

MARS STAR





MARS STAR has gone digital!!

If you currently receive a printed copy, you will continue to receive a printed copy. To receive hard (printed) copies in the future, contact Carl Kaminski at 303-726-1546 or via email at carlcolo@centurylink.net.

MARS Activities This Quarter:

Dinner Club Venues, pages 31 - 36 Luncheon Honoring Seniors, July 13, page 29 Marketing Committee Events, page 21 Rockies Picnic and Game, July 27, page 37

OFFICERS

President	Dick Sosnay	303-972-9209
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VP Business	Bill Schrott	303-808-3083
VP Communication	Mike Carroll	303-941-4193
VP Membership	Carl Kaminski	303-726-1546
Treasurer	Charlie Haupt	303-798-7113
Secretary	Al Nemes	303-908-0157
Historian POC	Barb Sande	303-887-8511

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Director Director	John Janczy Bill Wise	303-973-3847 303-771-4887
Director	Robin Zen	303-771-4667
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Cape Canaveral	Dick Olson	321-452-4015
Colo Springs	Doug Tomerlin	719-594-6392
Vandenberg	Charlie Radaz	805-733-2051

CLUB CONTACTS

Bridge	Dave & Kathy Martz	303-683-9524
Car Club	Roger Rieger	303-912-6217
Dinner	Becky & Gary	
	Englebright	303-973-4062
	Anita Kannady	303-794-9210
Golf	Bo Rodriguez	303-798-9157
Hiking	Sue Janssen	303-936-8339
Photography	John Chapter (Pres)	303-986-8277

REMINDER:

If you move, please give the membership VP a change of address. Also, if you are a snowbird, let us know when you are leaving and when you plan to return so your MARS STAR can be sent to you. It costs us 70 cents for each STAR package returned.

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IMPORTANT PHONE NUMBERS

LM Employee Service Center 1-866-562-2363

MARS Important Phone Numbers

(Be sure to have your MARS ID available)

MARS	Delta	Dental	of C	0
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Individual Team (representatives) 1-877-516-6512 Ron Rueger (Account Mgr) 303-889-8616

Assured Partners of CO

MARS Delta Dental "Vision" (EyeMed)
MARS Vision Service Plan (VSP)

 Jon Elmore
 303-228-2206

 Hudson Howard
 720-510-9505

 Sharla Leary
 720-510-9507

Aetna/Medicare Plus 1-888-562-8111

Kaiser Advantage Plus 303-338-3800

MARS Associates P. O. Box 1128

Littleton, CO 80160-1128

MARS Website: https://www.marsretirees.org

MARS Facebook:

https://www.facebook.com/groups/MARSAssociates

Cover:

- L: MARS Associates officers for 2022: (L-R) Linda Duby, Al Nemes, Mike Carroll, Carl Kaminski, Charlie Haupt, Ken Marts, Dick Sosnay. (Not shown: Bill Schrott)
- R: Dr. Vanessa Aponte Williams, Senior Manager at Lockheed Martin Space, during her presentation at the 2022 Annual Meeting.

From the Editor's Desk

Linda Stearns (<u>linda80120@comcast.net</u>) Tom Pighetti (<u>tipiqhetti@q.com</u>)

For comments or corrections, contact Linda (issue editor) or Mike Carroll, V.P. of Communications.

MARS welcomes your submissions. Submissions must be relevant to the MARS organization, informative, and appropriate for this newsletter. No personal dialogues or opinion pieces will be accepted.

Please submit your article for approval <u>in advance</u> to the V. P. of Communications. Articles will be included as time / space allows.



President's Corner
By Dick Sosnay
(richardsosnay@gmail.com)

I am looking forward to spring and summer, with all the great events that we are planning for your MARS Association. We had an outstanding Annual Meeting at the Denver Marriott South at Park Meadows, with about 77 members and their guests attending. Our guest speaker, Dr. Vanessa Aponte Williams, gave us a great presentation on how space is evolving for humans, and the possibilities for extending life to space for everyday people, not just astronauts. As usual, several of our vendors, including Assured Partners and Delta Dental, Beta Dental, Aetna, Red Rocks, and Hearing Resource Center, were there to answer any questions that our members might have. Thanks to all our attendees for your support of MARS Associates and making this an extremely fun and enjoyable event. Thanks to the Denver Marriott South for providing a wonderful space and a very tasty luncheon. And thanks to Linda Duby, our VP of Activities, for organizing this great event. As I look forward to the rest of this year, I continue to be encouraged with how well we seem to be recovering from the effects of the pandemic. We have exciting things planned for this year!

We are trying several new things this year for MARS members. As mentioned in our last MARS STAR, and at both of our Holiday Luncheon and the Annual Meeting, we are offering new activities for this year. These ideas originated from the Marketing Committee, an informal committee that we set up several years ago to do primarily two things: (1) Make MARS a more interesting & attractive association to join, for both existing and new members, and (2) Attract more new membership. The marketing committee was responsible for coming up with such things like the Happy Hours, free membership for the first year, and the host of new activities that we are More details are in the **Marketing** planning. Committee section, where we report on the new activities planned for this year, and the results of the completed activities. If you are interested in participating in some of those events, please contact the lead for that activity. If you have event ideas that MARS can support, please let an officer or director know. We are looking not only for participants for these events, but volunteers set up and lead other events! Please let us know.

We are encouraged with the results of the Marketing Committee and will continue to use it to plan for the future of your MARS Association. We are actively looking for MARS members that want to help identify and plan new opportunities. If you are interested in helping with that please notify any of the MARS officers or directors.

As many of you are aware, inflation has increased in the last few years and has resulted in costs climbing for almost everything. Not only is inflation affecting MARS, but several of our old vendors and event venues have changed their business models or have gone out of business; for example, we are no longer meeting at Pinehurst, and Bennett's, the caterer for our annual picnic for many years, is no longer in business. So, we are having to find new approaches. Our last two events have been held at new venues—the Wellshire Event Center for the Holiday Luncheon, and the Denver Marriott South for the Annual Meeting. Before the pandemic hit, MARS had begun to evaluate our overall finances and look at both our income and expenses. We paused that effort, due to the uncertainties that the pandemic caused not only to MARS, but to the entire world. As we come out of the pandemic, we are restarting that effort. We will report the results of that study to you, our members.

For the first time in a long time, I am happy to report that MARS Associates is growing in membership. Since I have been in the club that is the first year that we have seen an increase in MARS membership. Part of that increase is due to the Stardusters, members of the LMretiree organization based on the heritage Lockheed Sunnyvale organization. At the end of last year, the Stardusters ceased operation and many of them have joined MARS. In the last few years, several LM retiree groups have disbanded due to lack of volunteers: Baltimore, Orlando, and Sunnyvale clubs all had to cease operations due to lack of people stepping up and donating time to their clubs. We have an active, strong club, and we are continuing to expand. That is only strengthened by you, the members volunteering to step in and take on more roles in the club.

As I have said many times, we are a volunteer organization, and we are always looking for volunteers to support us. That includes not only being an officer or director, but also all the other volunteer positions we have, including MARS STAR editors, Historian, Volunteer coordinator, managing our Memorials section of the MARS STAR, managing and running the MARS website and the MARS Facebook page, and running one of our MARS clubs: Bridge Club, Car Club, Dinner Club, Golf Club, Hiking Club, and Photography Club.

As we grow towards our future, more and more of our communication with members is done through electronic means—the electronic distribution of our MARS STAR, our MARS Website, our MARS Facebook page, and our increasing use of blast emails to keep members informed in a timely manner. If you have a background in computers and/or Information Technology (IT) and are interested in using your skills to help your MARS Association, we need more help in our web committee.

If you are interested, please contact any of the officers or directors, or our webmaster Jim Kummer.

If you are a volunteer in a local organization, we are interested in hearing about it and will help you promote that organization in the MARS STAR . You can provide our members information about what the organization does, and how interested MARS members can also join. We provide a \$50 dollar donation to that organization as thanks for your article in the MARS STAR. If you are interested in promoting your volunteer organization in future MARS STARs, please let us know. In this issue, Belinda Waite describes her volunteering activities at the Denver Botanic Gardens.

Coming up in the next few months, I hope to see many of you at our Senior Recognition Luncheon in July, at our Happy Hours, and at several of the new activities we have planned. Keep up the feedback so we know how we are doing. Thanks for all your continuing support, and I am looking forward to an exciting and interesting year for our MARS Association.



Next UpBy Ken Marts
(martshouse2@aol.com)

I'm starting my article by asking all of us to be thankful for what we have in our lives. Bad news is everywhere, but it's important to consider what we ALL have that many in other parts of the world don't have. We have our freedoms, we have our health, we have family, we have many friends in the MARS Associates organization, we have many friends in our other activities, and we have SO MANY other things for which we can be thankful. Please take a few minutes each day (morning, night, or in between), to give thanks for one thing, and write it down. After a year, you'll have 365 things you are thankful for; or maybe, you'll have the same thing written down 365 times! Share some of these ideas with your partner or family members and describe why you are thankful. It could be a great conversation starter! It could also give you a different perspective on life and you can begin, or end, the day on a happy note with a smile on your face.

Hopefully all of you have renewed your membership in MARS Associates. If not, you'll get that reminder from our Membership VP (Carl Kaminski) to renew. We have many exciting activities planned for Colorado members including train trips at the Royal Gorge and the Silverton-Durango Narrow Gauge. A brunch tour of the Denver Museum of Nature and Science is planned in May and an Observatory tour in Estes Park for star-gazers (late

summer). These are in addition to our normal activities of Rockies baseball and Senior Recognition Luncheon. Look for information on these activities on our webpage at <u>marsretirees.org</u>, the MARS Facebook page, or massemailers that will be coming out. Lastly, look for the MARS Marketing Committee article in this edition of MARS STAR for more information on what's going on behind the scenes.

Activities we've completed so far this year included an enjoyable Frisco, Colorado, sleigh ride (pictures can be found on the MARS website); a January Happy Hour, and in March the Annual Meeting, as well as a tour of Lockheed Martin's Waterton facility for 27 lucky members. We apologize for the limited number of members on the LM tour, but we will be looking for opportunities in the future to schedule another tour.

We're not forgetting our out-of-state members. Let us know if you're interested in finding other MARS members in your area to plan activities amongst yourselves. We can help you reach out to these people if you're interested.

We're also interested in hearing from any members who would like to see other articles in the MARS STAR. We've added Pete Harrigan as a standing member to continue contributing the "In The News" section of the MARS Star. We're also considering adding member stories of their favorite Lockheed Martin or ULA program they supported (launch event or other milestone), vacation visits to exotic places with pictures, or short paragraphs on what they enjoy about the MARS STAR or changes they would like to see. We need your input to continue to provide a great organization that all of us can find beneficial and be proud members of it.

I look forward to an exciting 2022 and beyond, and I encourage all members to email or call me with your comments on what you'd like to see and hear from *YOUR* MARS organization. We're also always looking for people to volunteer in any capacity on our Marketing or Web committees to help with the workload or lead a special activity. Your input is always appreciated.

