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"Black Beauty" Drives Again. Ultra Van# 240 Lost in Europe.

by W. Christy Barden

At the 1996 Reunion at Hutchinson Kansas Ultra Van #252 showed up with a beautiful new dark blue paint job. It is owned by Steve and Karen Landsberg. They own and operate the Torbay Cottages in North Bay, Ontario, Canada. Their Van was the center of much attention while there. The following is an interview I had with them at that time.

Original owner was Major Keith Young, from the Air Force Academy. He paid \$8,450 and took delivery on January 4th, 1967. He was a man wanted dead or alive by communists for two million dollars according to a May 3 1967 article in the Air Force Times. Second owner Mya & Hanz Kraepelien, of Palm Desert, California.

But lets back up and start this story with Ultra Van #240. It was bought at the Factory November 17, 1966, by Egon Landsberg, Steve Landsberg's father. They had it for 7 years.

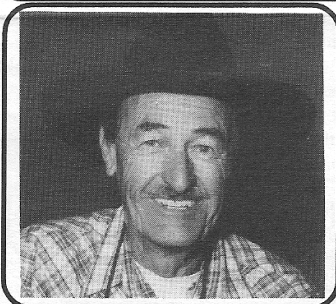


Steve and Karen Landsberg owners of Ultra #252 shown below.

the pilot light didn't blow out. He even bought an electric heater to plug into the cigarette lighter. It was just before the Hutchinson rally last summer they found the foam plugs that were installed at the factory had been blocking the heat all these years. He learned this from the original factory manuals that came with the Van. The plugs had been there for 30 years, and probably no one knew it. They used grocery bags and blankets to keep warm during this part of their trip.

Going through customs was eventful only in that the Ultra attracted so much curiosity that they almost forgot to charge them a bit of duty on their Ultra. Actually it took them some time to get used to the friendly Honks and Thumbs Up, not to say anything about the parking lot conversations and sidewalk stares. They said having #252 has been a lot of fun. They are enthusiastic Ultra boosters, they would like to have a rally at their place in Torbay in North Bay. It is west of Ottawa, and maybe Group Ultra Van could arrange a Get Together there if someone could take charge of it. Maybe after the CORSA National convention in Lake Placid in June. It's nice to have these young members using and loving the Ultra Vans like we do. Welcome aboard!

From The President

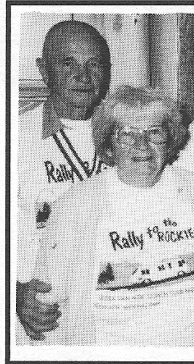


Since I didn't get to address the numerous members of our "Whales" group in the last two issues of the newsletter I'm going to back up here and give some credit where credit is due.

"Great Balls of Fire"! Was the "Whales" newsletter of "Winter-Spring 1996" great or what? As we all know, that was sort of a double issue, but man it contained so much information. Bob Ballews article on the automatic transmission was just out of sight. I'm sure he must have burnt the candle at both ends to come up with all those details. I don't believe or at least I haven't seen an S.A.E. factory paper on the automatic that can compare to his article. Bob is known as the "Corvair Nut" here in the high desert. I believe his loves are; his wife, Corvairs, viewing and feeding his wild squirrels and birds. Good show, Bob.

In Memory of: Mildred B. Dinesen Ultra Van #200

In memory of Mildred B. Dinesen, Ultra Van member #200. She was dedicated wife, business companion, traveler and homemaker with her husband Melvin for more than sixty years. She and Melvin met during the mid-thirties and were married for over sixty years. When Melvin joined the Merchant Marine Service, to do his part in WWII, Millie went to work for a defense contractor as a machinist. Mel tells the story about her, being such a good and fast worker, that her supervisor had to tell her to slow down, because she was making the men look bad. Those of us that knew here well, acknowledge that she set her own pace. She was a avid fisherwoman and enjoyed any kind of game with cards. She and Mel both enjoyed riding motorcycles for many years. In they're early married life they owned an Indian Chief motorcycle that Mel



had special turned and it was Millie that could ride it in the drag races and beat the men. During that time they operated they're motorcycle business in Oceanside and Bakersfield, California. Mel was away from her many times with his race team that they were promoting at the time. Millie was the person that kept the shop running during those times. We will all miss her a lot and wish her good fishing in the great beyond.

She passed away February 17, 1997 in Overton, Nevada. She was eighty-two years young. Services will be in Harlan, Iowa. Letters and cards of condolence can be sent to: Mr. Melvin Dinesen, P.O. Box 1485, Overton Nevada, 89040.

With Love, Jim & Marlene Craig.

Thanks also to Art Eller and Harry Yarnell for they're informative article. Congratulations to Christy, our editor and C.E.O. for receiving the Old Cars, "Golden Quill Award" for his work on the "Whales" newsletter. To swell his chest a little more, only one other Corsa Chapter earned the same award. Great Work! The CORSA National that was held in Albuquerque, New Mexico is now history. I understand that there was not one Ultra Van on site, although several of our members did attend. I did get a verbal report from Bob and Diana Galli.

Diana gave a really good report in the last Newsletter on our National at "Hutchinson". Hmm, another person that can really do it. Thanks, Diana.

In a recent letter from director Norm Helmky he reported on the meeting of "Mid-America CORSA Regional" in Columbus, Ohio. He sent out thirty letters to Ultra members in that area and four showed up. He also organized an evening meeting, which had 17 people attending, in which he talked about the Ultra Van and associated subjects. Thanks, Norm for all your efforts. Is it nice that we have these wonderful folks that will take on all these tasks. Ya, Ya. (See rally report this issue. Ed)

Annual dues; I only heard from one person regarding raising the dues to \$10 annually. Sooo—it will be up to our C.E.O. to make the final decision if and when that should take

effect.

Ultra Van #101 update: Due to other commitments I have not been able to do any work on #101 since the November 1996 rally. We have scheduled another work rally for April 17 - 26, 1997. I am hopeful that we will get all of the fiberglass and metal work done so that I can paint it after the rally. These are small jobs, so it should not be a problem. I have purchased the vinyl for the ceiling and if we have a couple of experts attending, possibly that job can be completed. Of course there are lots of little jobs that still need to be done. Also there is a small amount of electrical work to be done. SOOO-load up the old Ultra and come on out. Our work rally will be right after Art Ellers transmission clinic. Check the schedule of events elsewhere in this issue.

