

THE LOCAL OSCILLATOR

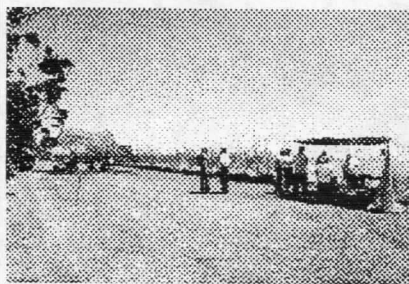


THE PUBLICATION OF THE PANHANDLE AMATEUR RADIO CLUB

FIELD DAY 1996 WE'LL BE BACK

Field Day 1996, a total success

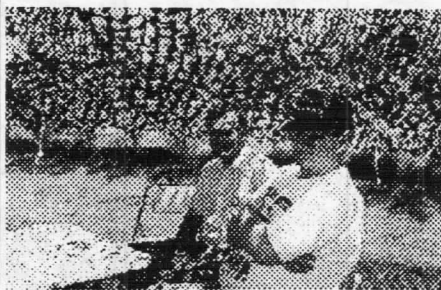
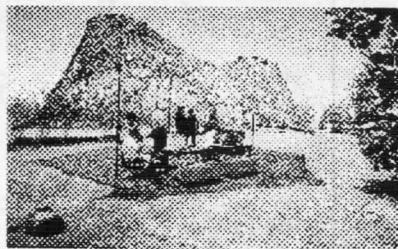
The first thing I learned about Texas



when I moved here last year was that Texans know how to put on a meal. If you missed this years field day you



missed one heck of a day. If you missed the barbeque, well, you can't



say you weren't warned. It was a meal to make any Texan proud.

The camouflage netting that "tentmiester" Don KC5EZO brought gave enough shade so that along with



the high plains breezes operating was comfortable In spite of the temperatures in the nineties.

The atmosphere gave a new meaning to the term "laid back." The casual visitor would never suspect that we were running a contest.

Joe's satellite station looked impressive but Joe and Ron spent most of their time repairing the antenna and feedlines and waiting for the birds to show up.



Marshal showed up to put the club on CW. The logs won't be sorted out and calculated in time for this issue of The Oscillator, but we can get that information later.



Bill KC5PIM brought a complete hamshack for 6 meters from Dumas

JUNE PARC MEETING

BY MONTY KC5OMK

Minutes of the June 1996 PARC meeting Monty Denney-Secretary

* Treasurers report was read by Robert, KC5DKQ and approved by the membership.

* Last month's minutes were read from the Newsletter and approved by the membership.

* Brett, N5SQK gave an update on the 94 machine. The Digital Voice recorder has been installed and memory for it has been donated and put it in place. The controller currently has a timer maxed out keeping the mail system from working. Brett is working on the problem.

* Brett also reported there is no news on the possible building musical chairs at ATC. We may be looking for a couple of sections of Rohn 25G to replace the sections we now have in use that belong to ATC.

* Don, KC5EZO reported that he has not completed his search for a club banner yet.

* There was discussion about a "Junk in the Trunk" gathering. A date of July 20th was selected with setup starting at 8:00am and the gathering will run until everyone leaves. The gathering will be held in the W5WX parking lot on the ATC campus.

* Joe, KA0YOS announced there would be an OSCAR dry run for Field Day in the park adjacent to Gene Howe elementary school starting at 9:00am on June 15th. The session will conclude around 1:00pm.

* The rest of the meeting discussion was centered around Field Day. Dick, N5AE coordinated the efforts and made logistics arrangements. The operating category will probably be 1A. And the W5WX parking lot was chosen as a rain alternate sight. Otherwise Chip, N5LTZ's ranch will be our location.

73,
Monty Denney
Denney@arn.net

President's Letter!

Field Day has come and passed. I hope you enjoyed it! I did even though the satellite station flopped. Maybe I should only get it out for Field Day, It always works well on the dry runs and we always have problems at Field Day.