Ken Marts
<u>Martshouse2@aol.com</u> or <u>kmarts4109@msn.com</u>
(303) 868-2168



Director's NotepadBy Roger Rieger
Chairperson, BoD
(rrieger10731@gmail.com)

Welcome to spring! Hope you were able to join your MARS friends at the 2022 Annual Meeting at the Denver Marriott South. This was a new venue for MARS as Pinehurst was not able to accommodate us, a collateral impact from the pandemic. A big thank you to Ken Marts for pulling together the 2021 Annual Report, as well as Dan Ellerhorst for ensuring that our Club Policy Manual and Bylaws are kept current. Copies were made available at the Annual Meeting. If you're interested, both of those documents are also available on the MARS website.

As you know, MARS is a volunteer organization and without all of the hard work put in by your MARS Officers and Directors, STAR editors, Historian, Webmaster, Facebook admin...MARS would cease to exist. We are always looking for new volunteers, if you are interested please reach out to me, or any of the BOD members or MARS Officers and let us know your interests!



Activities Updates
By Linda Duby
(lindaduby@comcast.net)

The Annual Meeting this year was held on March 9, 2022, at the Denver Marriott South at Park Meadows. This was the first "live" Annual Meeting MARS has held since 2020. Typical March, we had snow showers most of the day but not enough snow to impact the luncheon. We had 77 members and guests attend the event. The Marriott did an excellent job – the food was great and so was the service. Vanessa Aponte Williams, Senior Manager at Lockheed Martin Space, was the speaker this year.

On January 26, 2022, MARS held another happy hour event at the Platte River Bar & Grill. We had 65 members and guests attend this fun event. The next happy hour will be held at the Blue Spruce Brewery (Littleton/Ken Caryl location) on April 27. MARS is planning another happy hour in conjunction with a tour of the Wings Over the Rockies in July. Watch for more information on this event in a blast email and on the MARS website.

The Luncheon Honoring Senior Members is the next "big" event. It will be held on July 13, 2022, at the Manor House at Ken Caryl. We have held this event at this location several times and it has become one of our

favorite venues; it is a beautiful location to hold a summertime event. The flyer is included in this issue of the STAR and on the MARS website.

The Annual MARS at the Rockies Picnic and Game at Coors Field is set for July 27. This flyer is also in this issue and on the MARS website.

The Annual Picnic is scheduled for September 14 at Clement Park. I am in the planning process for this event and looking for a new barbeque catering company since Bennett's has gone out of business. More to come on this event in the next STAR.

If you have any questions or comments about events, please contact me at lindaduby@comcast.net.

Please check the MARS website and MARS Facebook page for updates on events.



BusinessBy William Schrott
(wmschrott@msn.com)

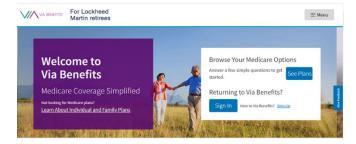
I hope everyone survived the winter. The weather this year has been different from recent years. Some of my time was spent in the Florida panhandle during February and March. The first month was cold and windy.

On May 3, 2022, we will be presenting a course on "Medicare 101". This will be at the Red Rocks Credit Union main office. Course details will be sent to members via email.

As Lockheed Martin retirees we have the privilege to use the services of VIA Benefits to receive reimbursements for health insurance costs. There are other things that they supply, for instance I found better dental coverage through the help of VIA Benefits.

Just go the VIA Benefits page:

https://my.viabenefits.com/ You will see this page popup:



When you scroll down the page, you'll find a Power Point presentation of the services provided by Via Benefits. I encourage all of you to look at it.



Membership Report By Carl Kaminski (carlkcol66@gmail.com)

MEMBERSHIP STATISTICS

As of April 1, 2022, there are 1,383 MARS Associates members, including 712 senior members. We have a total of 34 new members who have joined MARS for the 2022 CY.

Please welcome the following new members who have joined this guarter:

Colorado

Aurora Kimberly & George Abbott

Conifer Rory & Gail Ciepiela

Denver Blake Davis

Frederick Austin Brooks

Highlands

Ranch

Mark Lanning

Lakewood Sueann Smith

Littleton Russ & Shelly Ann Baker, Steve

Caruso, Carol Doehler, Glenn & Loreen Hannah, Scott Hardin, Richard Miliauskas, Cynthia

Schultz, Carolyn Steen

Morrison Paul & Cheryl Monce, Wayne &

Diane Troup

Westminster Shelly Huffman

Other States

<u>Arizona</u>

Surprise Brad Durham

California

Chatsworth Peter & Joanne Law

Menifee James & Patricia Penta

Newport Beach Dan & Jane Runner

Northridge Fred & Kay Bruckman

Oceanside Jerry Porter

Porter Ranch Gilbert Cooperman

<u>Idaho</u>

Mccall Charlotte & Jeff Riechmann

<u>Illinois</u>

Lombard Jerzy Michalowski &

Ewa Sianozecka

<u>Kansas</u>

Olathe Dan & Melony Bergen

North Carolina

Hendersonville Mary Callahan

West End Keith Golding

South Carolina

Fort Mill Hal & Arlene Clem

Summerville Betty Cowen

Texas

Houston Thao Le

Midlothian William Barton

Membership Renewal

The membership renewal cycle for 2022 started on March 1st. There was a printed copy of the renewal form contained in the January issue of the STAR. In addition, clicking on the Membership tab from the main page of the MARS Retirees website will provide access to a form which can be downloaded, filled out and printed for mail-in. Alternatively, click on this link:

(https://www.marsretirees.org/MembershipOnline.html)

You can type directly into this form from your web browser and print it out, or print the blank form and fill it in. Either approach should work. Also, you can renew directly online by selecting the red 'Renew' button under Membership Online Processing. This will allow you to pay via credit card and save the hassle of mailing your renewal form and payment via USPS. If you are uncertain whether you have already renewed for 2022 or have any

other questions contact Carl Kaminski directly at 303-726-1546.

NEW MEMBERS

Do you know someone who recently retired from LM or ULA? First year membership in MARS is free for 2022. Direct them to the website for more information or have them contact one of the Officers or Directors.

Change of email address or phone number?

Given the rapidly changing environment we are all dealing with, it's more important than ever that we have current email and phone information for our members. Please remember to include the MARS membership team in your list of people to notify when you have a new phone number or email. We want to make sure all communications are timely.

In Memoriam

By Norma Emerson (emer801@msn.com)

Please contact me at the above email address or at 303-646-1137 with information about the passing of a member, the spouse of a member or other MM/LM retirees so they can be acknowledged in the Memoriam section.

MARS Associates expresses our deepest sympathy in the loss of your loved one, and a donation will be made to a charity chosen by the Officers and Bord of Directors in their memory.

Members

Bybee, Susan (D: December 2021) (Survived by David Bybee) Highlands Ranch, CO https://tinyurl.com/34u3w3sr

Costello, Regina (D: December 2021) (Survived by Martin Costello) Centennial, CO No obituary published

Fox, Norman "Norm" (D: February 2022) (Survived by Frances "Fran" Fox) Highlands Ranch, CO No obituary published

Freeland, Judy (D: December 2021) (Survived by Gary Freeland) Coeur d' Alene, ID

https://tinyurl.com/3wuzbs3w

Green, Linda (D: No date given) (Survived by William "Bill" Green) Pine, CO No obituary published Harrell, Delores "Dee" (D: January 2022) (Survived by Ray "Keg" Harrell) Centennial, CO https://tinyurl.com/2k6z72kr

Hudoff, Frederick "Fred" (D: January 2022) (Survived by Barbara Hudoff)
Castle Rock, CO
https://tinyurl.com/y5dv32ax

Kapus, Lee (D: 2012) (Survived by Robert "Bob" Kapus) Cedaredge, CO https://tinyurl.com/mrxzcdn3

Marston, Stan (D: December 2021) (Survived by Karen Marston) Littleton, CO No obituary published

Pitt, Patricia L. (D: January 2022) Denver, CO https://tinyurl.com/tcz3jude

Polliard, Lena Ruth (D: March 2022) (Survived by James Polliard) Aurora, CO https://tinyurl.com/3m7rf4vt

Runkle, Sr, James "Jim" (D: November 2021) (Survived by Pat Runkle)
Bullhead City, AZ
https://tinyurl.com/tx6tx345

Runkle, Kari (D: July 2016) (Survived by Joe Runkle) Littleton, CO https://tinyurl.com/3dkhszxd

Schumacher, Harry (D: January 2022)
Castle Rock, CO
https://tinyurl.com/yc3tt4uh

Sullivan, Daniel J. (D: February 2022) (Survived by Betty Sullivan) Denver, CO https://tinyurl.com/4m6p3j2z

Veasman, Donald A. (D: November 2021) (Survived by Ruth Veasman) Morrison, CO https://tinyurl.com/bdf7ztn4

Williams, Grant (D: March 2022) (Survived by Marjorie Williams) San Tan Valley, AZ https://tinyurl.com/ycx3bn29 Williams, Shirley M. (D: February 2022)

(Survived by Don Williams)

Centennial, CO

https://tinyurl.com/2p9ee2fx

Non-Members

Ambrosch, Hank (D: November 2021)

Cocoa, FL

https://tinyurl.com/tz5n4vmx

Bakalar, David (D: January 2022)

(Survived by Ada Bakalar)

Buellton, CA

No obituary published

Berkebile, Charles (D: January 2003)

Hartsville, SC

https://tinyurl.com/7n23jr68

Berkebile, Edith (D: February 2022)

Hartsville, SC

https://tinyurl.com/3bhhky2f

Bunge, Thomas "Tom" (D: January 2022)

Aurora, CO

https://tinyurl.com/zwdav2kr

Clausen, Reid (D: March 2021)

Highlands Ranch, CO No obituary published

Creasey, Richard "Dick" (D: December 2021)

(Survived by Jo Creasey)

Castle Rock, CO

https://tinyurl.com/2p9he7zr

Dal Pra, Dennis (D: November 2021)

Kalispell, MT

https://tinyurl.com/2dckytmk

Drew, Richard (D: February 2022)

(Survived by Nancy Sencock)

Port Charlotte, FL

https://tinyurl.com/2p9eawc8

Flory, Alma (D: March 2022) (Survived by John Flory)

Denver, CO

No obituary published

Gentile, Richard "Dick" (D: January 2022)

(Survived by Nicolini Gentile)

Rockledge, FL

https://tinyurl.com/tm9e3fyh

Grant, Edwin "Ed" (D: December 2021)

Littleton, CO

https://tinyurl.com/msj2ndc

Gunderson, Kent (D: March 2022) (Survived by Barbara Gunderson)

Merritt Island, FL No obituary published

Hall, Raymond "Ray" (D: February 2022)

(Survived by Joyce Hall) Cape Canaveral, FL

https://tinyurl.com/wxwah35a

Janney, Charla (D: November 2021)

(Survived by Ron Janney)

Wheat Ridge, CO

https://tinyurl.com/368wjjwm

Jones, Gary B. (D: January 2022)

Lake Havasu, AZ No obituary published

Lantau, Robert "Bob" (D: January 2022)

Titusville, FL

https://tinyurl.com/5n7wp3xs

Lewin, Kenneth "Ken" (D: November 2021)

(Survived by Laurie Lewin)

Parker, CO

https://tinyurl.com/2p95cn9j

McElroy, Craig (D: January 2022)

(Survived by Toni McElroy) Colorado Springs, CO https://tinyurl.com/yzcjfn4m

Mitchell, Faith (D: January 2022)

Wichita, KS

No obituary published

Mueller, Mark (D: January 2022)

Littleton, CO

https://tinyurl.com/y5vmn6nu

Myllykangas, David "Dave" (D: December 2021)

Cope, CO

No obituary published

Neumann, Fred (D: February 7, 2022)

(Survived by Rose Neumann)

Littleton, CO

No obituary published

Peebles, Frank (D: December 2021)

(Survived by Sharon Peebles)

Melbourne, FL

https://tinyurl.com/4d6uy9ns

Roe, Martha Ann (D: February 2022)

(Survived by Garland Roe)

Denver, CO

https://tinyurl.com/5xcp276w

VanHorne, Brian (D: January 2022) (Survived by Marge VanHorne) Littleton, CO No obituary published

Worthington, Bradley "Brad" (D: February 2022) (Survived by Tammi Kay Worthington) Lexington, MO https://tinyurl.com/ymfnvsbm

The MARS Associates Website

By Jim Kummer (jkummer@comcast.net)

As mentioned in the last issue of the STAR, the website committee has a desire to add some new members. The duties are light, the members are amicable, and you can acquire some new skills. We meet monthly either at an in-person luncheon or by ZOOM. Updating pages of the website is done on your home computer at your convenience. If you're interested, send me an email, or call (303-986-3966) and we'll discuss it.

