Plano Amateur Radio Klub

PARKING TICKET

"Our 26th YEAR!" July, 1998

WWV: More Than Just The Time

By Larry Phillips, KC7LVZ,
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Remember when you took your exam, and you were asked about radio station WWV, or its counterpart WWVH in Hawaii? Since then, you have probably used it's broadcasts to set your clocks to the correct time. It's especially useful for keeping schedules with other hams in faraway places. Or perhaps you participate in a daily net, and don't want to miss it. Almost any HF rig, old or new, can tune in to one or more of the WWV or WWVH broadcast frequencies. So can most shortwave receivers.

You may also know that WWV broadcasts geoalert information about current solar and geomagnetic field activity. Up to now, you may have not paid very much attention to these messages, because you weren't sure how to use the information in them to your advantage. This article will help you better understand what WWV is telling you, so you can put it to good use when you fire up your HF rig.

THE EARTH ENVIRONMENT AND GOOD DX

You probably know that the Earth's magnetic field can affect your ability to reach distant stations and hear them clearly. If it is quiet and reasonable, you can expect good DX, but if it is unsettled or stormy, those distant stations will have to wait for another time. Similarly, changes in the ionosphere can affect skip distances, cause signal fade, or lower the MUF, among other things. Both of these Earth environment components are directly influenced by emissions from the sun, which, by itself, can thwart our ability to reach out and touch someone.

As we approach the maximum of solar cycle 23, the importance to hams of the behavior of the geomagnetic field, the ionosphere, and the sun increases. With a little knowledge of the information provided by the WWV geoalert message, you can get a good idea if you're going to have a good day on the air, or if it would be a better idea to make some popcorn and watch a good movie.

THE INDICES

The first part of the geoalert broadcast gives information on solar activity, and the activity of the Earth's magnetic field (geomagnetic field, or geofield for short), expressed as three numbers, or indices.

So how can these numbers help you determine propagation conditions? Let's look at the sun first, then go on to the geomagnetic field.

SOLAR FLUX INDEX

An active sun that shows disturbances can disrupt the geofield, which, as many of us know from experience, can terminate a contact often without warning. Solar emissions can also cause fading, change skip distances, and raise or lower the MUF. On the other hand, we all know that the presence of sunspots can mean better propagation conditions, which means better DX. The more active the sun is, the more sunspots we can expect to see. So, an index, or number scale, for solar activity was established. This is the Solar Flux index, sometimes called the F10 index.

THE 10.7 CM. FLUX INDEX

As you might expect, measuring RF emissions is a lot easier than counting sunspots. You do that every time you take a reading off your rig's S-meter for your log, or a QSL card. As it turns out, the radio emissions from the sun at the 10.7 cm wavelength correlate well with sunspot formation, which is often erratic.

The amount of radio energy that reaches the Earth can be expressed as a certain amount of power that falls onto a certain amount of surface area. The radio energy standard is called the Solar Flux Unit (SFU), and is measured in watts per square meter at 2800 MHz. The Solar Flux index that is broadcast by WWV is just a multiple of the Solar Flux Unit. In other words, a Solar Index of 100 is just 100 SFU. One SFU is defined as 10 exp -22 watts/square meter. That's 100 micro, micro, micro, micro watts over an area of one square meter. Doesn't seem like much, does it? Yet, we have recently seen that F10 indices of only a few hundred SFU were enough lower maximum usable frequencies world- wide for several days, and cause Short Wave Fadeouts to boot!

The F10 index broadcast by WWV is taken from a station in Ottawa, Canada at 1700Z. For the past year, F10 values have been steadily going up, which means that we are truly in solar cycle 23.

However, if the sun is very active, as indicated by very high SFU values, its emissions can cause more harm than good. For example, an active sun will have sunspots, but can also emit high energy x-rays, or hard x-rays that can impact the ionosphere. It can also eject part

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P.A.R.K. Meeting Minutes

June 16, 1998
1930 Hours

The regularly scheduled meeting of the Plano Amateur Radio Klub was called to order by Martin Reynolds, PARK President. The meeting was held at Harrington Library.