Jim Craig, President
Internet:jrcraig1@juno.com

New Tanks for #292

By Graham Dell

It was time to replace the tanks and floor in #292. My design requirements were to keep the price down, stay light weight, have a solid floor. I also wanted to use a center pathway inside the floor for cables and brake line, use a material for the water tanks that would not

affect taste, easy to empty and easy to winterize. From Boeing surplus I purchased five inch "I" beams with 4 3/4 inch dimension inside

the web for \$1.50/LB. Off the shelf plastic tanks (35 1/4" X 19" X 4 3/4) 14 gallons, that fit inside the web were purchased for \$100.00 each. Two to be used for fresh water and two

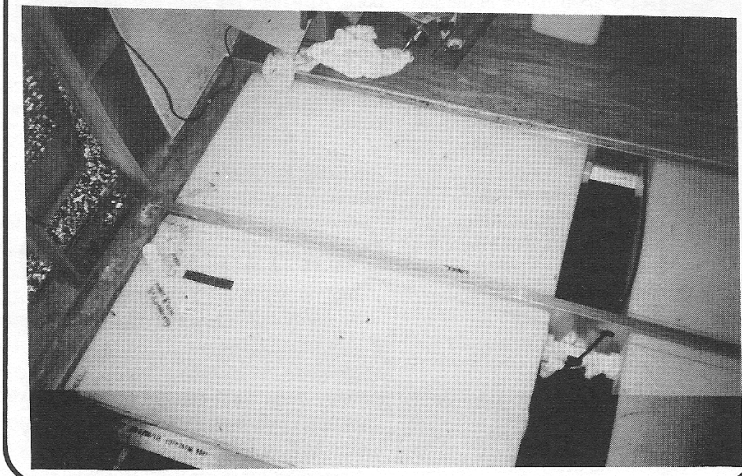
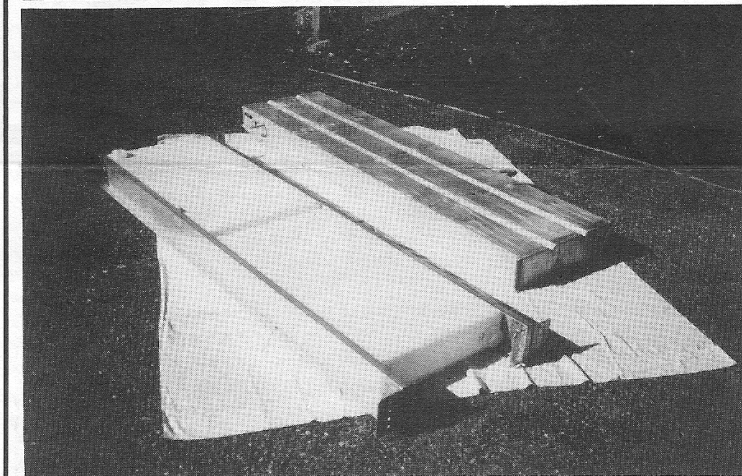
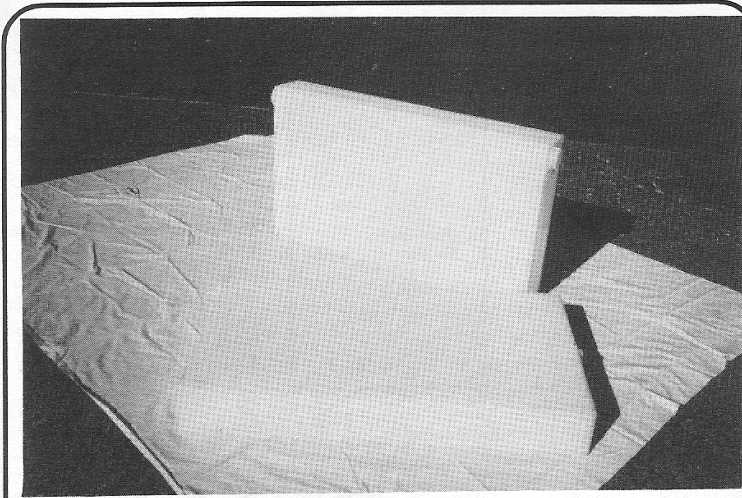
to be used for gray water. Each pair was connected with 1 1/2" PVC. I decided to use a Porta-Potti instead of hauling sewage around in the tank.

A new 10 gauge aluminum fuel tank was fabricated with a center 1" raceway for cables and brake line. It is, of course, the same length. It is 6" wider to avoid old mounting holes. The top is the same reinforced structure as the original, with 7 baffles spaced to add more reinforcement in areas where walking takes place. There is a baffle full height welded all the way around placed so that the first step in the door lands on it. This baffle has holes in the top third of the fuel transfer. The bottom two thirds is solid providing a reserve tank of approximately five gallons. There are five more baffles evenly spaced to enforce the floor and provide resistance to fuel slosh. From the reserve tank there is a fuel outlet through an electrical selector valve to the fuel pump. The return line from the engine dumps into the reserve tank, ensuring that it is always full. Main use of this feature will be when parked on severe slopes.

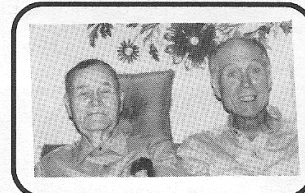
The four tanks removed and assorted hoses and pumps weighed 105 pounds. The new tanks and bulk heads weigh 119 pounds.

The 3/8" marine plywood floor is glued and fastened with sheet metal screws both around the perimeter and across the bulkheads. The plastic tanks have 1/4" walls and provide support at the edges, but not in the middle as there are no internal baffles.

The tanks empty through 1 1/2" slide valves at the left rear of each tank area. Drive the front right wheel up on a curb or block and pull the valve.



