2K communications, etc. He will also be adding some information to the ARES web page. On

Continued on page 2

The following dates are the Plano Amateur Radio Klub meeting dates for the 2000 year.

@ Harrington Library

Jan. 1-10-00

Feb. 2-07-00

Mar. 3-06-00

Apr. 4-18-00

May 5-08-00

June 6-12-00

July 7-18-00

Aug. 8-15-00

Sept. 9-11-00

Oct. 10-09-00

Nov. 11-21-00

Dec. 12-19-00

## Continued from page 1

it will be a couple of forms that can be filled out and submitted to Sheldon. The forms will be covering activities in the area that he can forward to the appropriate people.

TV/RFI Committee Chairman Don Hice noted the Klub had another customer. Don contacted the person, gained an understanding of the situation, and promptly resolved the issue.

New Business -President Bill Drake noted the Klub Meetings for 2000 will be on Tuesdays, but, the week will vary from Month to Month. Keep an eye on the newsletter calendar for more information and dates.

President Bill Drake noted ballots for the October Election were mailed with the October Newsletter. The elections will cover the Vice-President, Secretary, Public Relation Director, and Communications director. Nominees are as follows; Vice-President - Jim Holman KC5JGT, Secretary - Clarence Sebasta K5YO, Public Relations Director - Sheldon Fisher N5CAE, Communications Director - Bill Fell KK5PB. While the ballots were collected and counted a round of introductions was given and visitors were introduced. After the break the ballots were counted and since no other nominations or

challenges were presented, all of the nominees were elected to their respective positions. No further action was taken.

Old Business -

Announcements - President Bill Drake thanked Activities director Susie Hegg for her efforts toward the Chili Cookoff on October 10th. All agreed and thanked her with a round of applause. Also noted was a heightened concern for MARS training and involvement by the Military. This is a great opportunity for the amateurs all over the country to assist in emergency situations.

Richard Phillips, Sr. KB5YBQ is looking for 4 more volunteers for upcoming Robotics Competition of High School students on October 30th at Princeton High School. There will be 50 teams 5 from out of state. Last year the Klub and other amateurs provided communications between the game field and the pits. They are looking for the similar support from amateur radio operators. Richard discussed the competition and gave an overview of what could be expected. Food will be provided for participants. Any one interested in participating please contact Richard.

The meeting was adjourned at 2042 hours.

Jack Ward, KC5KOV Secretary

or lose it. "Useful" is obviously a subjective term but each of us needs to do our part in helping organizations like the ARRL define "useful" in terms that will be meaningful and strong enough to offset the lure of the money that is to be made by selling services.

Speaking of the ARRL, it is good to note that a large percentage of the money that the ARRL gets from dues and merchandise sales goes to support legislative activities. Without that insight and proactive stance, the concept of frequency retention would be even more uncertain. Rule making and reallocation would go unnoticed until too late.

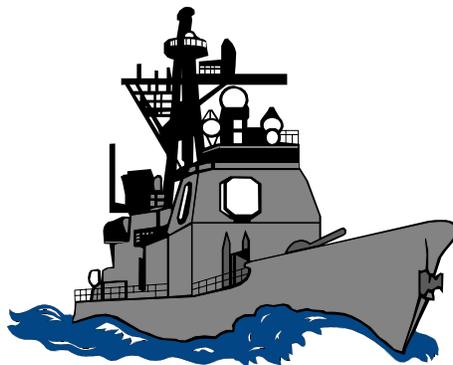
Recent high profile attacks on the current amateur frequency allocation has brought a great deal of hue and cry from the community. Comments like "They can't do that" or "I'll quit ham radio if that change goes through" or "PRB-1 will not allow that" sound like statements that should get someone's attention but in reality get very little attention. What does get attention is a record of service to the public, verifiable frequency utilization, support from non-amateur organizations, speaking with a unified voice, etc.