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

Twenty three members logged in and six visitors signed the visitors sheet.

A motion was made to accept the minutes of the April Meeting as printed in the May newsletter , it was seconded, it carried unanimously. **Special Note - I could not find the minutes printed in the May Newsletter. They will be read at the July meeting.

The Treasurer's report was read. A motion was made to accept the report, it carried unanimously.

There were six new applications for membership; Lee Bengston KD5DAT, Brett and Julia Holman KK5TT & KC5VPW, George & Lee Martindale N5VVL & WD4SIH, and Chris Dennis KD5EIA. A motion was made to accept the new members, it was seconded and carried unanimously.

Newsletter Editor Dan Kautz introduced himself to the Klub and indicated any contributions would be welcomed.

Dan ? noted on Thursday the Alcatel Club would be presenting their meeting on ATV (2.4 GHZ) at 7:30PM. It was also presented that a Klub meeting could be televised. There was a general discussion, no further action was taken. He also noted a program on ATV could be given after a meeting. Robyn Winans will schedule a program for a future meeting.

Martin Reynolds noted the next Board Meeting will be held at his home on Tuesday the 23rd and everyone was welcome to attend.

There was a general discussion about upcoming Field Day event. Since a Field Day Chairman had not appointed, President Martin Reynolds called for a short recess to allow for a general discussion on the subject.

After the recess it was decided not to have an Official Klub Field Day. There was no location or prior planning for the event.

The meeting was adjourned at 2043 hours.

Jack Ward, KC5KOV
Secretary

Another Place, Another Klub...

Amateur radio club event is only a test

By Susan Gill Vardon
Star-Telegram Staff Writer

COLLEYVILLE — It was obviously some type of command post, with radio equipment and computers, and large antennae hovering above the park's covered patio, near the swing set.

Phil Feigel, headphones on and pen in hand, was staring at the computer screen in front of him. As voices mixed with static issuing from his radio, he scribbled a variety of strange codes on his yellow legal pad.

Passers-by yesterday might have wondered: What dark deeds were being practiced in this woodsy area?

They needn't have worried. Sparger Park was the staging area yesterday and Saturday for a 24-hour drill to give Grapevine Amateur Radio Club and GTE Amateur Radio Club members, including Feigel of Colleyville, a chance to test their mettle and gauge their readiness for a national emergency.

The annual American Radio Relay League drill is a contest for amateur radio clubs across the United States and Canada to see which one can make the most radio contacts in the 24 hours ending at 1 p.m. yesterday.

Radio operators can use only emergency power and portable equipment.

"It creates a high-traffic environment, like a real emergency," said Al Plant, a GTE sales employee who lives in Flower Mound. "That's what it would be like in an emergency — pandemonium."

About 25 similar stations were set up across the Metroplex, said George Lottes, a Keller resident and retired GTE engineer. There are about 300,000 licensed amateur radio operators in the country, Lottes said.

In Colleyville, about 15 members of the two groups worked the drill, contacting operators around the country and swapping information.

In times of emergencies — earthquakes, floods, grass fires, severe thunderstorms and tornadoes — amateur radio operators can relay information when other communications systems, including telephones, get overloaded, club members said.

They work on a regular basis with the National Weather Service to track storms.

GTE club member Doug Graves recalled hearing a broadcast from a radio operator in Lancaster who monitored a tornado right up to the point when it slammed into his

home.

"I was glad it was him and not me," said Graves, a Flower Mound resident. "He was scared. You could hear it in his voice." The man and his family survived the storm, he said.

Yesterday afternoon, the club members disassembled the radios, the seven antennae and the computer monitors after working in searing heat and sticky, humid air.

Several admitted to quick breaks for fast food, a shower or a dose of AC.

"I went home for a short time," Lottes said. "I just wanted to sit in the air conditioning for a while."

As the deadline neared, Lottes pronounced himself happy with the group's progress.

"We did excellent despite the heat," he said. "We made about 1,000 contacts in 24 hours," he said. "We'll compare favorably to last year."

