



# THE VINTAGE ADVANTAGE

News Items for Vintage Airstream Owners & Admirers



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## Vintage Airstream Club

### A WBCCI IntraClub

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## The Vintage Advantage Quarterly Newsletter

August, November, February, May

Annual dues of \$10 payable to "Vintage Airstream Club". Send all dues, applications and classified ads to the VAC Treasurer, Mr. Edward Stanley. The *Vintage Advantage* (VA) is the official newsletter of the Vintage Airstream Club, which is an IntraClub of the Wally Byam Caravan Club International, Inc. (WBCCI), the recreational vehicle club of Airstream owners. The VA welcomes contributions of letters, articles, photographs, news items and classified advertisements, however, their publication does not constitute endorsement. The opinions of the authors are their own, and do not necessarily reflect the opinion of the VA, the VAC or the WBCCI.

## TABLE OF CONTENTS

<i>President's Message</i> . . . . .	1
<i>The Editor's Desk</i> . . . . .	2
<i>Letters</i> . . . . .	3
<i>VAC Announcements</i> . . . . .	3
<i>COOP's Corner</i> . . . . .	4
<i>The Airstream Story</i> . . . . .	6
<i>TL Article on Wally Byam</i> . . . . .	8
<i>Tech Talk (Physics of Towing)</i> . . . . .	10
<i>Best of the Web Q&amp;A's</i> . . . . .	13
<i>Free E-Mail</i> . . . . .	14
<i>VAC Internet Report</i> . . . . .	15
<i>VAC EMail Addresses</i> . . . . .	15
<i>New VAC Members</i> . . . . .	16
<i>Classified Ads</i> . . . . .	17
<i>Application</i> . . . . .	18

## PRESIDENT'S MESSAGE

Our fourth year as an Intra-Club of WBCCI is now drawing to a close. It seems hard to believe that the Vintage Airstream Club has grown as much as it has in such a short time. When you consider the interest that has been shown for an organization to maintain and renew Airstream trailers of past years and their associated lifestyle, it provides a considerable incentive for those holding office to structure programs of interest for its membership. We feel confident that you will find the VAC program at the Huntsville Rally to be as rich and rewarding as those that have preceded it.

Early feedback indicates that the VAC Pre-Rally at Monte Sano State Park during June 23 to 25, 1997, will be well attended. If you are unable to obtain a site at the park but find that you are in the area during that time, please plan on joining us at our "attitude adjustment" social hour of 5:00 PM, June 23rd and at the VAC dinner at Ryan's Restaurant at 4:30 PM, June 24th. It will be helpful if you could let me know on

the 23rd whether you will be joining us the next day.

International President Norm Hewer and his First Lady, Lucille, with the help of all of the WBCCI Officers and staff, have worked hard to make the 40th WBCCI International Rally in Huntsville a huge success. As many of you know, Norm and Lucille were among the original group of dedicated and talented people who founded the VAC as a WBCCI Intra-Club, so this year's rally takes on special significance for that reason alone.

The various VAC activities scheduled for the International Rally are listed elsewhere in the VAC Announcements section of this newsletter. Please take note of them and plan on attending and participating in as many as you can. I am especially pleased to let you know that the Doctors Norman Holman, father and son, will be presenting an interesting and informative talk on their experiences with their 1935 Airstream Torpedo that we saw at last year's International Rally. Their presentation is scheduled for the second hour of the VAC General Business Meeting, beginning at about 2:00 PM on Friday, June 27th. It is expected that the VAC business will be completed between 1:00 PM and 2:00 PM. Of particular importance will be the election of the candidates for the various VAC offices in 1997-98 and also consideration of the proposed changes in the VAC Constitution and Bylaws, as reported in the November 1996 VA.

I look forward to greeting as many VACers as can find their way to Huntsville, beginning with the Pre-Rally on June 23 and ending with the WBCCI Parade on July 4th. The activities that have been planned and the many attractions in the Huntsville area should ensure that we will have a

memorable time, including the most important activity of all - renewing and making new friendships.

I wish to express my sincere appreciation for the hard work and dedication of all of our officers, committee members, volunteers, and others who have enabled the Intra-Club's activities to be carried out with the high degree of success that we have come to expect. Without such support, this publication and the International and Regional VAC activities would never have been viewed by potential members and friends as being of sufficient quality to persuade them to become part of this enterprise. Clearly, our rapid growth has resulted from good people working hard to make it happen.

In closing, I would like to join the WBCCI Leadership in extending an invitation to those who are enjoying the Airstream lifestyle through the use of vintage Airstreams, but who have yet to join the WBCCI. We welcome you to join us in Huntsville and to enjoy all that this great club has to offer. It would be a surprise to me if that experience did not lead you to become members.

Dick Mumma, #4333

## THE EDITOR'S DESK

As most VACers know, this **Vintage Advantage** issue is the last one before the WBCCI International Rally in Huntsville, AL, on June 26 to July 4. Many of you are also fortunate to be attending the fun VAC PreRally that Dick Mumma has organized at Monte Sano State Park from Monday, June 23 until Wednesday, June 25 when the VAC will parade into Huntsville. Specific VAC events are discussed elsewhere in this issue, complete with a schedule of dates and times. I too am looking forward to

International. Because of the distance to the Rapid City Rally last year, I was not able to attend. However, this year my plans are to pull in on Thursday, June 26. Please stop by and chat. We won't be hard to find, we have three very young children who should be ready to run by the time we arrive!

The reason I mention this is that I am hopeful that other VAC members with children are also planning on attending. Two years ago in Amherst we had a great VAC group with children of all ages. I hope that we are able to exceed that during this Rally. I know many of our members are younger and have children so those of you in doubt, come on out and share in the fun.

We have continued to try to track down recent rumored sightings of 1930 era Airstreams in order to resume the *Classic Close-Up* feature. I have written to VAC Friends Eleanor & Larry Shireman in Arkansas who went out and saw a trailer in question. They did not see any markings on the trailer but took photographs which they are forwarding on. They found that the trailer is presently being used for storage but left a note for the owner. To date they have yet to hear from the owner. Hopefully we can identify the year from the photographs.

I also wrote three letters to VAC members in Oregon but it turns out that the closest VAC members to the sighted location of this Airstream are close to 200 miles away. Regardless, we have had one VAC member that will try and get out there later this summer to investigate.

In this issue we also didn't have further input for our *VAC In the News* column because I think we exhausted this subject in our last issue, however we do have some old and new favorites contributing.

Coop has returned from several recent Bambi trips and has some interesting Airstream news as well as a funny story from Mexico during a recent Airstream Company caravan. From his corner we go right on in to Coops last write-up on the Airstream Story. In this final version, Coop brings us back to William Hawley Bowlus. Coop was able to interview

Mr. Bowlus's widow and son to complete the story.

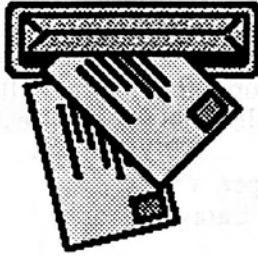
After Coops history lesson, I have included a write-up about Wally Byam as published in a 1981 *Trailer Life* magazine article. The author of the article was a past president of the WBCCI and, as a personal friend of Mr. Byam, was able to offer further insight into the Airstream founder.

We then go into our science lessons. VAC contributor Don Grayson is back with an interesting and rather technical perspective on the physics of towing. He covers many aspects that we often overlook but actually there are basic mechanics reasoning behind towing principles that we often take for granted. The article is rather technical but he has an excellent summary of comments that should be followed for safety sake.

The **Vintage Advantage** is proud to introduce our readership to a new column called *The Best of the Web*. Many of our web surfing members will recognize the name of Mr. Charles Burke. He has had a question and answer homepage called **Airstream Central** for several years. Mr. Burke is an Airstream trained technician who went through the factory training in 1972 and is presently an Airstream parts manager in Boise. He has a wealth of knowledge and has agreed to reprint several of the questions and answers from his Internet website for our newsletter. For members who wish to either post questions or read more, they can similarly access his homepage (address given in his article prelude).

Now for our members that still do not have email but wish to correspond with us electronically and free, Don Grayson has found a terrific answer. He has found a free service that allows one to read and write electronic mail messages from almost anywhere in the country. That's right, a FREE email service! To go with Don's article, we have expanded our email VAC members list to be as complete as we can find. If your name is NOT there, please let me know so that it may be updated.

Hope to see everyone in Huntsville, don't forget to save me a parking site!



## LETTERS

### "VAC Hi Sign?"

During our recent trip to South Florida, my wife Ramona and I passed several older Airstream trailers and, who knows, perhaps some vintage owners just in their cars. We thought "maybe the VAC ought to have a recognizable *Hello* sign to flash between members on the road." Sort of a friendly recognition.

Winston Churchill's famous "V for *Vintage*" hand sign is one that comes to mind.

Tell us what you think!

Jim & Ramona Lochhead, #5913



## VAC ANNOUNCEMENTS

### Membership Report

The Vintage Airstream Club is the exception to the rule, we are having another year of strong growth. Last year this time we had a total of Members/Associates/Friends of 400, this year, as of April 1, 1997, we have a total of 659, that is an increase of 65%! Our membership composition is as follows; Members, 432, Associates, 36, and Friends 191. New applications received via the VAC Internet web site are 95 (Members 20, Associates 4, Friends 71). This represents 37% of all the new applications received this year.

