

SIERRA NEVADA UNIT, WBCCI

APRIL 2007 *Airstreamers* NEWSLETTER

<http://sierranevadaairstreams.org/snu/index.html> 775-972-5011



March Rally What a difference a year makes! Instead of snow and wind chill factors low enough to give you frostbite, we had sunny skies, very little wind, and, for the most part, shirtsleeve temperatures for our first rally of 2007 at Washoe Lake. SNU members Gary and Anita Haskett and Dave Gmur weren't able to bring their trailers but they came out for visits. It took Randy and Vicki a day to recover from their grueling, long eight mile trip from their front door to the rally site. Other attendees included Jerry and Dyann Thornburg, Clint and Kathy Norrell, and Anita, Bryan and Diane Leipper. The Norrell's arrived Friday night just in time for dinner. We welcomed them, they got parked, and we made sure they had plenty to eat. Jerry had fixed some great tacos, Randy and Vicky had hot pastrami, and Diane made a beef stew so there was lots of variety.

Saturday we had our big BBQ lunch with chicken, hot dogs, and hamburgers. Jerry tried exerting executive privilege to get more of the grill space for his hamburgers but it didn't work. He had attempted to exert executive privilege earlier, also to no avail. When it comes to the business of the SNU he does get our attention and respect though so I guess all is well. We spent the weekend relaxing, catching up, checking out our rigs, helping the Norrell's get acquainted with their new Bambi, discussing the upcoming rallies, watching the hawks who were nesting again this year in the tree near the rally site, visiting with people who stopped by check us out, and enjoying great meals and evening campfires. We all look forward to our rally at Lahonton and hope to see more of our members there. To see pictures of the rally go to: <http://www.sierranevadaairstreams.org/snuze/index.php?cat=14>

Lahonton, Here we come! Thursday April 19 through Sunday April 22, 2007 are the dates for the SNU rally at Lahonton Reservoir Nevada State Park. The rally site will be beach 7 at the end of the paved road. It is an SNU category 3 rally site. The cost is \$5 per night per vehicle SNU kitty kall plus the appropriate Nevada State Park camping fee. Members & guests welcome. New Member, Don Williams will be giving an informative presentation most likely on Saturday after our short board meeting which is open to everyone. Enjoy the peace and quiet of lakeside camping, fishing and boating, hiking and good bike riding possibilities. As usual, bring firewood for our campfires. Arrival time - anytime after noon on Thursday April 19. For more information go to: <http://sierranevadaairstreams.org/snu/2007/events/07ap-lahonton-index.html>



March SNU Rally at Washoe Lake



What we do best!



Randy's photos from the gazebo lookout on a nearby hill



The President's Ramblings

We just had a very nice rally at Washoe Lake. The participation was very good, for a total of five rigs. I would again like to welcome Clint and Kathy Norrell and the brand new 19 foot Bambi, from Colfax Ca. who joined the unit at the rally. I would also like to welcome new members: Anthony and Dawn Placencia from Ridgecrest Ca. Also dropping by was Darryl and Sharon Van Dorn, and Marilyn Johnson all of Reno. I have friends that used to live in Hawthorne that moved to Ridgecrest years ago, and for those that do not know it they used to have a very nice drag strip there that I used to race at. The year and the Unit are looking up, with many places to go this year and the membership growing, I think we are on the right track.

The business part of the rally included the proposed changes to the Units bylaws and constitution. After some discussion it was agreed that the Keep It Simple route was the way to go. Please look at the enclosed copy of the bylaws and check the web site to read the changes along with the reasoning. Let me know via phone or email if you agree or disagree. This updating is required by WBCCI for Ohio state government for incorporation.

