

Feedline



www.qsl.net/n4nc/
N4NC@arrl.net

The Voice of The Cary Amateur Radio Club N4NC

July 2001

AO-40 Achieves a New Orbit

NEWINGTON, CT, Jul 5, 2001--AO-40 now is in a new orbit. Recent efforts to raise the satellite's orbit at perigee--its point closest to Earth--were somewhat more successful than originally anticipated. Ground controllers had planned to lift the perigee from 280 km to around 500 km. Successive firings of cold arcjet ammonia fuel resulted in an orbit that's 851 km at perigee, however.

"Indeed, the good news is that AO-40 is now in a safe and stable orbit!" said AMSAT-DL President Peter Guelzow, DB2OS, on behalf of the AO-40 team. "The bad news: All 53 kg of ammonia probably has been used up." This means further orbital adjustments--at least using the arcjet--are unlikely. Guelzow said ammonia stopped flowing after orbit 302, "and the pressure indicators in the telemetry show no more pressure in the motor and in the ammonia tanks, while the perigee clearly is higher than anticipated."

AO-40's height at apogee--58,971 km--was unchanged by the orbital adjustment.

Guelzow said stored telemetry was being downloaded and analyzed. Shut down prior to the start of the orbital adjustment, AO-40's transponders remain off the air. They will stay off as ground controllers adjust the satellite's attitude using on-board magnetorquing. The spacecraft's attitude will be moved back to ALON/ALAT 0/0 as soon as possible and command stations currently are preparing for magnetorquing, Guelzow said.

AMSAT-NA President Robin Haighton, VE3FRH, has said it's hoped that a slightly higher perigee for AO-40 will eliminate the effects of what he described as "a mysterious force" that alters the satellite's attitude when it comes through perigee. One theory, he said, is that atmospheric expansion caused by the current sunspot cycle peak was influencing the satellite's orbit in some way. The higher perigee should eliminate any atmospheric impact.

For more information on AO-40, visit the AMSAT-DL Web site or the AMSAT-NA Web site.--
thanks to AMSAT News Service

(www.arrl.org website)

Editor's Note: If anybody has information concerning the mechanical operation of a satellite, please send to waa4ke@earthlink.net. This information should include information on fuel, magnetorquing motor operation, etc.

The Annual Cary Amateur Radio Club Midsummer Swapfest is always the third Saturday in July.

The 2001 Swapfest will be on July 21, 2001 at the Cary Community Center at the intersection of Academy Street and Chapel Hill Road. This is one block from the Cary Amtrak station.

Contact Will Harper, K4IWW (k4iww@attglobal.net) for more information (including vendors and tables).

"Mister Guitar," Chet Atkins, W4CGP, SK

NEWINGTON, CT, Jul 2, 2001--Guitar picker, music legend and Amateur Radio operator Chester B. "Chet" Atkins, W4CGP, of Nashville, Tennessee, died June 30. He was 77. Atkins reportedly died of cancer complications. Known as "Mister Guitar," Atkins hailed from East Tennessee. He began his musical career playing fiddle, but later earned his reputation as a guitarist. He went on to become the most-recorded solo instrumental musician in history.

Formerly WA4CZD, Atkins, a General licensee, obtained the vanity call sign W4CGP in 1998—the suffix standing for "certified guitar picker." He was an ARRL member. He won 14 Grammy awards during his career and was elevated to the Country Music Hall of Fame in 1973. He was presented with a Lifetime Achievement Award in 1993 by the National Academy of Recording Arts and Sciences in part to recognize his guitar-picking technique as well as his wide influence on music. He had more than 100 albums to his credit. Nashville has continued to recognize Atkins' contributions with an annual "Chet Atkins' Musician Days" festival, which benefits the Chet Atkins Music Education Fund. A Nashville street in the Music Row area also is named for him, and a statue of Atkins was erected last year in downtown Nashville. The Chet Atkins Appreciation Society holds a four-day convention each year. For more information on Chet Atkins, visit the Chet Atkins, Mister Guitar Web site. 05/25/01 ARRL News Bulletin

Editor's Note: The BrightLeaf Amateur Radio Club newsletter "HamChatter" also had an article concerning Chet Atkins. In the article, it was stated that Susan Jones, WA4AKB, had a QSO with Mr. Aktins and also, stated that Mr. Aktins previously worked at WPTF-AM.