Coming up this month we have a "Junk

MINUTES OF



- in the - Trunk" planned for July 20th from 8:00am to ???. Dust off your junk/treasures and get them ready to sell now. And bring your sending money too! This event will be held at the W5WX club station parking lot on the ATC campus.

The first week in August brings the MS-150. Amateurs from all over the panhandle have traditionally helped out with this event and this year should be no exception. This two day event is a bicycle tour from Amarillo to Canadian on the first day and Canadian to Shamrock on the second. Hams will be located at each rest stop as well as shadowing tour officials. Food and T-shirts are normally provided! Please keep your ear to the airwaves for more details and if you haven't sponsored a rider yet, ask me for a suggestion the next time you see me!

73 for now and See you on the Air!

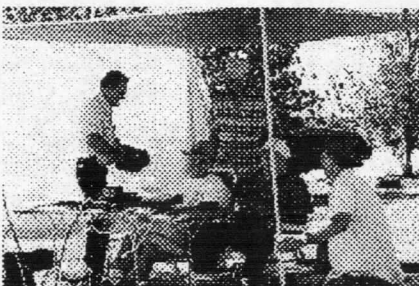
Joe

For Sale:

Yaesu FT-727R Dual Band HT with the following accessories: PA-3 Power Supply / Charger for use in the car
Tone board
Radio Shack Speaker mic
Nicad pack with charger
Spare battery pack Shell only NO CELLS

All original boxes and documentation including schematics

Well used, but works GREAT!!
\$225.00 gets it all
SBE - 144 Crystal controlled 2 meter



rig. This rig is 10 Watts out. All solid state. With several popular frequencies already installed (145.01, 146.34/94, ...) Also included is a Xerox copy of the manual and schematic.

\$50 as soon as the repairs are complete
Call Joe Mayfield, KA0YOS at 359-5884 or E-mail ka0yos@amsat.org

Complete Packet station with PK3 TNC, 386sx-20 computer with 60MG hard drive, 2 floppies and keyboard, and Regency 2 meter transceiver. Also Swan 350 HF rig and complete cell phone. The whole ball of wax \$350 OBO Call Marshal, AB4ZA on his beeper 342-8601 or catch him on the air.

SKYWARN

This message was received by Ben WS5R from the Denver SKYWARN group



Actually, we (Denver) are considered "one of the best," with "the best" generally considered to be you folks. Amarillo SKYWARN is generally spoken of in hushed, reverent tones.

William Kucharski
kucharsk@netcom.com

But then we knew that already. So this



brings us to something important to all of us, even those of us who aren't able to be part of ti.

ARES MEETING

July 9 7:30 PM Polly's Restaurant
I-40 and Bolton.

R A C E S

MEETINGS

Potter CTY July 30 7:30 PM at OP
Center at old police academy
Randall CTY July 23 at fire station

Satellite Round Up !!!!

In May I promised to get back to the "History of Ham Sats" this month so here we go!

OSCAR II

OSCAR II was launched June 2, 1962 by a Thor Agena B launcher from Vandenberg Air Force Base, Lompoc, California. OSCAR II was launched piggyback with a United States Air Force satellite. Orbit 384 x 206 km. Inclination 74.2 degrees. Period 89.8 minutes. OSCAR I was the second phase I satellite.

OSCAR II was very similar to OSCAR I. Differences included (1) changing the surface thermal coatings to achieve a cooler internal spacecraft environment, (2) modifying the sensing system so the satellite temperature could be measured accurately as the batteries decayed, and (3) lowering the transmitter power output to 100 mW to extend the life of the onboard battery [from The Satellite Experimenter's Handbook].

OSCAR II lasted 18 days ceasing operation on June 20, 1962 and re-entered June 21, 1962.

References:

* William Orr, "OSCAR II: A Summation," QST, Apr 1963, pp 53-56, 148, 150.