On another note, I received a letter from Verizon telling me that the drop dead date for analogue service was February 18, 2008. Living out here most of you know that digital service sucks in a lot of the areas we go to. Just not enough power to get out. I have maintained one of the original cell phones in my truck for use in the outlying areas do to the fact it is a full 5 watts. With that in mind I did a little research on trying to get more power from my cell phone. To that end I found a company called Hawk Express. Actually the manufacturer of the products gave me their phone number. Hawk Express has a line of products that will take our regular cell phones and increase the power out to up to a full 3 watts. These are amplifiers or in some cases wireless repeaters. I am going to purchase a kit for use in my truck and also allow me to move it to my trailer. The price tag can get a little pricey, from about \$250.00 to over \$500.00. They also have a 1 to 2 watt bag phone. The lady that I spoke to was very pleasant and helpful. Her name is Janice Grice, [JaniceG@pcicorp.com]. You can see the products at hawkexpress.com or call 877-677-0567.

Well I have been told to get this in so the newsletter can get out. So see you at the next rally or when you can make it.
Jerry Thornburg, President

SNU calendar now online The purpose of this interactive calendar will be to post the rallies but more importantly, it will be a place where members can add their own upcoming trips.

<http://sierranevadaairstreams.org/snu/index.html>

If you are planning a trip to other parts known and unknown and would like to encourage other SNU members to join you, you will be able to post the information on the calendar. If you have dates and information to add, contact the SNU at hq@SierraNevadaAirstreams.org and we will help you register and get started.

Welcome to our newest members

Anthony and Dawn Placencia live in Ridgecrest, CA. They have a 1955 Cruiser. Here is what Dawn said by way of introduction "A little info on my husband and I. We live in Ridgecrest California, a little town in the middle of nowhere. It is about 200 miles south of Bishop. Anthony is 26 and I am 25. We have been married almost four years and our only children as of now are two dogs, Bitsy a 7 yr old Chihuahua and a 5 yr old Rottweiler. I am a nurse and my husband does construction. We LOVE to camp and fish We go up to the Bishop and Lone Pine area a lot, as well as Lake Isabella." We hope to see Anthony and Dawn at a rally soon.

Clint and Kathy Norrell of Colfax, CA chose the SNU rally at Washoe Lake as the maiden voyage for their 2007 Bambi. Here is what they had to say. "Thanks to one and all for the warm reception we've received to 'Streamin'. We wanted our "retirement get-away" to be the smallest self-contained unit we could find which had a fixed bed and dinette . . . and that I could stand upright in. We got all we wanted and more. We're developing a true affection for our Bambi, and the AS community has opened a new world beyond solo camping. As the possibilities unfold, I get excited, like every day is Christmas Eve. "

Thank you Randy

Randy Grossmann has taken on the job of getting public service announcements of SNU rallies in local media outlets. As part of this task he has been updating our list of contacts. If anyone sees an SNU announcement in any local paper we would appreciate you saving it and sending it to the SNU for our archives. PSA's have been our second largest source of contacts and largest source of new members. Referrals from WBCCI are the primary source of potential member information. Thank you Randy for taking on this important task.

Remember you can now pay your rally kitty fees on-line!
<http://sierranevadaairstreams.org/snu/2007/payonline/snu-shopping.html>

Upcoming events

* Thursday – Sunday May 17 – 20 2007 Ramhorn Springs BLM campground north from Susanville on U. S. Highway 395 approximately 45 miles. No fee campsite 3 day Rally, members & guests welcome. Board meeting Saturday open to all. This is a good area for hiking, bird watching and just relaxing. Arrival time - anytime after noon on Thursday May 17

* Thursday – Sunday June 14 - 17 2007 Unionville - I80 east from Reno, near Lovelock NV, unstructured site in the old mining town of Unionville. 3 day Rally, members & guests welcome. Board meeting Saturday open to all. Activities available exploring Unionville, nearby fossil area, hot springs, horse back riding, bike trails, and hiking. Special Brunch at Old Pioneer Garden. Arrival time - anytime after noon on Thursday June 14

Installing Solar panels on an Airstream Don Williams recently made a presentation on the solar power installation in his and his wife Gail's Airstream trailer for the Lucky Henderson Chapter of the Quarter of the Century Wireless Association (QCWA) in Riverside, CA. Many of the QCWA members, Ham Radio Operators with more than 25 years of experience in the hobby, were not familiar with Airstreams. Some even asked, you guessed it, "Do they still make Airstreams?" Don's program answered this question, showcased the hobbies he hoped to share with his wife Gail during their retirement years, their transition from camping, motorcycling and RVing to Airstreaming, the need for solar power and their experience in the installation in their 25' CCD.