Perfect Weather Adds To Ham-Com'98's Success

Over 4,500 Attend West Gulf Division Convention in Arlington, TX

What a way to spend the weekend enjoying ham radio activities! Picture perfect weather provided the ideal setting for the 1998 edition of the Ham-Com'98/ARRL West Gulf Division Convention in Arlington, Texas. The flea markets were an enormous success both inside and out with additional tables added to the inside area to accommodate the last minute rush (425 tables total). Outside the DARC "tailgate" section was bigger and better. The weather was so nice that attendees spread all over the Arlington Convention Center property which gave everyone room for their favorite activity. About 60 different commercial concerns were present, several for the first time.to show their products to the Ham-Com crowd both in the flea market area and the "Exhibit Hall" section. Programs from Digital Techniques to "Boat Anchor" Forums provided a busy Saturday schedule while Sunday the Annual Sky-Warn School put on by the NWS was full as usual. We say "Thank You Volunteers" to all those who donated their time and effort to populate the unpaid staff and management which plans and operates Ham-Com conventions. Bigger and better is the plan for 1999 with the date moving to the second weekend in June (June 11,12,13, 1999). Start your planning today for Ham-Com '99

For more information contact: Tom Gentry K5VOU, Ham-Com, Inc., chairman@hamcom.org

New Tower Moratorium in Plano

Last month, Plano City Council voted and passed a moratorium on all new radio tower construction within city limits or jurisdiction. No further information has yet been made available for publication in the ***PARKING TICKET***.

FCC License Renewals and FCC License Expiration Notices

Amateurs may renew their FCC-issued licenses "on line" via the FCC web using FCC Form 900. FCC permits on-line renewals at 120 days or less before a license will expire. If a license is already expired, but is within the FCC's two-year grace period for renewal, the FCC will not accept an on-line Form 900 application--but they will continue to accept Form 610 requests for renewal when submitted by mail to:

FCC, 1270 Fairfield Rd, Gettysburg PA 17325-7245.

Amateurs may continue to renew their licenses within 90 days before the license expiration date, or within the two-year license grace period after expiration, using FCC Form 610 by mail to: FCC, 1270 Fairfield Rd, Gettysburg PA 17325-7245.

The FCC no longer issues notifications to amateurs just prior to their license expiration. The FCC had done so for a time, but they ceased doing so in October 1996.

FCC-license renewals are FREE (no renewal charge or fee is required by FCC).

Presently, expiration notices are sent from ARRL HQ to ARRL Members only! These ARRL-Member-only notices include a cover letter with instructions for renewing electronically or by mail, an FCC Form 610 with instructions, and an envelope addressed to FCC. ARRL Members may also choose to forward their

Continued top next page

hardcopy, signed Forms 610 to HQ (to the ARRL/VEC, 225 Main St, Newington CT 06111) and we will process them electronically (this FREE service is for ARRL Members only!). Expiration notices are also sent to all amateurs from the W5YI Group in Dallas TX (handling fee is charged for their service).

From the ARRL web page:
http://www.arrl.org/arrlvec/#renewals

Easily Heard Signals

DE W8EHS

Overcoming Apathy

Too bad we missed Field Day. I am as bad as the rest of us. My church choir scheduled a major concert and recording session for that Saturday afternoon and evening. (The men had to wear "black tie" and the ladies wore their "performance" dresses.) They should have consulted me about conflict with Field Day. As it turned out, there was no conflict. PARK did not have a Field Day.

Are we at a low interest point in klub activities? Perhaps it is the summer doldrums. The weather certainly favors a stay-at-home attitude. However, there is a blank space on the back of this newsletter where the "Activities Director" name should appear.

Webster defines Apathy as, "1: Lack of feeling or emotion : IMPASSIVENESS 2: Lack of interest or concern : INDIFFERENCE"

Is this the general attitude of the membership? Do we not care who our officers are or in what programs the klub participates? Suppose we held a meeting and no one came. That's OK for a war, not a klub meeting.

We are NOT to that point. We need some stirring up of interest is all. As I said before, summer is always tough on everyone's schedule. And after all, this is a hobby…not how we make a living or provide for our families.