So here is where you and I come in. Each of us needs to take personal responsibility for helping support the retention of frequency allocations that we enjoy using today. How you may ask? Here are some examples:

- Support Emergency Communication organizations such as the ARES or RACES
- Support the National Traffic System (NTS)
- Be an active member of a local amateur radio club
- Support non-emergency events from a public service perspective.
- Stay aware of local and national legislative actions that would impact the frequency allocations

## From the DEC

Frequency Retention! This is an area that impacts the ability of the amateur service to provide emergency communications and on a broader front it impacts all aspects of the service. What is Frequency Retention? In it's most direct terms, Frequency Retention means being able to hold on to the current frequencies that we now have. In recent years, the commercial commerce pressures on the FCC to support reallocation of desirable frequency segments have continued to increase. The FCC even auctions off frequencies to the highest bidder. So what does that mean to the ham community? Basically it sends a big warning message; use it for something useful



- Conduct your on-the-air conversations with respect and courtesy for all
- Write articles and/or give presentations to schools etc. to introduce amateur radio and its value
- Maintain the best possible relations with your neighbors and “educate” them as to what you do and the service that you can provide
- Help newcomers to amateur radio get off to a good start by providing good operating examples and where possible provide technical assistance.
- Send a note about your participation in some activity to your Emergency Coordinator and to the local newspapers
- Be ready to provide support to emergency communications through training and availability of equipment
- Support those organizations that speak for the amateur service, especially the ARRL in their legislative endeavors for example.

So you see, one person can make a difference.

Of all the things that you and I can do perhaps the most important is to not sit back and think that the hams will not lose the frequencies because they are ours forever.

This not a panic call, but it is an awareness call. Frequency Retention is a major issue and one that all of us in one way or another contributes to. Make it a positive contribution and remember that even though what you do may seem small and unimportant, that is not the case.

Frequency Retention! Let us all work together to do what we can to ensure that we continue to enjoy access to good frequencies

The best to each of you,

Bill – K5MWC DEC District 5 and Collin County EC

## Amateur Restructuring Details Possible by Year’s End

NEWINGTON, CT, Nov 10, 1999—Knowledgeable sources in Washington say the amateur license restructuring issue has moved to the front burner at the FCC, and a *Report and Order* could be released before the end of 1999.

The Amateur Radio community has been awaiting license restructuring—known officially as the 1998 Biennial Regulatory Review of Part 97 (WT Docket 98-143)—for nearly one year now. While no one has mentioned a hard-and-fast date to wrap up the long-awaited proceeding, reports from several sources suggest that the *R&O* draft is in its final stages and could be complete within a month or so.

Last May, the ARRL had urged the Commission to “not leave the Amateur Service in limbo” on the matter of restructuring but to act promptly. More recently, during a visit to top FCC officials in Washington, League officials pressed again for early action on the license restructuring rulemaking. They were assured that the issue was not stalled and that the Wireless Telecommunications Bureau was “working very actively” to move restructuring along.

One factor that’s been cited for the FCC’s perceived slowness on WT-98-143 was the Commission’s move to new offices in The Portals last spring. The FCC also has been under intense Congressional pressure in recent months to act on several major telecommunications issues.

Whatever its final form—and no one has hinted at that—license restructuring poses

significant implications for Amateur Radio and its future direction and growth. On August 10, 1998, the FCC proposed to phase out the Novice and Technician Plus licenses, leaving just four amateur license classes in place—Technician, General, Advanced, and Extra. The Commission also asked the amateur community to express its opinions on Morse code requirements for licensing and testing, but offered no specific recommendations.

At its July 1998 meeting, the ARRL Board of Directors—attempting to get the jump on restructuring—issued its own plan to restyle Amateur Radio. Among other details, the ARRL plan also calls for four license classes and for “refarming” Novice/Tech Plus subbands to provide additional spectrum for higher-class operators. Under the League plan, the Technician license remains unchanged, and the General would become the entry-level ticket to HF operation. The ARRL proposed Morse code requirements of 5 WPM for General and 12 WPM for Advanced and Extra class.

The restructuring debate generated more than 2200 comments to the FCC, many of them from individual amateurs. FCC officials have cited the huge volume of comments—which continued to arrive long after the comment deadline—as another factor in the length of time it’s taken to deal with the restructuring issue.

The ultimate FCC decision to approve and release the *Report & Order* could come at an FCC monthly meeting, but some predict it will be handled “on circulation”—outside of an actual meeting. A *Public Notice* will be issued, and the actual *R&O* will follow—probably within a few days.

## Hams Will Get to Help NASA with Space Experiment

**11/9/99 Update:** NASA now advises that the launch date for the PEST satellite package now will be no earlier than December 2, 1999, rather than November 19, as initially reported.

