

**TRA's**  
**No Name**

# **GAZETTE**

**For Northrop Grumman & TRW Legacy Retirees**

VOL. XXXIII NO. 6

Our 33rd Year

November/December 2021

## **Please Check Your Membership**

Please check your membership status by looking at the mailing label on this issue and checking the "Paid Thru" year. If it says 2021, then your membership will expire in 2022. Consider getting a jump on the year by renewing your TRA membership today.

**TRA membership is a real bargain at just \$10.00 per year.** The No Name Gazette newsletter provides you with happenings at Northrop Grumman, the Mail Pouch, special articles with information about our members, and sign-ups for and articles on special events for our members. Your dues also support the operation of our web site with its articles, news, and member forums.

For 2022 we plan to start having in-person gatherings again. Your membership will be a way to reconnect with your former co-workers.

You have two choices on how to renew: on-line or by mail. To renew on-line, go to our web site, [www.tra-spacepark.org](http://www.tra-spacepark.org), and follow the prompts. We process your renewal dues securely through Paypal. You do not need a Paypal account - you can pay your dues on-line with a credit card.

We really appreciate those who have used the website in the past to renew. Especially with the pandemic, it limits the need for our volunteers to process the mail and deposit checks at our local credit union branch.

To renew by mail, please cut out or copy the form below, fill out the requested information, and mail to TRA with your check.

Finally, renewals for more than one year are welcome because they reduce our in-house paper shuffle. So, consider renewing for four years to save time and stamps.

**Please include a note for the Mail Pouch about what you are doing.** And don't forget to spread the word about TRA to new retirees and encourage them to join. Thank you for your support!

### **Northrop Grumman Space Programs**

*by Jim Troy*

Much Northrop Grumman space news is focused on the James Webb Space Telescope, scheduled to launch on December 18, but Northrop Grumman has other major space-related awards and events this year including: the International Space Station (ISS) Cygnus supply spacecraft and Antares launch vehicle; support to the Space Launch System (SLS) for NASA's Artemis program; and the Habitation and Logistics Outpost (HALO), a program to develop a Cygnus-based lunar orbiting module to support the 2025 launch of the NASA Gateway.

What follows is a summary of these Northrop Grumman programs and an overview of the Artemis program that they support.

#### **Cygnus Spacecraft**

The Northrop Grumman Cygnus is now regularly servicing the ISS. Circling the Earth every 90 minutes, ISS has completed 22 years of continuously staffed operation. The ISS manufactures its own water, but replacement crew members, food, and supplies must be periodically delivered to the ISS and trash removed.

These flights, under the NASA Commercial Resupply Services (CRS) contract, were originally awarded in 2008 to SpaceX for twelve flights and Orbital Sciences for eight flights. The second phase of the contracts were awarded in 2014 to SpaceX (extending its contract to twenty flights), Orbital ATK (ten flights), and Sierra Nevada Corporation.

Northrop Grumman assumed responsibility for the CRS contract when Northrop Grumman acquired Orbital ATK in 2018.

*Programs - continued Page 3*

### **MEMBERSHIP RENEWAL FORM**

Member Name: \_\_\_\_\_

Street Address: \_\_\_\_\_  Check if new address

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Membership No. (from mailing label): \_\_\_\_\_ Phone: \_\_\_\_\_

E-mail Address: \_\_\_\_\_  Check if new address

Annual dues are \$10 per year. I would like to renew for:

\$10 for one year    \$20 for two years    \$30 for three years    \$40 for four years

Mail with a check payable to "TRA" to the following address: TRA, P.O. Box 1276, Redondo Beach, CA 90278

**And, please, include a note for the Mail Pouch about yourself, your family, and your doings!**

## TRA for Northrop Grumman Retirees

The Retirees Association (TRA) welcomes the retirees and the spouses of retirees of Northrop Grumman and TRW.