OSCAR*

Designed, built, and tested, OSCAR* was never launched. Similar in design to OSCAR I and II, OSCAR* contained a 250 mW beacon with phase-coherent keying. OSCAR* was never launched as the workers decided to focus their

efforts on the first relay satellite -- OSCAR III.

OSCAR III

OSCAR III was launched March 9, 1965 by a Thor Agena D launcher from Vandenberg Air Force Base, Lompoc, California. OSCAR III was launched piggyback with seven United States Air Force satellites. Orbit 924 x 891 km. Inclination 70.1 degrees. Period 102.7 minutes. Weight 16.3 kg.

Firsts: The first amateur satellite to operate from solar power and relay signals from Earth.

OSCAR III was the first true amateur satellite relaying voice contacts in the VHF 2 meter band through a 1 W 50 kHz wide linear transponder (146 MHz uplink and 144 MHz downlink). OSCAR III's transponder lasted 18 days. More than 1000 amateurs in 22 countries communicated through the linear transponder. The two beacon transmitters continued operating for several months.

References:

* William Orr, "The OSCAR III VHF Translator Satellite," QST, Feb 1963, pp 42-44.

* Arthur Walters, "OSCAR III -- Technical Description," QST, Jun 1964, pp 16-18.

* Arthur Walters, "Making Use of the OSCAR III Telemetry Signals," QST, Mar 1965, pp 16-18.

* William Orr, "OSCAR III Orbits the Earth!," QST, May 1965, pp 56-59.

* H.C. Gabrielson, "OSCAR III Report -- Communications Results," QST, Dec 1965, pp 84-89.

OSCAR IV

OSCAR IV was launched December 21, 1965 by a Titan 3C launcher from Cape Canaveral, Florida. OSCAR IV was launched piggyback with three United States Air Force satellites. The launch vehicle had a partial failure and placed the spacecraft in a low orbit preventing widespread amateur use. Orbit 29120 x 168 km. Inclination 26.8 degrees. Period 587.5 minutes. Weight 18.1 kg. Four monopole antennas.

OSCAR IV was built by the TRW

Radio Club of Redondo Beach, California. It had a 3 Watt 10 kHz wide linear transponder (144 MHz uplink and 432 MHz downlink). In operation until March 16, 1966. Re-entry April 12, 1976. Total operation 85 days. OSCAR IV provided the first US-Soviet amateur link.

References:

* "OSCAR IV News," QST, Dec 1965, p 41.

* "OSCAR IV Due Dec 21," QST, Jan 1966, p 10.

* E.P. Tilton and S. Harris, "The World Above 50 Mc.," QST, Feb 1966, pp 80-82.

Taken from the Amsat Web Page (<http://www.amsat.org>) with permission. Next month more history! 73, Joe

