Newsletter of the Big Bend Amateur Radio Club K5FD

July 2021 **Alpine, Texas**

July 13 BBARC Monthly Meeting
West Texas National Bank Conference Room
7:30 pm (doors open 7:00)

BBARC Minutes of Meeting

June 8, 2021

The meeting was attended by 18 members and guests.

AI4BA	David	Alpine
K4AAA	Ron	Fort Davis
KA5PVB	Chuck	Alpine
KD5KBU	Jim	Fort Davis
KE5WCP	Stephen	Fort Davis
KFA5FJR	Dane	Fort Davis
KG5LMG	Marvin	Fort Davis
KG5ZHT	Lonny	Van Horn
KG5ZIC	Pamela	Fort Davis
KG5OJV	Nancy	Terlingua
KI5ANQ	Scott	Terlingua
KI5EXF	Sharon	Alpine
KI5OQB	Brad	Terlingua
N5JOE	Jim	Alpine
N5MVV	Angie	Fort Davis
W5NPR	Bill	Alpine
WA5POK	Mike	Alpine
guest	Ken	Terlingua

The meeting was called to order at 7:37 PM by President Stephen KE5WCT.

The minutes of the May 11, 2021 meeting were read and accepted.

Treasurer Angie N5MVV gave the treasurer's report for June. The current balance is $9257.15. Income is from dues $108, ARRL membership $49, dues from PayPal $69.82, and ARRL & FD meals from PayPal $165.96. Expenses were payment to ARRL for dues $159. No phone bill yet this month.

Jim KD5KBU talked about races. No contact with the Permian Basin bicycle club yet for CycleFest held in September. San Antonio Ultra is MLK weekend in January. The BBARC members man the stations close to the race start plus the RV station as net control. Lonny KI5ZHT asked about the organization. For this race, a running store organizes the race and volunteers are San Antonio hams. The race uses 75 volunteers and handles up to 400 entries. Brad KI5OQB asked if the club owns the RV and the race location. The location is the Big Bend Ranch State Park Barton Warnock Center. The club owns the RV.

Nancy KG5OJV asked about the hospital net. The connection to our repeaters is done through the 92 repeater. Angie N5MVV said the repeater was tested and not our problem. It is a problem with the West Texas Connection. A permanent connection is possible. The hospital net is the 1st Tuesday. Nancy KG5OJV asked if BBEN check ins on 2m repeaters are okay. 2m and EchoLink are okay as the net controller has both 2m and HF radios at their station.

There was some discussion on Field Day. Ike Robert's daughter died and he will not be able to attend this year. The stations are manned in 2 to 3 hour shifts and not to be on the same band at the same time. We use high bands at night and low ones during the day. The Elekraft K3 has a very strong receiver and rejects interference, the reason we use them. Also the DSP on the K3 is excellent. Ron K4AAA asked about antennas. A yagi will be on the portable tower. The GOTA station will have a G5RV antenna. The emergency 90'

trailer tower from Jeff Davis county is not available. Ron asked about logging. Yes if possible. Also a question about site prep, Friday the 18th.

The meeting was adjourned at 8:37 PM.

Respectfully Submitted,

Scott McClanahan KI5ANQ, BBARC Secretary

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2 Meter Net Report

June 2021 from Chuck KA5PVB

Our 2 meter net meets EVERY Wednesday at 8:00 PM (local time) on the clubs repeater system network. These are good training grounds for potential emergency situations as well as helping new hams in the area to have an easy way to get use to "talking on the radio"!

Our club website (www.bigbendarc.com) has all the information about our 2 meter net. This includes the Net Control members schedule, the "script" (supplied only as a guide to insure that the important information is given out weekly - you can use it anyway you see fit) and a list of the recent check-in members.

If you have an interest in becoming a net controller, please call me (432/386-8052) or holler during the Wednesday Net. We could really use a couple of extra hands to be NCS! The script and 2m net roster are both posted on the club website for you to download and use as a NCS!

The month of June had five (5) Wednesday's and it went this way:

Date	*Check Ins*	*Net Station*	*Net Ctlr*
June 2	25	KF5KMA	Dan
June 9	20	KI5EXF	Sharon
June 16	18	KI5ANQ	Scott
June 23	17	KG5LMG	Marvin
June 30	17	KA5PVB	Chuck

Monthly total of 101 check-ins.

A hearty thanks to all for your participation in support of our net activities!

