



# THE OHM TOWN NEWS

*Voice of the Bridgerland Amateur Radio Club*

SEPTEMBER 2001

<http://www.barconline.org>

## Ongoing Summer Activities

### PRESIDENT'S MESSAGE

I can't believe that it is September already and the kids are back in school, and summer is shot, and I haven't even got my spring work done yet. It won't be long before we are worrying about ol' Jack Frost getting our green tomatoes.

We will resume having club meetings on the second Thursday of September, which falls on the 13<sup>th</sup> and it will be a picnic at the Merlin Olsen Park. See You all there. VEs please remember the exam session scheduled for the 8<sup>th</sup> and if possible come out to help. We have had some excellent activities this summer and still a few good ones coming up. Thanks to all who have participated to make these events work. Thanks to the repeater committee for their efforts in keeping the system running.

73, Jim K7OA

### VE Test Session

Coming up at 8:00 a.m. on  
September 8, 2001  
All tests given,  
walk-ins welcome  
At Campbell Scientific Inc.  
815 West 1800 North  
Logan, Utah

### HAM PROFILE

By Boyd Humpherys W7MOY

We'll all see a new face this year helping out with LATOJA. None other than one of the Smithfield contingent, Cline Hendrickson, K7KE. Smithfield seems to have a greater than normal concentration of Hams, not sure why that is, perhaps the place is Ham user friendly, no tower restrictions, no power limits, no quiet hours, everyone wanting to help you erect all sorts of sky wires, all the neighbors bringing in doughnuts and buttermilk!!!

Cline claims central Utah as his birthplace, a quiet hamlet called Glenwood. OK guys get the atlas out and pinpoint the spot. He surmised the population might be just shy of 200 or so. He attended schools in Richfield, then a brief skirmish with the Redskins at the U of U.

He got his ticket back in about 60 with an upgrade to extra in 65. He's been involved in BARC

nine years or so, with field days, and Jamboree of the air. His tools of the trade are a couple of hand helds, a Hallicrafters SR400A, (remember the rigs with the glass bottles inside), and a Kenwood HF rig. He tells an interesting story of a newly installed tower and beam erected a few years back, it had been

*(Continued on page 3)*



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## SOME UPCOMING EVENTS

**September 13 BARC Club Meeting**  
6:00 P.M. Merlin Olson Park

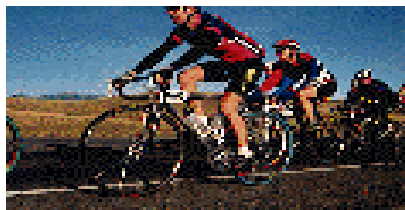
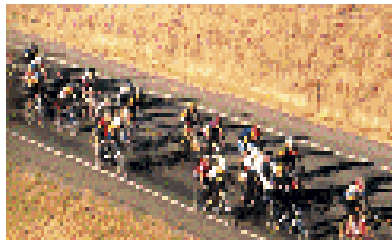
**September 15 LOTOJA Bicycle Race**  
The famous Logan To Jackson bicycle race

**September 22 Top Of Utah Marathon**  
Foot race from Hardware Ranch in Blacksmith Fork  
Canyon to Merlin Olson Park in Logan

**September 29 Bear 100**

**October 20-21 JOTA**

To sign up to help with events or for additional info contact:  
Tyler Griffiths N7UWX Phone: 752-7269  
or check the web site: [www.barconline.org](http://www.barconline.org)





==>KD5OPQ HEADS NEW ISS CREW

The guard is changing this week aboard the International Space Station with the arrival of the Expedition 3 crew headed by Frank Culbertson, KD5OPQ. Culbertson and his Russian crewmates-Mission Pilot Vladimir Dezhurov and Flight Engineer Mikhail Tyurin-arrived August 12 aboard the shuttle Discovery.

The Expedition 3 has taken over the space station and the Expedition 2 crew has moved to the shuttle Discovery in preparation for their return trip to Earth. A formal change-of-command ceremony was scheduled for Aug 17.

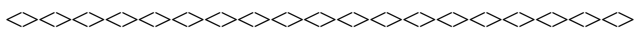
Culbertson, 52, rejoined the corps of active astronauts after desk duty as a NASA executive. He is a former shuttle commander. Before deciding to return to space, Culbertson was the program manager for NASA's Shuttle-Mir program, which saw crew exchanges that put US astronauts aboard the Russian space station and Russian cosmonauts aboard US shuttle missions.