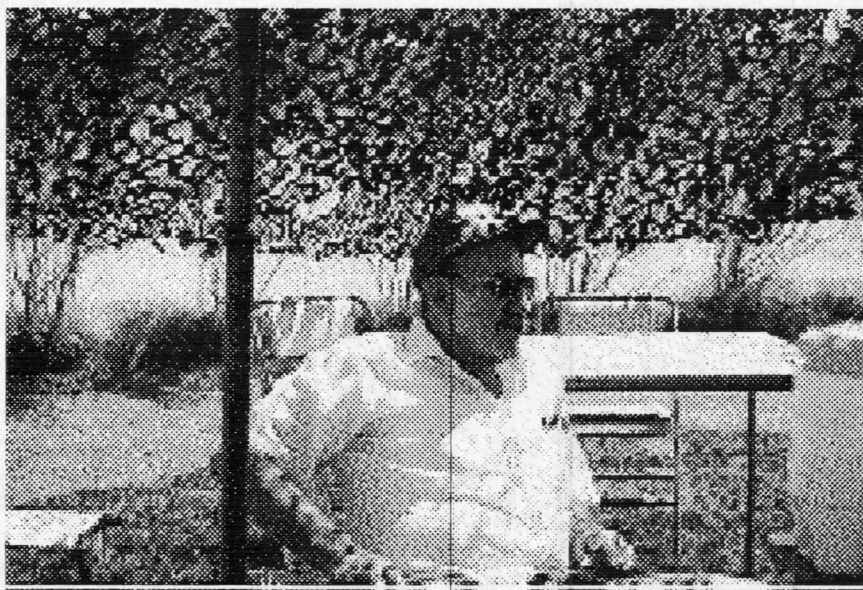
PANHANDLE NET SCHEDULE

P.A.I.N. 146.94 8:00PM SUN
*CLOUD CHASERS 145.92 8:00 PM
MON *SIDEWINDERS 144.2 USB
8:00 PM MON *A R E S 146.52 8:00
PM THURS *PANHANDLE
TRAFFIC AND EMERGENCY NET
3933 KHZ LSB 00:00 UTC DAILY
*A M S A T 3840 KHZ 9:00 TUES *S
W LYNX NET 147.56 6:00 PM
THURS

S A R E X Information for STS-78

This SAREX report was supplied from the Internet by Bill KD4IOC. Amateurs around the world will be looking for U.S. Space Shuttle during mission, STS-78. This will be a SAREX mission and will, once again afford hams the opportunity to contact with the astronauts aboard Columbia. Some of these amateurs have volunteered to assist student groups that





have prepared questions to ask the astronauts via ham radio.

As all licensed amateurs know, to operate Amateur Radio from the space shuttle, one or more of the astronauts must have an Amateur license. In the case of STS-78, Astronaut Susan T. Helms, who will serve as the Payload Commander, has Amateur Radio call sign KC7NHZ. Her third shuttle flight, Helms was a crew member aboard the shuttle Endeavor during STS-54 in January 1993, and last used ham radio from aboard Discovery during STS-64 in September 1994. In addition, Charles E Brady Jr. is N4BQW and will serve as a Mission Specialist on this, his first shuttle flight. Robert Brent Thirsk, a Canadian amateur, VA3CSA will serve as a payload Specialist, also on his first shuttle flight. The remaining crew members include Commander Terence T. Henricks, Pilot Kevin R. Kregel, Mission Specialist Richard M. Linnehan, and Payload Specialist Jean-Jacques Favier. During the mission, the shuttle will carry the Life and Microgravity Spacelab to conduct experiments in the weightless environment. Experimenters from around the world will conduct a wide variety of experiments from micro gravity bubble behavior to protein crystallization. Experiments will also

focus on the effects of weightlessness on human physiology and function.

Amateur Radio has been flying aboard the shuttles since 1983, when Owen Garriot W5LFL became the first to operate an amateur station from space. Launch of STS-78 is scheduled for June 20, 1996 at 1449 UTC (10:49 AM EST) from the Kennedy Space Center, Cape Canaveral, Florida. Landing is scheduled for July 6, 1996 at 1246 UTC (8:46 AM EST) at the Kennedy Space Center, Florida. 15 day mission. The launch will place the shuttle into Earth orbit at an altitude of 173 statute miles (278 km) and an inclination of 39 degrees.

NASA has several reasons for allowing amateur radio operation from the Shuttle. One of the most important is to involve the largest possible numbers of people, particularly students, in technology and the US space program. During SAREX missions, the astronauts will typically make the following types of Amateur Radio contacts: Scheduled radio contacts with schools. Random radio contacts with the Amateur Radio community. Personal contacts with the astronauts' families. SAREX Sponsors are: the American Radio Relay League (ARRL), The Radio Amateur Satellite Corporation (AMSAT) and The National

Aeronautics and Space Administration (NASA).

Eleven schools from around the world have been selected to make contact with the shuttle during most SAREX missions. Two or more students at each of the selected schools will ask questions of the astronauts during these contacts.

The following schools have been selected by the SAREX Working Group for a scheduled radio contact during STS-78.