FIELD DAY NEWS

After some site searching, we were able to secure Bond Park for another wonderful Field Day Event. This year's Field Day Event was a combined effort between N4NC and W4ATC, NCSU amateur radio club, which proved to be successful with regard to teamwork and cooperation. We



also had assistance from new hams, visiting operators and a summer school student from out of state. Around midnight Saturday, a large downpour tried to hamper the efforts of the group but operators continued to make contacts and the rain finally subsided around 2 am. Preparations should start immediately for planning Field Day 2002 and especially to explore sites other than Bond Park. A back-up site would be especially beneficial if the primary site is unavailable. Preliminary field day tallies have indicated a slightly higher score from the previous year. A majority of the points

resulted from an excellent CW operation. Also, bonus points were obtained from the majority of the bonus point categories. A breakdown of the contacts made are listed below:

BAND	CW QSO	CW QSO PTS	SSB QSO	SSB QSO PTS
160	3	12	0	0
80	102	408	105	210
80N	0	0	0	0
40	466	1864	213	426
40N	0	0	0	0
20	329	1316	237	474
15	185	740	143	286
15N	0	0	0	0
10	5	20	7	14
10N	0	0	0	0
6	1	4	52	104
2	0	0	2	4
	1091		759	

1850 Total QSO; (4364 CW QSO PTS + 1518 SSB QSO PTS) + 1000 BONUS = 6,882

CARC Minutes – 21 June 2001

The June meeting of the Cary Amateur Radio Club was held on 21 June 2001. The meeting was opened by Mike, WA4KE. Introductions by the attendees was done. The meeting took place at Bond Park, the site of the Field Day Event.

During the meeting, the set-up and operation of the Field Day Stations were discussed and positions for antennas were walked out.

Also, the Swap Fest was discussed and the next meeting of the CARC will be July 20 at the Cary Community Center to prepare for the Swap Fest on July 21. Will Harper stated that set-up would start around 1800 EST, and the set-up would consist of arranging tables and assisting vendors.

A regular meeting will be held July 26 at the White Plains Methodist Church to discuss Field Day results and Swap Fest financial tally.

SHORTWAVE CORNER - HCJB World Radio

HCJB World Radio, the world's first missionary broadcast organization, has been touching lives around the globe for nearly 70 years. Together with its local partners, HCJB World Radio now has ministries in more than 90 countries and broadcasts the gospel in more than 100 languages and dialects.

On Christmas Day 1931, from a makeshift studio inside a sheepshed high in the Andes of Ecuador, HCJB--the world's first missionary radio station--went on the air with 200 watts of power. Inside the shelter sat Clarence Jones and Reuben Larson, two Americans with a vision to reach the world. Today HCJB World Radio's ministries truly span the globe, proclaiming the good news using international shortwave, local radio stations and satellite program delivery, as well as training, healthcare, technical services and television program production.

HCJB World Radio operates one of the world's largest shortwave radio stations. Broadcasts go out from Quito, Ecuador, in 12 languages and 22 dialects, and the station receives thousands letters from listeners in 115 countries each year. We work with other missionary broadcasters in the World

by Radio goal to make gospel broadcasts available to everyone in languages they can understand by the end of the year 2000. Programs are also aired from other international broadcasting sites such as Seychelles, Swaziland and the U.K.

Making the broadcasts from Ecuador possible is a highly qualified engineering staff. Shortwave broadcasts are powered by a hydroelectric plant in Papallacta that harnesses energy from Andean lakes and rivers. The Loreto Hydroelectric Project which is presently under construction will add to the generating capacity of our system. The transmitter site in Pifo features 11 shortwave transmitters, ranging in size from 10 to 500 kilowatts. Staff at the Engineering Center in Elkhart, Ind., design and build antennas, high-power shortwave and low-power FM transmitters as well as recording studios. These are installed at sites around the world.

For more information visit www.hcjb.org/index.php

Article Contributions and Suggestions

PLEASE send any article contributions or suggestions to Mike Lewis, wa4ke@earthlink.net.