If you don't have the time to check-in to the net and participate in the round-table discussion, take a minute of your time and check-in as an "in-and-out" (you're in for the head count, but not participating in the actual net). ALL participation is appreciated and encouraged!

EchoLink System check-ins are as follows:

KI5JTB – Rachel from San Marcos, TX. 3 times

KI5RIC – Ric from Ruidoso, NM. 3 times

W5MOX – Jerry from Double Diamond

W5RHN and K5FRN – Bob and Fran from Crystal Falls, MI. – 4 times

WA5ROE – Bob from Alpine

KD9SLB – Jeff from Sellersburg, IN

KG5ZHT – Lonny from Van Horn, TX. 3 times

KD5KC – Mike from El Paso, TX. 3 times

K5CLO – Gordo from Dallas, TX

KI5EXF – Sharon from Buda, TX

KI5OQB – Brad from Terlingua, TX.

A big THANKS to Scott - KI5ANQ for his work on the EchoLink system, it really sound good and the long time delays seem to be gone!

I want to specifically thank our six (6) Net Control stations for all of their efforts on behalf of the club's 2 meter net for the entire year. It just wouldn't have happened if you were NOT there! Our Net Control Stations are:

KF5KMA - Dan, KG5LMG - Marvin, N5BBJ - Bruce, W5RHN - Bob, KI5ANQ - Scott and KI5EXF - Sharon (substitute, and "possible" future NCS). When you see them, thank them for all their efforts for the 2 meter net.

73,

Chuck Dobbins - KA5PVB
2 meter Net Manager

Big Bend Emergency Net Report

June 2021 from Bob WA5ROE

Date	*Net Station*	*Check Ins*	*Length (min)*	*Remarks*
June 6	WA5ROE	48	40	
June 13	WA5ROE	50	47	
June 20	WA5ROE	52	45	
June 27	W5NPR	47	20	Round table omitted due to Field Day activities

Remember – the BBEN meets every Sunday on 3922 kHz at 8:15 a.m. Central time (either CST or CDT). Visitors are always welcome. Early check-ins are welcome beginning around 8:05 a.m. on 3922 kHz or on the BBARC repeater system or on EchoLink.

Emergency Nets

Mondays .....7:30pm.....ARES section 3873 kHz
Sundays.....8:15am .....BBEN 3922kHz
Sundays.....2:00pm.....RACES state district 8 7255 kHz
2nd and 4th Sundays, listen only

EchoLink Report for K5FD-R

June 2021 from Scott KI5ANQ

Will post the EchoLink report on the web site this month. Be back next month.

Web Site Report

June 2021 from Scott KI5ANQ

Nothing new on the web page other than updates of members, 2m Net report post, BBEN reports, and the front page. The Field Day page will have pictures and scoring results soon.

BBARC Information

Field Day Results Still Compiling

The Field Day submission to ARRL is a compilation of all station log sheets and proof of bonus points. Station logs are either a computer text file in Cabrillo format or hand written log sheets. The hand written sheets are typed in and converted to the Cabrillo format, then all log files compiled together into one sorted list of QSO's for ARRL. Most of the logs sheets are done. Estimated completion is by July 16.

Renew or Join ARRL through the BBARC

Create or renew your ARRL membership through the club, and the club keeps some of the money! This takes about a month, so renewals should be done two months early. Print the **ARRL Membership form** from the BBARC web site home page, fill the form out, write a check payable to BBARC for the membership amount, and mail to the club.

1402 N 5th St, Alpine TX 79830-2512

Payment is also possible with PayPal on the club web site.

ARRL Email Alias

Prepare for the FCC email requirement now with a permanent email address. Many ARRL members have an email alias, which forwards messages to their regular email account. The club's email address is K5FD@ARRL.NET. It is easy to set up with Edit Account on your ARRL profile. Make sure your User Name value is set to your call sign. The User Name can be changed.

Club Dues

Club dues are done in January.

Dues are $36 per year for individual or individual & spouse. Dues can be mailed to the club's address with check payable to the BBARC:

1402 N 5th St, Alpine TX 79830-2512

BBARC and ARRL renewal can be done together with one check. Be sure to fill out the ARRL renewal form found on the home page of the web site.

BBARC dues and ARRL membership payment is now available through PayPal on the club web site.