### 2021 Officers

Mary Ann Chory	President
Michael Narigon	Vice President
Charles Clendening	Treasurer
Pam Overton	Secretary
Dena Bouskos	Past President

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Joyce Komatsu, Jim Nelson, Carol Schamp,  
Steve Smith, Stephanie Sundius, Jack Trost

*Archives Coordinator:* Robert Doll

*Facebook Coordinator:* Stephanie Sundius

*Membership Coordinator:* Joyce Komatsu

*Website Coordinator:* Steve Smith

The No Name Gazette is the official publication of TRA. It is published six times a year.

### Publication Staff

Editor: Michael Narigon

Contributor: Pam Overton, Jim Troy

Copy Editors: Kim Lewis, Carol Schamp

## Contacting TRA

### By Email:

TRA@tra-spacepark.org - Your email questions will be routed to the appropriate source. Also, if we have your e-mail address, we can notify you of information of interest to our TRA members. Send us an email to get added to the TRA email list.

### By Web:

Our website is at www.tra-spacepark.org. It is an excellent source for the latest news, lists of the new retirees, travel details, party photos (more than get into the NNG), forms of all sorts, personal photographs, and much more.

### By Mail:

TRA, P.O. Box 1276, Redondo Beach, CA 90278

### By Phone:

The pandemic has limited our office hours and email is the best way to reach us. If you need to phone, call 310-813-7745 to reach our voice mail.

### For Membership:

TRA Membership is open to Northrop Grumman and TRW-legacy retirees at \$10 per calendar year. The application is available on the website.

## TRW/NG Retirees Meetings Around the U.S.

As everyone knows by now, Covid-19 protection protocols have affected in-person meetings. E-mail or call the contact to make sure the event is occurring before you go. Changes from last issue are marked in **bold**.

If you have a group that you would like to have listed here, please contact us by email at tra@tra-spacepark.org.

GROUP	MEETING LOCATION	DATE & TIME	OTHER INFO	CONTACT
TRA Board Meeting	Zoom	3rd Wednesday, 9:30 AM, Monthly except December	Decisions, planning and actions on archives, events, NNG, coordination with NG	All members welcome. Contact TRA to receive meeting link
ATD Friends & Colleagues	Send ideas for meeting location	<b>1 November 2022, 11:00 AM</b>	Social, Nostalgia, Lunch	Jack Trost, Dena Bouskos, Cindy McCully 310-377-2194 cschamp@aol.com
Beach Cities Get-together	Grunions Restaurant, 1501 N Sepulveda Blvd, MB, CA	Last Monday, Even months, 11 AM to 2 PM	Social	Allen Parker 310-780-0712 777allendsp@gmail.com
Brevard Retirees	On hold due to Covid-19		Social	Tom and Vicki Moore 828-808-0457 seneca75@verizon.net, thistle33@verizon.net
Central Coast Chapter	Various Locations in the Central Coast Area	Various days: contact Zaiser for details	Social	George Zaiser 805-473-2105 gzais34@icloud.com
Houston Chapter	Baybrook Denny's, 19212 Gulf Fwy, Friendswood, TX	3rd Tuesday, 8:30 AM	Social	Gary Dinsmore 281-461-6270 samngary@att.net
Huntsville Chapter	Red Lobster	2nd Tuesday, 11:30 AM	Lunch and Social	Jim Troy 850-797-0044 jtroy28x@gmail.com
Northern Virginia	Zoom	3rd Friday, 11:30 AM	Social	Jim Miller 703-483-5448 jmiller158@gmail.com
Utah	Layton Cracker Barrel	1st Thursday, 8:30 AM	Breakfast Social	Charles Vono 801-745-5879 charlesvono@comcast.net
San Diego Chapter	Event Dependent	3rd Tuesday, Alternate Months	Social or Board Meeting	http://sandiego.tra-spacepark.org Jim Denton 858-385-0150 JWDenton@san.rr.com
Temecula Valley	On hold due to Covid-19		Social	Maureen Locken 951-818-6811 Maureen_Locken@yahoo.com
The Mountain Folks	On hold due to Covid-19		"We do have fun!"	Carl Winkelman 303-693-0034 winkelman@att.net
TRIN	Zoom	2nd Thursday, 1:00 PM, Optional lunch at 12:30	Investment info based on monthly newsletter reviews	Bob Eshbaugh 310-376-5880 eshonnet@yahoo.com
Ventura Romeos	Mimi's Cafe Thousand Oaks	1st Tuesday, Lunch	Social	Frank Yunger 805-444-1541, Harry Stroud 805-653-5117

