

February 2024

Vol. 43

No. 2

President's Letter

Hello to fellow Car Club Members,

Springtime weather in January. We truly live in a wonderful area. Shirt sleeve weather as I drink my morning coffee outside by the pool while chaperoning my puppy and her boyfriend. What a life!

January was a busy month for club members. We started the month with a wonderful lunch at a new restaurant in Cottonwood named "Eden." A great time with interesting friends and wonderful food. Next, a huge thanks for all the hard work by Bruce Huelat setting up a once-in-a-lifetime tour of the Lucid factory in Casa Grande. I had heard the tours were very entertaining and informative. The

catering was a first-class event with ample food and drink. But the highlight was the actual test drive of the new Lucid vehicle. While I'm not exactly an electric vehicle convert, they are exciting vehicles to drive and, in my opinion, Lucid is a top-of-line vehicle.

February sounds as exciting, with a tour of the Pima Air and Space Museum and Kartchner Caverns Rotunda/Throne Room. An overnight adventure that sounds very exciting. Craig deserves lots of thanks for all the work he accomplishes making these adventures happen.

On a personal note, my wonderful son Kris, scored some exclusive VIP tickets to Barrett-Jackson Auto Show. Leigh and I went on Friday 26 Jan. If you've never been to the show, and word "show" doesn't do it justice, I highly recommend attending one year.

We walked through the display areas for over four hours, and I bet we didn't see half of the displays. There was everything there imaginable, expensive classic cars was just the beginning. You could purchase anything from a house with all the indoor and outdoor furnishings to the dream garage you've always wanted. There was even a helicopter for sale. A lot more than just dream cars on offer.

After that, we were seated in a skybox for free food and drink. That boy sure knows how to treat Mom and Dad. The auction and the money exchanging hands was mind-blowing. A truly sensory overload day.

The Board continues to work on issues related to the car show. I'm still looking for someone to lead this project, many tasks remain to be accomplished. Jim Thomas continues to work on the issue of a social club having investment income. And I'm still waiting on the Arizona Corporate Commission to approve our changes so we can complete the changeover of duties.

All in all, a very busy time. See a task you'd like to lend a hand with, be sure to let me or another board member know.



Don





February Birthdays

Joe Tulley 02
Sharon White 03
Laurie Scott 04
Mary Tulley 23
Susan Price 25
Sandy Leon 29

February Anniversaries

Diane & Gary Carson 28

Sharon & Steve Blank 28

Editor's Note

Keep your story suggestions coming.

Send stories or ideas to:

raymond.michalowski@gmail.com

Thanks to Jim Thomas for technical help and

banner photo.

February Events

Next Regular Meeting: Tuesday, February 13

Snacks by Angela Thomas & Jim Schubert

Thursday Feb 8
Pima Air and Space
Museum
Members drive separately

to Tucson

Overnight in Benson
Make your own reservation
at the Comfort Inn http://
www.comfortinnhotelsbensona
z.com

Friday, February 9
Group tour of
Kartchner Caverns.

Please reserve cavern tour through Craig at craigster62@sbcglobal.net Or cell/text(415)385-6937

Upcoming Activities

Next Regular Meeting

Tuesday, February 13 7:00 PM, Sedona Library

Speaker: Bruce Huelat Lucid Car Company Tour

Save the Dates

Saturday March 16
Sedona St. Patrick's Day Parade 10:30 AM
Meet at overflow lot, Sedona Heritage Museum
No-host lunch following at Jose's

Saturday April 27

10am to 12pm: Cars and Coffee Part II
Reprise of last year's successful car display at

St. Vianni Catholic Church, 10 AM-12 PM

Monthy Cars and Coffee in the Verde Valley

1st Saturday - Firecreek Cafe, Mingus Ave, Cottonwood

2nd Saturday - SuzyQ Market, Main St, Cottonwood

3rd Saturday - Annie's Restaurant, Mingus Ave, Cottonwood

LAST Saturday - The Collective, VOC Sedona

Patty Reski Celebrates 81



Scholarships Awarded

In 2003 the Sedona Car Club donated \$2,500 to the Yavapai College Foundation to support students enrolled in automotive education. Last year, two students each received a grant of \$1,250 from your club to advance their automotive careers.

The 2023 recipients of our support were Rhys Tarver and Jailly Espinoz

Congratulations to them, and to members of the Sedona Car Club for supporting automotive education.