Ed Stanley, #21491  
VAC Membership Chairman

### Club Dues are Due in July

The VAC Club dues/subscription fees are due each year in the month of July and become delinquent after the 31st of the month. The mailing label on this newsletter shows the date that your dues/fees are due. The majority of the labels (513) show (Jul97) which means dues/fees are due this July. The other labels show future years (Jul98, Jul99 and one member Jul2002). A mailer envelope has been included for payment for those whose dues/fees are due July 1997. Please fill out the information on the mailer including the information on your trailer. Starting next year we will be mailing the newsletters to winter addresses, so if you have a winter address, please include both addresses and the times of years you will be at which address when you send in your dues/fees.

Dues/fees are \$10.00 a year, payable to the Vintage Airstream Club and mailed to:

Ed Stanley, Treasurer  
18940 Marine View Dr. SW  
Seattle, WA 98166

Ed Stanley, #21491  
VAC Treasurer

### Candidates for VAC Office

The nominating committee's recommendation for the 1997 to 1998 VAC officers is as follows:

President	Clyde Wagner, #8441
Vice-President	Forrest Bone, #22718
2nd VP	Tom Reed, #10283
Secretary	Mariann Pruitt, #6667
Treasurer	Ed Stanley, #21491
Technical Corr.	Bud Cooper, #26019

Elections will be held in Huntsville at the annual VAC General Business Meeting on Friday, June 27, 1997.

Robert L. Brubaker, #2501  
VAC Chairman & Immediate Past President

### VAC Has Unique Job Opening

In his March 19th address, Airstream resident Larry Huttle alluded to the fact that Airstream stocks 36,000 parts for past and current products. Realizing that if more people knew what is in stock then they will sell more parts, a printout of all these 36,000 parts with application data will be made available some time soon for selected entries. A complete copy is 12-inches high!

The thought flashed through my mind that the VAC is a natural place to maintain this information. In good faith however, I can not approach Mr. Huttle with a copy until there is a home for it. We need a VACer to take this super-book, keep it, care for it, and when the occasion arises, look up a part or application for some

member who has the need. Keep in mind that at present, these parts do not serve very many vintage trailers, but as time goes by, there will be more and more applications. This service will also focus additional interest in the VAC.

So, if you want the inside track on Airstream parts, let Coop know so he can bug Mr. Huttle for a copy.

Rutherford L. Cooper, #2601  
VAC Technical Correspondent

### Huntsville VAC Activities

The following schedule and list of VAC activities are being planned for the 1997 International Rally in Huntsville, AL, June 23 to July 4, 1997.

Date	VAC Activity
Monday, June 23	Arrive at Monte Sano State Park for Pre-Rally; early PM Social Hour, 5 PM
Tuesday, June 24	Dinner at Ryan's Restaurant, 4:30 PM
Wednesday, June 25	Parade into Rally Site, Time TBA
Thursday, June 26	VAC Board of Directors Mtg, 9 to 11 AM
Friday, June 27	Annual Club Mtg, 1 to 3 PM New Brd Mtg, 3 to 5 PM
Sunday, June 29	VAC Breakfast at Quincy's Steakhouse, 7 AM Vintage Trailer Polishing Demonstration, 2:15 to 4:15 PM
Tuesday, July 1	VAC Open House and Concours d'Elegance, 1 to 4 PM
Friday, July 4	WBCCI Parade with VAC Participation 10 AM to noon

Note, the VAC social hour ("Attitude Adjustment") sessions will be held each day throughout the Rally at 4:00 PM.

Dick Mumma, #4333  
VAC 1996-97 President

### Another Unique Job Opening

The selected site for the 1998 International Rally is Boise, Idaho, and it will be a shame if we can not resurrect the VAC Wagon Wheels Caravan. How can there be such a shortage in the midst of plenty? Why,

because no one has spoken up that they will lead it silly. So I am suggesting once more, that YOU are probably the correct leader and planner but you are just too modest to speak up. Don't be that way. Take the caravan leaders course at the Huntsville Rally and then try your wings while everything is fresh in your mind.

Rutherford L. Cooper, #2601  
Wagon Wheels '95 Caravan Leader

### COOP'S CORNER

#### *Airstream at Cemetery-*

Harold Strebeck (#11386), a charter member of the VAC, died March 12, 1997. Herman Hill (#6508), President of the Top-o-Texas Unit (#107) has reported. Chris, his wife preceded him by one year. Harold was known to his friends as an exceptionally "nice guy". In discussing Harold's association with The Vintage Club, Mr. Hill commented that the club had been an important part of Harold's life and had contributed to Harold's happiness, "perhaps much more than you know". At the cemetery, Mr. Hill had thoughtfully arranged so that Harold's Airstream was parked nearby.

This reporter cannot help but observe that there is nothing in our charter about improving people's lives. If we have managed to do that in this one instance, our members can take credit for a job well done.

#### *Larry Huttle Speaks-*

Speaking March 19, at the Region 9 Rally, Mr. Larry Huttle, current Airstream president, announced that Thor is currently the second largest manufacturer in the number of units sold, and hopes to be No. 1 by year 2000. There are currently 142 different brand names, with the top 7 accounting for 80% of sales.

An Airstream Company website is in the making as is an E-mail address. The engineering CAD system is coming on stream nicely.

New products are a high priority just now. The Safari line has been well received. This lightweight line is an Airstream, though it is built in another plant. The exterior is aluminum and has the looks of a classic. Details of structure and furniture take advantage of space-age materials and fabrication methods. Weight is down. To the 21 foot currently being made will be added 25 foot (4,600 lbs) and larger sizes depending on demand.

Describing Airstream as "An American Icon", Mr. Huttle says Airstream plans to take advantage of its mystique by introducing an American History series this year. A series of 50 Norman Rockwell trailers will be made with special decor appropriate to memorializing this great artist. The limited edition units will have premium mechanical features as well.

As Trailer Life buys Camping World, and Thetford buys Norcold, look for more consolidation in the

industry. Seventy percent of all fifth wheels are sold West of the Mississippi. Also, but not said by Larry, out of every five RVs sold, three are motor homes.



### **Region 9 Rally, Waco, Texas-**

Eight regular Vintage members were parked together March 17th. As usual, 4 o'clock was the signal and 25 or so chairs were dragged into a circle for introductions, hugs, and back slapping. The more these gatherings repeat, the more fun it is. In addition, there were three vintage trailers parked elsewhere, but these individuals usually appeared at the four o'clock hour. A past international president and his wife were present in a borrowed vintage, a first time happening.

Concours judges were Betty Reed (#29791), Bill Reed (#15062), and Sue Collins (#7839). Best-in-Show went to Vintage 1st Vice President Clyde Wagner and wife Ellen showing a 1964 Globe Trotter for the first time. Reserve Best-in-show went to Diane McElligott with her 1961 Bambi sporting a newly straightened and dent-free door. Oldest-in-show went to Henry and Sara Gerke (#1721) with a 1958 Traveler which is now for sale.

Bud Cooper gave his dent removal demonstration to an overflow crowd of 200+. Coop was pleased when, later on, 200 different people appeared to hear "The Airstream Story, The Missing Chapters". This traces the beginnings of the classic Airstream back to The-Spirit-of-St.Louis (Lindbergh's plane).

Soule Cotten led a maintenance seminar at which he addressed the following points:

1) At rest stops, kick your tires to check pressure, feel the tires for equal temperature as an added check on correct pressure, kick your spring bars for equal tension, feel your hubs for equal temperature.

2) If you don't know the best tire pressure for your rig, start with the maximum pressure imprinted on the wall of the tire. This may be too high, but will give the best gasoline mileage and handling. As tire wear progresses, reduce pressure by five psi if it is wearing on the center. This will also improve the ride.

*Coop adds the following on tire pressure. A booklet on tire pressure came with my new Tahoe. It made some interesting points. All recommendations on tire pressure are pressure while cold. Cold means cold, as in parked all night without moving. If you drive the car one mile to the gas station, this will raise the pressure four psi (Amazing!). Suppose you wanted to compensate for this pressure rise, what should you do? Add, not subtract, the 4 psi to the recommended psi. Should you add air pressure to your rear tires for trailer pulling? No, says the booklet.*

3) Tighten your hitch ball as tight as you can using up to a five foot wrench. (Yes, he said five feet.) Replace your ball every 100,000 miles or 3 years.



### **Assorted Stories-**

Bettye and I took the Bambi down the Baja

peninsula and back, a distance of 5,000 miles. Company caravan 235 had 35 units and 2 vintage members. There were about 10 motor homes, the balance were trailers, mostly large ones. This trip will provide me with writing material for at least two years. Often I was glad that my trailer was only 16 feet long and 80 inches wide. I suspect that some of the others wished they could change places. On the other hand, six weeks in a 16 foot trailer is a test for a solid marriage! Evidently, ours will last.

On the personal side, we had some fun experiences going down and back. In various parks, young couples would saunter over to meet the odd couple with the baby Airstream. Most recognized it was a Bambi and were delighted to be invited inside. They all walked away with a VAC membership blank. Two instances are outstanding.