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On August 10, the 16th Cygnus spacecraft supply mission was launched on an Antares launch vehicle, carrying over 3,700 kilograms of goods, equipment, and experiment modules to the ISS. Cygnus spacecraft are 3 meters in diameter and over 5 meters long.

The Cygnus/Antares stack is launched to the ISS from the Mid-Atlantic Regional Spaceport (formerly part of the Wallops Flight Facility) in Virginia. The trip to meet up and dock with the ISS, orbiting at an altitude of 400 kilometers at a speed 28,000 kilometers per hour, takes about two days.

Cygnus and Antares were originally developed under the NASA Commercial Orbital Transportation Program, with the first operational launch in 2014.

**Artemis Program Overview**

Artemis is the name of NASA's program to return astronauts to the lunar surface, preparing the way to human missions to Mars.

The Artemis program is organized around a series of SLS missions. Artemis I through Artemis IV are planned and later missions are proposed.

Support missions include robotic landers, delivery of Gateway modules, Gateway logistics, delivery of the Human Landing System (HLS), and delivery of elements of the Moon base.

**Space Launch System Component**

The SLS is a super heavy expendable launch vehicle that replaces the Ares I and Ares IV launch vehicles, which were canceled as part of the Constellation program cancellation. It is intended to become the successor to the retired Space Shuttle as the primary launch vehicle for NASA's deep space exploration plans. Northrop Grumman provides the SLS solid rocket boosters.

The Block 1 to 1B boosters are based on refurbished Shuttle program boosters. Block 2 boosters are an upgraded design based on Northrop Grumman's now-canceled Omega launch vehicle.



Space Launch System Block 1

**Orion Multi-Purpose Crew Vehicle Component**

The Orion vehicle is analogous to the historic pioneering Apollo command and service module. It consists of a crew module built by Lockheed Martin and the European Service Module manufactured by Airbus Space and Defense.

Orion uses its own thrusters and rocket engine to maneuver the return through space and back to Earth entry.

**Gateway Component**

NASA's Gateway is intended to be a mini-space station in lunar orbit to serve as a solar-powered communication hub, science laboratory, short-term habitation module, and holding area for rovers and other robots.

The initial Gateway configuration consists of the Power and Propulsion Element, being developed by the Jet Propulsion Laboratory, and the Habitation and Logistics Outpost (HALO), based on the Cygnus spacecraft, being developed by Northrop Grumman under a \$935 million contract.

A later International Habitation module, being built by the European Space Agency with collaboration by Japan, is planned to be launched in 2026 to increase the usable volume.

The final piece, the European System Providing Refueling, Infrastructure and Telecommunications (ESPRIT) service module, is planned for launch in two phases in 2024 and 2027.

The initial Gateway configuration is scheduled to be launched into lunar orbit by a SpaceX Falcon Heavy rocket in late 2024 to support the Artemis IV mission.

**Human Landing System Component**

The Human Landing System transports crew from lunar orbit to the lunar surface, acts as a lunar habitat, and returns the crew back to lunar orbit.

In April 2021, NASA selected the SpaceX Starship HLS.

Starship HLS is planned to be launched to Earth orbit using the SpaceX Super Heavy booster, and would use a series of tanker spacecraft to refuel the Starship HLS vehicle in Earth orbit for lunar transit and lunar landing operations. Starship HLS would then boost itself to lunar orbit for rendezvous with Orion.