I have always considered Amateur Radio clubs and especially their meetings as a "gathering of interests". There are many reasons to form a club. Amateur radio is very diversified. Not all members share the same vision of what this hobby is all about.

We have the communicators, DXers, ATVers, Social Lunch Bunch, Technicians (not the license class), computer and digital folks, contesters, QRPers, and the list could go on and on. The point is, the monthly meeting is the place where all these interests get together… swap stories and provide information to others who are looking for something new. That "something new" is what keeps interest high and apathy away.

Now, the plug for the newsletter. There is no better place to share what you like or find out what's new. All klub members are the "reporters" for the Parking Ticket. I am the Editor and Publisher. What you contribute is what you get. (WYCIWYG) "wicky-wig". The same is true about the klub in general… WYCIWYG! Tell us what you like. Write a paragraph or two or send me a picture (=1000 words) of how you enjoy amateur radio. I'll help you tell everyone. It will give this klub new interest.

OK… the soapbox is gone…for this month <g>

Got a nice contribution from Burt Syverson K5CW last month. It is in "hard copy" format. My OCR software is packed somewhere I haven't found yet. Unfortunately I had removed it from my computer to save space. I found the manual but not the disk. Burt's contribution is a short story and much too long for me to retype. Should have problem solved by next issue. Watch for it!

Two New Amateur Radio Satellites Launched

By AMSAT NEWS SERVICE BULLETIN
July 12, 1998

ANS is pleased to report the launch of two new Amateur Radio digital satellites.

TMSAT-1

The TMSAT-1 micro-satellite was successfully launched from the Russian Baikonur Cosmodrome in Kazakhstan. The launch, aboard a RESURS-O1 spacecraft, took place at 06:30 UTC, July 10, 1998. This was following a 40-minute launch delay and after a scrubbed launch the day before just 2 minutes before the planned liftoff.

Following the launch, the satellite was separated from the RESURS launch vehicle and became an object in its own right, placed into an 821km sun-synchronous orbit. TMSAT-1 was then switched on and began sending data on its downlink frequency of 436.925 MHz. Current output power is approximately 1.7 to 2 watts.

Chris Jackson, G7UPN/ ZL2TPO, the command station for this new bird, tells ANS the satellite is transmitting VLSI telemetry in an asynchronous format. Telemetry collected over the past 24 hours show the spacecraft is operating normally. G7UPN 's immediate plan for the satellite is to continue to load the flight software to the on-board computer and then start stabilizing the attitude. "This will hopefully be finished soon and we will then switch to the standard OBC telemetry mode that most people are familiar with," reports

Jackson.

G7UPN is asking stations that can receive the UOSAT VLSI telemetry format at 9600 baud FSK to capture telemetry from the satellite and send it to him using the following e-mail address;

C.Jackson@ee.surrey.ac.uk

Jackson is requesting that stations please refrain from attempting to uplink to the spacecraft at this time.

An initial set of raw Keplerian orbital data has been provided. The element set is accurate for tracking the spacecraft.