MARS Associates is continually adding new event opportunities. These will be announced in the website as they become available—watch the website for updates.

Here are the websites of the month that the web committee has offered for your browsing pleasure.

Mar – Income Tax Information:
Federal - www.irs.gov
Colorado State www.colorado.gov/tax
Resources for Free Tax Preparation
Feb – To the Moon and Mars with

NASA's Artemis Program

James Webb Telescope

Your website committee members welcome your suggestions for improvement of the website. If you frequent websites you think would be of interest to our membership as websites of the month, you can email them to me at jkummer@comcast.net. Your website committee members are: Al Butvidas, Bob Knickerbocker, Duane "Smitty" Smetana, Linda Stearns, and Jim Kummer (Webmaster).

Volunteering at Denver Botanic Gardens (DBG)



By Belinda Waite (nalanibnw@gmail.com) 303-906-9982

I have retired from ULA and have volunteered for DBG for 5 years. I served as an Ambassador (greeter/ticket processor) for 4 years, and now I am an Ambassador for special events & festivals. I've also been on a gardening team for 5 years, and love the hands-on planting, pruning, weeding, etc. In addition to my volunteer activities, the other volunteer opportunities at DBG are endless — working in the library, assisting with annual plant sale, teacher's assistant in numerous adult and children's programs/classes, school tour guides, summer butterfly attendant at Chatfield Farms, horticulture special offsite studies, giving science talks in the Science Pyramid, etc.

DBG has three Denver area locations: York Street, Chatfield Farms, and Plains Conservation Center (Aurora).

I volunteer for special events at Chatfield Farms, but am most familiar with the York Street location. One can visit York Street year round once a week and find something new each visit. During the pandemic it truly was an aid to promote one's well-being and is an opportunity to experience nature in the middle of the city. DBG York Street has three levels of FREE parking, two onsite restaurants, a gift shop, a tropical conservatory, science pyramid, and many different and unique gardens. The new Freyer Newman Building houses a library, seven classrooms, an offsite private free trade woman-owned coffee shop (the Copper Door), three art galleries, an auditorium, and a giant immersion screen that projects scenic areas of Colorado.

Check out their main website to learn more about the various gardens, special exhibits, individual or group tours, etc.: https://www.botanicgardens.org. To learn more about volunteering opportunities, go to https://www.botanicgardens.org/adult-volunteer-programs.

Historian Corner

By Barb Sande (barbsande@comcast.net)

GENERAL ITEM OF INTEREST

I have eliminated the decadal milestone events in this history column starting with this issue and going forward. Because there are still printed copies of the MARS STAR created every quarter, the space taken by the milestone events is being freed up to allow for more pictures and stories about expanding group activities and events. The milestone events have been replaced by daily major events for our heritage space companies that are posted on the MARS Associates Facebook page. Those daily events will be aggregated into a file for access by members on the web site later this year. If you would like to access the Facebook page, please register with Facebook as a user and request membership or contact me via my email address noted above.

ERRATA: In the last Historian Corner (History on the Road Kennedy Space Center), a photo caption incorrectly identifies STS-107 Commander Rick Husband as Rick Hubbard.

Program Profile

On February 20, 1962, Mercury astronaut John H. Glenn made history by becoming the first American to orbit the Earth. This program profile explores the highlights of that mission that involved an Atlas D LV-3B launch vehicle provided 60 years ago from our heritage company General Dynamics Space Systems (Convair division). A biography of John Glenn is also included.

Mercury-Atlas MA-6 (*Friendship 7*) Mission Overview

Launched: 02/20/1962 14:47:39 UTC, Launch Complex (LC) 14, Cape Canaveral Air Force Station (renamed Cape Canaveral Space Force Station in December, 2020) Mercury Capsule: No. 13 (McDonnell Aircraft)

Call Sign: *Friendship 7*

Launch Vehicle: Atlas LV-3B 109-D (Convair Division of General Dynamics) – man-rated and derived from the

SM-65D Atlas ICBM missile family

Splashdown: 02/20/1962 19:43:02 UTC, North Atlantic

Ocean, USS Noa Recovery ship

Crew: USMC Lt. Colonel John H. Glenn, Jr.

3 total orbits - 80 nautical miles by 134 nautical miles

with an inclination of 32.5 degrees

Mission duration: 4 hours, 55 minutes, 23 seconds



John H. Glenn in his Mercury Flight Gear Photo courtesy NASA-Glenn Research Center

Preparing for an Orbital Mission

In late 1961, NASA was under enormous political and media pressure to answer the space advances made by the Soviet Union. The USSR had successfully launched two cosmonauts to orbit on Vostok 1 and 2 missions. Gherman Titov, the cosmonaut on Vostok 2, completed 17 orbits of the Earth in August, 1961, as a follow-up to the first human spaceflight (and single orbit) in April, 1961, by cosmonaut Yuri Gagarin. Those two ventures were met by short suborbital flights on Redstone rockets for American Astronauts Alan Shepard and Virgil "Gus" Grissom because the planned orbital launch vehicle, Atlas LV-3, was not ready. Finally, on November 29, 1961, NASA successfully launched Enos the chimp in a Mercury capsule on an Atlas LV-3 (93-D). The plucky primate completed two orbits of Earth before splashing down near Bermuda. This success prompted NASA leadership to accelerate the first orbital flight for an American on Mercury-Atlas (MA)-6. Coincidentally, the MA-6 Atlas booster arrived at Cape Canaveral on November 30, 1961, a day after the flight of MA-5 with Enos. The booster, designated #109-D, was the third fully man-rated Atlas LV-3 booster delivered for flight.

Background: Challenges for Mercury-Atlas Development

The Mercury-Atlas test program began with MA-1, using Atlas LV-3 50-D, in an attempt at a suborbital test of the combined systems. With several subsystems uninstalled, this vehicle launched on July 29, 1960, and suffered a structural failure 58 seconds after launch. Weather conditions at the Cape kept observers from seeing exactly what happened; parts were recovered from the ocean

floor and engineers speculated that the skin of the launch vehicle buckled just below the spacecraft interface point. A modification was made to put doublers in the thin tank skin of the Atlas and use a shallower trajectory angle to reduce aerodynamic loads.

MA-2 was successful, launching on February 21, 1961, using Atlas LV-3B 67-D and Mercury Capsule #6. This suborbital flight met all test objectives, with the only problem being propellant slosh. This launch was three weeks after the successful suborbital flight of Ham the chimpanzee on Mercury-Redstone 2.

MA-3, launched on April 25, 1961, was not a success, unfortunately. Incorporating many of the man-rated system upgrades including a robotic astronaut and the launch escape tower, this mission, using Atlas LV-3B 100-D and Mercury Capsule #8, appeared to launch successfully from pad LC-14. At T-20 seconds the pitch and roll sequence failed to initiate and the vehicle continued on a trajectory straight up from the launch pad. Fearing the booster could threaten facilities at the Cape or nearby communities, the Range Safety Officer held his finger over the destruct command button, hoping for a recovery as the flight converged with the destruct limits. At 43 seconds after liftoff, MA-3 was destroyed, with debris raining down on the Cape area. The launch escape tower activated at destruct and brought the Mercury capsule only a short distance downrange intact. This capsule was re-used on the next flight. Although the flight programmer was recovered on a nearby beach, the exact cause of this guidance anomaly was not determined. It was speculated that the programmer reset due to a transient voltage or pin contamination. Several design flaws were also seen during the programmer investigation that required redesign. This flight failure, occurring thirteen days after the successful single-orbit flight of Yuri Gagarin, was very disheartening to the Mercury astronauts and NASA program managers, not to mention the political leadership in the US.

Delays due to the corrective actions and design improvements resulted in MA-4 not launching until September 13, 1961. By this time, Vostok-2 had been successfully launched, with Gherman Titov completing 17 orbits (a full day in space). The USSR rattled its usual saber, noting that their nuclear weapons could now easily reach any place on the planet. MA-4 was a re-flight of Mercury Capsule #8 and used Atlas LV-3B 88-D as the launch vehicle. Failures in the interim between MA-3 and MA-4 of two Atlas E ICBM test launches due to rate gyroscope malfunction and combustion instability (these both happened in June, 1961) and a programmer reset (again) on an Atlas-MIDAS launch led Convair to incorporate changes to the autopilot to counteract programmer malfunctions and work solutions for the Atlas E failure modes (the gyroscope mitigation, Spin Motor Rotation Detection System, was not incorporated until MA-5). MA-4 was declared successful, however, and

the capsule completed one orbit. Minor issues were noted with oxygen rates due to a leak and orientation in orbit due to an open circuit in a pitch gyro. A relieved Bob Gilruth, the NASA director of Manned Spaceflight, declared the Atlas LV-3B to be man-rated.

The program arrived at the launch of MA-5 on November 29, 1961, as noted earlier in this article. After chimpanzee astronaut Enos survived his flight, NASA called a press conference in early December, 1961 to announce that John Glenn had been selected as the primary pilot for MA-6, with M. Scott Carpenter functioning as backup. Donald "Deke" Slayton was chosen for MA-7, with Walter M. Schirra as his back-up. Now it was a full-court press to get this mission off the ground!

Mercury-Atlas 6 Pre-Launch Delays

Mercury Capsule #13 and Atlas LV-3B 109-D were stacked on Launch Complex 14 on January 2, 1962. The launch date was announced as January 16, 1962. This was postponed until January 20 because of problems with leaks in the Atlas propellant tanks. Then there were day-to-day slips from January 20 to January 27 due to unfavorable weather.

Glenn actually boarded the Mercury capsule on January 27, but the launch was called off at T-29 minutes due to thick cloud cover that would prevent photographing the vehicle after T+20 seconds; the flight controllers learned their lesson after the failure of MA-1, when no visual confirmation of cause could be seen. The Mission Director (Walter Williams) was secretly relieved at the bad weather on that day because he felt the booster and spacecraft were not ready to fly.