Going south of Mulege (say moo-lay-HEY), we spotted a beautiful Bambi parked on a magnificent crescent bay, right on the beach with a view over the Sea of Cortez. We commented on the idyllic location and uniqueness of a new looking Bambi.

Days later, on the way back up North approaching Mulege, we were flagged down at the Pemex (gasoline station). It was the people from the Airstream Caravelle (not a Bambi after all). They had reasoned that we would be coming North some time. Spotting the first of the caravan in early afternoon, they lay in wait for us. They had seen our Bambi at the same time we were looking them over. This nice couple will, no doubt, utilize the application blank I gave them. They were interesting people, hope you will meet them.

In another park near Todos Santos (All Saints), we chatted with a young couple who expressed interest in our underdeveloped specimen of a trailer. Turned out they had a 27 foot 1968. After a half hour of talk and a thorough inspection of the Bambi, they invited us to their trailer. Entering in the dark, she switched on one tiny light. The whole place instantly blazed with bright light. The entire interior had been redone in mirror-bright stainless steel. "Can't be stainless, must be something else" I said. It WAS stainless!

This young couple, without preconceived ideas of how an Airstream should look inside, had moved in new and interesting directions. Many of the interior furnishings were steel. This may sound strange but it had a pleasant hospital feel, as it should. She is, like two other vintage members, hyper-allergenic, meaning that she is made sick by trace amounts of gasses which our bodies don't even feel.

In addition they have a composting toilet, the first one I ever saw. It works and has possibilities for those who are inclined to try such things. It uses no water, but does use a constant small amount of electricity which the solar panel easily supplies. Great for beach camping with no sewer hook-up.

Rutherford L. Cooper, #2601

*[This is the fifth and final installment of research into the contribution of William Hawley Bowlus to the Airstream trailer. This historical recant is being presented in the Vintage Advantage in five parts; Introduction (VA May 1996 issue), Lindbergh and The Spirit of St. Louis (VA August 1996 issue), An Industry is Born (VA November 1996 issue), Enter Wallace M. Byam (VA February 1997 issue) and Bowlus and Byam (this issue).]*

## **THE AIRSTREAM STORY, Bowlus and Byam**

### **PART V**

William Hawley Bowlus, the man who had stayed up all night to follow the Lindbergh flight, did not stay with Ryan Aircraft for very long after they built Lindbergh's plane. He moved to the Los Angeles area near where he was born, and set up shop designing and building gliders. This might seem like a surprising jump, but at that time the U.S. had been forced to take a back-seat to Europeans in this field. Using Swiss and German designs, they had racked up record after record. Gliding, now called soaring, was a popular sport in the U.S. and had collected a fraternity of sportsmen and enthusiasts who held meets but failed miserably in international competition. Bowlus realized that the secret lay largely in our inferior designs and set about to remedy the situation. He found real support from men like Richard Dupont, with whom he formed The Bowlus-Dupont Sailplane Corporation.

As a fifteen year old student in 1910, he had won first prize in the glider division of the Los Angeles City Kite Tournament. Within a year he was flying his own man-carrying glider.

In 1929 Hawley flew a sail-plane of his design breaking a record of less than 15 minutes that had stood for 18 years, and within four months had extended the time to over nine hours. He was instrumental in returning a great many soaring records to U.S. shores. He continued designing and building gliders through WW II and is much better known in this field than as a builder of trailers. In fact, C. R. Roseberry, in "The Challenging Skies" says the he was "the foremost American glider specialist".

In 1933, America was discovering the house trailer. The epicenter of this activity was the Mid-West, although a second center was developing in the Los Angeles area. Hawley Bowlus was caught up in this and decided to build one. At that time the majority of trailers were home-builts. He had not yet met Wally Byam who was also involved in trailers in the Los Angeles area.

Hawley was perfectly situated to build a trailer because he already had a glider factory. His widow, Ruth Bowlus told me the story. He designed the structure like a Piper Cub. The framework was of strips of wood fastened over wooden bows. Then a cover of fabric was sewn and shrunken over the frame. She says it looked like a great egg, but I imagine it was a perfect tear-drop. They painted it red and took a trip to Central City, Nebraska. All along the way people asked where they got it and wanted to see inside. Hawley readily realized that he could sell some of these and it would be very compatible with his present business. They were successful and became quite busy. They expanded and drew in family members to help.

In 1934 Hawley announced to his family that if he could make a trailer out of fabric, he could do it better in aluminum and Mrs. Bowlus is quite sure that the first of the aluminum trailers was finished that year. This was a case of the right man being in the right place at the right time. When the final version was finished it was an instant success. It was a perfect tear-drop in sparking aluminum. Both stylistically and engineering wise, it was aeons ahead of anything the industry had to offer. And best of all, drawing on his aircraft experience, dating back to the engine cowl of The Spirit of St. Louis, he had created a design so sophisticated that virtually none of the existing manufacturers could copy it. Many wished they could. Later, when it was shown at a major trailer show, people stood in line to go through. It is most unlikely that this happening escaped the notice of Wally Byam. His factory with 54 employees was at 304 West 22nd Street, Los Angeles, only some 50 miles away.

There are 16 known examples of this model in existence. In addition there are photographs, video's, literature, and a few eyewitness accounts to substantiate the record. The body will be instantly recognized as identical to the earliest Airstream Clippers of 1936. The Bowlus frame, however, was composed of steel tubing (aircraft style) welded into a network that became integral to the body. Running fore and aft were Pratt trusses with a depth of about 13 inches, forming the main frame rails. These trusses started at floor level and the top chord was 13 inches above the floor. Thus the body was underslung in every sense of the term. It was rigid and extremely light, one Bowlus 18.5 foot long trailer weighs 1,450 pounds. For comparison, a 16 foot Airstream Bambi weighs 2,380 pounds.

This achievement did not come without a penalty. The unusually deep frame rails invading the living space, meant that the door had to be at the front; otherwise, one entering at the side, would have to step over the frame-rail in order to reach the center of the trailer. The front door was never popular because it made the trailer difficult enter at all times, but especially when attached to the tow vehicle. And, ladies in tight skirts resented it on principle. The frame also severely limited the scope of possible interior arrangements.

But, the most important penalty was in cost. The frame, composed of dozens of short pieces of tubing with angle-cut ends, had to be tediously welded by hand. And some of the framing had to be done after the shell was mounted on the frame because in the end it became one inseparable assembly.

Bowlus, in typical engineering posture, adamantly refused to sacrifice good engineering for salability. The .8.5 foot model sold for \$4,600, three times the price of a Buick. Sales were sluggish, profits skimpy. Struggling to get sales up and costs down, the company took in a partner and began a tentative expansion program which was a failure and resulted in a bankruptcy in 1936. So deep was the loss, that at the public sale, Hawley had to buy back his own hand tools. Such a disaster from such a glorious start!

Wally Byam, by this time well known to Hawley Bowlus, attended that sale. There was a conversation between the two in which Hawley, in gentlemanly fashion, gave Wally permission to bid on the materials offered and to take up manufacture of the Bowlus trailer under the name Airstream. Presumably, Byam bought partially completed trailers, fixtures, and materials. He probably also hired one or more of the former Bowlus employees, though none of this is on record today.

Wally wisely put the Bowlus body on a more-or-less conventional chassis, and moved the door to the side, apparently doing all this in a few months. The resulting trailer, at least two examples of which survive, was on sale in 1936. The transition from Bowlus to Byam could not have been easy. Luckily, a driver like Wally was at the helm or the project might have died a second time.

Bowlus continued to design and build gliders through WW II. His accomplishments were many and of major importance. He is regarded as a leader in that field.

It is interesting that two men, just two years apart in age, and with such similar names, Hawley Bowlus and Wally Byam, should have been drawn together to interact in such an unusual way. The rest is history; Airstream history.

The end ?

#### **Author's note-**

*Airstream owners can be proud of a lineage which extends back to "The Spirit of St. Louis", and includes such heroes as Lindbergh, Bowlus and Byam. In doing the research, I have drawn from various books on each of these people, have examined in detail two Bowlus trailers and have video records of each. I have conversed at length with Mrs. Ruth Bowlus, the widow of Hawley, and their son Charles, both of whom are living today. There is much that had to be left out for the sake of brevity.*

*In comparing 1936 Bowlus Chieftains with 1936 Airstream Clippers, it is apparent that a mere copy could not have been made which would agree in such detail, they had to be made from the same parts, probably by the same people. It is a bit puzzling that the Bowlus relationship was never talked about in early Airstream histories: there was nothing illegal or unethical about it. Perhaps no one asked. Or, perhaps Wally's flare for showmanship ruled it out. Your additions and comments will be most welcome, and will be published if appropriate.*

Rutherford L. Cooper, #2601



*[The following appeared in the March 1981 issue of Trailer Life magazine on pages 60 to 61. This article was published in a series called "Pioneers of the Past." The author of this article was the late Mr. Charles Kiefer (#1104), 1959-60 WBCCI International President (he was the fifth President of the WBCCI). The article is being reprinted here in its entirety without figures.]*

## **PIONEERS OF THE PAST**

# **Wally Byam - The Man And The Myth**

by Charles Kiefer

**SOME MEN CLIMB** mountains and some men move them. And then there are a very few who do both. Wally Byam was a member of this elite minority who dreamed the impossible dream and somehow, combining ingenuity, foresight and the right "Sanchos" in the right places, proceeded to slay windmills all over the world. His international adventures rivaled those of Quixote's and through them, thousands of travelers realized their dreams, either firsthand or vicariously.