From the Editor



W. Christy Barden (R) enjoys a conversation with Dr. Earnest J. Newhouse (L) on a recent visit.

We were saddened to hear of the passing of Millie Dinesen and our condolences to her husband of 60 plus year, Mel. That crusty sense of humor will be missed.

Well, retirement life is great. Most of you readers know this already, now I'm finding it out. I was going to take 603 to Seattle over the Christmas holidays, but trouble with the propane heater made me leave it behind. I

drove the Corsica instead. While in Seattle I spent some time with Graham Dell #292 our Vice-President. He and Nancy were gracious hosts, a wonderful dinner and warm bed. We also looked at the tank installations on his #292. Nice job, see the article and photos in this issue. I'm beginning to look at my projects to be done. Yes a long list, but I have plenty of time. This newsletter stuff is beginning to flow, which makes it easier for me. I still need all of your input for sharing with fellow members. So keep those cards and letters coming in.

The last three issues of the CORSA Communiqué have had excellent articles on our engines from many respected Corvair people around the country. Van Pershing had done a wonderful job in getting this information together. This is just one of the many reasons to become a CORSA member. The information in the Communiqué is really nitty-gritty stuff. So help out our National Organization and join.

Letter to the Editor

From: GWeller337@aol.com. Date: Mon, 10 Feb 1997. 71063.2265@compuserve.com, corvair@fan.net. Subject: ULTRA Chuck Blair (Puyallup Wash.) purchased #215 from Jim Williams (Renton Wash.) in the mid 80s. He rebuilt the damage sustained in 1977. I purchased it from Chuck in early 1990. It was gutted and had no engine. Chuck was ill and unable to complete the project (he passed away in Nov. Of 1990). I brought the engine home in pieces and rebuilt it and returned to Puyallup a couple of months later, installed it and drove it home to Renton. We have completed the restoration and have enjoyed it for the past 4 summers. The main problem now is the checking of the fiber glass on the rear corners and it is in need of a new black tank. We have been members of Whales on Wheels for 2 years. George and Carol Weller, 16243 122nd Ave. Renton WA 98058.

Ohio '96 CORSA Meet

by Norm Helmkey

Three Ohio Chapters of CORSA sponsored the Mid-Ohio Regional meet this year at Marriott North in Columbus, Ohio from July 31 to August 3, 1996. If you didn't get a chance to go to the CORSA National in Albuquerque this summer, the Mid-Ohio was your next best chance to enjoy the comradery of the Corvair world. There were Corvairs of every description from four Ultra Vans (the most we've seen at an Eastern Corvair meet in

years) to Greenbriers and Rampsides to Lakewoods station wagons, to every kind of Corvair car and even out and out Corvair race cars on display. Ultra Vans were not the only Corvair-powered motorhomes, there was another one from Indiana.

The swap meet/flea-market operated every day outdoors from dawn to dusk and indoors from 8:00 am to 5:00 Pm. A new vendor we had not seen before, Mike Squires, from Bettendorf, Iowa, brought large quantities of NOS (New Old Stock) parts that were reasonably priced, considering how hard this stuff is to find. I found a pair of NOS Rochester carburetors for just \$85 each. Mike's catalog has over 20 pages of NOS parts. In another booth, I saw two reconditioned 95hp cylinder heads, complete with exhaust valve rotators for just \$75 for the pair. It's amazing to see the quantity of Corvair NOS parts that continues to surface.

One of the highlights was the hospitality room hosted each day by a different Ohio chapter, from Dayton, Cincinnati and Mid-Ohio Vair Force. Soft drinks were always on tap and these folk tried to out do each other with all the goodies to eat. Popcorn, chips, pretzels, a variety of cheeses, crackers and several kinds of cooked meats were the order of the day. Being right next to the indoor parts vendors, it offered a way to continuously shop for that elusive part and still be able to eat. Another neat touch were the large tables, some with jig-saw puzzles, some with newspapers so you could snack and keep up on what was happening in the outside world, or visit with friends and put the puzzles together while you chatted.

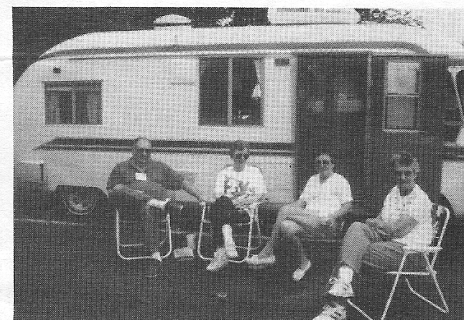
Seminars were scheduled every day covering, alternator repair and upgrading, air conditioning and all the latest scoop on alternative refrigerates for air-conditioned Vairs,



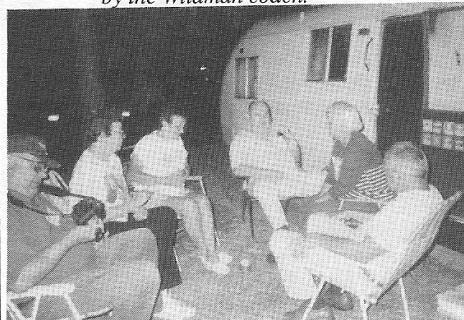
486 (Helmkeys) and #518 (Harveys) who travelled 33 hours from Florida to Columbus.



The other Corvair-powered motorhome, from Indiana. It is apparently one of two built.



Ken & Penny Wildman, Marion Helmkey and Ruth Harvey relaxing by the Wildman coach.



Ultra Vanners sitting round the campfire (a citron Candle) swapping old memories. Left to Right, Den, Penny, Marion Gord, Mickey and Don

trials and tribulations of adding seat belts to cars and trucks, etc.

Also, most special interest groups had their own meeting, usually at night. The Ultra Van Group meeting had seventeen people attend and our handouts was a reprint of a January 1996, Skinned Knuckles Ultra article. We signed up a few Group Ultra members, but the proof of the pudding will be when they actually buy an Ultra Van.

Other events run during the meet were a judging concours, people choice, economy run, a rally and on Saturday, in the hotel parking lot an auto-cross. All vehicles entered in the had to be equipped with seat belts and drivers had to wear helmets. Entrants were numbered and if more than one driver, a letter was added to the number (e.g. 155/155A). It was really fun to watch the ladies wind their way through the marker cones and more than one made better times than the men.