Don and Gail will present their program at Lahonton, their first Sierra Nevada Unit rally. Join us there for their program and where it could lead he and Gail as they 'Stream off in search of new adventure.

Don writes: My wife and I enjoy boondocking and camping in our Airstream at local, state and national parks that don't typically have hookups. We purchased a Honda EU3000is generator for those times when we might want to run the air conditioner or the microwave but otherwise prefer to operate on battery power.

Research

I looked at several sites on the Web that offered solar panel systems/ kits for RVs and chose the 260 watt DC3 RV solar power kit from Solartron Technologies in Victorville, CA. Our previous Airstream, a 22' CCD, had a 50 watt panel on it and I wanted more charging capacity, especially during low light conditions. Solartron had solar kits up to 520 watts of charge capacity and a 2500 Watt inverter to power heavy 120 volt loads for those that can't leave anything at home.

Don provides an excellent detailed description of his solar panel system installation. If you are interested in installing solar panels yourself, see the excellent presentation at: <http://sierranevadaairstreams.org/owners-guide/maintaining/energy-power/solar-kd6uvt/index.html>
An abridged version of his article is on the next two pages.



Campfire at Sept '06 Lahonton Rally

Lahonton Rally Location: Coming from Reno, Fernley, Carson City, or Fallon areas at the Silver Springs junction go south on US 95 alternate towards Yerington. A few miles out of Silver Springs turn left on the road to Lahonton. The turn off is well marked. Follow the road to the entrance to Lahonton recreational area. Turn left and go past the entrance shack and dump station and continue to follow the road around the north west side of the reservoir to the end of the paved road. The SNU rally will be at Beach 7 to the right just after leaving the paved road.

Solar Power Installation for 25' Airstream CCD

My wife and I enjoy boondocking and camping in our Airstream at local, state and national parks that don't typically have hookups. The Group 27 battery in our old motor home would last 4 full days with intermittent use of the furnace in the evenings, however, we found out what most of you know. Modern appliances in our Airstreams have a lot of parasitic electrical demand. We can squeak out 3 days with the two Group 24 batteries and careful use of power but not with frequent use of the furnace. We decided to install a solar charging system so that we could extend our stays somewhat indefinitely.

I chose the 260 watt DC3 RV solar power kit from Solartron Technologies in Victorville, CA. which included:

- Two Kyocera 130 watt photovoltaic (PV) solar panels rated 7.39 amps at 17.6 volts with a 25 year warranty;
- Two US made flat solar module mounting kits with stainless steel mounting hardware;
- A US made BZ Products MPPT250250 Watt high efficiency Maximum Power Point Tracking charge controller with a 5 year warranty;
- 25ft of sunlight resistant wiring;
- 25 amp inline photovoltaic fuse and instructions;
- Electrical box with 15 and 30 amp DC circuit breakers (optional).

After confirming the kit was complete located the yellow and green wires pre-installed by Airstream for solar power. The photovoltaic end was terminated in the lower part of the refrigerator space accessed from the outside hatch on the side of the trailer. The battery end was a coil of wire near the 12 volt power bus under and behind the sofa against the front wall of the trailer. The next step was to locate where the charge controller will be installed, in our case on the street side of the shelf between the sofa and the front of the trailer. Lastly I made detailed measurements to locate where the PV panels will be

installed on the roof, between the air conditioner and the rear roof vent.

