

NASA/MSFC Retiree Association P. O. Box 4492, Huntsville, Alabama 35815

MAY 2020 ISSUE



THE JUNE 9TH QUARTERLY MRA SOCIAL AND DINNER IS CANCELLED

Due to the current situation with corona virus and in consideration of the health and safety of MRA members, the decision has been made to cancel the June 9th quarterly meeting.

At this point, we are continuing with the <u>September 8, 2020</u> quarterly luncheon meeting. Dr. Jim Green will be our speaker. Jim, a former employee at MSFC in the Space Science Lab, is now the NASA Chief Scientist and is a great speaker regarding planetary science and, in particular, about the future exploration of Mars, both robotically and with humans.

From the President's Desk.....

Living in an "Earth Station"

Since just after our MRA lunch meeting on March 11th, we have all been given an opportunity to see what it would be like to live on the International Space Station for two months. With the onset of the pandemic our normal lives have been adjusted to spending time at home with our families. Even though our homes have more living volume than the space station modules, the opportunity to spend time in one place has been a unique experience and one that reminds us of an important element of life—"We're all on this spaceship together and there are no passengers, only crew members."

Whether it is from the perspective of families, friends, communities, states, countries or the entire planet, working together for the benefit of all has been a constant reminder and realization that has been reinforced during this time. NASA's images of the Earth taken by the Apollo crew members on the way to the moon imprinted the image of Spaceship Earth in our minds with the concomitant realization of our obligations to the planet as a whole, its environment and the important unifying goal for the future among all of us Earth crew members.

Please be safe by staying in your "modules" and keeping your "airlocks" to the outside mostly closed!! *Dr. Rick Chappell*

2020 MEMBERSHIP DUES REMINDER

Dues for 2020 were due beginning January 1, 2020, with a grace period ending April 1, 2020. Dues are \$30 per year and may be paid by mailing a check, made payable to MSFC Retirees Association, to: MSFC Retirees Association, P. O. Box 4492, Huntsville, AL 35815.

Membership in the Association is open to former MSFC or other NASA Center employees. New retirees are automatically offered a free membership for the remainder of the year in which they retire. Spouses of deceased MRA members may attain membership status with membership dues waived.

If your mailing address or e-mail address changes, remember to let Mary Spaulding know by e-mailing her at: md_spaulding@comcast.net or calling 256.883.2228.

SPACE EXPLORATION MEMORIAL (UPDATE)

By: Dr. Rick Chappell

While the corona virus has transitioned us to a dominant electronic mode, we have continued to develop our plans and activities for creating the Space Exploration Memorial, which will be located in the Rocket Park at the US Space and Rocket Center. The memorial project was officially announced to the public at the March 11 luncheon meeting, and we heard from MSFC Center Director Jody Singer about the exciting progress on the SLS and its future use in the return of astronauts to explore the moon by 2024. On July 1 of this year, MSFC will celebrate its 60th birthday. As part of that celebration, our MRA will present the database of all former and present MSFC employees that was created by a volunteer committee of 20 of our retirees, led by Sandra Turner and Gray Settle. This will be MRA's birthday gift of history to MSFC.

Having created this list, we are asking all former and present MSFC employees to go to the MRA website (www.marshallretirees.org), click on "Memorial Database", verify that your name is on the list and ADD YOUR BIOGRAPHICAL INFORMATION TO THE DATABASE. This online database will be accessible beside the memorial and will give information on each employee and show the location of their name engraved on the base of the dynamic memorial. The names of all Marshall associated companies will also be engraved on the memorial and the online database will contain the names of the company employees where they are available. Please make a contribution to support the memorial using the MRA website which will go into a restricted tax-deductible account in the USSRC Education Foundation 501 (C) 3 account.

While we have contact information on MRA members, we need your help in getting contact information for other former MSFC employees and/or families so that we can contact them about checking the database. Please take time to give us their contact information, by going to the MRA website (www.marshallretirees.org) and clicking on the "Questions and Comments" section and adding their contacts.

We are continuing our planning for the memorial phased design as well as reaching out to individuals and Marshall associated companies for information and support. For those who were not able to attend the March 11th luncheon, we will be sending out an email which contains a brochure which gives more information about the Space Exploration Memorial.

(On the following page, see a chart outlining the sources used by the committee to develop the database.)

DATABASE: All Former and Present MSFC Employees

The following chart (prepared by Gray Settle) depicts the sources utilized by the Space Exploration Memorial Database Committee to capture the names of all former and present MSFC Employees. Needless to say, a tremendous amount of purging of lists was required. Still some duplications have occurred.

Your help is needed to review the database list and notify us of any duplications or corrections that need to be made to improve the accuracy of the database.

Legend:

Retirees: List of retirees provided by MSFC Lundquist: Dr. Chuck Lundquist's files from UAH Library Since 1986: Another updated list of retirees provided by MSFC PB: Marshall phone books dating back to 1960 HR Cards: Reviewed ~11,000 handwritten Personnel cards dating from 1968-1974

| Name Database Development Process | | | | | | | | | March 2, 2020 |
|--------------------------------------|-----------|-----------|--------|----------|-----------------------|-------------------------------|-------------------------------|-----------|--------------------|
| Retirees | | | | | | | | ; | 6,715 |
| Retirees | Lundquist | | | | a and a second second | | | ; | ► + 2,985 = 9,700 |
| Retirees | Lundquist | Since1986 | | | | | | ; | ► + 4,669 = 14,369 |
| Retirees | Lundquist | Since1986 | PB1960 |] | | | | | + 520 = 14,889 |
| Retirees | Lundquist | Since1986 | PB1960 | HR Cards |) | | | > | + 3,402 = 18,291 |
| Retirees | Lundquist | Since1986 | PB1960 | HR Cards | PBs 74, 78, 82 | | | | + 407 = 18,698 |
| Retirees | Lundquist | Since1986 | PB1960 | HR Cards | PBs 74, 78, 82 | PBs 64, 66, 67, 76, 80, 84 |] | > | +1,888 = 20,586 |
| Retirees | Lundquist | Since1986 | PB1960 | HR Cards | PBs 74, 78, 82 | PBs 64, 66, 67, 76, 80, 84 | PBs 61, 62, 63, 69, 71, 72 |) | +891 = 21,477 |
| | | | | | | | | 0 | 1. c l l |