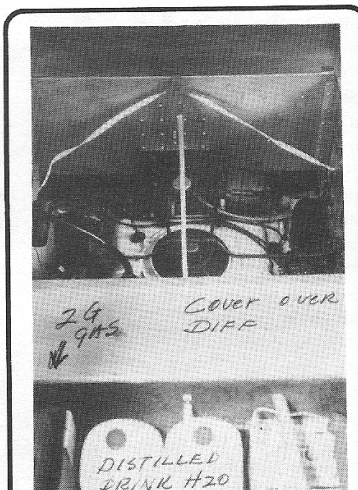
The awards banquet was held at the hotel on Saturday night and most waited until they were dried out on Sunday morning to depart. Ultra Vanners in attendance were: Penny & Ken Wildman (338); Mickey & Don Richards (379); Ruth & Gord Harvey (518) and Marion & Norm Helmkey (486).

Fire Protection

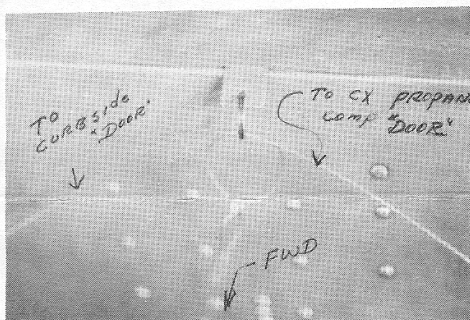
by Walt Davison

The photos accompanying this article help explain Walt's system of fire protection and efficient heat exchange systems. The five uses of the system are listed below.

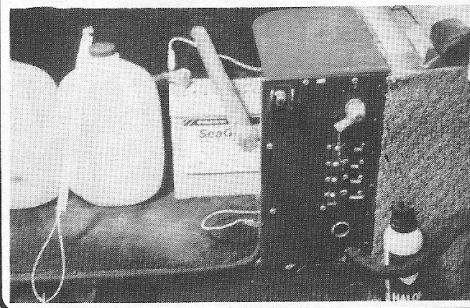
1. The original and main purpose is to close up the engine "room" to make fire fighting go better (i.e. prevent oxygen from getting to a fire)
 2. Having had a couple of cases of carburetor icing this will prevent it. Close the doors and then open the engine cover and let the engine breath "cabin" air. Of course the four inch heat tubes must be open and working.
 3. Wake up on a cold morning when you're off by yourself. Close fire doors, open engine heat tubes, turn on whatever you use for cabin heat, open engine cover, crank up and recirculate. The engine warms up MUCH quicker and so does cabin.
 4. At the end of the day when it's COOL/cold outside. Configure as in #3, just let the engine cool off into the cabin. Free BTU's.
 5. On a dusty/dirty road. The kind I promised myself I wouldn't go on. Configure as in #3 and the engine stays much cleaner.
- I, of course, hope I never use reason #1, but I've used #2, #3, #4 and #5 and they all work as advertised.



The cables shown below are highlighted with masking tape in the photo above.



Below shows the Distilled drinking water, battery, batters switch with C.B.'s, Halon fire extinguisher, and tube coming over the battery to squirt Halon in.



My Ultra #366 is configured to make this easy. Propane compartment is now the "second" air inlet into the engine room. I have a light (very Light) metal cover over the differential bay. So it was not much trouble to install this modification. In all the total weight is about a pound. All changes should be so easy and do so much.

Walt also sends this information on PERTRONIX IGNITION Systems. Call German Parts and Restoration at 1-800 321-5432. They will sell it to for \$65. He states this is a better price than Clark's Corvair Parts.

Causes and Cures for Engine Knock

By John Pizzuto and Ray Sedman

Engine knock - that annoying rattling sound that sometimes comes from under the deck lid of your pride and joy, is a real killer. We have all heard the stories of blown head gaskets, broken pistons and damaged rings. Maybe it has already happened to you, too. But just what is knock, sometimes also referred to as detonation or ping?

The knocking sounds you hear are the cylinder walls set into oscillation by intense pressure waves, caused by abnormal combustion. This is definitely not a good thing.

Normal combustion is a controlled burn that starts from the spark plug and spreads outward, causing a pressure rise in the combustion chamber. This pressure is then converted into torque on the crankshaft and this, in turn, turns your wheels. Ideally, the peak cylinder pressures will occur about ten to fifteen degrees after Top Dead Center (TDC), as the piston is on its way down.

Detonation or Ping is a form of abnormal combustion that starts off right, but at the last millisecond, or so, something goes wrong. The remaining air-fuel mixture, called the "end gas", explodes all at once, in one violent burst, instead of burning in a smooth, controlled way.

Resultant engine damage is caused by an instantaneous pressure rise that can exceed 1500 psi. This is more than double the normal peak com-

buustion pressure, and will blow head gaskets, pull case studs, break piston ring lands and hammer the connecting rod bearings. Another form of damage seen is that the tops of the pistons will melt. High pressure waves produce localized hot spots, which then soften and erode the piston material. This is especially acute on factory engines with cast pis-

tons or rebuilt engines using cast pistons. We have all known people running cast pistons that separated into two halves at the second ring land or at the oil land. Replacement forged pistons are more resistant to damage from detonation, but not at all immune.

High octane fuels are more resistant to detonation because they contain compounds that slow down the chemical chain reaction that we call combustion. If left unchecked, these chain reactions would quickly multiply, in the same way that a nuclear explosion occurs.

All fuels, regardless of octane, have a knock limit. This is reached when the temperature of the end gas mixture reaches the "autoignition point". Modern combustion chamber designers can use high swirl inlets and large "quench areas" to cool the end gas. Centrally located spark plugs and compact chambers can reduce the combustion time, inhibiting heat transfer to the end gas.