NASA and University of Alabama in Huntsville engineers integrate the PEST payload onto JAWSAT. [NASA/Marshall]

HUNTSVILLE, AL, Nov 4, 1999—Some veteran space instruments are ready for a final trip into



NASA and University of Alabama in Huntsville engineers integrate the PEST payload onto JAWSAT. [NASA/Marshall]

space to help demonstrate new measuring techniques for an advanced space propulsion concept. If all goes well, Amateur Radio operators will get a chance to contribute to the program by recording the data.

NASA says it's also an example of doing things "faster, better, cheaper."

"When we were first invited to participate in this mission, we had only 11 months to get ready to fly," said Dr. Nobie Stone, the project scientist for the Plasma Experiment Satellite Test—or PEST—at NASA's

Marshall Space Flight Center. "By the time we obtained funding and authority to proceed, we had only nine months to design, fabricate, test and calibrate the flight instrumentation."

Stone said that compared to a typical space experiment, PEST has been developed quickly and very cheaply. "This is an opportunity to fly almost for free on an orbital flight vehicle and test a new instrument concept," he said.

PEST will ride on the Joint Air Force-Weber State University Satellite, or JAWSAT, scheduled for launch no earlier than November 19. The primary payload will be the US Air Force Academy's Falconsat.

JAWSAT will serve as a bus for several deployable payloads and the attached PEST experiment.

The telemetry stream from JAWSAT—which includes data from PEST—will be broadcast on Amateur Radio frequencies. In addition to ground receiver sites at Weber State University and Marshall Space Flight Center hams can receive the downlink telemetry signal with a special kind of modem.

"Hams will be able to obtain data that characterizes certain aspects of the ionosphere above the D, E, and F layers where most of their signals are reflected," said PEST Project Manager Fred Berry, WA4IWY. "We're going to publish the data format in terms that everyone can understand."

Data from PEST will be using either a G3RUH modem or a GMSK modem. Data rates should be as high as 38.4 kb/s. Data will be transmitted on 437.175 MHz or

2403.2 MHz.

NASA will also publish instructions for sending in data so the PEST team can use it.

A University of Alabama-Huntsville engineer attaches part of the PEST electronics to the grid frame that forms the skeleton of JAWSAT. [NASA/Marshall]

"We'll use it for our purposes and hopefully they'll use it in ways that we don't know yet," Berry said. "It's an experiment. We're hoping that high school and college kids will get involved and learn something about the ionosphere and radio propagation."

Deployable payloads aboard JAWSAT are the Orbiting Picosat Automatic Launcher—or OPAL—provided by Stanford University, the ASUSAT provided by Arizona State University, and the Optical Calibration Sphere experiment provided by the Air Force Research Laboratory and L'Garde, Inc.

ASUSAT itself will contain amateur packet hardware and a 2-meter/70-cm FM voice repeater. OPAL will release three tiny picosats—one of them, StenSat—will have a crossband repeater aboard that will operate much like the popular AO-27 satellite.

The centerpiece of PEST is the new Deflection Plate Analyzer, developed by the Space Science Department of Marshall Space Flight Center's Science Directorate. The lineage of the DPA dates back to the mid-1970s. The laboratory instrument was upgraded to a flight version, called the Differential Ion Flux Probe, which flew successfully on several shuttle missions.

NASA says that whenever a new instrument is introduced, it's best to see how it compares with older, proven methods. That is where the leftover hardware comes into play. PEST includes two additional plasma detectors, a Retarding Potential Analyzer flown on the third shuttle mission in 1982 and Spacelab 2 in 1985, and the back-up flight unit of the Soft Particle Energy Spectrometer from

the flight instrumentation for the Tethered Satellite System carried by the shuttle in 1992 and 1996. The original DIFP was also carried on all of the above missions.

“Using the flight data from PEST together with laboratory test data will give us a very good idea of how the DPA will function for the ProSEDS mission,” said Dr. Ken Wright, PEST co-investigator at the University of Alabama in Huntsville, referring to the Propulsive Small Expendable Deployment System being developed for flight in August 2000.

ProSEDS will be the first flight test of the propulsive capabilities of electrodynamic tethers. It will use an electrodynamic tether to lower an expended rocket stage's orbit so that it re-enters the atmosphere in less than two weeks rather than the normal five to six months.

After JAWSAT reaches its desired polar orbit at 700 km (420

mi.) altitude, it will be about two weeks before PEST is first powered on, allowing sufficient time for the satellite to vent completely and eliminate the chance of electrical arcing in high voltage circuits. PEST will acquire data for at least a two-month period.