However, as with most great men, Wally's reputation often preceded him: His attributes grew; his accomplishments multiplied. Superlatives sprung up: Great-grandfather of the RV industry - grandfather of trailers - father of caravans - it was difficult to distinguish between the man and the myth, between the labor and the luck....

When I first heard about Wally Byam I found that, although many people worshipped the ground he walked on, a lot of other people disliked him intensely. I wondered in my own mind, what kind of man could he be to cause such diverse reactions in people. After I met him, I quickly found out. Wally was, basically, an honest man who did not fear expressing his honest

opinion whether it bruised someone's ego or not.

After Wally died in 1962, I was amazed to read various articles about him. They all credited him with having deliberately thought out the entire travel trailer and caravan concept. According to Wally's own recollection shared with me during our rather close friendship, it all happened quite accidentally. I was taken into Wally's confidence many times to discuss and advise on various problems and this is the true story of how it all began.

Mr. and Mrs. Cary Biswell, Wally's grandparents, were given the task of raising the boy when his parents passed away shortly after his birth on July 4, 1898, near Baker, Oregon. It was under his grandfather's tutelage that young Wally was bitten by the travel bug: Cary Biswell hauled freight pulled by 16-mule teams from Baker to the Colorado River, a distance of about 900 miles. Wally was a passenger, a partner and finally a teenage pilot. His first solo trip came when his grandfather sent him and a new flock of sheep to their summer pasturage in Oregon's high country. That small covered wagon where he lived alone for several months may have set the stage for the silver shell of the future.

After high school, Wally

longed for something other than mountains and spent the next three years at sea earning his mate's license. Once ashore, his inquisitive mind sought new horizons and entered Stanford University in California where he completed his degree in law. But Byam never did practice law.

A job with a magazine publishing firm, coupled with his avid avocation - camping - soon unleashed the flood which would carry him to, quite literally, all the corners of the earth. Wally loved the beauty and the tranquility of the outdoors and would often spend a few days in the forests or mountains - much to his wife's displeasure. She did not appreciate sleeping on the ground! In an attempt to alleviate her objections, Wally purchased a Model T Ford chassis and built a platform on it; he would tow the platform with his car, select his campsite and set up a tent on the platform.

After using that system for a while, he decided to eliminate the chore of putting up and taking down the tent by building a low teardrop-shaped permanent shelter that included a small ice chest and a kerosene stove. Next, he increased the size of the structure so he could almost stand upright when inside the vehicle.



Wally described the progress of his various creations in several magazine articles and received numerous letters requesting additional information. One day the publisher suggested that he prepare a little booklet describing how to build a trailer. Wally wrote the instructions which were printed and sold for \$1.50. The book proved so popular that the publisher suggested that Wally add more information to the book so they could sell it for \$2.50.

One day Wally received a letter from a man who had read the book but was not mechanically minded and asked if Wally would build the trailer for him. Wally agreed. After he completed it, he mentioned the job humorously in his next article. This initiated a number of requests from other readers who could not build their own trailers. As a result much of Wally's time, when at home, was spent building trailers in his backyard. The time was about 1930. Trailers had been on the market for several years but they were being manufactured in the Midwest. Wally's unit was one of the first on the West Coast. It was not until 1936, however, that Wally Byam conceived the Airstream name and not until 1947 that the company was actually established.

In 1942, the War Production Board interrupted the little backyard trailer business. Ordered to cease production of all trailers except those directly involved in government housing, Wally closed up shop. He refused to be associated with the "substitute for a house," as he called the wartime mobile housing units. Trailers were for *going*, not staying.

He was employed in the aircraft manufacturing field at Curtis Wright Industries, in Los Angeles, California. Also employed at Curtis Wright were Art Costello (now deceased), a bright business administration graduate from Cornell who went on to become chairman of the board of Airstream: Andrew Charles, a

production genius and later president of Airstream: and Dave Jacobs, current sales manager of Traveleze Industries. In 1947, this group formed the core of the fledgling Airstream Trailers, Incorporated. The company's fantastic growth since then is history.

In order to keep abreast of any manufacturing problems, Wally soon began holding what he called bull sessions: meeting with groups of Airstream owners, he would ask anyone who had a trailer problem of any kind to stand up and discuss it. He would accept the criticism, make no excuses and ask if anyone else had the same problem. All complaints were immediately directed to the factory where they were resolved.

All during this period of trial and error, Wally Byam continued his pursuit of the great outdoors. He traveled as far and as often as work permitted, sometimes going into the "forbidden wilds" of Mexico. After one such trip, he reported his adventures in an article. An impressed reader contacted Wally, expressing his interest in Mexican travel. However, the man's fear of traveling alone in a foreign country kept him at home; could he go with Wally sometime? Wally was so intrigued with the man's attitude that he decided to encourage him. Instead of answering the letter with another letter, Wally included the request in his next magazine article. He ended the article by assuring that he would welcome the man on his trip into Mexico. He guaranteed the man an interesting and very rewarding trip. Then he proceeded to tell him exactly when and where he was going to cross the border and suggested that he wait for him there. When Wally arrived at the border crossing site, he found 75 trailers waiting for him. Thus was formed the first U.S. trailer caravan in history - a complete shock and surprise to Wally.

From 1951 to 1960, Wally Byam caravanned the globe. He

had developed a trailer durable enough to follow a passenger car anywhere and comfortable enough to make the journey a joy. He was a true pioneer, leading his followers not to battle, but to beauty. Thousands of travelers, afraid to attempt such trips alone, followed Wally into Mexico, Canada, Europe, the Orient, Africa, Alaska and the Holy Land. The caravans were masterpieces of organized audacity and high adventure. They were large events, both in distances and destinations involved and in their emotional impact. They have profoundly touched and added glamour to the lives of ordinary Americans who otherwise might not have known what the world of travel had to offer.

The Wally Byam Caravan Club International, which was officially organized in 1955 under the direction of Fred (Pop) Riley of Long Beach, California, continues to follow in Byam's footsteps. Over 60,000 Airstreamers strong, the WBCCI hosts over 100 meetings weekly. The Way of Life Division of Airstream, which creates and organizes the worldwide caravans, is responsible for keeping the dream alive.

So when people ask me about Wally Byam - was he the granddaddy of the RV industry; how much of the legend was the man and how much the myth - does it really matter? He led thousands of people, young and young-at-heart, to places over the rainbow and that's what matters. TL

**Editor's (TL) note:** Charles Kiefer, a close personal friend of Wally Byam's, is the author of numerous travel articles and a book *Tow Each His Own*. He was elected international president of the Wally Byam Caravan Club in 1959 and held the directorship of the Airstream Way of Life Division from 1961 until his retirement in 1967.

*TRAILER LIFE, March 1981.*

## TECH TALK

### PHYSICS OF TOWING

Many insights on what makes a trailer tow well can be inferred from extremely basic physics. This article is an analysis of some physics principles behind the art of trailer towing.

#### Friction

The starting point is understanding the difference between static, sliding and rolling friction. As everyone knows, pushing a concrete block across a concrete floor is difficult, but once started it slides easier. The clue here is that the small imperfections of the concrete floor mesh in with the small imperfections of the block (like teeth on a gear) and lock the two together. Once enough force is applied to break these little "teeth" off, most of the block is actually rolling on debris like little ball bearings. After the block stops, it can settle down again and allow the imperfections to mesh and increase friction. We see this higher static friction every day when we try to slide things. We even see it in our cars when we stop. The last few inches of motion of a car in a slow rolling stop often results in a "jerk". This results from the increased friction as the brake shoes and pads transition from sliding friction to static friction. One test of a good driver is how effectively they can reduce brake peddle pressure to cause a smooth stop.

The next fundamental is rolling friction. Rolling friction is less than either static or sliding friction. Imagine how a wheel touches the road; the leading edge of the wheel actually lays down on the pavement and the trailing edge is picked up. The bottom of the wheel is actually stationary! Therefore there is no sliding friction. This is an important point, the bottom of a moving wheel is stationary, the axle moves at the speed of the vehicle, and the top of the wheel moves at twice the speed of the vehicle. If this concept is hard to visualize, consider the caterpillar tread. Clearly the tread on the ground is stationary; one could actually nail the tread to the ground briefly without affecting the forward motion of the vehicle. Again clearly the top of the tread is moving faster than the vehicle so that it can "catch up" and be laid down again for the vehicle to move over it.

From these three fundamentals we can now infer the following:

1. A wheel rolls in a straight line because the rolling friction in a forward direction is less than the sliding friction in a sideways direction.

2. A wheel can still roll with a small sideways "slip angle" since the tread in contact with the ground is connected to the rim with a flexible sidewall.

3. Once a wheel stops rolling and starts sliding there is no directional restoring force. A sliding tire

will slide sideways just as easily as any other direction.

4. Since static friction is higher than sliding friction, and since the bottom of a rolling tire is actually stationary with respect to the road, tires can apply more stopping force while they are still rolling than when they are sliding.

5. Anti-lock brakes that release brake pressure when the tire stops rolling will always stop a car in a shorter distance than "locking up the tires" and sliding. This is especially true when the tires are on different surfaces, such as ice or gravel and concrete.