Our Corvair heads have a fairly good "quench area" (except 64-66 Turbos and 67-69 'Smog' heads which have none) but the spark plug is located on a remote side of the chamber, thus requiring a longer flame travel and poorer flame propagation. We can do things to minimize this, but we can not 'redesign' our chambers without much expense. We will list below some of the other factors that affect end gas temperatures and resulting knock:

- 1.) Intake charge temperature
- 2.) Engine temperature; head temperature
- 3.) Static Compression ratio
- 4.) Camshaft profile
- 5.) Manifold pressure
- 6.) Spark timing
- 7.) Air-fuel ratio
- 8.) Humidity
- 9.) Air density (altitude)

An increase in compression ratio, manifold pressure, or spark timing will increase peak cylinder pressures, which in turn raise the end gas temperature and promote knock. Higher inlet temperatures also increase the end gas temperature. Make sure all your shrouding is in place and the air recirculation plate(s) are installed during warmer months. Richer mixtures (larger main jets) can be used to cool the charge, but there is a limit. Richer than about 9.2 to 1, however, will again increase the tendency to detonate. We want to strive for, around 14.6 to 1 for 'cruise' and around 12.5:1 for Wide Open Throttle (WOT). A decrease in humidity will also tend to increase detonation. Solutions: Some things we can change, and some we are stuck with. Obvious things to do are to get cold, fresh air to your air cleaner and, if you have a turbocharger, get the best intercooler you can afford. Work on your cooling system to bring the temperatures down. It goes without saying, you also need to de-flash your heads, keep the engine clean, free of oil, grease, etc., install a 12 plate oil cooler and install end cov-

ers on it, get a good aluminum pan and valve covers. In extreme cases, remove the lower shrouds and install in 60-61 fan and a remote oil cooler.

A very helpful device, if you desire, is an O2 meter. Get one that can be installed easily and viewed while you drive/road test your carburetor jetting. This will allow you to actually see what your air-fuel ratio is during actual operation conditions and make the necessary changes in carburetor jetting to set the mixture 'right on'.

Water-alcohol injection is very effective, but it can require thirty to fifty percent additional fluid, in relation to the fuel, so it is generally useful only for short bursts such as hill climbing or passing (pretty funny in an UV, huh?). It is my understanding, as of January 1997, that there is no current manufacture of water injection systems, so you will have to build one yourself or find an used one. You may be able to locate one at an automobile swap meet. Once installed they do require some 'adjusting' so they operate properly, this can be very time consuming. They are a 'open loop' system (no feedback) and can be difficult to tune for maximum performance. As the variables which relate to detonation (humidity, fuel octane rating, etc.) change the 'adjustments' to the water injection system may have to be revised. This can be a source of inconvenience during a trip.

**pressure rise that
can exceed 1500 psi.**

For example, your system is adjusted perfectly for your UV given your favorite fuel and your geographic location. You load your coach, fill the tank with fuel and proceed to have that nice relaxing trip you have been planing. You venture into another area, the fuel quality is not what you expect, the temperature gets warmer, you climb some good elevation....you get the picture. Your water injection system is now not properly calibrated. You are either using too much water or not enough and you start to hear ping. Not very fun, but what more can we do. We can recurve the distributor, that is a good move but, naturally this is full of compromises when we are dealing with a mechanical device with springs, weights, [distributor] cam profiles, vacuum advance units and such. The only purpose for all the different 'curves' in factory distributors is to keep the engine in 'close' to it's ideal timing at a specific RPM and TRY not to allow it to detonate [ping, knock].

This knocking is based on the cylinder which

is most prone to knock during factory dynamometer testing and is based on testing and variables over 35 years old. Add a good dose of today's fuels, worn distributor parts, your ideal engine in your Whale-on-wheels, etc., and you can see that getting the correct curve from a distributor is going to take more than a 'educated shot in the dark' and lots of testing. Each UV is going to need a different distributor curve, because each UV is different, much more so that a typical Corvair car is. The size, weight and other demands that the Ultra Coach places on the engine requires the engine to operate at peak efficacy, much more so than any demands that a car can place on the same engine.

We are dealing with 'old' technology with our carburetors, distributors, mechanical advance curves, vacuum advance curves and initial timing settings. The rules of the game have changed vastly over the last 35 some odd years when our cars/engines were designed and they just can not deal effectively with some of the variables that are being thrown at us now.

Spark retard, within limits, is a powerful means of controlling detonation. Traditionally, this has been accomplished by retarding the spark in proportion to manifold pressure. The 62-64 Spydors and 65-66 Turbocharged Corsas had this built in. It was a simple, but effective system. These engines ran a low compression ratio (advertised at 8.0 to 1, but measured at 7.5 to 1) a small carburetor, and a built in exhaust system restriction to limit boost. This clever 'limiting' factors were tied together with a distributor which was set at 24 degrees BTDC, no vacuum advance, no centripetal (mechanical) advance until 4,500 RPM. The pressure retard was in proportion to boost. This varied by year. Typical was 2 degrees for every 1 PSI, with a limit of 12 degrees for the 65-66 Corsas.

Now how would this retard system work with your UV? It would not work at all unless you had a turbocharger, since it is based on boost pressure, not vacuum. Ideally, we need something for non-turbocharged engines that will sense the onset of detonation and take action before the ping destroys our engines. Modern factory turbo and some exotic non-turbo cars have gone beyond simple boost retard, and are sensing the onset of detonation with a knock sensor, and then electronically retarding the spark. This is called closed loop spark control. Technology has advanced to the point that microprocessors can now even figure out which cylinder is pinging, and then retard only that cylinder. This would allow each cylinder of the engine to be running at the this principle.

There are many aftermarket timing computers and ignitions systems that are now available, but most do not use a knock sensor. The few ones that do use a knock sensor, are not

able to control individual cylinder spark. This is very important. If the knock sensor uses knock (ping, detonation) as its only input, regardless of which cylinder is causing the knock, then we can lose, up to 12% of the engine's potential torque output. It is important that the knock retard system does not retard the baseline ignition setting on all cylinders. Only the ones that require it. This can add significant torque to an otherwise 'retarded' engine. With this, you will decrease your fuel consumption, lower engine temperatures and promote engine longevity. Just what we are looking for.