The decision was made to postpone the launch until February 1 so that appropriate attention could be paid to ensuring safety standards. However, during propellant loading on January 30, a fuel leak was discovered between the RP-1 (Refined Petroleum-1 or Kerosene) and LOX (liquid Oxygen) tanks, necessitating two weeks of repairs. On February 14, the weather again caused a delay; the weather finally broke on February 18 and February 20 appeared to be a favorable day to attempt the launch.

MA-6 Launch and First Orbit

Glenn entered Friendship 7 at 11:03 UTC on February 20 after a 90-minute delay to replace a faulty component in the Atlas guidance system. The hatch required 70 bolts for securing and a broken bolt was noticed when almost every single bolt had been installed. This led to another ground delay as all of the bolts were removed and the defective bolt replaced. The gantry was finally moved back at 13:20 UTC, but another ground delay occurred due to a repair of a LOX propellant valve.

At 14:47 UTC, Convair Engineer T. J. O'Malley pressed the button in the blockhouse launching MA-6. O'Malley said "the Good Lord ride all the way" and capsule communicator Scott Carpenter chimed in with "Godspeed, John Glenn." Due to a glitch in Glenn's radio at liftoff, he did not hear these encouraging words.



MA-6 Launch, February 20, 1962

Photo Courtesy NASA

MA-6 initiated a roll program at T+2 seconds, rotating along the roll axis 2.5 degrees per second, from 30 to 0 degrees. The pitch program began at T+16 seconds, with a 0.5 degree per second pitch from 90 to 0 degrees.

Thirty seconds after lift-off, the Atlas guidance system (designed by General Electric/Burroughs) locked onto a radio transponder in the booster to guide the vehicle to orbit. Max Q (maximum dynamic pressure) occurred at T+1:24 and measured 980 pounds force/square foot. All flight parameters appeared nominal and the booster engines cut off at two minutes and 14 seconds after launch. The escape tower, which was built by Grand Central Rocket Company from Redlands, California (later becoming Lockheed Propulsion Company) was jettisoned at two minutes and 24 seconds into flight right at the predicted time. Sustainer engine cutoff occurred at T+5:20. Booster performance was nearly flawless and the Atlas accelerated the Mercury capsule to a speed only 7 ft/sec below nominal. AT 14:52 UTC, Friendship 7 entered Earth orbit. Computers at the Goddard Space Flight Center indicated that the orbital parameters were good enough for nearly 100 orbits. Glenn was informed that the mission would try for seven orbits.

Posigrade rockets were used to separate the capsule from the booster; when these fired, the five-second rate-damping operation started 2 ½ seconds late, causing a substantial roll error as the capsule turned around. The attitude control system took 38 seconds to place Friendship 7 in the proper orbital attitude, using 5.4 pounds of the total control system fuel supply of 60.4 pounds. Final orbital velocity was 17,544 mph.

One of the things that Glenn insisted on before this flight was a personal camera to capture his own views of Earth (there were video cameras on board to capture his movements during flight). He brought on board a Minolta Hi-Matic 35-mm camera that he bought at a local drugstore; the camera had been modified to work with flight suit gloves, but he still had difficulty changing film and one canister ended up floating behind an instrument panel. The photo below is one of the images Glenn took during the first orbit. He also had a survival kit for post-splashdown contingencies and a medical kit with morphine and other drugs to treat shock symptoms and motion sickness. The Soviets had not shared any of the physical effects of space travel on humans with the Americans, obviously.



Image Taken during Flight by John Glenn
Photo Courtesy NASA/JSC Digital Image Collection

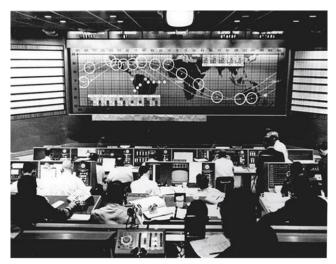
Friendship 7 crossed the Atlantic and passed over the Canary Islands. Observing the African coastline, Glenn reported to the tracking station team in Kano, Nigeria, that he could see a dust storm in the area; the ground station crew confirmed this observation. At this point Glenn took manual control of the spacecraft and started a yaw adjustment until he was facing into the flight path. After crossing Africa, Glenn saw his first sunset from orbit, describing it as "beautiful". As he neared the Australian coast line, he made star, weather and landmark observations before coming into radio contact with the Muchea, Australia, tracking station. Mercury astronaut Gordon Cooper was on comm at this station 60 miles north of Perth; Glenn reported he was feeling fine and noticed the bright lights of Perth and Rockingham on the western coast. The people in those cities had turned on as many lights as possible in the hopes that he would see them from orbit. Shortly after passing over Australia,

Glenn observed the startling "fireflies" around the capsule on the outside, which were likely ice crystals venting from on-board systems.

As Friendship 7 passed over Kauai, Hawaii, Glenn noticed a lot of interference on the High-Frequency radio band. Crossing the Pacific Coast of North America near Guaymas, Mexico, the ground crew informed Glenn that a yaw thruster was causing attitude control problems; this issue remained for the rest of the flight, resulting in Glenn eventually using manual fly-by-wire techniques to control the spacecraft attitude.

Second and Third Orbits

Friendship 7 crossed over Cape Canaveral and Mercury Control to start its second orbit (see photo of the control room below). A flight systems controller noticed that a sensor providing data on the spacecraft landing system was giving a reading that the heat shield and landing bag were no longer locked in position. If this was true, the heat shield was being held onto the spacecraft only with the straps of the retro rocket package. The sensor was known as "Segment 51" and all ground stations were asked to monitor it during the next orbital pass. Glenn was also advised to immediately put the landing-bag deploy switch in the off position. Glenn was not advised of the concern, but he became suspicious when every ground tracking station reiterated the request to keep the landing-bag deploy switch in the off position.



Mercury Control Room at Cape Canaveral

Photo Courtesy NASA Archives

As Glenn crossed the Atlantic, he kept busy with flight plan tasks and manually controlling the attitude control system to keep it properly oriented. Crossing the Canary Islands, Glenn felt that his spacesuit was too warm, but did not try to adjust it until a little later in the orbit. The African tracking sites at Kano, Nigeria, and Zanzibar, Tanganyika (now Tanzania), noted a sudden 12 percent drop in the secondary oxygen supply. As he passed over the Indian Ocean, a tracking ship had planned to release balloons for an observation experiment, but instead

released flares due to the weather conditions. Glenn was able to see lightning in storms but did not see the flares.

Trying to adjust his suit temperature resulted in an imbalance in cabin humidity versus suit cooling, another issue that required him to constantly adjust the balance of cooling and cabin humidity. While passing over Australia, another warning light came on, indicating that the fuel supply for the control system was down to 62%. Mercury Control recommended that Glenn let the spacecraft drift to conserve fuel. However, he did continue to consume more fuel by tweaking the spacecraft attitude and more than 6 pounds from the automatic control tank and 11.8 pounds from the manual tank were consumed just during the second orbit.

The third orbit was relatively uneventful, although Mercury Control was still undecided about what to do about the "Segment 51" sensor reading. The Hawaiian tracking station asked Glenn to toggle the landing bag deploy switch into the automatic position. If a light came on, reentry should take place while retaining the retro pack. Glenn finally realized that there was a possible concern about a possible loose heat shield. He performed this switch toggle and no light came on. Fight Director Chris Kraft and Mission Director Walter Williams finally decided to keep the retro pack on during reentry as assurance to keep the heat shield in place.

Friendship 7 Reentry and Splashdown

Glenn was now preparing for reentry as he crossed the North American coastline. Keeping the retro pack in place meant that he had to retract the periscope manually and would have to activate the 0.05 g sequence by pushing an override switch. The US National Archives have keep the transmissions from this portion of the mission:

Texas Com Tech: Friendship 7, Friendship 7, this is Texas Com Tech. Do you read? Over

Friendship 7: Roger, Texas, go ahead.

Texas Com Tech: Ah, Roger. Reading you 5 square. Stand by for Texas Cap Com.

Friendship 7: Roger

Texas Cap Com: This is Texas Cap Com, Friendship 7. We are recommending that you leave the retropackage on through the entire reentry. This means that you will have to override the 0.05 g switch, which is expected to occur at 04:43:03. This also means that you will have to manually retract the scope. Do you read?

Friendship 7: This is Friendship 7. What is the reason for this? Do you have any reason? Over

Texas Cap Com: Not at this time; this is the judgment of Cape Flight

Glenn was perplexed, but followed the instructions to the letter and began retrofire for reentry. As he crossed Cape Canaveral, he noted that he had been controlling the spacecraft manually and would use the automatic fly-bywire mode as a backup. He was given a mark command to press the override button for the 0.05 g switch. Things began heating up, literally, outside Friendship 7 as the reentry plasma stream burned up pieces of the retro package (Glenn feared that was the heat shield, as he watched searing chunks fly by the window). Attitude control system fuel was at critical levels and Glenn switched to the automatic tank and fly-by-wire. After passing the peak g region, Friendship 7 began oscillating severely, crossing 10 degrees on both sides of a vertical zero-degree point. Glenn activated the auxiliary damping system, which helped stabilize the yaw and roll instabilities.

Fuel continued to be depleted, finally running out in the automatic fuel supply nearly two minutes before drogue chute deployment and 51 seconds before deployment in the manual fuel tank. Oscillations resumed and Glenn decided to deploy the drogue chute manually to regain attitude stability. Just before he reached for the switch, the chute deployed at 28,000 feet (programmed for 21,000 feet), restoring attitude stability to the spacecraft. The periscope opened and was available for use; the window was coated with so much soot and film that Glenn could not see any details. The main chute deploy happened at 10,000 feet, slowing the descent rate significantly. Glenn was reminded to manually deploy the landing bag. A loud clunk could be heard as the heat shield and landing bag dropped into place below the capsule.

Friendship 7 splashed down in the North Atlantic at 21 degrees 21 minutes North, 68 degrees 40 minutes West, which was 40 miles short of the planned landing zone. Retrofire calculations had not taken into account changes to the spacecraft weight due to loss of onboard consumables. The USS Noa, a destroyer in the recovery group, spotted the spacecraft when it was descending on its parachute. The destroyer came alongside Friendship 7 seventeen minutes later. The spacecraft and its earthorbiting American occupant were pulled from the water onto the destroyer deck. Glenn was suffocating from the heat and decided to blow the side hatch, warning the crew members to stand aside. He slightly cut his hand when the detonator plunger recoiled, but emerged happy and smiling, helped out by the first US Navy Seal Harry Beal. Both the spacecraft and its pilot came through the mission in good shape.

Post-flight analysis determined that the "Segment 51" warning light problem was caused by a faulty sensor switch, meaning that the landing bag and heat shield

were secure during reentry. After the return of Friendship 7, NASA announced on April 19, 1962, that the spacecraft would go on a world tour, with more than 20 stops across the globe (known as the "fourth orbit"). Glenn was, of course celebrated in many publicity events and ticker tape parades across the nation. Americans breathed a sigh of relief with this hero's flight - now we, too, had successfully orbited the Earth. I was in the first grade in February, 1962, and my first memories of a space event came from reading about this flight in a "Weekly Reader" at school. That young girl, who really liked math and science, was hooked on all things "Space" from that day forward. For those that are interested, Friendship 7 is currently on display at the Smithsonian Udvar-Hazy Center, located near Washington Dulles Airport in Chantilly, Virginia.