6. Starting off from a slick surface such as ice or snow is more effective if power is reduced to prevent wheel spinning. The spinning wheel has only sliding friction while the stationary or rolling wheel has static friction.

7. If a tire is sliding sideways, applying brakes will do nothing to slow it down or to stabilize its direction.

The preceding insights explain why an automobile with sliding tires often goes into a spin; there is no restoring force. This explains why the rules are to turn the front wheels in the direction of the spin; if the front wheels can be turned enough that they will roll again, the sliding friction of the rear wheels will be greater than the rolling friction of the front wheels and the car will straighten. This is why they recommend that the brakes NOT be applied in a spin, because the front wheels need to roll so that they will have less friction than the sliding rear wheels. If the slide angle is too great to get the front wheels rolling, then nothing can be done until the car rotates around again (either front or back).

These principles help us understand why one should never lock up the wheels of a trailer; and that is that it is likely to start sliding sideways and pass the car. This is especially true with a car with anti-lock brakes; the car is stopping using maximum static friction from the rolling wheels, the trailer brakes lock up and start sliding with less than maximum friction. The result is that the trailer has no directional stability and is not stopping as fast as the tow vehicle, thus, the trailer tries to pass it. The only choice to prevent a complete jackknife is to release the car brakes and let the sliding friction of the trailer straighten things out. This is a poor choice, of course, if the original intention was to stop quickly!

These insights also explain why applying brakes to a fish-tailing trailer will dampen the swing and straighten it out ONLY if the trailer brakes are applied before the trailer wheels start sliding significantly. Once the trailer tire slip angle is exceeded and the tires are sliding, no additional braking force is available until they are rolling again. They also point out why, if you must lock up automobile wheels, the ones to lock are the FRONT wheels, NOT the rear wheels. If the rear wheels lock up, they have no preferential direction forward or sideways. As a result, a disturbing force such as uneven pavement can push the rear sideways

and there will be no restoring countering force from the rear. At the same time, the front wheels will be pushed sideways, increasing their sideways friction and forcing the car into a spin. On the other hand, if the front wheels are locked and the rear wheels are rolling, if a disturbing force pushes the front sideways the rear wheels will increase their friction as they are pushed sideways and will tend to restore directional stability. The front wheels, already being locked and slipping, cannot add any increased friction to encourage the car to spin.

The differences in sliding friction vs rolling friction explain why multiple-axle trailers have the reputation of being more stable to tow than single axle trailers. Any change in direction of a multiple-axle trailer will require at least an increase in slip angle for the tires on one axle, if not an actual slipping of tires. This increase in friction to sideways motion translates to a more stable trailer.

Another related fundamental is speed. Obviously there is only so much friction (read road adhesion) available to a tire. Clearly if the drive wheels are using most of this to propel the rig down the road, little excess may be available to resist sideways motion. Additionally, disturbing forces such as wind gusts increase strength with the CUBE of speed. Slowing down just a little will make a huge difference in rig stability.

### Hitch Geometry

The next fundamental is the geometry of the tow vehicle/trailer connection. Consider a tow vehicle with a conventional, pivoting hitch placed somewhere on or behind the rear axle. It is clear that if this pivoting point were placed as far as 20 feet behind the rear axle this becomes a long lever arm and any disturbing forces applied to this point by a trailer would have a significant effect on the tow vehicle. A disturbing force to the right would move the front of the tow vehicle to the left, which would cause the hitch point to move to the right, which would increase the movement of the front to the left, moving the hitch point even more to the right.....a classic case of positive feedback where the disturbing force makes the problem worse. It is clear that reducing this lever arm will increase the stability of the system. It would appear that a zero-length lever arm would be ideal in that disturbing forces by the trailer would not affect the front of the tow vehicle.

This rationale can be extended to place the pivot point slightly in front of the rear axle. In this case a disturbing force to the right by the trailer would tend to move the front of the tow vehicle to the right and would move the pivot point back into line with the direction of motion. The disadvantage to short hitch point lever arms is that they do not allow the trailer wheels to track the path of the tow vehicle. From the limited viewpoint for perfect tracking, the ideal axle-to-hitch-point distance should equal the trailer hitch-point to trailer

axle distance.

From this fundamental we can state that: Reducing the distance between hitch pivot point and the rear axle will increase the stability of the system and reduce the trailer tracking accuracy in turns. Also we can say that given a non-zero hitch point to rear axle distance, a longer wheel base tow vehicle will be more stable because the hitch point lever arm is a smaller fraction of the tow vehicle wheel base.

We can now enumerate the following insights:

1. The simplest way to reduce this distance is to choose a tow vehicle with a short rear overhang and have the actual hitch pivot point as close to the rear of the car as possible.

2. One way of reducing this distance is to use a "fifth wheel" trailer and a pickup truck as a tow vehicle. This is a very stable system, but the trailer wheels do not track the tow vehicle well as "corner cutting" can be severe.

3. Another way of reducing this distance is to use a trailer hitch that pivots on or near the rear axle. This approach does not require a pick-up truck and can use a conventional trailer. This is a very stable system, but the trailer wheels do not track the tow vehicle well as "corner cutting" can be severe.

4. A third way of effectively moving the pivot point toward the rear axle is the "moving ball" hitch approach. The actual ball is placed on a series of lever arms that allow the ball to move a few inches from side to side. By choosing the geometry of the lever arms, within the limits of this motion the ball moves sideways in a direct line as if it were pivoted at or near the axle. This gives, within the limits of the hitch ball movement, the stability of a zero length hitch point, and the short turn tracking of a conventional hitch.

### Center of Gravity

Another fundamental that needs to be addressed is the longitudinal center of gravity of the trailer. Any moving object is more stable if the center of gravity is ahead of the center of resistance. If an object is moving sideways the resistance forces will tend to move the lighter end more than the heavier end. The lighter end will tend to rotate about the center of gravity until the heavier end is in the front. This principle is found in such diverse objects as arrows, spears, rockets, automobiles and trailers. The typical automobile has about a 60/40 weight distribution on the front and rear axles. This means that the center of gravity is about 10% ahead of the center of the car, and in extreme conditions, the car has a tendency to rotate until the front end is forward. Consider the bad reputation the VW Beetle and the Corvair developed when they did not follow this fundamental principle. This is why you should load up the front seat first, this is why pick-up trucks can become unstable with heavy loads in the rear and this is why trailers should have 10 to 15% of their weight on the tongue. Experience has shown that 5%

tongue weight is unstable, 10% is usually good, 15% is marginally better and 20% is not noticeably better than 15%.

This added tongue weight on the rear end of the tow vehicle has two bad effects. One is that it acts to shift the center of gravity of the tow vehicle to the rear, upsetting its weight distribution making it more unstable, and the other is that the reduced weight on the front wheels reduces their capability to steer. The solution to this problem is the weight distribution hitch. A series of springs lifts the rear end of the tow vehicle, putting more weight on the trailer axles and the front axle of the tow vehicle. The amount of weight to take off usually equals the tongue weight. One way to determine this is to increase spring tension until the tow vehicle is sitting level with the trailer hitched up and loaded.

Since instability involves undesirable rotation about the hitch pivot point, any device that restricts this motion will increase towing stability. These devices are typically called "sway bars". This usually involves the addition of a device that adds friction to the pivot point. These devices typically add around 10 to 15% to the stable towing speed of a trailer.

### Brake Controllers

Trailer electric brake controllers are notoriously poor. Just listen at the next rally to the screeching trailer brakes and sliding tires. Systems adjusted for concrete will slide on wet asphalt or dirt and gravel. If they do not slide on gravel then they are not adjusted for maximum braking force on dry concrete. The simplest kind are merely timed from the brake lights. They start off with low braking force and increase that force over a few seconds to a maximum force. Both the timing and maximum force are adjustable for different road conditions, but once the brake lights go on then the timed sequence starts and continues until the brake lights go off. Modulation of the braking force during the stop is not possible with this type of controller. This type controller is difficult to make smooth controlled stops if the trailer is very heavy compared to the tow vehicle unless the trailer brake maximum force is set very low. Pressing on the brake pedal just enough to turn on the brake lights, but not enough to apply the tow vehicle brakes is a possible technique with this type of controller. When you hear people talking about "leading" trailer brakes, this is what they are talking about. This technique should be practiced before attempted in an emergency. Too much pressure will turn the tow vehicle brakes on and will just aggravate the situation.

The next kind of electric brake controller is a combination of timed response aided by a pendulum that measures deceleration and adds a proportional trailer braking force. This type can provide smooth controlled stops and can be adjusted to provide some "leading" trailer brake capability. Some limited

modulation of the braking force during a stop is possible, but if the trailer is heavy compared to the tow vehicle it will be the dominant force affecting the pendulum.

Other electric brake controllers take their input from either mechanical pressure on the brake pedal, or from hydraulic pressure from the brake lines. Either are capable of smooth, controlled stops, which can be fully modulated during the braking sequence and may be adjusted to provide some "leading" brake capability. To date, no one provides anti-lock electric trailer brakes. If the trailer brakes lock up, the only current recourse is to take all of the brakes off and then reapply with less pressure.

There is one device on the market that, with the push of a button on the steering wheel, can apply a limited amount of braking force to the trailer wheels. This should be a very effective technique IF it is applied before the trailer tire slip angle is exceeded.