The Expedition 2 crew of Commander Yury Usachev, RW3FU, and US astronauts Susan Helms, KC7NHZ, and Jim Voss, has been in space since March. Their departure comes about a month later than originally anticipated because of problems with the ISS robot arm. By the time the shuttle returns them to Earth August 22, they will have spent 167 days in space. Helms has admitted to having mixed feelings about leaving the ISS.

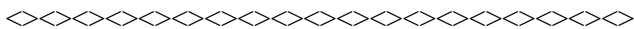
During their stay, the Expedition 2 crew managed to fit in 14 Amateur Radio on the International Space Station (ARISS) contacts with youngsters on Earth-including one with Scouts attending the Boy Scout Jamboree in Virginia. Helms also conducted the first ARRL Field Day operation from space in late June. The Expedition 3 crew is expected to also be active in the ARISS effort. The tentative schedule calls for contacts later this month with the Kopernik Space Education Center in New York, as well as contacts with Altamonte Elementary School in Florida.

More information about the launch of STS-105 and the International Space

Station is available on the Web, <<http://spaceflight.nasa.gov>>.-NASA



Never argue with an idiot. They drag you down to their level then beat you with experience.



Answers to questions on page 6:  
1-B, 2-A, 3-C, 4-B

(Ham Profile Continued from page 1)

cranked up 40 or 50 feet or so. Even a beautiful star on top at Christmas time. Along came a hairy windstorm and you guessed it, terrible things happened. After surveying the pile on the ground, he repented of such activity for a spell. Ted McArthur finally volunteered to salvage the structure and we haven't heard from his neck of the woods as to how the resurrection process is coming. The wind probably doesn't blow in the South end of the valley, we might just see another cloud scraper over in Paradise.

Cline spent a stint in the Army in 62 at the polite invitation of Uncle Sam with a tour of duty in Germany. He mentioned that they liberated one of the underground V2 missile sites on the North coast of Germany, apparently un-detected and undamaged. Von Braun, their missile genius, some of his cohorts and the prize of a pile of V2 technology promptly came to the US, ending up at White Sands, and was the beginning of a huge missile program in years following. When asked if he had mastered the German language, he responded with "just enough to get me in trouble". That's OK Cline, some of us manage to do that with English.

Cline spent quite a few years involved in the electronics and instrumentation end of the nuclear activities in Nevada in the 50s, probably closer than most of us would like to be, witnessing the undescrivable energy of nuclear fission. One experiment of great interest which some of you may remember was the concept that the force of nuclear explosions could be used to excavate areas for canals and waterways. Cline described the results of one such experiment. A huge crater about 1200 feet across and 200 to 300 feet deep, that's a lot of dirt to come out of a hole in a fraction of a second. Most of their observations were at distances of 5 miles or so, even then, most were jarred off their chairs. Just like rare DX.

Cline married his High School sweetheart, Judy Stillman, also a Utah Southerner, they have 8 children, five boys, three girls, all married. Judy passed away about three years ago.

Cline indicated the enclosed picture was taken at a birthday party, his 39th., as he recalls, at a family get together in CA a couple of years back.

Cline also spent a wild year or so managing a field crew in the oil drilling business across the west, also spent a few years with Auto Liv, retired in Jan of this year. Now we'll get to know him a bit better and he can share his know how with this group of upstarts.

Welcome to the mob, cline, no monkeying around with e=mc2, however!!! 73s.



From ARRL Headquarters  
 Newington, CT August 17, 2001  
 To all radio amateurs

**SB SPACE ARL ARLS016  
 ARLS016 AO-40 Attitude Control System**

**Appears Functional**

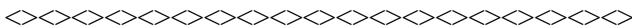
The commissioning of the AO-40 satellite took another giant step forward this week as ground controllers reported success in testing the spacecraft's attitude control system—the momentum wheels. AO-40 controllers hope to use the momentum-or "reaction"-wheels to aim the satellite's antennas and, eventually, its solar panels. The testing paves the way for possible deployment of the solar array and better signals on the ground.

"We can say with some caution that we have a working three-axis control system!!!" enthused AMSAT-DL President and AO-40 team member Peter Guelzow, DB2OS, in a posting to the AMSAT bulletin board. Until now, AO-40's attitude has been under "spin control."

The three-axis control offered by the momentum wheels will mean much more positive attitude control from the ground anywhere in the satellite's orbit.

After preliminary tests to energize the momentum wheels earlier this week, ground controllers Stacey Mills, W4SM, and James Miller, G3RUH, ran them up to more than 100 RPM Aug 16 during orbit 365 and left them at this speed for about a half-hour. Telemetry before and after the spin-up, once the solar sensors re-locked, showed that the system appeared to be working properly. The momentum wheels are designed to run at a nominal operating speed of 1000 RPM.