Friendship 7 on Display - Udvar Hazy Center

Photo: Courtesy Smithsonian Institute

John H. Glenn, Jr. Biography

John Herschel Glenn, Jr. was born on July 18, 1921, in Cambridge, Ohio. His father, John H. Glenn, Sr., was a plumber and his mother, Clara Teresa Glenn, was a teacher. His parents married just before John Sr. left for the western front in World War I. Shortly after John Jr. was born, the family moved to New Concord, Ohio. As a toddler, John Jr. met another toddler, Anna Margaret (Annie) Castor, who later became his wife. John Jr. also had an adopted sister, Jean.

Glenn first flew in an airplane with his father when he was eight years old and he immediately became fascinated by flight, building balsa model airplane kits. He attended New Concord High School, playing on the varsity football, basketball and tennis teams. Graduating in 1939, Glenn entered Muskingum College where he studied chemistry and played on the football team. Annie also attended the same college, majoring in music and competing in swimming and volleyball. Glenn earned a private pilot license through a Civilian Pilot Training Program in 1941.

World War II saw Glenn quit college before his senior year to enlist in the Army Air Corps. He was not called to duty, so he also enlisted as a U.S. Navy Aviation Cadet in March, 1942, making his first solo flight in a military aircraft at Naval Air Station Olathe in Kansas. He moved on to advanced flight training at Naval Air Station Corpus Christi in Texas and accepted an offer to be in the U.S. Marine Corps; he was commissioned as a second lieutenant in March, 1943. Shortly after his commissioning, he married Annie at a Presbyterian church in New Concord, Ohio. He and Annie were devout Presbyterians throughout their lives.

Glenn was assigned to Marine Squadron VMJ-353 at Camp Kearny, California, flying R4D transport ships. He was more interested in fighter flying, so he transferred to the VMO-155 squadron, which flew the Grumman F4F Wildcat. VMO-155 moved to El Centro, California and was re-equipped with the faster and upgraded F4U Corsair in September, 1943. Glenn shipped out to Hawaii in January, 1944, as a first lieutenant and then headed to the Marshall Islands were he flew 57 combat missions in the area, earning two Distinguished Flying Crosses and ten Air Medals. In February, 1945, Glenn was assigned to Marine Corps Air Station Cherry Point in North Carolina, then to the Naval Air Station Patuxent River in Maryland. He was promoted to Captain and joined another Corsair squadron; he moved again, to Marine Corps Air Station El Toro in California and volunteered for patrol missions in occupied North China.

Back to the US in December, 1948, Glenn was reposted at NAS Corpus Christi and became a flight instructor there, then joined the Amphibious Warfare School at Marine Corps Base Quantico. He was promoted to Major in July, 1952. After a short leave to move his family back to New Concord, Glenn was ordered to South Korea in October, 1952. Before leaving, he applied to fly the F-86 Sabre jet through an exchange program with the USAF. Glenn first flew 63 combat missions with the F9F Panther; during this time, his wingman on several missions was Red Sox baseball legend (and future Hall-of-Famer) Ted Williams, who said Glenn was the most fearless pilot he had ever seen. In June, 1953, Glenn reported for duty with the USAF's 25th fighter squadron and flew 27 combat missions in the F-86, patrolling MiG Alley, shooting down his first MiG on July 12, 1953. His service in Korea

garnered two more Distinguished Flying Crosses and eight more Air Medals.

Glenn applied to be a test pilot at the US Naval Test Pilot School at NAS Patuxent, Maryland while he was still in Korea. He tested a variety of aircraft and on July 16, 1957, he made the first supersonic transcontinental flight in an F8U Crusader, flying from Los Alamitos, California, to Floyd Bennett Field in New York City in 3 hours, 23 minutes and 8.3 seconds, averaging supersonic speeds in spite of three mid-air refuelings. He received another Distinguished Flying Cross and was promoted to Lieutenant Colonel on April 1, 1959. He became a minor celebrity after this flight, receiving a profile in the New York Times and appearing on the television show "Name that Tune."

On December 17, 1958, Project Mercury was announced National Aeronautics and the new Space Administration. Glenn was very interesting in the developments in space and spent time at Langley Air Force Base making runs in a flight simulator and also being subjected to high-G forces at a centrifuge in Johnsville, Pennsylvania. Because of his participation in these simulators he was sent to the McDonnell Aircraft plant in St. Louis as a service advisor to NASA. Recruitment began for the Mercury astronauts, culling from test pilots in the various branches of service. Glenn barely made the first cut because of his age and lack of a college degree (he had more than enough college courses for completion), but his commanding officer Jake Dill at test pilot school visited NASA and called Glenn the perfect candidate. Glenn easily passed subsequent evaluations, including the grueling physical tests at Lovelace Clinic in Albuquerque, New Mexico, and was called by NASA on April 6, 1959, announcing his selection as one of the "Mercury Seven".



The Mercury Seven Pose in Front of an F-106 – Glenn is Third from the Left

Photo courtesy NASA Spaceflight Gallery

The Mercury Seven were publicly announced on April 9, 1959, at a press conference in Washington, D.C. They gathered at Cape Canaveral to watch a test launch of an

Atlas SM-65D on May 18, 1959, and were stunned when the vehicle exploded minutes after lift-off.

Glenn remained an officer in the Marine Corps after selection and was assigned to the NASA Space Task Group at Langley, Virginia; this task force moved to Houston, Texas, in 1962. Glenn worked on cockpit layout design and control functioning for Mercury and follow-on manned programs. Glenn functioned as back-up pilot for Mercury-Redstone 3 (Alan Shepard) and Mercury-Redstone 4 (Gus Grissom) and was assigned to Mercury Atlas-6, as noted in the main article.

After MA-6, Glenn became an iconic figurehead for NASA and the decision was made that he would not fly again in the Mercury or Gemini programs. Glenn became friends with President John F. Kennedy and was awarded the NASA Distinguished Service Medal and his sixth Distinguished Flying Cross for the mission.

Glenn resigned from NASA on January 16, 1964, to run for US Senator from Ohio. He suffered a serious concussion in a fall in a hotel room and his long recovery made campaigning difficult so he dropped out of the race. He retired from the USMC, with President Johnson promoting him to full Colonel. RC Cola courted the famous astronaut and he hired on in a variety of leadership positions, including president of Royal Crown International. Glenn also made investments with business partners in several hotels in the Orlando area near the new Walt Disney World.

Glenn and his wife remained close to the Kennedy family and campaigned for Robert Kennedy in 1968. Glenn was at the hotel when RFK won the California primary and was assassinated during a victory speech. Glenn was a pallbearer at the funeral. Glenn entered and lost in the 1970 Ohio Senate primary to a well-funded Howard Metzenbaum (who lost the general election). Glenn was finally elected to the Senate in 1974, a role he held until 1999. Since I am more interested in Glenn's space contributions than his political career, here's a bullet list of his accomplishments in political office:

- 1. Glenn was considered for Vice-President in the 1976 campaign by Jimmy Carter, but was not impressive at a Convention Speech.
- 2. Glenn won by a landslide in the primary for re-election in 1980 and also beat his Republican opponent by 40% of the vote.
- 3. In 1984, he announced his candidacy for President, running on a centrist platform. The movie "The Right Stuff" came out in 1983 and gave him a minor boost with the heroic portrayal of Glenn by actor Ed Harris. Glenn lost at the early caucuses and on Super Tuesday and he withdrew on March 16, 1984.
- 4. Glenn won the Ohio Democratic Senatorial primary in 1986 by 88% of the vote and won re-election with 62% of the vote.

- 5. Glenn won a narrower re-election victory against Republican Mike DeWine in 1992.
- Glenn served on and/or chaired the Governmental Affairs Committee during his various terms. He also served on Special Committees for the Aging and on the Foreign Relations Committee, moving to the Armed Services Committee in the 1980s.
- 7. Glenn was caught up in the Keating Five Scandal as a Senator for being involved in the Savings and Loan Crisis, after accepting a campaign contribution from Lincoln Savings and Loan (headed by Charles Keating). John McCain was another Senator investigated. Both Glenn and McCain received minor disciplinary actions.
- 8. Glenn announced his retirement from the Senate on February 20, 1997.

In 1995, Glenn started lobbying NASA Director Dan Goldin about sending Glenn into space to advance studies about the aging effects of space travel. On January 16, 1998, Goldin announced that Glenn would be part of the STS-95 seven-person crew. STS-95 (*Discovery*) launched on October 29, 1998, with Glenn as the oldest space traveler at that time, flying as a mission specialist on the nine-day mission that conducted a variety of experiments with the SPACEHAB module. The mission was criticized as a publicity stunt, but there was valuable research obtained using Glenn for experiments on balance and perception, immune system response, bone and muscle density metabolism, blood flow, and sleep patterns. He was awarded the NASA Space Flight Medal for STS-95. After his return, he was a popular public speaker and participated in the ceremonial transfer of Space Shuttle Discovery to the Smithsonian Institution in 2012.



John Glenn Working on STS-95 in 1998 Photo Courtesy NASA/NBC News

Glenn was physically active and in good health most of his life. In early December, 2016, he was hospitalized in declining health and passed away on December 8, 2016, at the age of 95. He left behind his beloved wife of 73 years, Annie, two children (John and Carolyn) and two grandchildren. His body laid in state at the Ohio Statehouse and he was interred in Arlington Cemetery; he was the last of the Mercury astronauts to pass away. His legacy is undeniable as a war hero, pilot, astronaut and political figure. He had so many awards and honors that

it is impossible to list them effectively in this article. John's dear Annie followed him, passing on May 19, 2020, at the age of 100. She was notable for raising awareness of speech defects and other disabilities (she was a stutterer from an early age).

I briefly met John and Annie Glenn at a book signing in 1999 at the Tattered Cover Bookstore (downtown) when they were touring promoting John's autobiography "John Glenn: A Memoir." I made her laugh when I asked about his (and her) bravery when he flew on an Atlas. She said she worried more about his Shuttle flight! She was a very gracious lady; he was quite business-like, but he smiled as he signed the book and I treasure this volume to this day.

Resources and Links

NASA History

https://www.nasa.gov/feature/60-years-ago-john-glenn-the-first-american-to-orbit-the-earth-aboard-friendship-Z

National Archives

https://www.archives.gov/exhibits/featured-documents/friendship-7-transcript/reentry-transcript.html

Mercury-Atlas History

http://www.astronautix.com/a/atlaslv-3bmercury.html

STS-95

https://www.nasa.gov/mission_pages/shuttle/shuttlemissions/archives/sts-95.html

"John Glenn: A Memoir", John Glenn and Nick Taylor, published by Bantam Books, November, 1999. Available as a Kindle Book.

https://www.amazon.com/John-Glenn-Memoir-ebook/dp/B00A1SDYKY

<u>Biography and General Information:</u> https://en.wikipedia.org/wiki/John Glenn

On This Date in History

As noted in the general note at the beginning, this section has been eliminated in the MARS STAR. I have created a daily events list for our heritage companies from a variety of sources that is posted on the MARS Associates Facebook page.