Bethlehem Central Senior High School
Delmar, NY

Eisenhower Middle School

San Antonio, TX

Heritage Middle School

Collyville, TX

Anacortes Middle School

Anacortes, WA

Valley Heights Jr-Sr High School

Blue Rapids, KS

Monroe Elementary School

Santa Barbara, CA

Maple Grove Education Center

Nova Scotia, Canada

Saskatoon Public Aerospace Education
(S.P.A.C.E.)

Saskatchewan, Canada

Toowoomba State High School

Queensland, Australia

Catholic Ladies College

Victoria, Australia

CENG - Nuclear Center of Grenoble
Grenoble, France

During many SAREX missions, Shuttle crew members make random contacts with hams on Earth. They make these contacts during their breaks, before and after meal time, and during their pre-sleep time. In fact, over the past 16 years, astronauts have contacted thousands of amateurs around the world. On many missions, they have carried a 2-meter packet radio station. Innovative computer software allows the crew to operate the packet gear in an "unattended" mode, allowing amateurs to make contacts with the Shuttle ROBOT station when the astronauts are not able to be at the rig.

The crew will use separate receive and

transmit frequencies. Amateurs are asked to not transmit on the shuttle's DOWNLINK frequency. The crew will not favor any of the uplink frequencies, so success in working the Shuttle will be the "luck of the draw." Hams should transmit only when the shuttle is within range of their stations, and when the shuttle's station has been heard.

FM Voice Downlink: (Worldwide) 145.55 MHZ

FM Voice Uplink: 144.91, 144.93, 144.95, 144.97, and 144.99 MHZ

FM Voice Uplink: (Europe only) 144.70, 144.75, and 144.80 MHZ

FM Packet Downlink: 145.55 MHZ

FM Packet Uplink: 144.49 MHZ

Call signs to be used on STS-78 are:

FM voice Call signs KC7NHZ, N4BQW, VA3CSA

FM packet call sign W5RRR-1

QSLs go to ARRL EAD, STS-78 QSL, 225 Main Street, Newington, CT 06111-1494, USA. Those sending cards are reminded to include the following information:

STS-78, date, time in UTC, frequency and mode. In addition, a SASE using a large, business-sized envelope must be included if a Shuttle QSL is desired. "The Net" in Anacortes, Washington

State has generously volunteered to manage QSL cards for this mission.

During STS-78, the SAREX hardware will be flown in configuration C which consists of the handheld transceiver, I/F module, PGSC (serves as the packet data terminal), spare battery set, window antenna, packet module, SAREX headset assembly, personal recorder, and the required cable assemblies. The packet module contains a power supply and packet TNC. The power supply provides power for the TNC and the handheld transceiver. Configuration C is capable of operating in either the voice or data mode in communications with amateur stations within LOS of the Orbiter. This configuration can be operated in the attended mode for voice communication and either the attended or automatic mode for data

communications.

Paul E. Trauffer

111 Emerald Dr.

Harvest, AL 35749 USA

Phone: (205) 837-0084

E-mail: wintrak@traveller.com

FCC OPENS VANITY CALL SIGN GATE 1A JULY 22!

The FCC has announced it will open vanity call sign program Gate 1A on July 22, 1996. Under this gate, applicants can request an in memoriam call sign for a club station to honor a deceased former member. You may request the call sign even though it has been less than two years following death of the club member. Upon the death of the holder, the call sign is assignable immediately to an otherwise eligible club station. (However, the license grant first must be deleted from the FCC database; see below.)

If you are the license trustee for your club station, you may request in memoriam for your club station the call sign previously shown on the primary, secondary, repeater, auxiliary link, control, or space station license of a deceased person who was a member of the club. Here are the specific guidelines to request a call sign in memoriam for your club station under Gate 1A:

The club must have held a club station license grant on March 25, 1995.

You must have in your station records a written statement from a spouse, child, grandchild, stepchild, parent, grandparent, stepparent, brother, sister, stepbrother, stepsister, aunt, uncle, niece, nephew, or in-law of the deceased confirming the deceased person's association with the club and showing consent of the relative to your request. Do not send this statement to the FCC unless you are requested to do

so.