A Letter of Thanks

Dear Don and David,

Please share with your members enormous thanks from the food bank for all the toys so generously donated at the luncheon on December 12th. Not all of our clients signed up for Toys for Tots so those who didn't got to chose gifts for their children from the great variety provided by the car club members. They were most appreciative. One woman, who had a oneyear old, lit up when she saw a stuffed animal that talked. Another man chose a kitchen utensil set for his daughter who loved to cook. Many happy people...

Merry Christmas to one and all. Jane Tusso

Touring the Lucid Production Facility Bruce Huelat

Three to 4 times per year I would drive past the Lucid plant under construction on the south end of Casa Grande. Once completed, I was always going to stop and see if they offered tours. Then last year at the Barrett-Jackson auto auction, I met some folks from Lucid. That began my quest to tour their facility. This is a brief story of their newest 3 million square foot facility and a tour by 10 of our club members last month in Casa Grande.

After numerous calls. meetings, discussions, getting handed off, my persistence paid off. One year to the day of meeting the Lucid folks at Barret-Jackson, I was able to snag 12 VIP tickets to tour The Lucid Motors car manufacturing facility in Casa Grande, The tour invitation coincided with their ribbon-cutting ceremony. However, there were two problems. The event was in just 9days away, and I was offered 4, maybe 6 VIP passes if available. Also, they wanted the names the next day for a security check because the Governor would be

there. After a second call, I could have 10, maybe 12 VIP Tickets. I sent a blanket announcement that night to our club members. By 9 am the next day I had a wait list. Final confirmation came 4 days prior to the event. Some of us drove to Case Grande the night before, others left the day of the tour at O-Dark-30 for the 3-hour drive to make it there for the 9:30 registration. We were not disappointed!

At the reception and registration there was coffee, breakfast snacks, juices and fruit. The VIPs included the Governor, state and local officials, media and VIPs like us!! The CEO and Senior VP of Operations gave presentations about of the history of the Lucid company, and the build-out of this second phase; a 3 million square foot building with state-of-the-art equipment. We were then treated to a catered lunch. After lunch we broke into small group tours of the operations. Finally, for those wishing to do so, we took a test drive. For me it was high speed on the Interstate, others drove some side and city roads.

Lucid started in 2007 as an electric car battery and component manufacturer, then expanded their focus to car manufacturing. In 2014, they began looking for a place to build their envisioned vehicles, settling on almost 600 acres in Casa Grande. They have a half dozen component manufacturing (stampings, interior, powertrain & foundry, and warehousing) sites in Arizona. Design and headquarters are in California. Currently, Lucid has 7,000 employees worldwide and 2,100 in this plant; working 10hr shifts 4 days a week. This newest expansion added 3 million square feet to the 850,000 already in place. It will be a vertical integration plant with many satellite operations moving under the same roof with the final assembly. The logistics, beginning with their design and purchased components, through every piece and procedure is tracked by part numbers/barcodes.

Several monitors at every workstation guide the operator and track every part and function performed. They continue to debug problems at every step, train employees, and thus design in quality throughout the process.

This facility was designed and built literally from the ground up, and they did it in only 30 months!! By 2021 they began building vehicles, albeit mostly by hand. By 2022, they achieved the highly coveted Motor Trend Car of the Year award. In 2023, they began putting or relocating equipment into this new facility. The entire plant is an almost medically-clean space; bright, clean and quiet (no air tools - all assembly hand tools are battery driven). From the spotless floor to white superstructures holding the movement of cars and components, it is immaculate.

Twenty feet above the assembly floor there is a complete transit center for bringing assemblies to the various work stations.... in a whisper! The coolest, if not the most ergonomic and satisfying from an employee's perspective, was the way the cars moved.

Much thought went into green processes from power source, water-based coatings, to rechargeable hand tools. There is no welding as they maximized an all-aluminum vehicle. This eliminated solvent fumes, weld

performed. Having worked myself in a car assembly plant, putting vinyl tops on 1970 Torinos, touring the first (mid 50's) Corvette plant, and later the new Vette plant in Kentucky, the car assembly plants I knew continuously moved the vehicle. They never stopped. Problems or not, they kept moving. Fixes/repairs were made at the end. At Lucid, it is different.

The Lucid car final assembly started with the painted, stamped / fabricated aluminum skeleton placed on individual 16x25 foot wooden platforms. Each platform had a 30x30-inch lifting block. This lifted the shell to the height easiest for the operator. If the next station put the rocker panels on the car, it was raised up 4 feet. This avoided having the operator bent over, but instead, working on a moving car while sitting on a stool.

The final Lucid assembly began with the painted car skeleton and operator moving together on the platform. At each station the next part was staged on racks or boxes, at the line or overhead, coming down via a whisper-quiet transition to the operator to be installed - all

while the platform, car <u>and</u> <u>assembler</u> moved along. The assembler stepped off at the end of that station and returned 10-20 feet to his /her station.