Reference websites for the Facebook daily events:

https://nssdc.gsfc.nasa.gov/planetary/chronology.htm l#2014

https://en.wikipedia.org/wiki/Timeline of spaceflight

https://www.ulalaunch.com/missions https://news.lockheedmartin.com/news-

<u>releases?year=2021</u> <u>https://space.skyrocket.de</u>

https://space.skyrocket.de http://www.astronautix.com

Next Edition

Be sure to check out the next History Corner when I will profile the Apollo 16 mission to the moon . Coming soon: 25th Anniversary roundtable of the Titan/Centaur Cassini launch; Apollo 17. 2023 will include a series about the Apollo/Skylab missions.

Barb Sande, MARS STAR and MARS Facebook Page Historian. Contact me at barbsande@comcast.net or 303-887-8511 or find the closed group MARS Associates page on Facebook.

Bridge Club

By Dave & Kathy Martz (martz20@comcast.net)

Come play bridge with us! It is social, not tournament, with light conversation while we play. All MARS members and their guests are welcome. With a few exemptions, we normally play on the 3rd Friday of each month at the Buck Community Recreation Center in Littleton from 10 AM to 2 PM. The next quarter, we are scheduled to play on 22 April, 20 May, and 17 June.

You'll need to pack a lunch, as we stop midday to eat and then resume playing. The club provides the cards and all required items for the games. We also provide coffee, tea, and hot water. There is a small fee for the Buck Center, as well as a small fee to the club (which helps with supplies and the year-end Holiday party).

Come and join us by calling at least a week ahead to reserve a place at the tables.

Welcome our newest players Amy Hefestay, Sandie Mossman and Wayne Troup.

We have couples, as well as singles, playing. If you're a single, invite a friend to be your partner. Your partner does not need to be a member of MARS to play.

If you want to join us for bridge or have any questions, please contact any of the following Bridge Club Officers:

Presidents:

Dave & Kathy Martz, 303-683-9524 Vice-President: Bill Kacena, 303-973-2685 The 1st Quarter 2022 winners are as follows:

January 21 (3 tables)

1st – Ernie & Cecile Berliner

2nd - Mark & Jan Ugale

3rd - Bill & Mavis Kacena

4th – Leo Johnson & Joni Rosenberger

February 28 (4 tables)

1st - Ernie & Cecile Berliner

2nd – Ed & Laurie Bock

3rd – Dave & Kathy Martz

4th – Charlie Haupt & Amy Hefestay

March 18 (4 tables)

1st - Ernie & Cecile Berliner

2nd- Dave & Kathy Martz

3rd – Jack & Margie O'Boyle

and Ed & Laurie Bock tied

Car Club

By Roger Rieger (rrieger10731@gmail.com)

303-912-6217

Carol Lovelace

(cyberbear51@comcast.net)

303-358-7459

Greetings MARS members and fellow Car Clubbers! Have you gotten your car out of hibernation yet and taken her/him for a spin? Or at least cleaned off the dust and spiderwebs, making room for some new road and smashed-bug grime? Spring is here! And, of course in Colorado it is a short driving season so what are you waiting for?



The Car Club got together for the first of the season, Cars and Coffee at Cornerstone Church, in Lone Tree on April 2nd. This is a really fun, low-key event with cars of all genres—hot rods, classics, Porsche, McLaren, Delorean…even the Colorado State Patrol had cars there!

While there, Carol got the contact information from the CSP and an invitation to come out and tour their facilities: Watch for an announcement for this fun event. The Cars and Coffee at Cornerstone is held the first Saturday of every month from 8-11am; come out sometime and join your fellow MARS members. The Car Club is also planning a visit to the Carroll Shelby Museum in Boulder, CO, on May 14, keep an eye out for an announcement and sign up.

Other events in the planning stages are a tour of Bandimere Raceway with an opportunity to drive your car on the drag strip, another driving road trip to a lunch destination, and of course our annual car show held in conjunction with the MARS Picnic in September. Stay in touch with the Car Club through our MARS Car Club Facebook page, MARS Associates website link, or by contacting either Carol or myself to be added to our email distribution.



Happy Motoring and hope to see you soon at a club event! There is nothing special you need to do to join the MARS Car Club, all it takes is to be a MARS member in good standing, and a desire to have fun! If you are interested in joining the club, please drop either Carol or myself an email, we'd love to have you!

Dinner Club

By Becky and Gary Englebright englebright@me.com

303-941-3167 (Gary) 303-263-6457 (Becky)

03-263-6457 (Be and

Anita Kannady

anitakannadv@vahoo.com

303-794-9210

Thinking back to a year ago, we thought we were in a position that life would return to what it was like prepandemic. Little did we know. A year later, with the reduction in the number of COVID cases and the beginning of a new normal, we have started scheduling

lunch events again. It will be great to start seeing everyone again.

A big "Thank You" to everyone for your patience and understanding with the cancellations of the luncheons throughout the pandemic. If you're reading this and have not been getting an update email from us, it is probably because we don't have an email address for you. If you would like to be added to our email list, you can call or email us your email address. See the contact information above. Any email information sent to us will be kept in confidence.

By the time you read this, we will have had our first lunch event of the year at Outback Steakhouse in Littleton. Everyone there always does a great job for us to make sure that everyone has a good time.

The following events have been scheduled for the year so far:

- 1) May 24th at Red Lobster in Littleton
- 2) June 13th at Zest in Denver
- 3) July 19th at Café Jordano in Lakewood

We want to encourage anyone who is interested to join us for any of the luncheons. Please send us an email so that you can be added to our mailing list.

On a different note, we have decided that we need to stop doing this full-time by the end of the year. Consequently, we are looking for someone to take over the Dining Club, whether full-time or part-time. It would involve deciding on restaurants, scheduling them, and collecting the money. If you, or anyone you know, is interested, feel free to call or email us.

Golf League

By Bo Rodriguez (boandpat@comcast.net)

Our 2022 golf league season begins Thursday, April 7th at Broken Tee Golf Course. We held a virtual Kick-off meeting on Thursday, March 3rd for our participating members which was reasonably attended using the Zoom system. We started the meeting by reviewing the successes of the 2021 golf season.

Our officers for the 2022 season are:
Bo Rodriguez – President
Sandy Mossman – Vice President
Don Johnson – Secretary/Treasurer
Tom Ripper – Handicap Chair

Bob Knickerbocker did a fine job of orchestrating the Zoom meeting and slide presentation so that each of the presenters could address their portion. A constructive discussion by many in attendance followed. A summary

of the Golf Genius system for which our league uses to manage our golf schedules and record our golf scores into the Golf Handicap Information Network (GHIN) was presented by Tom Ripper.

Each season our league has thirty weekly events from April through October, weather permitting. The nice thing about our league is that there aren't any up-front green fee costs like some other leagues. We have a pay only when you play, so vacations or personal needs don't necessarily conflict with league play. Players simply indicate on the Golf Genius system the league dates that they are not available. Members are required to give our schedulers advance notice if they are scheduled to play but need to cancel out of an upcoming event per our golf league bylaws.

If you are interested in learning more about the golf league and would like to join, I encourage you to log on to our MARS website, https://www.marsretirees.org, and click on "Golf". Contact anyone of our officers for assistance. MARS Associate members including spouse or significant other are encouraged to join. Come join us! Slots in the MARS golf league are still available this season!



Photography Club By John Chapter johnchapter@msn.com 303-986-8277

Our April 2022 Photo-Club meeting will be held using our virtual Zoom.com format that we have been using because of the covid pandemic. We will be continuing with the Zoom.com format until September 2022 when we will reassess our meeting format approach. A viable option may be a Live-Meeting at the Littleton Bemis Library combined with a Zoom.com formatted online meeting. This approach is flexible as members may choose either the Live-Meeting or the online virtual online Zoom.com. We are currently looking into the technical details.

In January, February & March 2022, our programs were from some of the Great Courses/National Geographic DVD photographic series by well-known photographer Joel Sartore. April and May programs will be from the National Geographic DVD, and the meetings will be virtual. By September, we hope to be able to meet in person, with programs provided by club members.

We have been able to continue our member image competition. The first-place images for January through March are shown below.

<u>First Place January 2022</u>: Rick Price captured the complex geometric patterns of a complex and beautiful bridge.



Bridge Over The Rhone, Lyon

<u>First Place February 2022</u>: This image by Larry Stearns is particularly interesting. The similar tone of the tree emphasizes the texture of the owl's feathers:



Camouflage

<u>First Place March 2022</u>: This colorful landscape is by Rick Price. We all enjoyed the wonderful contrasting colors.



Solitude at Marvine Lakes

The MARS Photo-Club has met at the Littleton Bemis Library for over twenty years. For the time being, we will continue using Zoom.com to present our meetings. We do not meet June, July and August as this is our standard summer vacation break. Remember that we are continuing to investigate the possibility of hosting a Live/Zoom virtual combination meeting.

Please check the MARS Retirees Website for the latest updates to the Photo-Club meetings. And we always encourage new members to join our club.

Thanks, and Regards, John Chapter and Jim Kummer

Colorado Springs Lockheed Martin Retiree Group News

By Doug Tomerlin (dougincs@aol.com)

Our retiree group held a luncheon on Tuesday, March 29, at Cheddar's Scratch Kitchen in Colorado Springs. Fifty retirees and significant others attended. Group coordinator Doug Tomerlin made a short presentation, introducing several first-time attendees and announcing retirees who had passed away since the last luncheon. As at the last luncheon, retirees had a great time with many staying for a long while visiting with other retirees. Many retirees stated that the food and service was excellent.

We were sad to hear that fellow retiree Lyndon (Lyn) Sheldon passed away in January, 2022, and Randy Parks, a long-time Lockheed Martin employee that many retirees knew, also passed away in January 2022. Our deepest condolences go to their family and friends.

If you would like more information about the Colorado Springs Lockheed Martin Retiree Group or luncheons, please contact Doug Tomerlin at dougincs@aol.com.



Co Springs Group Luncheon, 3-22-2022

Cape Canaveral News

By Dick Olson (olsons5145@aol.com)

Luncheons

February 2022 – Present were Bill Rhode, Ken Hawes, Jimmy Weddle, Bob Rodamer, Wendell McDaniels, Abe Smith, Don Bollinger and Bob Matschner. Someone mentioned Bill Hendry and the last I heard from him, he was living up in the panhandle. Then we got to recalling some of his escapades.

Heard from Kent Gunderson that Fred Hudoff has passed. Fred was a Flight Controls engineer back in the Titan I and II days and was down here supporting many of the early launches. He retired as president of Launch Vehicles.

Seen in the paper there was a Richard Gentile who passed but since there was no obituary was not able to confirm if it was the same Dick Gentile who once worked for Martin. Info anyone?

February 14th is coming up so remember your Valentine and everyone stay healthy,

March 2022 – The Materiel department was well represented with Don Bollinger, Bill Rhode, Roger Wright, Laverne Wilcox Jones, and Lynda Howard attending while Quality had Ray Caldwell and Jimmy Weddle and Ops with myself and Abe Smith. Laverne hasn't attended for some time and I believe it was Lynda's first luncheon. Glad to see them both. There was lots of discussion about other Titan Team members, both those still with us and their whereabouts and those who have passed. No details as I couldn't keep up with all the conversations.

Roger did report that Lynn Johnson was planning on being with us next month.

Have a good St. Patrick's Day!

Recent Obituaries

Cheryl Poye, 67, passed away 16 December. Cheryl was the wife of Darrel Wayne Poye.