"More tests will be done over the next few weeks, before we will transfer the spacecraft from spin stabilization into three-axis stabilization," Guelzow said.



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**==>AO-40 GIVES EARTHLINGS ANOTHER SCARE**

Sighs of relief were heard around the world as the 2.4-GHz S2 beacon aboard the AO-40 satellite reappeared August 28 after an ominous absence. The beacon failed to return as scheduled on Orbit 381 after the RUDAK connections shut off.

Gunter Wertich, DF4PV, who is equipped for moonbounce work, reported hearing normal telemetry blocks very weakly, however, so ground control-

lers were assured that the onboard computer had not crashed. Ground controller Stacey Mills, W4SM, suspected—correctly, as it turned out—that a solid-state matrix connection had not properly latched up and that DF4PV was hearing “bleed through” of the middle beacon through the IF matrix.

When the satellite came into view at Mills' Virginia location, he manually cycled the middle beacon-to-S2 transmitter connection off and on, “and the middle beacon popped back up.”

According to Mills, the beacon glitch has occurred before and may be related to critical software timing issues. “This event will be studied further, and we will watch closely for several days to see if this occurs again,” he said. If it does, ground controllers will try to make changes to the spacecraft's software to prevent a recurrence.

AO-40's S1 transmitter recently failed after only a short time of operation. Attempts to restore it have failed.

The RUDAK has been turned off temporarily, but the schedule will remain in place. For now, there will be no middle beacon and no RUDAK from MA0 to 44. AMSAT-NA says AO-40 is entering a long period during which the Earth eclipses the sun near perigee. During September, eclipses will peak at 85 minutes. In order to conserve the batteries the S2 transmitter, including the middle beacon, will be off from MA 220 to 250. The on/off times will be adjusted as the eclipse periods change. Eclipse periods will continue well into June of next year.



**==>NORTHERN CALIFORNIA ARES ACTIVATES FOR “OREGON FIRE” EMERGENCY**

Northern California members of the Amateur Radio Emergency Service this week assisted with communication at the “Oregon Fire” emergency near the historic town of Weaverville in Trinity County. The fire, named for nearby Oregon Mountain, caused the temporary evacuation of around 1000 residents. Sacramento Valley (North) Section Emergency Coordinator Dave Thorne, K6SOJ, reports that more than a dozen trained volunteers were providing emergency radio communication and other support for the American Red Cross and the California Department of Forestry and Fire Protection.

Emergency Communication—or EMCOMM—stations were set up at Red Cross evacuation centers near Weaverville and at the Red Cross Shasta Area Chapter Headquarters. Team members—who are also registered with the CDF's Volunteers in Prevention, or VIP, program—helped CDF officials at the fire





## Questions for Extra Class License

- 1.(E1B09) If an amateur antenna structure is located in a valley or canyon, what height restrictions apply?
- A. The structure must not extend more than 200 feet above average height of the terrain
  - B. The structure must be no higher than 200 feet above ground level at its site
  - C. There are no height restrictions since the structure would not be a hazard to aircraft in a valley or canyon
  - D. The structure must not extend more than 200 feet above the top of the valley or canyon
- 2.(E1D09) What type of emergency can cause limits to be placed on the frequencies available for RACES operation?
- A. An emergency in which the President invokes the War Emergency Powers under the provisions of the Communications Act of 1934
  - B. An emergency in only one state in the US would limit RACES operations to a single HF frequency band
  - C. An emergency confined to a 25-mile area would limit RACES operations to a single VHF band
  - D. An emergency involving no immediate danger of loss of life
- 3.(E1E06) What term does the FCC use for space-to-earth transmissions used to communicate the results of measurements made by a space station?
- A. Data transmission
  - B. Frame check sequence
  - C. Telemetry
  - D. Telecommand
- 4.(E1G10) Who may prepare an Element 2 amateur operator license examination?
- A. A VEC that selects questions from the appropriate FCC bulletin
  - B. A Technician, General, Advanced, or Extra class VE or a qualified supplier that selects questions from the appropriate VEC question pool
  - C. An Extra class VE who selects questions from the appropriate FCC bulletin
  - D. The FCC, which selects questions from the appropriate VEC question pool

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PO BOX 111  
PROVIDENCE, UT 84332**

*September, 2001*

### *Some Contents...*

Presidents Message .....	1
Ham Profile: Cline Hendrickson.....	1
Club Officers.....	2
Summer Activities .....	2
ARRL Bulletins .....	3, 4, 5