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Northrop Grumman Habitation and Logistics Outpost (HALO)



# ATD Colleagues and Friends Luncheon, November 2, 2021

Photos by Jack Trost



Dick Croxall, Bob Doll



Slice & Pint in El Segundo, CA



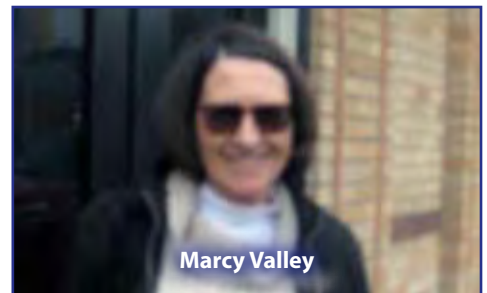
Dick Croxall, Alan Eskovitz



Bill King



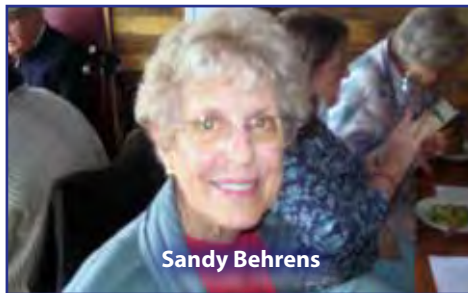
Gary Moir, Marcy Morrison



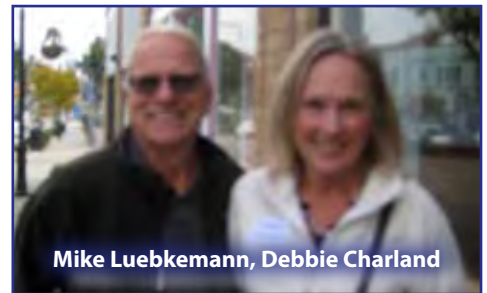
Marcy Valley



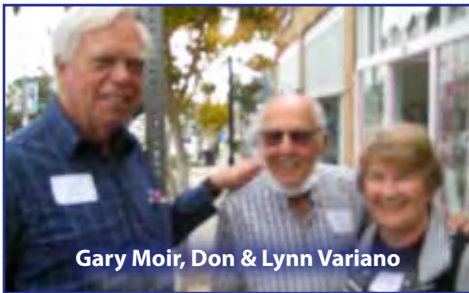
Tim & Cindy McCully



Sandy Behrens



Mike Luebke, Debbie Charland



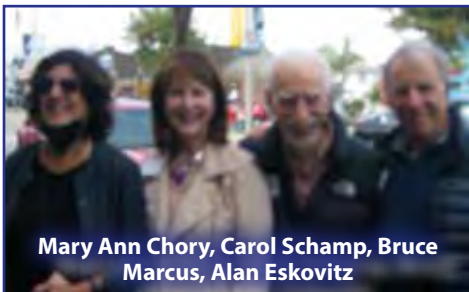
Gary Moir, Don & Lynn Variano



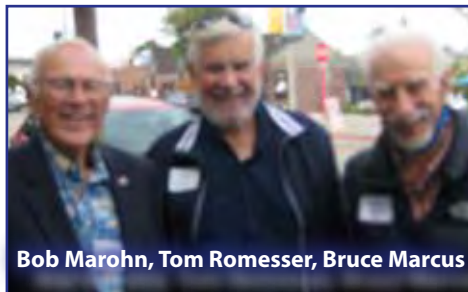
John Latimore



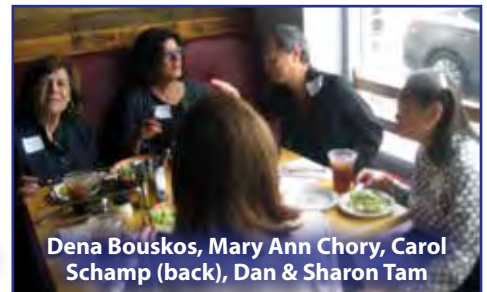
Bill King, Fred Kohler



Mary Ann Chory, Carol Schamp, Bruce Marcus, Alan Eskovitz



Bob Marohn, Tom Romesser, Bruce Marcus



Dena Bouskos, Mary Ann Chory, Carol Schamp (back), Dan & Sharon Tam

### Benefit Contacts for Retirees

The Northrop Grumman Benefit Center (NGBC) is where you can report a change of address, report a death, or apply for a pension. See the "myRetirement" menu item on the NGBC home page for retiree services.