“We think that flying a new generation of instruments at this altitude (700 km) over Earth's poles will provide a good data set that can be used to improve our ability to model that part of the magnetosphere,” Stone said. “It's an important area because the polar regions are very active, including the aurora borealis, energetic particle streams, and out-flowing plasma that escapes from Earth.”

For more information, visit [http://science.nasa.gov/newhome/headlines/ast04nov99\\_1.htm](http://science.nasa.gov/newhome/headlines/ast04nov99_1.htm). — *NASA Space Science News*



*A University of Alabama-Huntsville engineer attaches part of the PEST electronics to the grid frame that forms the skeleton of JAWSAT. [NASA/Marshall]*

## Easily Heard Signals

de W8EHS  
[w8ehs@arrl.net](mailto:w8ehs@arrl.net)

Did you notice the new look on the back cover? Look again. No stamp! At least no old fashion stamp. I have integrated my mailing system into the 21<sup>st</sup> century. What you are looking at is the new postage you can apply from your computer system. The stamp actually has the recipient's address embedded into the 2D bar code — plus a whole bunch of other information.

The postage can be applied directly to your own envelopes or in the case as I have done here, placed on labels so the labels can be applied to odd shaped mail or boxes.

The process is much the same as

a postage meter but without the cost of the meter or the need to go to the post office. Yes, there is a fee of 10% over the cost of the postage. So if you mail \$50.00 worth of postage it will cost \$5.00 for the service. Figure the cost of a visit to the post office and standing in line for service and you will realize the added cost can be justified. If you want dead cheap, stick with stamps. (Pun intended.)

The software (from stamps.com) is free and there is no start up cost. Other service companies have other costs; so check it out before you decide this is something you would like to use.

I left out the calendar this month. Not enough space. Check out the new meeting schedule on the front cover. Mark your new 2000 calendar NOW so you don't miss a

meeting date. I have updated my Palm Pilot and took out the old repeating schedule. Any auto calendar programs will have to be changed.,

The weather has been holding out very nice for fall. The only problem has been not enough rain. What will the winter be like? I was writing in a previous issue about waiting for bad weather before doing any outside ham work. Wonder when that time will occur? Just better enjoy it while we can.

The latest issue of QST is already the December issue! Makes it seem like it is already the end of the year. I don't even want to hear the word "millennium"! Check out the PSK31 tuning aid on page 35 in that issue. I guess it is time to go check out that new mode. Seems to be catching on.

**BOARD OF DIRECTORS**

Office	Name	Home	Work
President	Bill Drake, KJ5ZV	972-964-5516	972-497-5255
Vice President	Jim Holman, KC5JGT		972-424-4282
Secretary	Jack Ward, KC5KOV	972-527-8344	972-497-6098
Treasurer	Bruce Dingman, NSBYL	972-442-4542	972-344-3872
Activities Director	Susie Hegg, KB5SSV	972-516-0989	214-855-0449
Communications	Bill Fell, KK5PB	972-424-0496	972-705-3611
Editor	Daniel Kautz, W8EHS	972-712-7741	972-323-4814
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220 Trustee	Steve Jones, WB5SGN	972-241-6311	214-265-3243
440 Trustee	Tom Gentry, K5VOU	972-442-3502	972-423-3421
Former President	Martin Reynolds, N6LIF		972-727-6746
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TV/RFI Committee	Don R. Hice, WB5TVI		972-599-2038

**LONG-RANGE PLANNING COMMITTEE**

Chairman	Name	Home	Work
Jim Holman, KC5JGT		972-424-4282	
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The **PARKING TICKET** is the monthly publication of the Plano Amateur Radio Klub (PARK) and is intended to present news, issues and opinions of interest to the PARK and the Amateur Radio Community. We encourage contribution of articles, letters to the editor, etc. and welcome newsletter exchanges with other clubs around the country. Permission is granted to reprint material as long as proper credit is given. Ideas for and contributions to the **PARKING TICKET** should be sent to:

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Submissions must be received no later than the first day of the month to be included in that month's issue. Material received after the deadline will be included in the following month's issue if it is still current.

The Plano Amateur Radio Klub meets the 3rd Tuesday of each month at 7:30 PM in the Harrington Library, 18th and Avenue P. Dues are \$15 per year, \$21 for family membership, and \$7 for the Repeater Association, prorated biannually. The PARK operates three repeaters: WD5ERD on 147.18+, WB5SGN on 224.22- and K5VOU on 444.25+. Look for PARK on the Internet at: <http://www.holman.net/park/>.



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