



## Shady Ladies of the Seven Seas

September 2021



*Group photo of the LAA members at the Mariners' Museum*

*By Dan Palumbo, Vice President and Programs Chair*

**W**elcome! In lieu of an August 10<sup>th</sup> Zoom meeting, the LAA met at the Mariners' Museum for tours and lunch. The gathering was attended by about 40 members. There were two tours scheduled, one before lunch and one after. Both tours had the theme "Shady Ladies of the Sea," which emphasized the role of women in maritime history. Our numbers were such that the Museum staff asked us to divide into three groups to more comfortably progress through the tours.

One tour wound its way through the Museum's galleries. If you haven't been to the Museum in a while, you might be surprised how it has grown.

The second tour was "Behind the Galleries," in which artifacts most related to the Shady Ladies theme were pulled

from the Museum's extensive archives. The Museum staff explained that, at most, 20% of their artifacts are on display at any time.

Before we started out on our tours, we had a group photo taken around the golden eagle figurehead that has been with the Museum as long as I can remember. After round one of the tours, we met back for lunch in the lower lobby of the Museum. Food was supplied by the Museum's Café. After lunch, we were off to complete the second round of our tours.

To all those who expressed their thanks to me for arranging an event they thoroughly enjoyed, I'd like to return a hearty "You're welcome." I was delighted to see us all together, enjoying each other's company once again. ♦

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### *Communications Officer*

Richard Hueschen

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### *LRKC Ad-Hoc Committee*

Marilyn Ogburn

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Michael Marcolini

## President's Report

*By Damodar Ambur, President*

We made several strides this quarter and I commend the Committee Members, the Board of Directors and our members for these. Their time and energy to serve the association makes LAA vibrant and beneficial for all of us. I am highlighting some of these below.

- I am pleased to inform you that Rick Ross was proposed and elected as the new LAA Secretary. He replaces Raymond Whipple, who served LAA exceptionally well during the past six months and opted to step down in July.
- We will continue with the virtual meetings until we can do hybrid meetings (by combining members that participate virtually and in-person) from the NACA room. Please know that we have worked out most of the logistics with Langley to conduct hybrid meetings (see Rick Ross' report for details) when Langley fully reopens.
- I am excited that our first one-day tour to the Mariners' Museum was held in August by our Programs Committee (see Dan Palumbo's report for details). Thanks to the Board for approving LAA funds to cover all non-food related expenses for this outing.
- In order to publish member pictures and guest speaker presentation materials in LAA promotional publications, some members suggested that we obtain their written permission first. To address this, the Board developed and approved an "LAA Consent and Release of Rights Form" for LAA use. A digital version of this form is posted on our website for each of us to sign and submit so we can begin sharing our meeting and event photos. If you have not already submitted a form, please do so as soon as possible.

We have a great opportunity to help develop the next generation workforce by supporting STEM education (see Linda Bangert's article from June 2021 LAA Newsletter). In addition to your ongoing individual efforts, there is an additional avenue within Virginia to promote STEM education. In July, I was selected to serve on the State Governor's STEM Education Advisory Board and will share information on those opportunities as I learn more. I strongly suggest that we take on this challenge to help the younger generation with STEM.

Please feel free to propose and contribute to any activities that help LAA; talk to a Committee Chair or Board member about them and consider becoming a Board member next year. Please encourage other retirees to join LAA to hit the 200-membership mark by the end of 2021. ♦

## LAA Hybrid Meetings

*By Rick Ross, Secretary*

LAA responded to the COVID pandemic by transitioning from in-person meetings in the Langley NACA room to virtual meetings using Zoom. While we lost face-to-face contact, we gained the ability to engage with members who were unable to attend in person. We are working with our Langley Representative, Melanie Robinson, and NASA conferencing specialists to employ hybrid meetings when we can return to Langley. We will still meet in the NACA room as before, but we will live stream the event using WebEx for our remote members and for those who are not able to attend in person. We will also be recording the sessions and will post the videos on the LAA website. These hybrid meetings will combine the best features and benefits of both face-to-face and virtual meetings. ♦