**Northrop Grumman Benefits Center (NGBC)**

www.benefits.northropgrumman.com  
Phone: 800-894-4194

Fidelity administers pension payments and the Northrop Grumman savings plan.

**Fidelity NetBenefits**

www.netbenefits.com/northropgrumman

Via Benefits handles Medicare supplemental insurance and open enrollment.

**Via Benefits (a Tower Watson Company)**

www.viabenefits.com  
Phone: 855-832-0976 (M-F 8AM-9PM Eastern)

A small number of TRW retirees receive their medical benefits through the Northrop Grumman Benefits **Service** Center. This center is staffed by Benefits Outsourcing Solutions, Inc. Their number is 800-410-6605.

Metlife administers your life insurance if, after you retired, you continued your coverage under the Northrop Grumman group plan.

**Metlife**

www.metlife.com  
Phone: 800-638-6420

If you were employed by TRW and retired before January 1, 2006, you may be eligible for an insurance benefit, payable on your death.

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**Artemis Mission Overview**

Artemis I is an un-crewed SLS test flight, which will place the Orion spacecraft into lunar orbit and then return to Earth. It will fly deeper into space than any previous human-rated spacecraft.

Lacking the weight of a crew, the initial Orion payload will be loaded with a number of self-propelled scientific packages including living cells, used to measure non-earth shield protected radiation and asteroid effects above the Space Station's low orbit.

Artemis I is in final preparation for launch from Cape Kennedy. Recently, NASA announced that the Artemis I mission has been delayed to early 2022. This is a result of changes in scope and resolution of a lawsuit by Blue Origin on the Human Landing System contract.

Artemis II will be the first modern crewed flight around the Moon, currently scheduled for May 2024. Four crew members will perform extensive testing in Earth orbit and then will be boosted into a free-return trajectory around the Moon, returning for reentry and splashdown.

Artemis III will land a crew on the Moon at its south pole to detect water thought to exist there. First, the HLS will be launched into lunar orbit. The SLS/Orion will then be launched and rendezvous with the HLS. Two astronauts will use the HLS to land on the Moon, spending around six days on the lunar surface. The HLS will then return the astronauts to lunar orbit, where they will use the Orion to return to Earth. Artemis III is planned for no earlier than 2025.

Artemis IV, planned for 2026, is a crewed mission to the Gate-

### IN MEMORIAM

**Edward Bañales**, 77, September 14, 2021. Eddie joined TRW in 1966 working on systems for the Apollo program and Pioneer. He retired in 2009 after working for the company for 43 years, primarily as a Mechanical Test Conductor in satellite assembly, test, and launch.

**John Chedotte**, 92, February 2021. John worked at TRW for more than 25 years, involved in Apollo, Galileo, and other projects, and retired in 1987.

**LTG (Ret.) Otto J. Guenther**, 80, 14 October 2021. At Northrop Grumman, he was VP and Division Manager of the Tactical Systems Division in Dominguez Hills. Gen. Guenther had an extensive military career in the Signal Corps and in Procurement before working for Northrop Grumman.

**Lemoine (Lee) Kent**. Passed away August 18, 2020.

**Harry Miles**, 60, August 12, 2021. Harry started with TRW as an electrical engineer and technician on the TDRSS program beginning in Las Cruces, New Mexico, and continuing through the ground station sell-off when he relocated to Space Park. He was appointed sector VP for process improvement programs at NG Ship Systems in 2006.

**Don R. Mullins**, 90, September 1, 2021. Don began his career in Business Management at Space Park in 1959. In 1983 he moved to TRW's San Diego facility, helping to "open" the Rancho Carmel facility, where he retired after 30+ years.

**Scott Douglas Ninegar**, 74, October 23, 2021. Scott worked at TRW Space and Electronics Group for 20 years, left for a brief stint for the J. Paul Getty Trust and returned in 1998. He was a member of the transition team as TRW was acquired by Northrop Grumman. He remained at Space Park as an IT Director until his retirement in 2007.