With our UV's we want all the torque we can get. This loss of torque output is caused by the knock retard system retarding ALL the cylinders to eliminate the knock, not just the offending cylinder that is causing the knock. Remember the old adage to set your timing: "2 percent power loss below border line knock setting". What this effectively is doing is setting your timing to the cylinder that has the greatest tendency to knock. Not all cylinders are created equally, even in the same engine with matched chamber volumes and matched piston deck heights.

After much research I have located a knock system that does everything we want, and more. This system is from J & S Electronics. It is a beautiful, self contained unit. All the J & S systems I have installed have performed flawlessly, beyond my greatest expectations. These units are specifically programmed for Corvair engines using the Motorola 68HC11 microprocessor. The unit is programmed to know that the cylinder that is pinging is the one that just made the spark. The computer knows that this cylinder won't fire for two more revolutions, so it counts off the remaining cylinders, retarding each one in turn, only if necessary.

"The main problem with sensing knock", as J & S states, "is you're trying to hear inaudible pings, and at the same time you're trying to ignore audible valve clatter and piston slap." The knock sensing program that J & S has developed is proprietary, but the program has the characteristics of detonation stored in computer memory. The signal from the knock sensor, is amplified and compared to a threshold developed from the Digital Signal Processor (DSP). If a detection is made, the program can retard that cylinder in proportion to how loud the detected ping was. This unit can retard up to six degrees before the knocking cylinder can fire again, and if necessary, keep retarding up to a total of twenty degrees. The unit incorporates a High Output ignition module with active dwell control. Works with or without a ballast resistor. The unit adjusts dwell for a full seven amps. Compare this to GM's HEI system which is limited to 5 1/2 amps.

Also built into the system is a digital rev con-

trol. This fully adjustable rev control requires no plug in modules or 'pills'. Easily change the setting anywhere from 4,200 RPM to 9,000 RPM. It is a 'soft-touch' rev control. When that set point RPM is reached, the computer cuts every third spark. This results in a very smooth one-third drop in power. For our six cylinder engines, this could result in two fouled plugs, so the program fires three cylinders, then skips two, resulting in a forty percent drop in power.

The J & S unit does what we want, effectively, in one integrated, self contained, compact box. Measuring only 6 x 5.5 x 1.5 inches and weighing a meager one pound this will not cramp your UV in size or weight. The unit will convert a antiquated mechanical advance/curve system to a stepless, electronic system with individual cylinder knock retard. Your engine will always run a peak advance without destructive detonation [ping, knock].

More research has been, and is being, devoted to a study of the knock phenomenon than to any other aspect of the internal combustion engine. We hope we have provided some answers to the causes of detonation, and what can be done to help you get the most out of your Ultra Coach. To learn more about this subject, pick up a copy of *The Internal Combustion Engine in Theory and Practice*, by Charles Taylor, Professor of Automotive Engineering, Massachusetts Institute of Technology.

For further information on knock retard and ignition systems you may contact: Ray Sedman. 19111 Chase Street, Northridge, California, 91324
rsedman@earthlink.net
818 3499508

ABOUT RAY SEDMAN:

I purchased my first Corvair when I was 15. It was such a basket case the guy should have paid me to take it away. I did all the body work, paint, rebuilt the suspension, drive train and the 140 engine. I still have the car today and it is being converted to an Auto-X car. The car helped put me though collage by

street racing [the statue of limitation is up so I can disclose this] and pocketing the cash. I never lost a race. The car won two 'BUG-INS' before they changed the rules so Corvairs could not compete in the V.W. Events. In my 'spare' time during collage I 'worked' at Batways Auto (a Corvair Shop) in Chastworth California. Mostly there to help with the stuff that no one else wanted to do....Weber Carb conversions, Turbo stuff, tuning HV's so the cars ran right.

I use my 65 Corsa Turbo for a daily driver and are currently restoring a 65 Monza Convertible with A/C.

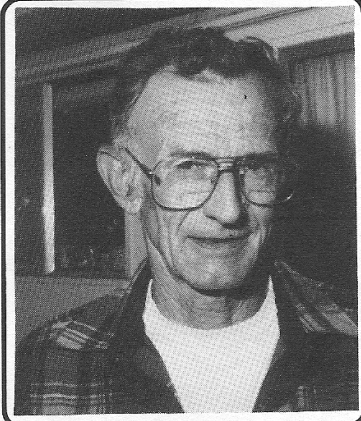
My Ultra Van exposure started with helping Dean Hanson, of Batways Auto, restore his UV; what a blast that was. I have a small driveway so I can not own an U.V. I currently live vicariously through other UV owners.

My formal education is applied Physics and Engineering. My daily live allows me to engage in a few areas of expertise; My 'jobs' are database marketing and operations support for direct marketing companies. My true passion is an product designer and inventor. I have been awarded two U.S. Patents and have two pending. I am always looking for ways to improve the Corvair and continually design/make little 'stuff' to that end.



The Star Trek IV cartoon above is from the "Bevair Tales" the newsletter of the Beaver State Corvair Club. Their September issue was devoted entirely to the Ultra Van, including full color photos of Ultra Vans, atributes and a floor plan lay out.

Introducing Bob Galli Western Director



I was born and raised 68 years ago in Atascadero, Ca. This is where Diane and I now reside. We both graduated from Atascadero High School, as did my mother, and our youngest daughter, and now our grandchildren. I worked in machine shops all my working life, ending up owning my own company, where we make small diameter metal tubing, Corvair tail lights, and radio bezels for Corvairs. We have always enjoyed camping, having owned a 20' vacation trailer that we previously traveled in. Now we go in our Ultra Van which we bought from Milt and Gene Rayburn. Milt and Gene bought it new and went to the factory to pick it up in Hutchinson Kansas in 1970. They took many happy trips in it, and now we are doing the same. We bought 504 in 1991 in May and left for the CORSA National in Washington, DC. in July. That was our "Shakedown Cruise". Since then we have been all over the United States, Diane driving and Bob fixing- and having a wonderful time doing it.

Classified

1967 Ultra Van #278, 110 H.P. Corvair (889 Cam) 3,000 miles, powerglide. New Interior, Fridge, Brakes, packed bearings. Rear suspension and shocks modified. Swamp Cooler, 3:89 gears, new tires. Howard E. Baso, 1536 W. Roundup St., Apache Junction, AZ, 85220. Mon. - Thur. 8 - 5 PM, (602) 288-8166. \$7,000.