## Payments to the Langley Alumni Association (LAA)

*By Geoff Tennille, Treasurer*

LAA members have two options to pay their dues or fees for a scheduled LAA function. The options are payment by personal check or, for those members with an account at Langley Federal Credit Union (LFCU), you can set up a member-to-member transfer from the member's personal account to the LAA LFCU account. The set-up is done once and must be approved by the Treasurer before a transfer can occur. Thereafter, all transfers are initiated by the LAA member and the transfer is made immediately into the LAA account. If you would like to establish the ability to do member-to-member transfers from your LFCU account to the LAA LFCU account, please send me an e-mail at [gtennille@cox.net](mailto:gtennille@cox.net) and I will send you the sheet with all the information.

Paying by check gives rise to an entirely different set of issues. Checks *must* be made out to either "LAA" or "Langley Alumni Association." LFCU recently told me it will no longer accept checks made out to Geoffrey Tennille or Geoff Tennille for deposit into the LFCU account. This leaves me with two options. First, I could contact the user and ask them to rewrite the check correctly and get it to me as quickly as possible. Second, I could deposit the check into my personal LFCU account and transfer funds from my account into the LFCU account. This does not resemble good accounting practices and would probably be looked upon unfavorably by an auditor after we receive tax-exempt status from the IRS. I will not do this for future events. Our application to the IRS for tax-exempt

status is now under review and we should know our status sometime in September, if not sooner.

So, please, in the future, don't make checks payable to me or any future LAA Treasurer. Make your checks payable to either "LAA" or "Langley Alumni Association."

Finally, if you register for an LAA event and cancel after the cut-off date for any reason, even an emergency, you may not be able to get your money back. It depends on the venue. You must take the liability for this risk, not the LAA. You can, however, find another LAA member to take your place and have them pay you directly. You and they must inform the LAA that someone will be taking your place. ♦

## Engagement and Communications with Delinquent or Inactive LAA Members

*By Dick Hueschen, Communications*

Note that delinquent members are those who have been paying dues until this year (due January 2021). Inactive members are those who have not paid dues for two or more years.

LAA Officers met recently to discuss ways to keep delinquent and inactive LAA members connected with LAA. The following steps were developed and agreed upon by the Officers during this meeting and were shared with the Board. We continue to hope that members in these two categories become active again, join our current virtual meetings and, when LaRC is fully open, join our planned hybrid (virtual/in-person) meetings.

The LAA will send all communications (monthly meetings, program announcements, and other LAA/LaRC communications) to delinquent and in-active members during the rest of

2021 to give them the benefit of this information in view of the COVID-19 pandemic.

The Communications Officer will send one more communication to delinquent members informing them of their current status and potential future inactive status and encourage them to become paid members. We also suggest all Board members to make personal contacts with the delinquent/inactive members they know and encourage them to become active LAA members.

When members move from the delinquent to inactive status, the Communication Officer will continue to inform them of this change including the following messages.

- That their contact information will be kept in a database together

with information on their work experience, areas of experience, and related information, if such was given to LAA in the past.

- That they will continue to receive select information regarding LAA and LaRC communications. This select information will be for calls to serve on judging competitions, mentoring middle and high school students, and for supporting LaRC requests to volunteer as tour guides, help with open-houses, or share their knowledge.
- Inactive members can opt out from receiving calls for judging competitions and mentoring and can choose to remain or not remain in the inactive database.

Inactive members that have already expressed their choice "not to be contacted" will not be maintained in the inactive database. ♦



### Langley Retiree Knowledge Capture (LRKC) Ad Hoc Committee

By Marilyn Ogburn, LRKC Ad Hoc Committee Chair

Perhaps you noticed the following description of this committee on the LAA's main web page: "The LAA ad hoc committee entitled Langley Retiree Knowledge Capture (LRKC) has been active since early 2019. It is well known that former employees have a vast reservoir of past experience and expertise that may need to be accessible to Langley, other NASA Centers, and even outside organizations. This sub-committee has been exploring this matter and has initiated several related activities. Members of the sub-committee are Marilyn Ogburn, Dan Palumbo, and Wayne Richie and they have been reporting their findings and progress to the Board. All LAA members are encouraged to contact any member of this sub-committee with any ideas or suggestions. The primary point of contact is Marilyn Ogburn ([meogburn2@cox.net](mailto:meogburn2@cox.net))."