The width of the PV panels required that I carefully measure and layout where they would be located. I loose fitted one panel on the roof in both planned locations to make sure they would fit between the refrigerator vent on the street side and the awning rail on the curb side. Loose fitting the panel identified several issues that needed to be addressed. The curved roof of the Airstream had to be considered in the installation. The electrical junction box on the back of each panel would almost touch the roof. Secondly the bottom of the mounting brackets did not sit flat on the roof. Lastly the mounting holes in the panel frame didn't line up with the spacing of the ribs or spars in the Airstream roof.

My examination identified one more issue to address. Airstream pre-wires the trailers for about 100 watts of solar power. I was installing two 130 watt panels. The instructions recommended that 6 gauge wire be used for distances of 11 to 20ft. The existing 10 gauge wire would create some voltage loss at higher current levels and reduce the efficiency of my system, however the equipment in the kit I chose offered a solution.

The BZ Products Charge Controller incorporates "maximum power point tracking" technology or MPPT to maximize power output from the PV panels. The LC130 PV panels produce the most current, 7.4 amps, at 17.6 volts. If the panel were connected directly to the batteries being charged it would operate at the battery voltage, typically 12 to 14 volts depending upon its state of charge. Panel output at battery voltage would be would be higher, 7.8 amps, but total power, volts times amps or watts, would be lower; $14 \times 7.8 = 109$ vs. $17.6 \times 7.39 = 130$. The MPPT uses digital technology to maintain the PV voltage to optimize total power output. The controller also includes a high speed switching network and inductor to transform

the voltage and current to the that of the connected load, typically 12 to 14 volts. In our example charge controller output to the battery would be 9.2 amps at 14 volts and 10.8 amps at 12 volts, both higher than the 7.8 amps that would have been delivered if the battery was connected directly to the PV panel. The most recent MPPT designs can transform even higher mismatches in voltage with little loss of efficiency, 24, 50 and even 100 volts to 12 or 24volts! This feature is very useful in large fixed solar installations such as a business or home. I decided to use it to my advantage in dealing with the 10 gauge wire in the Airstream. I wired my PV panels in series as a nominal 24 volt system; current flow or amps at 24 volts would be reduced 50% compared to a 12 volt system, resulting in less voltage drop through the 10 gauge wiring. The higher voltage of the PV panels operating in series would also help in low light conditions where output of a parallel system might be too low to charge the batteries.

With the basic design concept complete I installed the brackets, electrical wiring, both PV panels and charge controller. The last task was to allow the panels to fully charge the batteries, check the temperature and set the float voltage to the battery manufacturers specifications.

Don Williams KD6UVT
WBCCI #14207, SNU
(#157)

For an unabridged version please see the Sierra Nevada Unit web site,
<http://sierranevadaairstreams.org/owners-guide/maintaining/energy-power/solar-kd6uvt/>

Solar Power Installation for 25' Airstream CCD



1: PV Panel with Wiring (Note Relocated Lower Mounts)



2: PV Panel Wire Through Refrigerator Roof Vent



3: Street Side Junction Box & Series Wiring



4: Wiring Harness at MPPT Charge Controller



5: Lower Refrigerator Access Opening (Note Wiring Tag Labeled 24 Volts)



6: System Installed and Float Voltage Set (Note Wiring Tag Labeled 24 Volts)



7: Street Side Installation



8: Completed Installation



We now have Basecamp!

We have 2 on the lot and we hope to bring one to the May rally. The Basecamp is a “Swiss Army Knife” of a trailer that features an interior that can be configured for multiple uses -- suiting customers needs, from young couples who might want to take it camping on the weekends to cyclists heading off for a weekend of extreme riding. Ultra-light: most conventional vehicles with a 2,000 lb gross weight when fully loaded can tow the Airstream Basecamp.

We have a lot of other Airstreams to see on our lot, including six 19 foot trailers (Three 19 foot Bambis and 1 International). We also have 25 foot, 27 foot, and 28 foot Safaries of various floor plans.

Come by to see them all!!

The time is now to buy the trailer of your dreams.



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