Online Submittals = 26 New Hires Since 3/28/19 = 152

New Hires Since 3/28/19 = 152

Total Names To Date = 21,655



WAFF TV Anchor Liz Hurley attended the MRA March luncheon to show off her ABBY award from the Alabama Broadcasters Association for her documentary, "The People of Apollo", celebrating the 50th Anniversary of the lunar landing last year. She wanted to thank MRA, along with Alex McCool, Ed Buckbee, Sonny Morea and Brooks Moore for their participation in the documentary. If you did not have an opportunity to see the documentary, you may view it in its entirety on You Tube: <u>https://youtu.be/EPzMQf6x4c0</u>.

USSRC – 50TH ANNIVERSARY ORAL PRESENTATIONS

The USSRC is pleased to announce that they have documented all of the panel discussions held at the USSRC and the Huntsville Public Library celebrating the 50th Anniversary of the Lunar Landing activities. Many of the MRA members participated in these panel discussions. If you did not have an opportunity to attend the panel discussions, you may view them at your leisure at the following link: https://www.sternallow.com/user/87022931/folder/1382228 . Many thanks to MRA for your support. By: Joe Vallely, Vice President of External Affairs, USSRC

WELCOME NEW MEMBERS!!

David K. Hall Tracy Lamm Robert W. (Wayne) Richie (Retired from Langley Research Center)

NASA SPINOFFS 2020

Since 1976, NASA has featured an average of 50 technologies each year in the annual publication, and Spinoff maintains a searchable database of these technologies. When products first spun off from space research, NASA presented a black and white report in 1973, titled the "Technology Utilization Program Report". Below are two items of technology from Marshall that were included in the 2020 issue:

Low-Cost, Long-Lasting Valve Seat A simple new valve seat installation technique for leak prevention

Marshall Space Flight Center has developed a new, simplified method for installing valve seats, eliminating the need for a swaged assembly process and the additional hardware and equipment typically found in conventional, elastomeric valve seat installations. In addition to lowering the overall weight, the reduced number of hardware components decreases potential failure modes. This simplified technique saves time and installation costs and results in comparable leakage protection. NASA has tested the long-term performance of a solenoid-actuated valve with a seat that was fitted using the new installation technique on an inductive pulsed plasma thruster. This solenoid-actuated valve test successfully reached a million cycles with desirable leakage performance, outperforming traditional solenoid valve requirements. The method is most applicable to instruments that have an orifice of half an inch or less.

Modular Fixtures for Assembly and Welding Applications Rigid, adjustable tooling that reduces configuration time and cost

Researchers at Marshall Space Flight Center have developed new modular fixtures for holding metal in place during the assembly and welding of cylindrical and conical sections of rocket bodies. Previous methods required time-consuming design, fabrication, and assembly of expensive, project-specific fixtures, which often took up to six months and cost millions of dollars. NASA's modular fixtures are adjustable and easily form different configurations for rocket sections with various dimensions. This improved setup allows for a more rapid shift from one project to the next, allowing welding to begin in a matter of weeks rather than months.

Supporting braces that form the base of the modular structure slide into radial grooves. Other extending, clamping, and joining fixtures can be variously connected to the base structure to provide circumferential support for producing conical and cylindrical structures. NASA has used the tooling to produce structures with diameters of up to 27 feet.

Photo Gallery from March Luncheon



Center Director Jody Singer gave an update on MSFC programs and schedules.



Louie Ramirez, Acting CEO, USSRC, shows his support of the Space Exploration Memorial at USSRC.



Gene Goldman, former Acting Center Director and MRA Program Chair with Patrick Scheuermann, former Center Director.



Obituaries of Marshall Retirees

Byrd, Clarence A., 85, of Fayetteville, TN, died March 19, 2020. Carroll, Marvin, 88, of Hazel Green, died April 16, 2020. Doherty, Robert S., 84, of Decatur, died February 27, 2020. Hardage, James Nolan, 88, of Athens, died May 5, 2020. Harrison, James K., 85, of Huntsville, died March 9, 2020. Hauff, Christian, 82, of Huntsville, died May 1, 2020. Hawkins, Billy Joe, 87, of Huntsville, died April 28, 2020. Herndon, John Loritts, 81, of Huntsville, died March 30, 2020. Jackson, Richard Henry, 92, of Huntsville, died April 6, 2020. Justin, Gladys W., 104, of Huntsville, died February 22, 2020. Kennedy, Billy G., 91, of Huntsville, died February 22, 2020. McKay, Thurman W., 89, of Madison, died February 27, 2020. Pierce, Bunyan Burton., 93, of Madison, died April 1, 2020. Price, Clifford Eugene, 85, of Harvest, died February 8, 2020. Pritchett, Jack, 97, of Albertville, died April 9, 2020. Struck, Heinrich Georg, 95, of Seattle, WA, died March 11, 2020. Turner, Thomas Richard, 80, of Foley, died April 28, 2020. Vandergriff, Sandra Crisson, 73 of Boaz, died October 19, 2019.