The committee is considering, devel-

oping, and has initiated a wide variety of activities to enable the LAA to provide knowledge services to LaRC. We meet with LaRC's Chief Knowledge Officer (currently Kevin Rivers) quarterly and have additional meetings as needed with the rest of the LaRC Knowledge Services Team (Bart Singer and Lisa Harvey) and various LaRC organizations that would benefit from former employees' knowledge. Since early 2020, LaRC senior leaders and other employees have identified nine ideas for LAA knowledge services. These nine activities include four that are related to mentoring. The others include the identification of metadata for films and photos, documentation of lessons learned, community engagement/outreach, and an "Ask an Alumnus" service. We are also exploring methods for LaRC to help former employees enhance their ability to provide knowledge services (e.g., increase access to their NASA "body of

work" or provide instructions for donating items to NASA repositories).

The objective of one activity that was recently initiated is to capture lessons learned information for inclusion in related NASA repositories. In early July, Dan Palumbo sent a request for this information to about 50 LAA members who had expressed interest in NASA/LAA knowledge capture activities. They were instructed to contact the LaRC Lessons Learned Committee if they remembered lessons from past projects they worked on at NASA that were not properly documented or otherwise communicated. Two suggestions have been submitted, one of which involves ways to better publicize to our LaRC community a publicly available video and another that involves finding some old LaRC test records to better understand problems that were encountered during a wind-tunnel test. ♦

### A Glimpse Behind the Scenes of Our LAA Website

By Olaf Storaasli, Website Chair

#### 1. What happens when I type [LarcAlumni.org](http://LarcAlumni.org) in a web browser?

LarcAlumni.org is translated to 148.72.22.219 by the [Domain Name Server](#) specified by your computer/ISP, where our LAA WordPress (WP) website is hosted on [HDL.com](http://HDL.com) run by Steve Pierce in Ypsilanti, MI, plus SD, IA & Ireland. Steve and former Cray (now HPE) colleague, Dave Strenski, both solar power buffs, donate time and HDL.com resources to [solarypsi.org](http://solarypsi.org). Steve's home and three HDL facilities are solar-powered. Will our LAA website someday be solar powered? ©

#### 2. What can you do on LAA's website?

You can view current events and the latest info. In Menu, view '21 Events,

LAA info, Minutes, Website, Hall of Honor, New Members & Obits, Videos & Calendar. You can sign up and pay for future events (such as the Winter Luncheon), pay dues, and send Rick or me items to share with members.

#### 3. How does WP organize/display our website information?

We create or update a page for each Menu item. To avoid long pages, we store charts and tables as WP Media pages with links.

#### 4. Is our website secure from hackers?

LarcAlumni.org is open to all, but only Rick and I can access or change our WP LAA Website source. From August 2-9, our Wordfence security software

has blocked over 14,000 attacks from China alone, plus other countries.

#### 5. How often are backups done?

When LarcAlumni.org is changed, I back it up (in less than two minutes) on both HDL and elsewhere.

#### 6. Geek details

Our \$49.95/year website includes 4 GB storage. We use just 1 GB, so 3 GB extra space can store 30 full length presentations plus Q&A (e.g., mine is 100 MB). HDL's cpanel and Steve's knowledge and rapid response are invaluable in maintaining the website.

Please send website questions or comments to [me](#) or [Rick](#). ♦

## Getting In Touch—Building a Database of Current/Formers Branch Members

By W. Douglas Morris

I started this project after searching for two old Vehicle Analysis Branch (VAB) colleagues I had lost touch with. I finally succeeded in locating them and was able to talk to them after 20 to 30 years. Then one thing led to another.