BBRC Repeater System

The BBARC operates six 2m repeaters, all connected via the hub 147.020. Contact with one repeater transmits from all repeaters. The frequencies are 100 kHz apart on the 2's: 146.62, .72, .82, .92, 147.02, and .12.

All repeaters use standard offsets on your radio for transmissions (negative below 147 and positive above 147. The following frequencies are for receiving (listening) with the offset your transmission frequency.

145.230-.....Emergency Repeater (currently off and stored)

146.620-.....Located at McDonald Observatory, covers Davis Mtns Resort, Fort Davis, Davis Mtn State Park, Davis Mtns, Prude Dude Ranch

146.720-.....Located on Pearce Mtn, covers Alpine, US 67 (frequency is "6.7") East/North, and south to Mile High Road

146.820-.....Located on Christmas Mtn, covers Terlingua, Study Butte, South County Road, Terlingua Ranch, northern half of Big Bend National Park, Old Ore Road

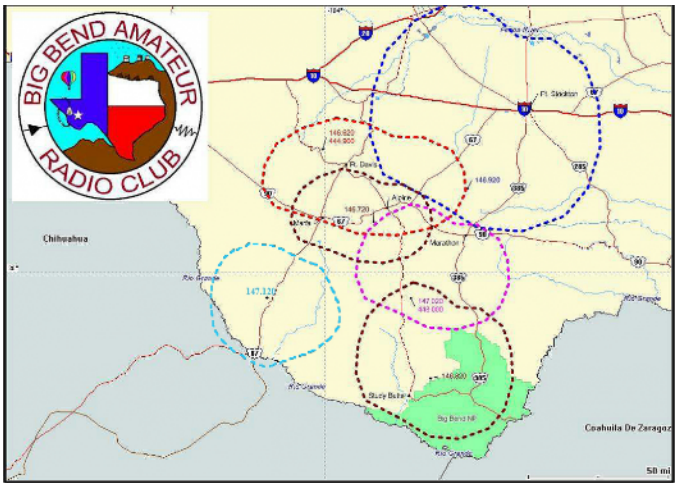
146.920-.....Located on the Glass Mountains, covers US 67 north, Alpine, Fort Stockton, I10 from picnic area 20 miles east of town to US 67 exit west of town, Odessa

147.120+.....Covers Presidio, Shafter, Cibolo Creek

147.020+.....System hub. Located on Elephant Mtn, covers TX 118 South of Mile High Road, O2 Flats (the "O2" frequency), Terlingua Ranch

All repeaters require a 146.2 Hz squelch tone on your transmit signal (CTCSS) and standard offsets. There is a 3 minute timeout. No digital modes, make sure those are off.

The repeaters cover remote areas and should be monitored for emergency calls. 146.520 is the simplex call frequency and the Wilderness Protocol frequency for this area.



EchoLink Station K5FD-R Alpine

Access the 2m repeater system through the club's EchoLink station. Get the EchoLink application on your smartphone or Windows station computer. echolink.org

Club Officers

President .....Stephen Cook.....KE5WCP
Vice-president .....Billy Roberts.....W5NPR
Secretary .....Scott McClanahan KI5ANQ
Treasurer .....Angie Otoupol N5MVV

Club Information

BBARC is an ARRL affiliated club.

Founded December 17, 1974, ARRL affiliate since 1986

The BBARC is a 501(C)3 organization.

Contributions are tax deductible.

Monthly meetings are the second Tuesday of each month unless a special meeting or event.

Meeting location is the West Texas National Bank Building in the center of Alpine at the intersection of state highway 118 and US highway 67. Parking is on the north side of the building. Enter the north side to The Community Room.

Meeting time is 7:30pm CST/CDT.

Annual membership is Jan. 1 to Dec. 31 each year.

Dues are $36 per year for individual or individual & spouse.

Membership allows you to participate in all club activities and vote at the monthly meetings.

Dues can be mailed to Bob Ward WA5ROE at the BBARC mailing address below.

Club Mailing and Email Address

Big Bend Amateur Radio Club

1402 N. 5th St.

Alpine, Texas 79830-2512

K5FD@ARRL.NET

www.bigbendarc.com

The BBARC web site contains a Member exclusive area, news, events, regular reports, Big Bend Emergency Network reports, 2m Net reports, and newsletter archive.

Member is password protected with exclusive member information.

Field Day features upcoming Field Day preparations or pictures and reports of the past Field Day.

Newsletters contains PDF files of The Bark newsletter.