### Conclusions

Having examined the fundamental physics behind towing, we can now develop a set of rules that will help if, in spite of all our knowledge, we get into a situation where we have an unstable trailer. Anything that tends to straighten out the towing angle (the angle the trailer tongue makes with the hitch) will be helpful. When this is a perfectly straight line the trailer is not influencing the stability of the tow car. Things that tend to straighten this out include:

Drive slowly

Drive in straight line

Leading center of gravity

Sway bars

Increased towing load:

Headwind; Uphill; Trailer brakes; Accelerate

Things that tend to increase towing angle include:

Drive faster

Maneuver

Trailing center of gravity

Decrease towing load:

Tailwind; Downhill; Car brakes; Decelerate

### Comments:

*Driving slowly sounds silly, but it does work. Never try to exceed your maximum stable speed. And be aware of the factors that will unexpectedly reduce that speed.*

*Driving in a straight line also sounds silly, but if your choice is to run over road debris or violently maneuver, choose the debris.*

*Sway bars help, but they do not correct fundamental stability problems, they merely reduce the effects.*

*Be careful towing in a headwind, the system may*

be stable until you turn and it becomes an unexpected tailwind.

*Be especially careful going downhill. That in itself will increase the instability, not counting the probable increased speed and a possible tail wind.*

*Acceleration will always increase stability. It is not, however, a useful technique when you are going too fast down hill. What to do then? Try acceleration AND trailer brakes to slow you down.*

*Trailer brakes can help in limited circumstances. If they can be applied before the situation deteriorates to a panic they will be very helpful. Once the tire tread slip angle is exceeded and the trailer tires are sliding, it is too late. They should never be applied to the point that the tires lock up. See the above discussion on different electric brake controllers and how braking techniques may vary.*

*Always be aware of the center of gravity of both the trailer and the tow vehicle. Store heavy canned goods up front. Older trailers have the black water tank in the rear and the fresh water tank in the front. Never tow with a full black water tank and an empty fresh water tank if your rig is configured this way. Do not put heavy tools in the rear of the trailer or carry heavy motorcycles on the rear.*

*As a rule of thumb, when the trailer weighs much less than the tow vehicle, it is light enough that it has little effect and the system is usually quite stable. When the trailer weighs around the same as the tow vehicle, then care must be taken to insure that the center of gravity of the trailer is correct, and that load equalizing hitches are used. When the trailer weight significantly exceeds the weight of the tow vehicle, consideration must be given to using some type of sway bar and possibly a hitch that reduces the axle-to-pivot-point distance.*

Don Grayson, #2758

## **BEST OF THE WEB**

### **Questions & Charlie Answers**

#### **concerning Airstream**

*This column is going to be a regular VA feature of the best questions and answers from the Airstream Central web site (<http://www.channel1.com/users/brosius/air.htm>). This column is authored by Mr. Charles Burke, an Airstream factory trained technician since 1972. Mr. Burke regularly answers questions concerning Airstreams and has agreed to take the best of these each quarter and republish them here. We at the VA are proud to have Mr. Burke on board and look forward to his column as a regular feature.*

*Charlie: I first started working for an Airstream dealer in late 1971 and in 1972 had the chance to attend the factory school in Cerritos, CA. From that time until I*

retired from the Air Force in 1991 I worked occasionally part time. With retirement I went directly to work at the Airstream dealer in Boise, ID, in the service department. After about 20 months I moved into the parts department. During my time in service I completed qualifications in servicing virtually all RV appliances. Since moving to the parts department I have continued my training and currency. Our dealership is fortunate in that we have a complete set of original service manuals from 1972 to 1984. In July 1996, while "surfing the Internet" I came across an Airstream Message Board and offered to help where I could. After a fairly short time things took off and here I am. I don't claim to know all the answers I give, I'm just not afraid to ask or admit I don't know. Over the years I have, and continue to, develop contacts with the folks that do know. So I will continue to gather information and pass it along as I can.

#### **Subj: Solar Panels**

*Question:* We own a '67 Overlander and want to install solar panels. When we removed the air conditioner (it was toast) we noticed that the roof was not supported and couldn't take weight. You know r-e-a-c-h across the roof, don't lay your body on it. So this question is: where is the preferred, "strong" place to put solar panels?

*Charlie:* The reason the roof does not appear to have support for the air conditioner is that the air conditioner was built wide on a pan which straddled the roof frame. The key to an Airstream roof is keeping to the rivet lines, they are where the strength is. Actually the solar panels we deal with are very light and we have been able to mount them where ever space allows.

#### **Subj: Can I Tow It?**

*Question:* I am planning on buying an early '60's 24' Airstream with a double axle. I have a 1969 Ford Galaxie 390 cubic inch V8 that is in great shape. Is this car a good one to tow this trailer and what sort of hitch would I need?

*Charlie:* The simple answer is yes, maybe. The whole answer follows. Cars of that era had the horsepower to pull a trailer. In fact, Airstream owner's manuals well into the '70's showed cars as the tow vehicle of choice. The following is quoted from the 1972 Airstream Owners Manual: "... include such things as a heavy duty alternator and radiator, heavy duty springs and shock absorbers, automatic transmission cooler, heavy duty fan and flasher unit..." Their rule of thumb to determine adequate horsepower was to divide the total weight of your trailer by the cubic inch displacement of the engine. If the ratio of weight to cubic inches was 20 pounds or less it was considered adequate.

A load equalizer hitch is required. The load rating of the hitch is determined by the weight at the tongue for your setup. The tongue weight should be between

500 and 750 lbs, so the recommended hitch rating will be 750 lbs. Check your car owners manual and do all service at the severe service interval recommendation. Airstream also mentioned that most "trailerites" carry more than really needed. So be mindful of what you load in for the first few shake down cruises.

### **Subj: Airstream Suspension**

**Question:** I have a 1973 International 27' where the right side is about 2" lower than the left. Is there an adjustment to the torque axle to compensate for this problem?

**Charlie:** Is there a fix, yes and no. There is no particular adjustment that can compensate for a difference such as yours. First you need to verify the tires on the coach are of the same tire size and manufacturer. The same tire size from two different manufacturers can physically be a different size. Given that things are the same then there is one last alternative. No you don't have to replace the axle. It can be repaired. You can make arrangements with your nearest Airstream dealer to have the axle shipped back to Airstream and their subsidiary Henschen will rebuild it. Don't be surprised if the dealer is not aware of this service, I wasn't until I called today to ask about your problem. When they call Airstream, have them ask for Jim Kitsmueller at Henschen. The estimated cost is \$100 per axle. Of course the killer is the freight getting it back and forth. Still it beats several thousand for a new axle.

## **FREE EMAIL!**

During this last winter when we Airstreamed, naturally vintage style, through Kentucky, Georgia, Florida and points South, we kept in touch with home and our friends via a new free national E-Mail service. Yes VACers, that was FREE national E-Mail service! It seems that a company named "Juno" has set up a network of local numbers throughout the United States to provide free electronic mail service. All that is required is a telephone, a modem, a computer, and software from Juno! What is the catch? They put advertising on the upper right hand corner of the screen while you are using it. Note that this is only an electronic mailing (E-Mail) service capability and not the world wide web (WWW) or Internet access. If you already have a national Internet Provider such as AOL, you do not need this service, but if you have either a local Internet Provider or no service at all, this is an excellent approach to get E-Mail as you roam about the country. And the price is right!

How do you get it? There are three ways. One is to call Juno by telephone (800/654-5866) and request it by mail. Don't expect a fast response, with over 1.5 million customers they are experiencing rapid growth and (like AOL) are not servicing new requests until

their capacity catches up. The second way is to call up their WEB site (<http://www.juno.com>) and download their software. Takes about 25 minutes using a 33k modem. The third is their recommended way and that is to get a copy from an existing user. This uses none of their resources, saves them money and ensures that the customer is serious.

Once the software is inserted into the computer, installation is largely automatic. A number of questions about your computer and modem are asked, your local phone number is requested and a list of local phone numbers are presented for your selection to dial the service. Questions about your hobbies and interests are requested in order to tailor the advertisements and then you proceed on-line to their central computer where you register your chosen E-Mail name. That's it!

They claim local, toll-free numbers to 95% of the population of the United States. I found the service to be good although a few of the more remote campgrounds in Georgia and Florida required a short toll call. Since the process of sending and receiving several messages takes less than a minute, even the toll calls are inexpensive.

I have used the system several ways. If I am going to be in one spot for several weeks, I have a 100 foot telephone cord that was purchased from Radio Shack that I run to the nearest unsuspecting telephone! If it is a one time deal, I can carry my computer to the telephone and plug it in for a quick session. If the telephone location already has a computer and a modem hooked up, then I carry the floppy disk to the computer and install the Juno program as a "guest", get and send mail from my floppy disk and I am done. Slipping a quarter into the phone kitty if it is a short toll call does wonders for next time and helps keep friends.

If you cannot find a handy phone jack, or if you must use a pay phone, then an acoustic modem will be needed. These are hard to find, but two sources: Konexx Koupler (800/275-6354; <http://www.konexx.com>) and Road Warrior (800/274-4277; <http://www.warrior.com>) have systems available for about \$150.