Like many employed by NASA, I felt that the organization I worked in and the people I worked with were exceptional. We were part of an environment that helped to shape us, and in turn, helped shape the organization. I now understand that the VAB I knew was only a time-limited snapshot of an organization that was constantly evolving, both in its personnel and its purpose. My perspective was from the 24 years I was with the organization. What I've tried to put together is a history of the organization and its evolution, from its inception to the present, as well as a database of my colleagues, who made it such a special place to work.

For the first ten years, the initial purpose of the Vehicle Analysis Branch, as the name implies, was to define the aerodynamics and technologies needed for the Shuttle. Once the Shuttle began flying, the focus shifted to defining the next generation vehicle and the improved technologies that were needed to make it happen. As the VAB combined the capability for both aerodynamics and planetary entry analysis, it then became involved in the revised Mars exploration vehicles. It continues to play a role in Moon, Mars, and Planetary Sciences today. Concurrent with this work, VAB has always had a role in helping to resolve issues with conflicting proposals by providing unbiased assessments to NASA Headquarters.

Populating the database wasn't easy, but everyone has a story to tell. I enjoyed hearing about where everyone came from, how they were drawn into our field of work, how they arrived at NASA and VAB, and where life has taken them since. Their stories revealed amazing coincidences that most of us were unaware of, some involving VAB colleagues and some with people outside VAB. It's been my pleasure to share these stories. My original thought was that 20 to 25 people, who have typically made up the Branch, was a reasonable number to contact. However, I was brought up short when I considered that, because of the dynamics of the organization, which began in 1970 and continues today, it has employed over 180 members. The database, which contains over 50 members, covers some who came before me as well as those who joined the Branch after I retired.

The database largely contains updated contact information, a note on what the people are doing today, what schools they attended, their work history, and information about their families. This provides an expanded insight into many

co-workers only known to us at the time by name as well as by the work they did. It also includes information about who they've become, both personally and professionally. Everyone I've spoken with has been enthusiastic about the project and has freely contributed their information. One recurring comment is that their time with VAB was a major contributing factor in shaping their lives and careers.

My enjoyment in compiling this database has come from the opportunity to talk to many of my former co-workers and find out where they are and how their lives have changed over the years. I've been both surprised and delighted by what I've learned. This personal connection with a colleague is invaluable. We've all touched each other's lives in ways worthy of being remembered. ♦

### Flight Noises

By Norm L. Crabill — June 11, 1977

*Alone in my aluminum skin,  
IFR at 10.0, in and out of cloud,  
Out of sight of that other world,  
My only contact is by sound.*

*Sounds of voices on the ground,  
Telling of altitudes and fixes,  
Traffic and weather and squawks and headings,  
And "Have a good day."*

*Sounds of others diverting around the Big T,  
Reporting CAT or smooth,  
At Level 330 or 2.5,  
"What scher" active and any reported traffic,  
Please call her, I'm OK, but two hours late.*

*Sounds of my airplane,  
Talking to itself as it does its thing,  
I listen as it roars, growls, hisses,  
Swishes and sighs, with cable slap and fuel slosh,  
Nerding, muted noises, muffled and masked,  
By the flow by my skin.*

*Radios crackle, center calls,  
Updrafts whomp, airspeed whistles,  
Rain drums the skin, splats hail-like on the plexiglass,  
Airplane hums its wet weather tune —  
"A" above middle C, 'til no more rain.*

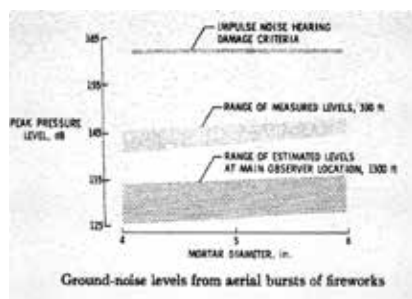
*'Two chirps at touchdown: gear clatter on rollout,  
A final call—for fuel,  
Then mixture, mags, and master,  
And silence, but for the wind.*

## Noise from Fireworks

By Domenic Maglieri

While much has been published on noise from fireworks, little, if any, information exists in regards to measurements of the pressure signatures associated with the bursting of aerial fireworks. Many observers associate the noise from bursting of a low-altitude aerial firework to that of a sonic boom flying at an altitude of 22,000 ft. at Mach 1.4. Comparing the shock wave noise history of these two impulsive events reveals that both signatures are N-wave in shape, but the peak overpressure of 15 lb/ft<sup>2</sup> is markedly higher for the aerial burst than for the 21 lb/ft<sup>2</sup> sonic boom produced by the Concorde at the beginning of cruise flight. The duration of the fireworks air burst is much shorter (1.2 ms compared to 76 ms). Since the ear response is about 50 ms, the observer would experience a single boom from the aerial burst, whereas for the sonic boom, two booms would be heard.