Repeaters has the reference information and coverage map of our 2m repeater system.

Nets has information and reports about our 2m Net and Big Bend Emergency Net.

EchoLink has information about the club's K5FD-R EchoLink station, logs, and setting up EchoLink.

Licensing has contact information for training and testing, and the schedule of upcoming classes and exam sessions sponsored by the BBARC.

About Us provides the officer list, dues information, meeting map and time, and mailing address.

On the right side are the Posts. The most recent are listed first, then the **Posts by Category** drop down menu. Exploring the links from the **Posts by Category** menu is fascinating and contains most of the content of the BBARC website.

The Bark Newsletter

Published monthly on the first of the month.

Newsletters are available by e-mail for members and friends. To be added to the distribution list, submit content, make comments, or add events, send an email to the editor.

Editor .....Scott McClanahan KI5ANQ
contact.....KI5ANQ@ARRL.NET

Big Bend Emergency Net 3922 kHz

Founded September 18, 1977

Meets every Sunday morning at 8:15 A.M. CST/CDT

Controlled net format. Welcomes new participants and visitors.

Established and managed by Bob Ward WA5ROE.
Emergency Net Mgr .....Bob Ward WA5ROE
contact.....K5FD@ARRL.NET.

Big Bend 2-meter Net on Repeater System

Founded July 9, 2008

Meets every Wednesday evening at 8:00 P.M. CST/CDT

Controlled net format. Welcomes new participants and visitors.
Established by.....Bob Ayer .....KA1AAJ (SK)
2m Net Manager .....Chuck Dobbins ...KA5PVB

ARRL News

Email to ARRL Life Members

To keep member records up to date, ARRL emailed Life Members on June 16 and will be sending a follow-up email in the next few days, asking them to verify their mailing address. Be assured that it is a legitimate request sent from ARRL. Thank you to all those who responded.

Wooden Satellite Launched

The world's first wooden CubeSat successfully completed a test flight into the stratosphere in June. WISA Woodsat is constructed using birch plywood panels in a 1U configuration measuring 10 centimeters square. Nine small solar cells will power the satellite, which will orbit at an altitude of 500 – 550 kilometers. The novel spacecraft will carry several amateur radio experiments as well as photo downlinking, including selfies. A goal of the project is to determine how well wood products will perform in space.

During the recent test, a functional model of the WISA Woodsat climbed 19 miles into the sky tethered to a weather balloon. The satellite's camera captured a "selfie" video of the balloon bursting. A parachute deployed to take the nanosatellite back to Earth, where it was recovered intact, lodged in a spruce tree.

The test satellite and a duplicate "spare" version, were manufactured at UPM Plywood's Savonlinna, Finland, factory. The company sells its construction-grade panels under the WISA trademark. The panels were thermo-vacuum dried and processed on a CNC machining center.

The wooden satellite is based on a basic, versatile CubeSat format, Kitsat, which is designed with educational use in mind.

As the sponsor quipped, "WISA Woodsat will go where no wood has gone before. With a mission to gather data on the behavior and durability of plywood over an extended period in the harsh temperatures, vacuum and radiation of space in order to assess the use of wood materials in space structures."

Once in orbit, Woodsat will be able to extend its selfie stick to capture photographs of the wooden box as it hurtles through space at 40,000 kilometers per hour (24,800 miles per hour. This will allow the mission leaders to monitor the impact of the environment on the plywood.

The satellite would downlink its telemetry and images from two cameras using amateur radio frequencies. In addition to testing plywood, the satellite will demonstrate accessible radio amateur satellite communication; host several secondary technology experiments; validate the Kitsat platform in orbit, and popularize space technology.

BBARC News

17m Daily Propagation Net

From Charlie N5CET

The 17m fun net starts at 17:45UTC every day on 18.1575 Mhz.

In a previous newsletter, I shared some of my experiences with Aeronautical Mobiles. I detailed a Parachute contact that with KD9OLN during a jump. I assumed and stated that he was probably linked to the plane. That was not accurate.. He has contacted me with the following correction:

I am not linked to the plane in any way. I exit the plane, I immediately deploy my parachute, then I get to deploying my antenna and I work the airwaves for about 10 minutes. I have the tallest antenna tower in the midwest for 10ish minutes at a time.

Please look for Carlos KD9OLN on the air and catch his next jump.