The overhead carrier that brought the windshield, hood or door from above returned back up to be reloaded at some obscure place and returned. These platforms moved at less than the speed of a moving sidewalk, through the hundreds of workstations. Under this 3 million square foot roof, these platforms moved several thousand feet from one side of the facility, then moved across the aisle & back to the other side of this ginormous facility.

The final assembly line was actually a half dozen lines that reached the full length of the plant, parallel lines moving from one side of the plant then back until fully assembled and the car was complete. The finished car is driven to the water blaster and systems check area. The final assembly line is supported by dozens of shorter 'sub assembly lines'. These sub assembly lines are perpendicular to the final assembly bringing

assemblies toward the final lines. All the individual components like the dash, chassis, battery and carrier assembly, wiring harness, drive components, interior, switches, motors and many, many more sub assemblies.

What if there is a problem while the car is in the process of final assembly? They can pull one or a number of the 16x25' platforms, which are on rollers, out of the line. They can also shut that line down and, if the fix is quick, restart as necessary. Their goal is to debug all issues at the source, create specifications at every step, and hold to them.

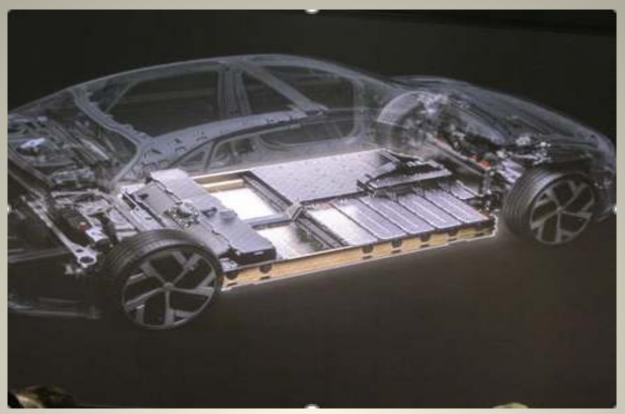
In today's world, chips, software and AI converge to become an electric automobile. We were able to see a state-of-the-art facility do this in minutes.

At Tuesday's meeting, I will have an expanded video presentation of our Tour. For those that wanted to get in on this but couldn't, I wish we could have had more time and more tickets. For those that had a ticket and canceled, you missed a heck of an experience. For details on the Lucid cars, their features and future, I'll defer to Jim Thomas, who, after the tour, called his broker and is rumored to be a shareholder!



Lucid Plant - Casa Grande, Arizona

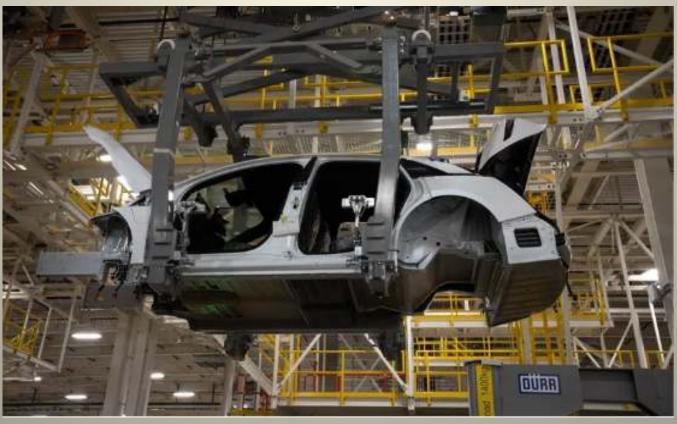
Car Manufacturing in the Age of AI





Overhead Delivery System





Building Cars on Moving Platforms





From Quality Control to Final Product





General Information

Club Meetings

Meetings of the Sedona Car Club are held at 7:00 p.m. on the second Tuesday of each month at the Sedona Library except in June when our meeting is the Annual Picnic and in December when it is the Annual Christmas Party. We do not meet in July.

Please attend, and bring a car-loving friend.

Board Meetings

The Board meets on the first Wednesday of each month at 9:00 a.m. at the Christ Lutheran Church. All members are invited to attend.

Tire Tracks

Tire Tracks is published eleven times a year for information on events and activities of interest to members. The editor is RAY MICHALOWSKI. Look for it on the club website before the monthly meeting.

We encourage member stories. Send your submissions to:

<u>Raymond.Michalowski@gmail.com</u>

Car Sales Advertisements: Only those sponsored by members will be considered for inclusion in TireTracks