1967 Ultra Van #295. Reduced price! Buick fuel injected V/6 fuel injected, 3.8 Lt., 3 speed

lockup Trans. New tires, carpet, drapes, Optima batteries. Good paint, 3 solar panels. Video & Photos and detailed list \$8.00. Excellent, ready to travel. See "Whales on Wheels", VOL. XIV, #1, Winter of '95. Bill Binney owner, \$7,995. Seller; Jim Craig, 7011 Sunny Vista Rd., Joshua Tree, CA. (619) 366-9104

1966 Ultra Van #318, 110 H.P. Corvair, powerglide. Roof air, mostly original condition, Bill Bursleson, Roanoke, VA, (540) 427-4151. \$3,200.

1968 Ultra Van #380, 110 H.P. Corvair, powerglide. New exterior paint, curtains, carpet and upholstery. Ken Woiak, 4551 W. Abbott Ave., Milwaukee, WI 53220. (414) 421-3972. \$7,000/offer.

1968 Ultra Van #396, 110 H.P. Corvair, powerglide. New paint and interior. Good Mechanical condition. Ready to travel. Asking \$8,500. Warren Romberger, 904 NW 59 St., Oklahoma City, OK 73118. (405) 842-2879.

1968 Ultra Van #412, 110 H.P., Corvair, Powerglide. Unique 24 foot model, only one make in this year production. New engine, Transmission, Onan 2.8 Generator, 6cu. foot refrigerator, roof air. New interior, upholstery, tires, awnings all around. Many spares including NEW windshields. \$13,000, Allen Driggers owner. Seller; Jean McMasters 916 Lighthouse Drive, N. Palm Beach, Fl 33408. (407) 626-0388.

1968 Ultra Van #435, 110 H.P. Corvair, powerglide. Air Conditioning. Francis Boydston owner, \$6,000. Seller; Jean McMasters 916 Lighthouse Drive, N. Palm Beach, Fl 33408. (407) 626-0388.

1968 Ultra Van #444, 110 H.P. Corvair, powerglide. Extra engine included. (No price stated) Joe Allen, 239 Plantation Ave., Taremier, FL 33070 (305) 852-5641

1969 Ultra Van # 466, 140 H.P. Reduced Price! Corvair, powerglide. 3:89 gears (w/4 gear spiders.) 9,000 miles on complete engine overhaul. New batteries & Tries. Cruise Control. Video & Photos available \$8.00. Jim Bents owner, \$6,995. Seller; Jim Craig, 7011 Sunny Vista Rd., Joshua Tree, CA. (619) 366-9104

1969 Ultra Van #468, 110 H.P. Corvair, powerglide. Well maintained, \$7,500. John & Clair Hoffman, 3760 S. Huron Street, Englewood, CO 80110. (303) 781-8617

1969 Ultra Van # 482, 110 H.P. Corvair, powerglide. Air Conditioning. Owned by Lain Guthrie. Seller; Jean McMasters 916 Lighthouse Drive, N. Palm Beach, Fl 33408. (407) 626-0388.

1969 Ultra Van #487, 110 H. P. Corvair, Powerglide. Air Conditioning. Owned by Richard Badstibner, \$7,000. Seller; Jean McMasters 916 Lighthouse Drive, N. Palm Beach, Fl 33408. (407) 626-0388.

1969 Ultra Van # 489, 110 H.P. Corvair, powerglide. Recent head and cylinder work, 3:55 gears. Pressure water system. Recent tires and

paint. Video & Photos - \$6.00. Owner Mary Snyder, \$7,995. Seller; Jim Craig, 7011 Sunny Vista Rd., Joshua Tree, CA. (619) 366-9104

1969 Ultra Van #492, 110 H.P. Corvair, powerglide. Lots of extras. Clean in and out. \$10.00 refundable video. \$7,975 Hal Honer, 6136 Simms St. #1, Arvada, CO 80004. (303) 940-6804 (Located at Christy Bardens in Boulder CO).

1970 Ultra Van #513. Chevy 350 V-8, 3 speed auto trans, 4:11 axle. This is the Ryerson's Ultra Van, which they purchased new. Len, who wrote the RYERSON ULTRA VAN MANUAL, accomplished many modifications in the electrical, mechanical, and structural areas including completely redone suspension using air bags; **it handles**. New (3 years old) three tone paint job, tires, carpet, seat upholstery, curtains & walnut interior paneling. Gen. and roof air. Ready to travel. Details, photos, price \$15,000. Len died and his wife is selling the Ultra Van. Edy Ryerson, 18618 Rayen Street, Northridge, CA 91324. (818) 349-5058. Summer and Fall in Canada (604) 885-2875. (**This is one of the best overall units on the market.**)

1970 Ultra Van #538, New Chevy 350 V-8. New batteries, shocks, water pumps, starter, alternation, completely refurbished interior. Ready to travel. Dori & Joe DeCamillis, 1045 Green Springs Ave., Birmingham AL 35205. (205) 324-3995. \$7,000

1970 Ultra Van #550. New Chevy 307 V-8. White ash interior, new suspension, tires, roof air, three way refrigerator, color TV and battery. Clean inside & out. Engine has 3,000 miles on recent rebuild. Ready to travel. Joseph P. Alvarez, 6628 Puerta de Lomas, Fallbrook, CA 92028. Phone & FAX (619) 945-4451. Seller; Jim Craig, 7011 Sunny Vista Rd., CA 92252. (619) 366-9104.

1970 Ultra Van # 556, Chevy 307 V-8. No specific information or price. Contact: Charles Hunter, 132 Holly Drive, Rio Grande NJ 08242 (609) 889-0879

1971 Tiara #T2020. All standard equipment plus air and two roof pods. 18 foot awning plus add-a-room with outdoor carpet. Best offer. Call Jack Bates, East Lansing, Michigan. Phone: Office (517) 351-2990, Home, (517) 332-6631.