Joseph James Andrukaitis. Jr., 88, passed away on 6 January. Joe worked Pad Safety.

Richard Rogers, 93, passed away on 13 January. Richard was a Safety engineer on the Titan Program until his retirement.

Bob Lantau, 86, passed away on the 21 January. We have lost another Cape Titan Team member.

Robert Shuey, 89, passed away on July 25, 2021. He started as an engineering technician working on Titan systems. Later, Bob joined Lockheed Martin as a quality engineer on special satellite programs.

Richard Gentile, 86, passed away 22 January. He had a long career at the Kennedy Space Center.

Frederick Herman Hudoff, 89, passed away January 27. Fred was a Flight Controls engineer back in the Titan I and II days.

Ray Hall, 87, passed away on 10 February. Ray was a member of the Titan Team in the USAF and in the Ground Instrumentation group at Martin.

Russell Batchelor, 97, passed away 10 February. Russell worked Activations as a Titan Team member in the early 1960's.

Edith Henderson Berkebile, 94, passed on 26 February. She and husband, Charles, were Titan Team members.

Kent Gunderson, 89, passed on 15 March. Kent was a Titan Team member since the early days of Titan I and spent his entire career with Martin working various programs.

Marketing Committee – MARS Associates, April 2022

Ken Marts, Judy Nielsen, Dick Sosnay, Bill Wise

MARS Associates Marketing Committee has been working hard assessing new adventures for our members. We've heard from a number of you that you'd like to participate in additional activities beyond the standard five we've done in recent MARS history. These efforts are coming to fruition this year in the form of Extra Activities. I hope all of you have logged onto the MARS Associates webpage (http://www.marsretirees.org/) and have seen information about some of these events we've had or are planning. We've added quarterly Happy Hours, organized and completed a Frisco Sleigh Ride and LM Plant Tour; and we have more activities planned throughout 2022. Also, MARS Associates has its own Facebook page limited to MARS members where these activities are or will be advertised. Historian Barb Sande has been posting daily articles/pictures of interest to the Lockheed Martin MARS Associates family on this same Facebook page.

The Marketing Committee is planning more activities and is looking for more ways we can communicate with our members. Please be patient as we flood your senses from all directions with news and newsworthy activities, contacting our members via the following means:

- 1) Mass mailers via email
- 2) Notices on MARS Associates webpage (https://marsretirees.org)
- 3) Notices on MARS Associated Facebook page (accessible via the MARS website) https://www.facebook.com/groups/MARSAssociates
- 4) Posters and flyers in the quarterly MARS STAR
- 5) Posters and Flyers at our regular and special events

Please let us know if you have special requests for activities that you think our members might enjoy; and, maybe an activity you'd like to lead in the future. We're here for YOU and would love to hear from you.

Extra Activities Status

If interested in these activities, contact the people listed at the end of this article as organizing the activity. Specifics of what the Marketing Committee has organized or is organizing are below:

- <u>Jan 19, 2022, Sleigh Ride in Frisco</u>, Colorado, led by Bill Wise. A great time was had by all 27 attendees enjoying muledrawn sleighs, a nice dinner, and entertainment. Pictures are on the MARS webpage.
- Mar 7, 2022, LM Waterton Tour led by Judy Nielsen MARS Lockheed Martin Waterton Campus Tour:
 "Shamina Fletcher, administrative assistant to Nick Spain, HR Vice President for Space, along with a few others greeted us with buses at the Visitor Center where we were badged in and boarded two buses to accommodate the group. Our assigned bus seats were marked with our name placards, a commemorative water bottle and goodie bag.

"From the Visitor Center we traveled to the Engineering Bldg. for a welcome reception with Nick Spain, along with HR Directors, Reese Reynolds and Jonathan Mallette. We were treated to coffee, tea and pastries, while we viewed the beautiful, newly remodeled lobby/atrium. (See the photos in this STAR and on the webpage.) We were then escorted to the Pulsar Center in the Engineering Bldg., where we experienced a launch with spectacular sound and vibration, and an amazing video of MARS and the Moon. We felt like we were experiencing a live launch!

"Our next stop was the IRF building to see the Lockheed Martin-built Orion spacecraft, which is one step closer to going to the Moon. The NASA spacecraft that will fly to the Moon during the Artemis I mission has been lifted onto, and mated with, NASA's large SLS rocket at Kennedy Space Center. Then on to the FAB for a birds-eye view of the GPS build. All hosts were very knowledgeable and were able to answer our retired engineers' questions. It was amazing to witness the intellect in our group as well as in those who hosted."

Upcoming Events:

- May Cassini Roundtable discussion organized by Barb Sande,
- May 25, 2022 brunch Denver Museum of Nature and Science (Dan Ellorhorst) with speaker, and tour. This event is planned for Wednesday, May 25th, at the Denver Museum of Nature and Science. It will start at 10:00am with breakfast, followed by a speaker from the museum, and possibly a few words by Jim Crocker, an ex-LM VP who has been on the board of the DMNS for nearly 20 years. After brunch, entrance to the museum is free and Dan is still looking into possible tours. Access to special exhibits and/or IMAX will be your responsibility. There will be more details to this group as the planning progresses. Cost will be a max of \$50 per person, maybe a little less depending on the number of participants.
- <u>Durango-Silverton Narrow Gauge Train Ride in June</u> (Shar Petty and Beth Worthington organizing). A mass emailer went out for the Durango-Silverton Train ride and a limited mailer went out for the Museum Tour. Join us for an overnight trip to Durango to ride the Durango Silverton Train. Drive up on June 5th and drive home on June 7th, or extend your trip to include other activities (on your own). We will start in Durango on the steam engine train and travel through the San Juan National Forest, arriving in Silverton. About a 5-½ hour round trip.

There will be time to shop, explore, and have lunch at Silverton before returning to Durango. Cost per person for the steam engine train with the 10% discount will be \$98.17 (limited number of 30 that we may be able to expand). We have a contact and phone number to make the reservations. Hotel and meals will be extra. Attendees will provide their own transportation to Durango, and carpooling is encouraged.

For more information, please email Shar Petty at sharpetty1313@gmail.com or Beth Worthington at worthingtonbeth17@gmail.com.

- <u>Wings Over The Rockies</u>: Details are not available at the time of the STAR printing so stay tuned to the MARS webpage and Facebook page for them. Planned for July 20, starting at ~ 10AM and will include a tour of the museum followed by a Happy Hour at the nearby Beer Garden. Cost is expected to be about \$10 for the museum and appetizers will be available at the Beer Garden. Drinks will be your expense.
- Royal Gorge Train Ride: (Robin Zen) Wednesday, August 17, at 9:15AM (return by about 11:30AM) is the date set for the Royal Gorge Train adventure with the MARS group. We are planning this activity where people will buy their tickets up front (the train company will only book large groups if we pay up front).

There is also a limit of 20 tickets booked at one time via their website. So instead, we will use a setup similar to other activities, where each interested party will call into the Royal Gorge Railroad Company to reserve their own seats. If groups of people want to sit together, then it is suggested one person books for your small group. The 9:15 tour was selected since it had the most seats available, and we are planning a lunch on the way home.

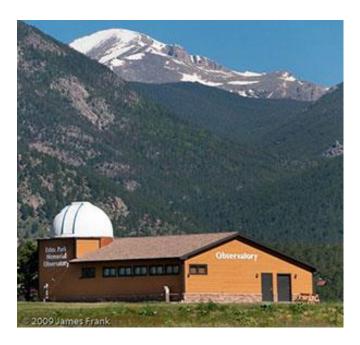
Seating options: (Additional fees for dining: \$22-25)

Coach Class: \$79/adult Club Class: \$89/adult Vista Dome: \$109/adult

The best option is to book online at: https://www.royalgorgeroute.com/. If you are interested and have purchased tickets, please let Robin Zen (robinzen0615@comcast.net) know.

• <u>Estes Park Memorial Observatory</u>: (Dick Sosnay) We are also planning a MARS visit to the Estes Park Memorial Observatory (https://www.angelsabove.org/). It is managed by Mike Connolly, a former Lockheed Martin Thermal Engineer. When Mike retired, he and Carole moved to Estes Park to join Michele Johnson and her family. Mike and Carole Connolly and Michele built the observatory in honor of their children and Michele's siblings, Thomas and Christian Connolly, who died in a traffic accident.

Mike kindly offered to provide an Observatory tour and stargazing session, or two, to interested MARS members. He can handle 12 to 15 persons max, per night, so if we had a lot of interest, we could set up several opportunities. We determined that August, September, or October would be the best times of the year, with clear weather and good viewing opportunities. The observatory is closed around the full moon because it is just too bright for stargazing. The program takes about 1.5 – 2 hours, beginning after dark, of course, so I think most of us would just plan on staying up there in a hotel for a night. Since it is Estes Park, I don't think we should schedule anything for a weekend in the fall. So, I am thinking of the following dates: August 2, 3, 4; 8, 9, 10; 31 August.-1 September, 6,7; 28, 29, 30; October 3, 4, 5. The visits are free, but they ask for donations. The donations go to maintaining the observatory and supporting the Estes Park High School Science programs where it has provided over \$20,000 in scholarships. The observatory is a 501(c)(3) public charity and all donations are tax deductible. Mike asks that only vaccinated people attend. I would like to see how much interest we have. Please send an email expressing your interest, how many people would attend, and the dates above that you would be interested in to richardsosnay@gmail.com. After we assess the interest, I will set up more definite plans and email those interested.





See the table below for contact information on these and other activities. Events listed below without a lead will be pushed out to 2023. Mass mailers will be sent out for each event with contact information.

Activity Name	Activity Lead	Date	Part	Notes
Sleigh Ride Breckenridge	Bill Wise	1/19/22	27	Great Trip
LM Plan Tour #1	Judy Nielsen	March 7, 2022	30	Another Great Trip. Have ~100 interested, will schedule some more if we can
Cassini Mission Zoom Disc	Barb Sande	May 12, 2022	TBD	
Denv Museum of Nature & Sci	Dan Ellerhorst	May 25, 2022	60	
Durango-Silverton Train Trip	Shar Petty, Beth Worthington	June 6, 2022	24	
Wings Over the Rockies	Terry Lilly	~July 2022	90	Combine with July Happy Hour?
Royal Gorge Train Trip	Robin Zen	~Aug 2022	80	
Estes Park Observatory	Dick Sosnay	Aug - Sept 2022	TBD	Write-Up in April MARS STAR to gauge interest
Central City Opera	TBD	TBD		Need to Find a trip Lead, Maybe 2023
Cumbres/Toltec Train Trip	TBD	TBD		Need to Find a trip Lead, Maybe 2023
Broadmoor/Manitou Train Trip	TBD	TBD	78	Need to Find a trip Lead, Maybe 2023
Cripple Creek Train Trip	TBD	TBD		Need to Find a trip Lead, Maybe 2023

Activity Lead Contact Info				
Activity Lead Name	Telephone	E-Mail		
Judy Nielsen	303-905-3957	nielsen 129@q.com		
Dan Ellerhorst	303-263-1944	<u>dan.ellerhorst@gmail.com</u>		
Barb Sande		<u>barbsande@comcast.net</u>		
Shar Petty	303-904-1884	sharpetty1313@gmail.com		
Beth Worthington	303-717-9448	worthingtonbeth17@gmail.com		
Terry Lilly		talilly65@gmail.com		
Robin Zen	303-335-6443	robinzen0615@comcast.net		
Dick Sosnay	303-916-0651 richardsosnay@gmail.com			

IN THE NEWS

Compiled by Pete Harrigan

The following news headlines are drawn from open-source publications, as noted parenthetically. Click on the hyperlink to access the full article. Please note that some links may not work for all readers. Some sites may require a paid subscription or a login for free access. Other paywall sites may limit the number of free articles you are able to access each month.