The Juno program software is very well done and has all the features of any E-Mail system, including a good spell checker. Access for me has been pretty good except for some evenings. Being retired, I like to check my mail in the morning and have never had any problem. Free technical help is limited to an extensive file of Frequently Asked Questions (FAQs) which can be accessed on line. The only problem is that I now have two addresses, one for the trailer when I am on the road, and one for the home address. Many Internet Providers will give you a small discount for vacation and forward your home mail to your trailer address.

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# THE VAC INTERNET HOMEPAGE

This column is a regular VA feature discussing the VAC Internet homepage, its progress and interest. Our website perator is Mr. Duane Hedahl (#1175), who has been able to get our new site up and running.

Our Internet website address is the following:

<http://www.commerce-center.com/vac/>

where there is a dash between the words "commerce" and "center" as required for proper webpage access.

Thanks for all the favorable comments regarding the Vintage Airstream Club Website. Suggestions you have made are taken seriously. It does take time to implement some of the procedures you have suggested, however, sooner or later, they will be on the VAC Webpage. In the near future, we will try and get the regional membership chairperson's name and address listed. We will try and get the Membership Secretary of WBCCI on. We will try and get the Video Librarian and Technical Librarian's name, address and telephone number on the website. In most cases, we need permission to do so and that takes some time. Thanks again for your interest and participation.

Duane Hedahl, #1175  
VAC Web Site Master

## VAC EMAIL ADDRESSES

Below is a running list of VAC members and subscribers electronic mail (email) addresses. This list was compiled by VAC folks sending in their address, either through the computer or through postal means. If other folks would like to be included in the future, just send me your address. I will continue to print and update this list in upcoming issues until either the list becomes unmanageable or the WBCCI begins to list email addresses in their annual Membership Directory.

VAC Name	WBCCI #	Address
Allredge, John	Friend	72212.2652@compuserve.com
Anderson, Timothy	Friend	tand@chervon.com
Anderson, Ursula	Friend	uand@a.crl.com
Bailey, Martin & Betsy	Friend	mbailey@hunton.com
Baston, Stanley/Florence	01348	sbastonnj@aol.com
Bednark, Kenneth/Kaye	17453	lemmieeee@aol.com
Bone, Forrest & Jeri-Ann	09712	F23Bone@aol.com
Braun, J. & Beth	03374	103231.64@compuserve.com
Burkhart, Bryan	Friend	bryan_burkhart@ccacsf.edu
Case, Patrica	Friend	pcase@hsph.harvard.pdu
Dahl, Robert & Heather	Friend	robbdahl@aol.com
Damron, Dallas/Deanna	Friend	drd@sciotonet.com
Darrington, Dan/Joanne	Friend	darringd@mitchell.net
Davis, CE/JL	03883	jlDavis95@aol.com

Demorest, Allan	14910	ademorest@aol.com
Dennison, Paul & Rose	Friend	as138@detroit.freenet.org
Dickinson, John & Linda	03884	john dick@sunherald.infi.net
Dix, Frank	30215	fadix@vnet.ibm.com
Dustin, Cary & Miriam	Friend	m_dustin@conknet.com
Fortner, Dale & Deborah	03352	dfortner@pond.net
Foster, Jeffery/Alta	Friend	maintala@aol.com
Funke, Don & Caryl	11893	dfunke@sprynet.com
Galang, Tony	Friend	tgalang@distream.net
Gizinski, Norbet	Friend	dr gdds@aol.com
Goddard, Glen & Carol	23585	gleng@tcity.com
Grayson, Don & J'Nann	02758	dgrayso@indy.net
Greene, Ken & Sandra	05236	san draf626@aol.com
Habermann, Heinz-J.	Friend	habsi@usa.net
Hedahl, Duane/Beverly	01175	dhddl@worldnet.att.net
Hilliker, Richard	Friend	104404.3016@compuserve.com
Howarth, Thomas	06490	howarth@nrl.navy.mil
Jones, Steve & Akiko	Friend	1032150.61@compuserve.com
Jowders, Victor & Julia	01338	vjowders@juno.com
Kennedy, Tom & Chris	04810	tkx045@aol.com
Kosut, Walt & Linda	Applied	wkost@execpc.com
Landvoigt, Arnold/Lois	Friend	amiland@allware.com
Le Gresley, Farncomb	4314	farncomb@mail.durham.net
Lynch, Barbara	04382	babaha@aol.com
Meeker, Tom/Ann	05303	piedmont@jx.netcom.com
Meller, Jef & Sandi	Friend	meller@oakweb.com
Mizusawa, Steven/Jenny	Friend	mizuaw@hotmail.com
Muecke, Michael	Friend	mikesch@iastate.edu
Mullendore, Don & Karin	Friend	dmullend@aol.com
Niblock, Fred & Ann	22244	niblockf@aol.com
Nicholson, David/Ann	Friend	frozenduck@aol.com
Oldfield, Tom	07012	T6487@aol
Outley, Kent & Delores	Friend	ottleybabb@aol.com
Park, Jim & Ruth	07070	jpark@ju.net
Patterson, Bob/Sharon	07701	Cars1to43@aol.com
Peterson, Howard		hpete@allwest.net
Pierce, Melvin/Charlene	03724	mpierce@scranton.ctctel.com
Raynard, Ray & Bea	01744	ray-bea@worldnet.att.net
Reasons, Don	Friend	calldon@airmail.net
Reece, Gene & Emily	19610	genereece@sava.gulfnet.com
Reed, Tom & Jennifer	06768	tpreed@mindspring.com
Rogers, Dennis	1860	BearWallow@sprintmail.com
Ryner, Peter & Gail	Friend	pryner@idonline.com
Ryno, Dick & Joanne	Applied	dick@calweb.com
Sawicki, David	Friend	aj023@free.net.buffalo.edu
Shireman, Eleanor/Larry	Friend	eve12@juno.com
Stanley, Edward/Lorraine	21491	estanley@gte.net
Tenewitz, Richard/Diane	06726	diarchie@aol.com
Todd, Doyle & Michele	Friend	jto dd@tenet.edu
Tyler, Terry	6477	TYLERBEARS@delphi.com
Wingwood, C&B	Friend	phelock@primenet.com
Winn, Coulter	01555	coulter winn@wdi.disney.com
Woldseth, Vegard	Friend	vegard@corrocean.no



## NEW VAC MEMBERS

To understand the levels of VAC membership and subscribers, the following classifications are provided.

**Member:** Members of the Wally Byam Caravan Club International (WBCCI) who own a vintage Airstream trailer (where a vintage trailer is defined as an Airstream trailer 25 years old or older). This is the dues paying, voting membership. A VAC member may hold office or be appointed to a position.

**Associate:** WBCCI members who do not qualify by owning a vintage Airstream trailer but wish for mutually beneficial reasons to belong. Associate members pay dues, vote and have all the benefits of a regular member, except that they may not be elected to office or park their trailer in the Vintage area at the annual WBCCI International Rally. A VAC associate may be appointed to a position.

**Honorary Member:** Membership bestowed upon VAC benefactors provided that they are WBCCI members. This is non-dues paying and a nonvoting membership.

**Friend:** Any person 18 years or older who has an interest in vintage Airstream trailers and wishes to receive the VAC newsletter (*The Vintage Advantage*). Trailer ownership is not a requirement. This category is for non-WBCCI members who want a subscription to the newsletter only. It is the hope of the VAC that the Friends subscribers will be introduced to the WBCCI through the VA and then join the WBCCI such that they may be full VAC members.

Since the last VA issue, we are pleased to welcome in the following new VAC members, associates and subscribers (note that the "A" after WBCCI number denotes associate VAC member).

VAC Member/Subscriber	WBCCI #	Trailer
Anderson, Timothy & Ursula	Friend	None
Bain, Tamara	01284	'64 19' Globetrotter
Begley, Michael	Friend	None
Bryde, Francis & Evelyn	15059	'88 34' Excella 1000
Burkhart, Bryan	Friend	'62 22' Flying Cloud
Byars, Bruce	Friend	'76 25' Trade Wind
Case, Patricia	Friend	None
Chamberlin, Mary	Friend	None
Collin-Roberts, Bill/Luize	Applied	'63 19' Globe Trotter
Cox, Richard	Applied	'68 30' Sovereign
Coy, Edward & Ruth	02827	'71 27' Overlander
Dahl, Robert & Heather	Friend	'70 25' Trade Wind
Damron, Dallas/Deanna	Friend	'67 26' Overlander
Danio, Gary & Sandi	09362	'61 16' Bambi