**Stephen Toner**, September 4, 2021. Dr. Toner retired from Northrop Grumman in December, 2015. He had been an employee with the company for 29 years and held numerous positions of responsibility in advanced technology, systems engineering, business development, and business and program management.

The first step in notifying Northrop Grumman of a retiree's death is to call the Northrop Grumman Benefits Center. If the deceased was a member of TRA, please notify TRA whether you want the NNG continued or you want to be removed from future mailings.

If you know of a person that should be included in the "In Memoriam" column, please inform us by either email or mail to the TRA office. As a minimum, we request the name of the deceased, date of death, and the name of the person submitting the information. If more information is available and desired, include age, position and years at NG/TRW, any notable programs, and special skills.

way.

Artemis V through VII and beyond are proposed to land additional astronauts on the lunar surface, where they will take advantage of increasing amounts of infrastructure.

Future plans include crewed travel to Mars, a vastly more complex project requiring a two-year Mars occupation, due to the orbital dynamics between Earth and Mars. Although SLS is far more powerful than Saturn V, it will take at least seven months to get

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The next NNG will be  
mailed in January.

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to Mars, dictating the need for food, oxygen and proper environmental conditions to house the confined astronauts.

At its closest point Mars is 62 million kilometers from Earth, with the furthest being 400 million kilometers or 22 light minutes when Mars is on the other side of the Sun from Earth.

**Complexities**

Among countless complexities is where to manufacture such giant rockets and how to move the SLS assemblies to test sites and then to Cape Kennedy for completion and launch. Too large for

shipping by large airplanes, trains or trucks, they are transported on Southern water ways.

Initial production is underway for 24 SLS rockets at the NASA Marshall Space Flight Center-owned Michoud facility in New Orleans, Louisiana. This amazing plant has 43 acres of enclosed floor space with very high ceilings.

Initial system testing then occurs at the Stennis Space Center in Hancock County, Mississippi, continuing at NASA Marshall in Huntsville, Alabama. Final integration and launch preparation is performed at Cape Kennedy in Florida.

A special water transport is used to ship these behemoths through the Gulf, rivers, and canals through size-limiting locks and the Atlantic Ocean to Florida.

**New TRA Members**

- |                    |                         |
|--------------------|-------------------------|
| Robert Bennett     | Colorado Springs, CO    |
| Stephen Bodnar     | Fontana, CA             |
| Diane Daegele      | Manhattan Beach, CA     |
| Nancy Dolinar      | Strongsville, OH        |
| Norman Guiles      | Redlands, CA            |
| Jovita Jenkins     | Playa Vista, CA         |
| Jolie Key-Bolotin  | Encino, CA              |
| Kristopher Koehnen | St Paul, MN             |
| Steven D. Lee      | Irvine, CA              |
| Gerrit Legrand     | Newport Beach, CA       |
| Stuart Linsky      | Rancho Palos Verdes, CA |
| Barry Lowenstein   | Redlands, CA            |
| Gary Schelin       | Redlands, CA            |
| Steve Sheffield    | Naples, FL              |

We hope these new members will send a note to us at [mailpouch@tra-spacepark.org](mailto:mailpouch@tra-spacepark.org) telling us a little about themselves and where they worked at Northrop Grumman/TRW.

**THE MAIL POUCH**

*By Pam Overton*

◆◆◆ From Don Lee - The last Mail Pouch had a note from me. I'd like to correct a small error, with an additional comment. Although I appreciate the Editor's view that my longevity and happiness is a result of living on Whiskey Island, I must advise that I really live on WHIDBEY Island. I'm sorry if any of my friends who were about to plan a visit are disappointed. ◆◆◆

**Mail Pouch Items**

Let us know what you are up to by e-mailing the Mail Pouch at [mailpouch@tra-spacepark.org](mailto:mailpouch@tra-spacepark.org) or by mail to Mail Pouch, P.O. Box 1276, Redondo Beach, CA 90278.