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TMSAT-1
1 25395U 98043B
98191.87373682 -.00000045
00000-0  00000+0 0 24
2 25395  98.7944 261.8948
0001516   6.1903 313.0257
14.22263117 96
```

The satellite is being heard worldwide. Roy, W0SL reports receiving the data carrier on a recent low elevation pass. “I found the frequency about 4 kHz higher here than I expected,” reports W0SL. Bill, N4DH reports a “strong carrier” on a recent pass. From Tokyo, Masa, JN1GKZ reports hearing the satellite with 5x9 plus signals. Cliff, K7RR reports the downlink telemetry of TMSAT was very loud. Scott, VE6ITV reports a very strong downlink signal while he was testing his new 70cm preamp. IK2XRO and IW2EGC report the signal was very strong over Europe as well.

A brief overview of the TMSAT satellite and commissioning plan is available at the following URL:

http://www.ee.surrey.ac.uk/EE/CSER/UOSAT/amateur/tmsat/tmsat_commissioni ng_plan.html.

TechSat-1B

Also launched aboard the RESURS-O1 spacecraft from the Baikonur Cosmodrome was the TechSat-1B satellite. TechSat-1B is a digital store-and-forward satellite using 9600 baud, frequency shift keying (FSK), much like UO-22, KO-23 or KO-25. TechSat-1B will feature VHF/L-band uplinks, with downlinks in the 70cm band.

No official announcement about this new satellite has been received from the TechSat team.

Assi Friedman, 4X1KX/KK7KX tells ANS the satellite does not have a continuos beacon, but does transmit a 9600 baud burst every 30 seconds (about 3 seconds in length).

Richard Limebear, G3RWL reports receiving some preliminary information about the spacecraft from Shlomo Menuchin, 4X1AS. The satellite appears healthy and is currently being stabilized after experiencing cold temperatures during the launch phase.

4X4AS is estimating that it will be several weeks before the initial in-orbit testing is completed. In the meantime TechSat will continue its present burst-mode transmission format.

The TechSat team will soon have an operations facility whereby ground control stations will be able to call for telemetry during overhead satellite passes. In addition, Menuchin reports software will soon be released to decode the transmissions from the satellite.

A TechSat web site is available at the following URL:

http://www.technion.ac.il/~asronen/techsat/

AMSAT-NA congratulates the TMSAT-1 and TechSat-1B launch teams for this exciting development.

[ANS thanks Chris Jackson, G7UPN/ZL2TPO, Assi Friedman, 4X1KX/KK7KX and Richard Limebear, G3RWL for this information]

WWV: More Than Just The Time - *continued from Page 1*

of its corona in our direction, or bursts of energetic electrons or protons, or both. When this happens, we can experience geomagnetic storms, shortwave fadeouts, noise bursts, multipath signal fading, Polar Cap Absorption events, or, in the most extreme cases, stratospheric warming. Since the geofield flux lines concentrate at the poles, the higher latitudes are often affected first, and more severely than the lower latitudes.

So, what we want is a SFU index that falls in a range of values, not too high, not too low. Usually, if it is below about 85, it indicates low solar activity with few sunspots, which could lead to average or poor propagation. If it starts to climb to the middle or high 90s or higher, then propagation will start to improve.

Unfortunately, just one or two SFU readings can be somewhat misleading. If the sun is showing moderate or higher activity, such as x-ray flares or coronal mass ejections, or if energetic particle emissions increase, the SFU value may not reflect that fact. The SFU value that WWV gives is a daily reading for a 24 hour period, which means that an energetic flare event could send an intense burst of radio energy our way that would last only a few minutes. For example, a flare occurred on April 28 that lasted for 43 minutes, and spawned a peak SFU of 950! Another occurred on May 4 that lasted for 37 minutes, and resulted in a SFU of 810. Yet, the respective SFU values for those two days were 98 and 121, respectively. The daily SFU values from April 23 to May 25 went from 90 to 96, with a peak of 133 on May 5. During the period of about April 30 to May 7, propagation conditions were seriously degraded at most latitudes, but returned to normal after that time.

This illustrates the value of keeping a record of the daily values that WWV provides. As you record more successive SFU values, you can see an overall increasing pattern emerging. If you compare them to their respective K indices, you can begin to see how flares and other energetic transients can affect the SFU values. The more you record, the easier it will be to see not only the overall pattern of cycle 23 emerging, but you can also see the perturbations to that overall pattern caused by flares and other

energetic events.

THE GEOMAGNETIC FIELD

The Earth's magnetic field is the great overseer of HF communications. Since it extends from below the surface of the Earth to thousands of miles into space, it can affect your ability to pull in weak signals, or reach out farther without having to increase your power. The A-index and the K-index numbers that WWV broadcasts give a numerical indication of the geofield's behavior.