Darrington, Dan/Joanne	Friend	'61 28' Ambassador
Dennison, Paul & Rose	Friend	None
Duncan, Gary & Betty	Friend	'55 22' 22X8
Dustin, Cary & Miriam	Friend	None
Flood, Bill & Sandy	05080	'69 25' Trade Wind
Foskett, James & Barbara	04200	'65 17' Caravel
Foster, Jeffery/Alta	Friend	None
Galang, Tony	Friend	None
Gizinski, Norbet	Friend	'64 19' Globe Trotter
Goddard, Glen & Carol	23585	'72 31' Sovereign
Gregerson, Eric & Judy	Friend	'60 20' CCH
Hay, Bruce	Friend	'67 22' Safari
Heineman, Robert & Pamela	Friend	None
Jackson, Daniel & Linda	01605	'72 31' Excella 500
Jarvis, Mark	Friend	None
Johnson, Robert & Mary Jane	Friend	None
Jones, Robert & Shiela	13318	'72 31' Sovereign
Jones, Steve & Akiko	Friend	None
Jowders, Victor & Julia	01338	'70 25' Caravanner
Kelner, Dan	07398	'66 28' Ambassador
Kennedy, Geoff	Friend	None
Kosut, Walt & Linda	Applied	'69 18' Caravel
Lakey, Dwight & Sharon	Friend	None
Lewis, Ken	Friend	None
Lollar, Claude	01045	'72 25' Trade Wind
Meller, Jeff & Sandi	Friend	'68 26' Overlander
Mellon, Susan & Don	01058	'62 16' Bambi
Mizusawa, Steven/Jenny	Friend	None
Mullendore, Don & Karin	Friend	None
Nelson, George/Patricia	Friend	None
Nicholson, David & Ann	Friend	'73 31' Sovereign
Oldfield, Tom	07012	'66 17' Caravel
Olson, Robert & Martha	Applied	'72 31' Sovereign
Outley, Kent & Delores	Friend	'78 28' MH
Phipps, Floyd & Evaline	30570	'64 17' Bambi II
Pierson, Tad	Friend	'53 16' Bubble
Raynard, Ray & Bea	01744	'91 29' Excella
Roby, John Walter	09674	'61 16' Bambi
Rogers, D./Reeves D.	Applied	'70 31' Sovereign
Ryno, Dick & Joanne	Applied	'65 17' Caravel
Schaefer, Trudi & Paul	Friend	'60 26' CCH
Schaffer, W./P. Hendricks	Friend	'64 19' Globe Trotter
Steenbergen, Thomas/Alice	05835	'69 31' Sovereign
Thompson, Jr., Joesph	Friend	'67 17' Caravel
Todd, Doyle & Michele	Friend	None
Trippel, C.M.	Friend	'59 18' Globe Trotter
Tunstall	11137	'68 26' Overlander
Varley, Fay	07650	'68 17' Caravel
Wingwood, Curtis/Brigitte	Friend	'73 31' Sovereign
Winkel, Frank	Friend	None
Woldseth, Vegard	Friend	'67 19' Globe Trotter
Wood, Lorenz. N	05925	None

Ed Stanley, #21491



## CLASSIFIED ADVERTISEMENTS

*Anyone may advertise in the VA since membership in the VAC is not a requirement. As a VAC member or Friend, one advertisement per year may be placed in the VA for no cost as a subscriber. Any additional advertisements in the same year cost \$5.00 per advertisement. For non-VA subscribers, the cost of each advertisement is \$5.00. In order to place an advertisement in the VA, please send all information to Mr. Ed Stanley, Treasurer, who in turn will forward them to the editor. Please send advertisements in the format shown.*

### AIRSTREAM PARTS

**For Parts:** 1972 Airstream Land Yacht, rolled over. A/C, oven, door, some glass, small misc. trim, no chassis parts. Bruce Duckworth (#1268) 3700 Decker, Moore, OK 73160; 405/769-3318 (work), 405/799-8912 (home).

**Wanted:** Two Airstream hub caps, dog-dish style (small ones) for 1968 26' Airstream Overlander trailer, any condition as long as not rusted through or flat. George M. Nieuwenburg (#1268) Rembrandt St. 133B, 3202 EP Spykenisse, Holland; 0181-659850.

**Wanted:** Good copy of **Fifth Avenue on Wheels** by Wally Byam. Bradford Carr, PO Box 2, New Boston, NH 03070; 603/487-2009.

**Wanted:** Trailer literature from 1935 to 1955, all makes. Also trailer magazines from the same period, such as, Trail-R-News, Trailer Topics, & Automobile and Trailer Travel. Ed Smith, P.O. Box 1432, Bisbee, AZ 85603; 520/432-4858.

### TRAVEL TRAILERS FOR SALE

**1950 25' Airstream**, Make Offer. Exterior and frame in very good condition, interior needs repainting, floor is getting soft, will be scrapping this summer. Dennis Meyerhofer, 4246 S. Elizabeth-Hanover Rd., Elizabeth, IL 61028; 815/858-3714.

**1954 25' Airstream**, Make Offer, single axle, 7.00X15 tires, excellent exterior that needs polishing, roll-up awning, spare tire, interior wood in good shape with birch cabinets, four burner stove with oven, 14cf 110V fridge, 5A cooler, rear bed, white ceiling and blue carpet. Frances Welhouse, 2779 W. 8th Street, Space 74, Yuma, AZ; 520/726-8536.

**1957 22' Airstream Caravanner**, \$5,000. In the family since new, well maintained, single axle, rear bath, holding tank, awning, electric jack, new wheels, shocks and electric brake assemblies and many other extras. R.L. Botenberg (#7696), 13 Circle Drive, Decatur, IL 62521; 217/428-4812.

**1957 27' Airstream Vacation**, \$5,700. Good condition, tandem axles, AC, rear bath, dbl bed. Linda Delvac, 5 Linden Street, Centereach, NY 11720; 516/981-3684.

**1957 26' Airstream Overlander**, \$3,200. Good condition, rear bath with stool and shower, twin beds, couch in front for bed and A/C. Glen Hubbard, (#28413), 2519 53rd Street, Des Moines, IA 50310; 515/279-2898.

**1963 19' Airstream Globe Trotter**, \$5,900. All original, won Best of Show in 1993 Concours d'Elegance, very good condition, stored inside, new tires & battery, ready to travel. Howard Lawson (#8060) 2889 Marian Street, Lewiston, MI 49756; 517/786-4349.

**1963 26' Airstream Overlander**, \$3,500. New fridge, tires, furnace, water tank & pump, rear bath, twin beds, inside is clean, outside needs some work. Also, Ford Club Wagon, 12,000 miles, 5.8L engine, includes all Ford's "Bells and Whistles" possible. Vernon Thiele, (#8885) 7355 McCellan Dr., Walton Hills, OH 44146; 216/232-3198.

**1964 19' Airstream Globe Trotter**, \$3,500. New tires, polished aluminum wheels, new cabinets doors & stove, cushions recovered. Slipstream Ventures, Irl L. Collins, 5346 S. Sheridan, Tulsa, OK 74145; 918/664-6626.

**1965 20' Airstream Globe Trotter**, Make Offer. Redecorated interior, new fridge, water pump, purifier, TV antenna and tires, electric jack, A/C, awning. Leon Hadley (#14262) 6641 Colfax Ave., Lincoln, NE 68507; 402/464-8648.

**1967 28' Airstream Ambassador**, \$5,000. Original carpet, upholstery & curtains, twin beds, rear bath, sofa bed in the living area, everything is in excellent working order. Trailer may be seen at Sippewisset Campgrounds, 836 Palmer Avenue, Falmouth, MA, 02540; 1-800-957-2267. Jean Girder Grinnell, (#4385) 134 Hesperus Avenue, Magnolia, MA 01930; 508/525-4855.

**1968 29' Airstream Ambassador**, \$3,500. Nice and very clean, twin beds, rear bath, AC, 110V water heater and ref. Can be seen at Paradise Park in Punta Gorda, FL. Ray Porter, Rt. 2 Box 398, Galax, VA 24333; 540/236-4069.

**1970 18' Airstream Caravel**, \$3,500. Roof A/C, interior needs work, overall in good shape. Slipstream Ventures, Irl L. Collins, 5346 S. Sheridan, Tulsa, OK 74145; 918/664-6626.

### TRAVEL TRAILERS WANTED

1960's, 17'-22', Airstream Caravel, Globe Trotter or Safari with dinette convertible to bed at front, pull down table in the middle, bath with shower (preferably at side), original mahogany woodwork, full screen door. Robert Heineman, 22 Biscay Place, The Woodlands, TX 77381; 713/377-6396 (work), or 409/321-6856(nights).

**Membership Application**  
**Vintage Airstream Club**  
**A WBCCI IntraClub**

Please Print

Date \_\_\_\_\_

Last Name \_\_\_\_\_ First Name (His) \_\_\_\_\_ (Hers) \_\_\_\_\_

Mailing Address \_\_\_\_\_

Telephone Number \_\_\_\_\_ WBCCI# \_\_\_\_\_ Unit Number & Name \_\_\_\_\_

Trailer Year \_\_\_\_\_ Length \_\_\_\_\_ Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Hobbies & Interests (His & Hers) \_\_\_\_\_

Occupation (now or before retiring) \_\_\_\_\_

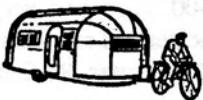
Winter Address & Telephone Number (Newsletter will only be sent to mailing address) \_\_\_\_\_

- Please check one:
- Member (own a vintage Airstream & belong to WBCCI)
  - Associate Member (do not own a vintage Airstream but belong to WBCCI)
  - Friend (am interested in vintage Airstreams but do not belong to WBCCI)

Send this application, along with your dues payment of \$10.00 to Mr. Edward Stanley, Membership Chairman, 18940 Marine View Drive SW, Seattle, WA 98166.

Note: If you are not a WBCCI member, we will be happy to assist you with the application.  
Caution: Joining this Club could change your life!

The Vintage Advantage  
Mr. Duane C. Hedahl, VA Distributer  
2225 Ninth Avenue, South  
Great Falls, MT 59405



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