From the Editor

Field Day is over. Time to plan for next year. The aftermath of Field Day is the scoring and lessons learned. First, let's discuss what worked. The logistics worked, including getting the water fixed and operational. The food was great despite the thunderstorms hitting before both dinners and Sunday breakfast. Power, antennas, and all the radio gear worked, though some stations had to take cover because of the open pavilion. The lessons and preparations for next year are mainly to make things easier. Setting up the antennas did not go smoothly. Field Day is to test our ability to set up in the field for emergency operating, and thankfully, this is not a timed event. Clubs have 24 hours to set up, including thunderstorms. A Shake Down Saturday a month before Field Day might be good preparation for setting up portable stations. Our elected official, Jim Wasserman, got a tour of the frantic work late Saturday morning.

One of the most difficult parts of Field Day is the GOTA station, and we were exceptionally lucky to have Charlie N5CET be the operator. GOTA has more rules than the rest of Field Day, and one rule is that the operator has to be newly licensed since the last Field Day. The practicality of the rules is that the operator also needs to be Extra Class. The club simply needs a new member each year that took all the license tests at once. This is Olympic rules, so we need to be like the Russians and groom GOTA operators from birth, perhaps even genetic cloning. We need to develop next year's GOTA operator now.

The last big lesson learned from Field Day is logging QSO's. ARRL is pushing for computer files and awards bonus points for electronic submission, just like your Federal Income Taxes. Contesters use computer logs and have hundreds of software titles available. Digital modes are especially easy since the computer can read the contact and get the call sign and other information. The contest logging software makes Field Day scoring easy.

Field Day scoring is special because multiple operators are using the same callsign, K5FD, and duplicate QSO's are not counted in scoring. All of the club's Field Day log files need to be compiled into one list with the duplicates removed. A duplicate is call sign, band, and mode all matching. Modes are just CW, phone, and digital, not by every mode we know in ham radio. We now have software to do all this by processing the Cabrillo log files of every station. **The effort next year needs to be to use computer logging for every QSO.**

The slow part of Field Day scoring is creating Cabrillo log files from the hand written log sheets. It takes as long or longer to type up the hand written log than the actual operating. **Computers and computer logging needs to be at every station next year.**

Scott KI5ANQ

Dean WA5MHO, Ron K4AAA, and Steve KI5YG assemble a satellite antenna on Friday, when the weather was perfect and the floors were dry.

Field Day 2021 Special

The Elvis Flag

The fuchsia and black Elvis flag hanging in the Calamity Palace is a relic of the early days of the BBARC. When the Marfa Lights Festival first started in 1986, the BBARC sold 600 hamburgers at a booth as a fund raiser. They were cooked on an open grill, and the booth next door got most of the smoke. At the end, the BBARC crew decided they should buy something from the vendor in the other booth for enduring the grill. The Elvis flag was the decided upon item. The flag has participated in every BBARC Field Day since, so entering its 35th year. Dave N5DO is seen with the flag, the founder of Field Day for the BBARC. Dave has never missed a BBARC Field Day.

Epilog

The hamburger grill was a really good one. It rode back to Alpine in an El Camino. Many of the parts flew out, a great loss to the hamburger booth. The grill is spread along Highway 90 somewhere between the Marfa Lights Viewing Area and Alpine.

The Marfa Lights Festival was a great fund raiser for a few years. The game changed when contract commercial vendors were allowed, and that was the end of local charities participating.

Lonny KI5ZHT and Charlie N5CET talk at the GOTA station. Both have licensed and joined the BBARC in the past year. Charlie made Extra Class and was the 2021 GOTA operator.

GOTA Answer to Why Do Field Day?

Writing press releases and passing out business fliers, there is a curiosity by the public of what is the purpose of Field Day. Most of the time, explaining doesn't capture that one image.

Field Day in The Farmer's Almanac

Bob W5ROE has a theory about Field Day in Alpine. The ranchers look forward to it. The Big Bend country is hard to predict rain. Zero percent chance can mean 80 mph winds and softball sized hail.

Look at that blue sky Friday morning. Glad I took a picture.