Other Makes. 1991 Xplorer, Extra-Van model #603A. Dodge 250 V-8, 27,368 miles. 20 feet long, 7 feet wide. Fully self contained motorhome. Easy to drive. This unit has extras and additions that would fill this newsletter. It has been well cared for and garaged all its life. Age and health are the reason for selling. New price was \$49,500, all reasonable offers will be considered. Contact Earnest Newhouse, 15239 Soneto Dr., Whittier, CA 90605-1646. (562) 698-1740,

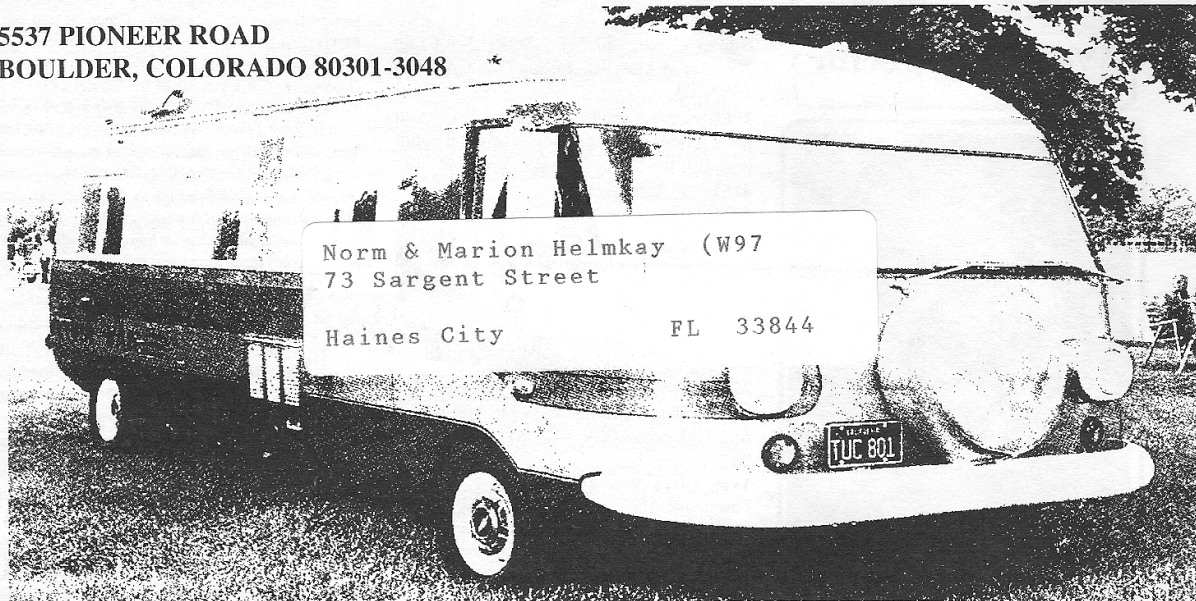
Parts for sale. Two each, Corvair Truck and Van rear axle bearings. NOS (new old stock) in original boxes, \$175 each. Ultra steel bell crank steering assemble. New with bearings and bolts. \$150 each. 1969 Corvair model, by Prestige, sill in unwrapped box, \$20. Contact Jim Craig, 7011 Sunny Vista Rd., CA 92252. (619) 366-9104.

Ultra Brake Hoses for Sale. Braided steel-wire covered rubber brake lines are available at \$70 a pair. Contact: Lew Rishel, 4751 Mt. St. Helens Dr, San Diego, CA 92117 (619) 565-1962

Wanted Ross steering gear assemble for #101. Thanks to Jane Harrison, she found a "Danish" style table we were needed for #101. Contact: Jim Craig, 7011 Sunny Vista Rd., Joshua Tree, CA 92252. (619) 366-9104.

GROUP ULTRA VAN

5537 PIONEER ROAD
BOULDER, COLORADO 80301-3048



FIRST CLASS MAIL

Rallies

March 30 - April 4, 1997, Florida Rally at Sebastian. Church of Christ parking lot at Main Street & US Hwy #1, Sebastian, Florida Emergency Phone (561)388-5876. Hosts Jean & Betty Mc Masters 916 Lighthouse Drive, N. Palm Beach, FL 33408 (407) 626-03

April 13 - 15, Eller Transmission Clinic, Los Angeles, CA. Bring your automatic Transmission and rebuild it under the supervision of Art Eller #422 (he has rebuilt over 170 of them). Parking will be down the hill at the Breakfast Club. Host is Art & Millie Eller, 3873 Shannon Rd., Los Angeles, CA 90027 (213) 660-3883. Make reservation to help Art in planning.

April 16 - 20 , #101 Restoration Rally #6. Includes shopping in Palm Springs and the new Aircraft Museum, Bob Ballew's unusual Corvair sharing. Minor work to be done on #101 before painting. Host: Jim & Marlele Craig, 7011 Sunny Vista Rd., Joshua Tree, CA 92252 (619) 366-9104.

June 12 - 15, 1997, Eastern Summer Rally, Chattanooga, TN. Shipp's RV Park and Campground. 1 mile From TN-GA state line on I-70. Hosts: Jim Howell, P.O. Box 5942, Knoxville, TN 37928 (615) 687-2292; Jim & Ann Guider, P.O. Box 9182, Chattanooga, TN (432)499-4078; Jean & Betty Mc Masters 916 Lighthouse Drive, N. Palm Beach, FL 33408 (407) 626-0388.

August 26 - 31, 1997 National Ultra Van Rally, Durango, Colorado. La Plata County Fairgrounds. (Downtown Durango) Hosts: Jim & Marlene Creag #163, 7011 Sunny Vista Rd., Joshua Tree, CA 92252 (619) 366-9104.

Join the:

Corvair Society of America

(CORSА) P.O. Box 607, Lemont, Illinois 60439
(708) 257-6530

WHALES ON WHEELS is a quarterly publication of GROUP ULTRA VAN, a CORSA chapter. It is dedicated to the preservation and use of the ULTRA VAN. This 22 foot unique motor home was designed by David Peterson and built in Kansas until 1970. About 365 units were built. Dues are \$6.00 annually, please remit to the Secretary-Treasurer. Submit all technical information to the Editor.

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