THE K-INDEX AND THE A-INDEX

Since the last century, special facilities have been established globally in order to measure the strength of the geofield. Each time a measurement set is taken, it is recorded and assigned a number from 0 to 9, which is called the K-index for that station at that time. The stronger the geofield, the higher the number. Because the geofield is so dynamic, it can change at any location within a matter of minutes. So, the more often measurements are taken, the better a picture we can make of its behavior. Early on, it was decided to do this every three hours, so each station produces 8 K-indices every day.

One problem with the K-index is that it is quasi-logarithmic. It doesn't change in a smooth, one-for-one, or linear, way. So, to make life a little easier, each K-index is converted to a near linear scale, which is called the a-index. The 8 daily a-indices are then averaged into one number, which is called the A-index. The A-index, then, describes geofield activity for a 24 hour period, and the K-index that follows is the geofield activity for the current three hour period. That's why WWV gives the time of day the announced K-index was taken, but doesn't for the A-index. The K and A indices broadcast by WWV and WWVH are taken at a station located at Boulder, Colorado.

Like the SFU, the K index should fall within a range of values for hams to be happy. It has been shown that a K-index range of 0 to 3 will almost always indicate smooth sailing for HF work. Occasional K-indices of 4 indicate an unsettled geofield, and consistent K-indices of 4 or 5 suggest choppy seas ahead. Anything over 5 is a clear message to start up that popcorn.

SUMMARY REPORTS AND PREDICTIONS

Immediately following the index reports, WWV broadcasts solar-terrestrial summary reports for the previous 24 hours and forecasts for the following 24 hours. These are one or two word reports derived from geofield and solar activity measurements that include, but are not limited to, those measurements taken for the three index reports.

SOLAR ACTIVITY

The first one given is the solar activity for the previous 24 hours. For the purposes of this report, solar activity is defined as the amount of transient surface activity that generates x-ray radiation. Since flares are the most common mechanism for x-ray emission, the solar activity report tells you about how many x-ray flares have occurred in the 24 hours previous to the report, and how strong they were.

Solar Flares

Flares are sudden eruptions on the solar surface that eject x- rays out into space. They can last for from minutes to hours. The most severe can last for several days. When the x-rays they produce arrive at the Earth, propagation can be severely affected. The report is based on the occurrence of the three most severe classifications of x-ray flares: C, M, and X. A class X flare is the strongest of the three. The classifications are as follows:

- VERY LOW: x-ray events less than C class flares.
- LOW: C class x-ray events have been seen and recorded.
- MODERATE: up to 4 isolated M class events.
- HIGH: 5 or more M class events, or 1 to 4 isolated M5 or greater events.
- VERY HIGH: several M5 or greater events.

GEOMAGNETIC FIELD

The next report is the geofield activity for the previous 24 hours, given in 5 classifications based on the A and K-indices. They are:

- QUIET — A-index = 7 or less, K-index = 2 or less
- UNSETTLED — A-index between 7 and 15, K-index = 3 or less
- ACTIVE — A-index 15 or more, but less than 30, K-index = 4
- MINOR STORM — A-index 30 or more, but less than 50, K-index = 4 or 5
- MAJOR STORM — A-index 50 or more, K-index = 6 or more.

From this, you can see that a K-index of 4 means that the geofield may be doing you more harm than good. But it's always worth a try. Anything over 4 should tell you not to try too hard or for too long. Start thinking about that movie.

FORECASTS

The last two reports are predictions for solar and geofield activity for the 24 hour period following the broadcast. The same classifications are used for these forecasts as were used for the previous 24 hour activity reports.

SUPPLEMENTAL

This report is seldom given, and only during periods of exceptional solar activity as the WWV operations managers deem appropriate. It outlines the causes of major disruptions of propagation conditions with the following descriptive classifications: Class C, M, and X solar flares, Major Solar Flare, Proton Flare, Satellite-Level Proton Event, Polar Cap Absorption (PCA), and Stratwarm, in order of severity.

During the heightened periods of solar activity in late April and early May of this year, partial PCAs did occur when the sun produced an exceptional stream of energetic protons for several days. When they arrived at the Earth, they were drawn by the geofield to the poles, where they were concentrated by the geofield flux lines. One effect of

this event was that many people in the northern United States that ordinarily do not see the Northern Lights were treated to a magnificent celestial light show. The downside was that HF communications were almost completely disrupted in the higher latitudes, and VHF communications were significantly degraded.