You must be an Amateur Extra Class operator to request a Group A call sign, at least an Advanced Class operator to request a Group B call sign and at least a Technician Class operator to request a Group C or D call sign.

Your mailing address does not have to be in the region designated in the sequential system for the call sign requested. A call sign requested in memoriam may be in any region.

You must enter the relationship to the deceased of the person giving consent exactly as listed in the instructions, ie, child, niece or in-law.



The license grant of the former holder now deceased must have been deleted from the licensee database. To do this, a relative of the deceased should submit a signed request to have the license grant canceled. This request should include copy of an obituary or the death certificate. Submit requests for cancellation to the FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245 prior to filing the application for a vanity call sign.

A \$30 fee is required with your FCC Form 610-V application. Payment of fees may be made by check (payable to "FCC"), bank draft, money order or credit card. Do not send cash. If paying by credit card, also complete and submit FCC Form 159 with your FCC Form 610-V. Send your application package to: Federal Communications Commission, Amateur Vanity Call Sign Request, PO Box 358924, Pittsburgh, PA 15251-5924.

The FCC has not announced when it plans to open the additional vanity call

sign gates. Gate 1 opened May 31 for applicants seeking former personal or club station call signs and call signs once held by deceased close relatives. Gate 1 will remain open indefinitely. A reminder: The FCC will return any Gate 1A applications it receives before July 22, 1996 for timely resubmittal. Applications that do not qualify under Gate 1 or Gate 1A eligibility standards, will be dismissed. A future public notice will announce Gate 2, which will have expanded eligibility standards affecting Amateur Extra class licensees.

Meanwhile, the flurry of vanity call sign application activity under Gate 1 seems to be tapering off. The FCC reports 269 applications for the period of June 11-17, 1996. Between May 31 and June 10, the Commission got nearly 1700 applications. The FCC's Gettysburg office also got a flood of another sort during the week of June 16 when heavy rains shut down the town and

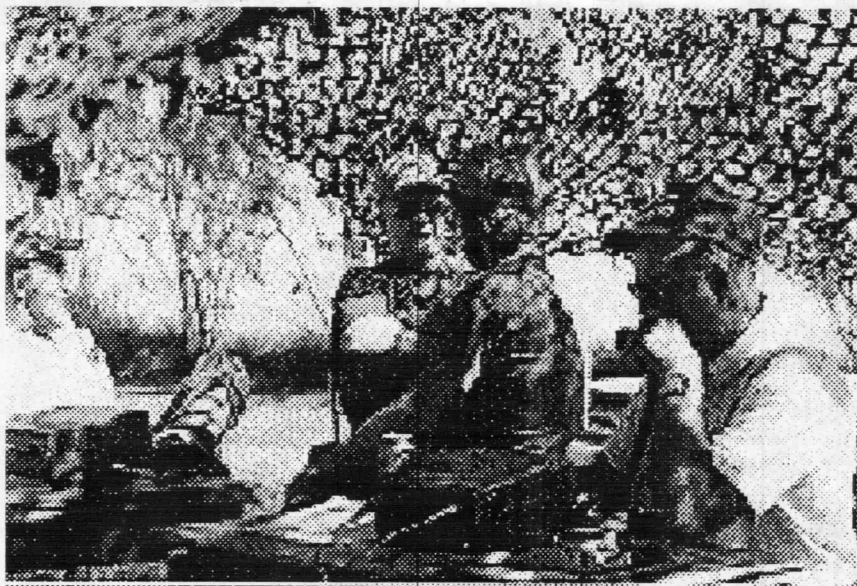
a message to listserv@netcom.com



with the body
subscribe letter-list

Ham Expo '96

10/05/96 Belton, TX
Largest Indoor Tailgate Swapfest in the world! Sponsored by Temple Amateur Radio Club with support from Bell County REACT. Prizes - VE Testing - Dealers - & More. Bell County Expo Center, Belton, TX.



reportedly flooded the basement of the FCC's building (among others).