Rattlesnakes are known to be in the exact same place on the same day of the year. Thunderstorms are like rattlesnakes, and thunderstorms have this tradition with Field Day. The 2021 BBARC Field Day had a thunderstorm Friday before dinner, another one Saturday before dinner, and the best one predawn on Sunday and raining until after Field Day ended. The experience was much like emergency communications for a hurricane. The ARRL would be very happy to know we had Field Day with realistic conditions. The ARRL should add another multiplier for operating in emergency conditions. Amazingly, the generators never skipped a beat despite sitting out in the rain. Next year's preparation will include sandbags

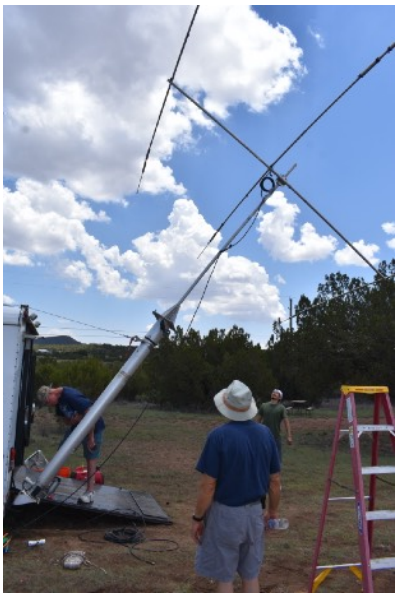
and a gang plank. The calamity of Calamity Palace is its water drainage, or rather, water capture system.

Hand Written Field Day Log Sheets

by Scott KI5ANQ

Reporting Field Day QSOs

The QSOs from Field Day are delivered to ARRL in a computer text file. We get bonus points for doing this and uploading on the ARRL web site. The list is sorted by call sign, band, and mode, in that order. This list is called the Dupe Sheet. We build the ARRL list from Cabrillo log files, a computer text file. The club keeps the Cabrillo files for several years, but does not submit them to ARRL. Kind of like Federal Income Tax, incase we get audited.



A custom computer program, called a Perl script, creates the ARRL list from all the Cabrillo logs at once. The script also creates reports for the log owner and the club. The script does some validation.

The station operators use a computer logger, software that may read the frequency and other information from the radio and create the Cabrillo log. This is the way to go. Three K5FD operators turned in Cabrillo logs - Mike WA5POK, Cheryl KM4TYV, and Steve KI5YG. Mike operated CW, and the computer can decipher CW to automate the call sign in the logging software. Cheryl operated PSK31 and FT8, digital modes, and the computer can decipher the contact from digital modes. Steve did SSB and had to type the QSO into the logging software while talking and operating the radio. I think that is 5 arms and hands.

Hand Written Log Sheets

The other method of logging is by hand. A paper form lists QSOs one per row with the information in columns. Getting the hand written list to text requires manually typing each QSO, then getting the text to Cabrillo format. The optical character recognition (OCR) found in most products (Acrobat) only recognizes printed fonts. Hand writing to text recognition is not easy. Writing on a tablet recognizes the strokes for the letters. An image of hand written text, even if printed, has to decipher the graphics, much like the "I'm Not a Robot" tests when ordering online.

Entering Log Sheets into the Computer

The big lesson from Field Day is how to type in the hand written data. Here are some tips.

1. Scan high resolution (600 dpi) color image of each log, preferably to PDF format. Grayscale may work, too. The goal is readability on the screen and to zoom the image.
2. Use a spreadsheet to enter the data. Have the spreadsheet window the right half of the screen (full height, half screen width). The columns will be frequency, mode, UTC, call sign, station class, ARRL region abbreviation, and notes.
3. Use a viewer, like Acrobat, for the image. Get the Acrobat window full height/half width also and place on the left side. Get both spreadsheet and Acrobat windows up at the same time and next to each other. There will be lots of looking at the image and typing in the spreadsheet, plus scrolling the image.
4. Use one spreadsheet per day, so only the UTC is needed. Work down the UTC column and type the times.
5. Next, work the frequency and mode, which may be easy with lots of duplicating.
6. Now run down the row of call signs using the UTC to keep track. Each pass will verify the previous data, so you will find or fix UTC errors.
7. Do the station class column. Can put caps lock on and just type with the left hand as all the characters are over there.
8. Last is the abbreviation, and this is easy, too. The autocomplete feature of the spreadsheet will help. Each pass visits the data in the PDF image, so the data entry gets a thorough validating.

Save early and often, remember Leisure Suit Larry?

Print the spreadsheet so you have a good copy to verify against the original (desk check).

The Next Step Next Time

How do you get the spreadsheet into Cabrillo format? That will be in Part 2 next month.