All of these major solar events raise the SFU and K indices far beyond those upper limits that are optimal for good HF propagation.

SUMMARY

WWV broadcasts this information in their geoalerts every hour at 18 minutes after the hour simultaneously on 5 HF frequencies: 2.5 MHz, 5.0 MHz, 10.0 MHz, 15.0 MHz, and 20.0 MHz, using double-sideband AM. WWVH does the same at 45 minutes after the hour. As you have seen, they can tell you in the space of 45 seconds or less if you have a good chance to find a new radio friend, or make that schedule, with just 3 numbers and a few words. Even if you tune in only once a day, and copy down those 7 brief descriptions for a week or more, you can make increasingly reliable propagation predictions. The more records you keep, the better your predictions can become, until you can rival the most venerated propagation guru in your neighborhood.

FOR FURTHER INFO

So there you have it. Radio station WWV, and its sister station WWVH, can be valuable resources for any ham that uses HF as a part of his hobby. It can be especially valuable for regional HF emergency nets in times of trouble.

The easiest way to get the WWV reports is to tune in on one of the HF frequencies. Don't forget to switch your rig to AM, or it will be a little off frequency, and harder to hear. If you want to get the reports, but can't use your rig for some reason, you can get them over the telephone, at (303) 499-7111 for WWV, and (808) 335-4363 for WWVH.

If you want to know more about WWV, you can visit their web site on the Internet. The web site address is:

http://www.boulder.nist.gov/timefreq/wwv/wwv.html

Happy hamming!

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ARRL says scanner proposals could hurt hams

From ARRL Headquarters
Newington CT July 15, 1998
To all radio amateurs

The ARRL has told the FCC that some of its recent proposals to tighten scanning receiver rules "constitute severe regulatory overkill" and could harm law-abiding amateurs. The League made the comments in response to last month's FCC Notice of Proposed Rulemaking, FCC 98-100 (ET Docket 98-76).

The ARRL said it's "sensitive" to the FCC's concern that devices not be able to readily intercept cellular calls. But, the League added, some of the FCC's proposals could result in "insufficiently defined regulations" that would prohibit or unreasonably restrict the making and selling of ham and test gear. Some product lines could become prohibitively expensive or prohibited altogether by the proposals, the League asserted.

Among other things, the League asked the FCC to avoid requiring scanning receivers in ham equipment to block access to frequency-control circuits, and to not entirely prohibit frequency converter or transverter kits for use in the Amateur Service. The League said the net effect of the kits ban would be to prohibit any frequency converters, even though they would not be used or useful for cellular reception, and asked the FCC to create an exception for Amateur Service frequency converters.

The League also asked that amateur receivers not be required to undergo potentially expensive direct-pickup immunity testing, and it urged the Commission to more clearly define its proposed rules to avoid unintended consequences that could adversely affect hams.

The League agreed that some extended coverage ham transceivers have image responses that make them able to receive cellular signals. But the League said this is not widespread and "largely not an issue in the Amateur Service," because the transceivers are not made, marketed, bought, or used for cellular image reception. Manufacturers could configure products to preclude cellular image frequency reception, the ARRL said.

The League said that current language banning the manufacture or sale of scanning receivers that are "capable of readily being altered" is sufficient. But the ARRL said requiring tuning and control circuits be made inaccessible would be "an overbroad requirement," and that potting or encapsulating frequency-control hardware "is simply unnecessary for most amateur equipment."

The League said such a requirement would limit the ability of hams to legitimately experiment with or to even repair their own equipment and could needlessly drive up the cost of ham gear and make repair expensive or impossible. "The potting requirement is severe regulatory overkill and should not be enacted," the League said. "There are sufficient, less burdensome regulations now in effect and as proposed."

The League also called the FCC's proposed definition of test equipment ''unreasonably limiting" and advised the Commission to correct the problem by eliminating the word ''professional" from its definition.

A copy of the League's full comments is available at http://www.arrl.org/announce/ET98-76-cmt.pdf.

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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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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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