For more information, call the FCC's Consumer Assistance Branch at 800-322-1117.--FCC

To subscribe to the automatic redistribution of the ARRL Letter, send

Contact Eric, N5WFU (817) 986-1257 or Mike, WA5EQQ (817) 773-3590 or Temple ARC -Ham Expo - PO Box 4511 - Temple TX 76505.

N5TOY

PARC DUES

- A Individual members \$25.00
 - B Associate Members \$ 9.00
 - News letter only
 - C Family membership \$25.00
- Individual member and family at one address.

See Robert, KC5DQK or send to
Panhandle Amateur Radio Club
PO BOX 10221
Amarillo TX 79116

WIN A STEAK DINNER AT THE NEXT MEETING

The next meeting of the panhandle amateur radio club will be held on July 2 at the Southwest Branch of the Amarillo Public Library on 45th Ave. at 7:30 PM The Volunteer Examinations will be held immediately prior to the meeting at 6. Don has tickets for free meals at the Big Texan, Country Pride, and Malcoms to be raffled off to make money for the club.

P A R C JONQUE IN THE TRUNK MINI HAMFEST

8:00 AM July 20 at the parking lot at the club station. Brett says come hungry because there will be plenty of hamburgs. Bring money because there will be plenty to bring home to the ham shack. And fill your trunk. There will be plenty of fellow hams with their pockets jingling ready to buy you out.

A M A T E U R L I C E N C E

Panhandle Amateur Radio Club
PO Box 10221
Amarillo TX 79116



03/03/97 - Individual
 CARL JEANS N5YXN
 6112 CALUMET
 AMARILLO, TX 79106

EXAMINATIONS

Results of last testing June 1 1996
 Well good turn out, 4 showed up to be tested. We now have two new hams and one upgrade. The big news is with posting 610 form direct to W5YI via E-Mail The FCC had new calls assigned by June 3. That is less then 48 hours, will wonders never quit Hi C.U.L. 73's George N5WTW
 Next testing will be at 6:00 PM on July 2 prior to the PARC meeting at the Southwest Branch of the Amarillo Public Library on 45th near Tekla.

From the ARRL Letter

N4T OPERATING SCHEDULE

Ron Quednau, N4GHU, reports a more refined schedule for the Tennessee Bicentennial Station, N4T, at the

Bicentennial Mall in Nashville. He says operators will try to concentrate on the following frequencies: 3.502, 7.002, 7.108 and 14.002 MHZ.

Guest operators and visitors are welcome by appointment. Call N4GHU at 615-532-1711, days, or 615-776-5345, evenings.

A commemorative QSL card signed by Tennessee Governor Don Sundquist will be issued for contacts with N4T. The card bears Sundquist's message: "Let Tennessee Amateur Radio commemorate our Bicentennial with this QSL card." Quednau says similar cards bearing the governor's proclamation are available to all Tennessee amateurs for the Bicentennial celebration.

OL' SOL IS SPOTLESS AGAIN

Sun watcher Tad Cook, KT7H, says there is very little solar activity to report! There was an eight-day run of no visible sunspots at the end of May, but activity has picked up slightly since then. Average solar flux is up about

two points from the May 23 report. Solar flux is expected to drop down below 70 after today (June 14). It isn't expected to rise above 70 until after the first of July.

Geomagnetic conditions are quiet, but some moderate unsettled conditions are forecast for June 16 and 17. Propagation on the upper bands remains depressed. As we move toward summer, 160 and 80 meters are getting noisier. Check 30 and 40 meters during the night for worldwide propagation and 20 meters during the day.

Sunspot numbers for May 30 through June 5 were 0, 0, 11, 11, 13, 23 and 28, respectively, with a mean of 12.3. The 10.7-cm flux was 66.5, 68, 68.5, 68.2, 69.1, 69.2, and 70.7, respectively, with a mean of 68.6.

Get the Oscillator on Line

See it in full color. Send your email address to n4bz@juno.com