Peak pressure levels in decibels are shown in the figure below. At all observer and worker locations, the highest peak pressure levels were about 15 dB below the impulsive noise levels damaging to hearing.



Impulsive sounds such as fireworks, thunder, and sonic booms also “startle” their observers, even when expected. While observers expect a loud burst following some fireworks displays, they are still “startled” when the impulsive noise reaches them. When one observes lightning, it is expected that thunder will follow, yet thunder may still be “startling.” ♦

## HoH Class of 2022

By Duncan McIver, Hall of Honor Chair

The Langley Research Center NACA and NASA Hall of Honor (HoH) was conceived by the Langley Alumni Association (LAA) and the NASA Langley Research Center. The HoH recognizes those researchers, managers, and support personnel whose individual contributions have had the most sustained and far-reaching influence on the leadership, direction, mission, and capabilities of the NACA Langley Memorial Aeronautical Laboratory, the NASA Langley Aeronautical Laboratory, and the NASA Langley Research Center. Their work at Langley must have enabled unprecedented and fundamental advances in either a scientific, engineering or support field and made significant and impactful contributions to NASA missions and the United States’ aerospace industry, for civil or military aircraft, spacecraft, or atmospheric sciences. HoH honorees of the first two Classes, 2015 and 2017, are posted on both the LAA website (<https://larcalumni.org>) and the NASA website (<https://www.nasa.gov/langley/hall-of-honor>) and the HoH is preparing to identify Honorees for the third class, the Class of 2022. On September 1, 2021, Class of 2022 Nomination guidance was posted on the LAA website. An experienced team of LAA and NASA Langley professionals will choose the 2022 Class from among the nominees. The third HoH Induction Ceremony for the 2022 Class is planned for July 2022. For additional information please send inquiries to [info@larcalumni.org](mailto:info@larcalumni.org). ♦

## LAA Activity Updates

By Dan Palumbo, Programs Chair

Due to the current COVID surge, the LAA Board voted to cancel the September picnic. Instead, we will hold a meet and greet with the theme “LAA member experiences in retirement.” You may have 5-10 minutes to say how you have been keeping yourself occupied. So far, we have three speakers: Olaf Storaasli will relate his experience as a COVID vaccine trial volunteer, and Damodar and Manjula Ambur will talk about their activities teaching STEM, organizing Food Bank drives and delivery, and raising climate change awareness.

If you would like to share your experiences, please email me at [dpalumbo@live.com](mailto:dpalumbo@live.com) to reserve a slot. ♦

## Membership Update

By Mike Marcolini, Membership Chair

As of August 4, 2021, the Langley Alumni Association has 22 Honorary Life Members, 52 Paid Life Members (a new category of member instituted this year), and 109 Active Members (those who have paid their 2021 dues). If you wish to join, go to the LAA website ([www.larcalumni.org](http://www.larcalumni.org)) and click on the “Join LAA” button on the left-hand side. It will take you to the signup page. Note that dues are free for the first year of membership, \$10 per year thereafter, or \$100 for a lifetime membership. If you have questions, you can email me at [larcalumnimembership@gmail.com](mailto:larcalumnimembership@gmail.com). ♦



### LANGLEY ALUMNI ASSOCIATION

The LAA Newsletter is published quarterly. Please submit articles for publication to [rick.ross@verizon.net](mailto:rick.ross@verizon.net) no later than the 10<sup>th</sup> of February, May, August, or November for publication the following month. Please contact [mhueschen@gmail.com](mailto:mhueschen@gmail.com) to subscribe or unsubscribe.