CORPORATE NEWS

<u>Lockheed Martin scraps \$4.4 billion deal</u> to buy Aerojet amid regulatory roadblocks (Reuters)

End of Lockheed Martin-Aerojet deal puts pressure on leadership of both firms (Reuters)

Defense contractor <u>merger and acquisition activity to get tougher scrutiny</u> from the Pentagon (Bloomberg News)

Analysis: Is this the <u>start of a new defense supercycle?</u> (Aviation Week Network)

Internal dissent roils top industry trade group as some members threaten to withhold dues (Politico)

Lockheed Martin posts better-than-expected profit, reiterates 2022 sales outlook (Reuters)

Lockheed Martin hires new chief financial officer from L3Harris (Defense News)

Corporation applies for extension of deep-sea mining licenses in Pacific Ocean (Maui Today)

Lockheed Martin to invest \$1 billion in manufacturing in Saudi Arabia (Reuters)

Company eyes Asia-Pacific multi-domain opportunities (Aviation Week)

<u>China sanctions Lockheed Martin</u>, Raytheon over Taiwan arms sales (Reuters)

Lockheed Martin Ventures invests in firm developing short takeoff and vertical landing electric aircraft (Aviation Today)

Lockheed Martin Ventures invests in UK firm Satellite Vu, seeking U.S. focus (ElectronicsWeekly.com)

Lockheed Martin, other contractors resume contributions to members of Congress who challenged 2020 election (The Hill)

Kelly Johnson, other Lockheed engineers reported <u>UFO sighing</u> in 1950s (The Hill)

North Korean hackers <u>target Lockheed Martin job seekers</u> in phishing attack (Tech Times)

NFL team owner revealed as purchaser of former CEO Stevens' home in record-setting deal (Washington Business Journal)

Rick Ambrose joins Textron board following retirement from Lockheed Martin (Bakersfield Californian)

5G.MIL NEWS

Lockheed Martin developing new technology to connect military vehicles to 5G networks (KFTV News)

Lockheed Martin eyes Project Convergence after successful 5G expedition (Defense News)

Lockheed Martin and Microsoft collaborating on 5G military tech (Defense News)

Lockheed Martin to develop <u>5G testbed for U.S. Marine Corps</u> (C4ISRNet)

HYPERSONICS NEWS

Hypersonic missile failures risk U.S. chase of China, Russia (Bloomberg News / Stars & Stripes)

Congress nixes Air Force plans to buy hypersonics this year after test failures (Defense News)

Pentagon urges CEOs of largest defense companies to <u>accelerate hypersonic weapons</u> development (CNN / KTEN-TV News)

SPACE SYSTEMS NEWS

Work urgently, Lockheed Martin's new space chief tells his team (Defense One)

Lockheed Martin, Northrop Grumman, York Space selected to <u>build Pentagon's internet-in-space constellation</u> (Space News)

Lockheed Martin wins NASA contract to build ascent rocket for Mars sample return (Space News)

Lockheed Martin to launch new satellite bus aimed at mid-size market (Space News)

GM, Lockheed Martin unveil concept for lunar rover (Motor Trend)

Lockheed Martin eyes <u>UK satellite manufacturing</u> base (Space News)

Lockheed Martin, Northrop Grumman choose payloads for Space Force missile warning satellites (C3ISRNet)

New GPS IIIF satellites bring a wealth of new capabilities to the U.S. military (C4ISRNet)

Lockheed Martin working with Amazon, Cisco to <u>outfit NASA's Orion spacecraft with artificial intelligence and videoconferencing</u> (The Washington Post)

As new space telescope fixes eyes on the universe, Colorado companies keep an eye on the spacecraft (Denver Post)

ULA's launch of U.S. Space Force missile warning satellite <u>delayed indefinitely</u> (Space News)

ULA Atlas 5 launches Lockheed Martin GOES-T weather satellite for NOAA (Space News)

ULA says Russia sanctions aren't expected to disrupt Atlas 5 operations (Space News)

U.S. Air Force sees no impact from Russia's decision to cut off supply of rocket engines to ULA (Space News)

ULA <u>launches two space surveillance satellites</u> for U.S. Space Force (Space News)

Boeing Starliner test flight next on ULA's launch schedule (Spaceflight Now)

Star Trek tribute to fly on inaugural launch of ULA's Vulcan rocket (Space News)

AERONAUTICS NEWS

U.S. <u>Air Force says it has built, flown a full-scale prototype</u> of its next-generation fighter, shocking industry observers (Defense News)

Pentagon to request fewer F-35s in next budget (Reuters)

U.S. Air Force <u>F-35 costs to climb</u> (Aviation Week Network)

F-35 full rate production decision won't come until the end of Fiscal Year 2023, at least (Defense News)

Pentagon's weapon tester highlights <u>F-35 availability</u>, <u>software problems</u> in latest report (Defense News)

Pentagon completes first phase in <u>replacing F-35's troubled logistics system</u> (Defense News)

U.S. Air Force upgrading F-35A fuel tanks to withstand lightning strikes (Defense News)

F-35C that crashed on U.S. Navy carrier salvaged from South China Sea (Navy Times)

Lockheed Martin delivered three more F-35s than planned in 2021 (Breaking Defense)

First U.S. Marine Corps <u>F-35C squadron deploys on an aircraft carrier</u> (Marine Corps Times)

The U.S. Marine Corps needs the F-35, but the aircraft's future is complicated (Marine Corps Times)

F-35s from five nations flew seamlessly during British aircraft carrier deployment (Seapower)

Germany wants to buy 35 F-35s, defense minister tells lawmakers (Reuters)

Thailand's purchase of F-35s hinges on U.S. government, Lockheed Martin exec says (Reuters)

Multiple F-16 upgrades packaged into \$6.3 billion project (AviationWeek.com)

U.S. seeks ways to speed delivery of new F-16s to Taiwan (Reuters)

U.S. approves \$4,2 billion F-16 sale to Jordan (Defense News)

<u>Lockheed Martin delivers 500th C-130J</u> transport (Air Force Technology)

Guard, Reserve would get 20 more C-130J transports under budget deal (Defense News)

Leonardo, Avio Aero, Lockheed Martin to support Italy's C-130Js (Reuters)

Lockheed Martin hands over first C-130J to Germany (Janes)

U.S. approves C-139J sale to Egypt (Defense News)

<u>Lockheed Martin eyes Asia-Pacific region</u> in push to sell C-130Js (Defense News)

Human error, technical glitches and a piece of tape led to F-22 crash, investigators conclude (Air Force Times)

U.S. Air Force chooses to work directly with third-party vendors for F-22 upgrades (Aviation Week Network)

Lockheed Martin sees opportunities in manned-unmanned teaming (Air Force Magazine)

Lockheed Martin says it would build <u>next-generation air tanker in Alabama and Georgia</u> (Reuters)

NASA's "quiet" supersonic plane, built by Lockheed Martin, moves to Texas for testing, calibration (Space.com)

Lockheed Martin names <u>new "Skunk Works" leader</u> (Washington Technology)

Volunteers help to restore F-117 at Nebraska museum (Lincoln Journal Star / Associated Press)

MISSILES AND FIRE CONTROL NEWS

<u>In first operational use</u>, THAAD destroys midrange ballistic missile in Houthi attack (Defense News)

Missile Defense Agency <u>fires Patriot missile from THAAD system</u> (Defense News)

GAO questions Missile Defense Agency's cost estimates for THAAD, other programs (Defense News)

U.S. approves \$100million in Patriot system upgrades for Taiwan (Reuters)

Why the <u>U.S. won't give Patriot interceptors to Ukraine</u> (Defense One)

What to know about the role Javelin antitank missile play in Ukraine's fight against Russia (The Washington Post)

Lockheed Martin to <u>upgrade sensors</u> on Egypt's Apache helicopters (The Defence Post)

Lockheed Martin joins Hanwha team competing for British artillery program (Defense News)

<u>IAI teams with Lockheed Martin</u> on ground-based air defense (Globes)

ROTARY AND MISSION SYSTEMS NEWS

In a first, UH-60 Black Hawk flies with no one aboard (Defense News)

U.S. State Department approves potential sale of MH-60R helicopters to Spain (Defense News)

CH-53K heavy-lift helicopter scores well in Pentagon tests (Bloomberg News)

\$3.1 billion Israeli defense deal includes Sikorsky CH-53K heavy-lift helicopters (Reuters)

U.S. Marine Corps' CH-53K to wrap up testing in 2022 (Marine Corps Times)

U.S. Navy to install Lockheed Martin high-energy laser aboard destroyer (Breaking Defense)

Lockheed Martin making final push for Greek frigate construction, modernization work (Defense News)

Evolution of Aegis Weapon System could underpin all joint-domain operations (Defense News)

Construction of <u>Aegis Ashore system in Poland nearing completion</u> (Defense News)

U.S. Navy, Lockheed Martin still haven't reached cost deal on LCS combining gear fix (U.S. Naval Institute News)

LCS temporary lost power during sea trials, returned to home port (Defense News)

Freedom-class LCS community to tackle mine warfare, grow footprint in 2022 (Defense News)

Artificial intelligence to play key role in Lockheed Martin's A\$2.7 billion missile detection plan for Australia (Australian Aviation)

Lockheed Martin delivers pilot training system to Australian Defence Forces (Australian Aviation)

ANNUAL MEETING, March 9, 2022

Photos by Larry Stearns



MARS Directors 2022: (L-R) Bill Wise, Daniel Crumb, Robin Zen, Roger Rieger, Dan Ellerhorst. Not Shown: John Janczy, Monte Kopke, Debbie Carr, Heidi Urie



Dr. Vanessa Aponte Williams and Shea Williams



Cheryl and John Grace



Kathy and Gary Hetzel



Doreen and Jim Ryan



Gina Curet

See the MARS Associated website (https://www.facebook.com/groups/MARSAssociates
for more photos of the Sleigh Ride, the LM Tour and the Annual Meeting.



2022 MARS Luncheon Honoring Senior Members

The Officers and Board of Directors of MARS Associates are pleased to invite you, your spouse/companion, and guest to the annual MARS Luncheon Honoring Senior Members. The luncheon is scheduled for Wednesday, July 13, 2022, at the **Manor House at Ken Caryl, 1 Manor House Road, Littleton, Colorado 80127.** The doors will be opened at 11:00 a.m. and lunch will be served at 12:00 noon.

The menu choices will be grilled salmon with quinoa, garden vegetables, garden greens and citrus vinaigrette; or, grilled flat iron steak with mushroom risotto and asparagus. Lunch will include a variety of breads and butter, beverages, coffee, tea, and dessert. Please specify your choice of entrée(s) when you make your reservation. If you have special dietary needs, please contact Linda Duby at 303-249-1665 with the details.

A **CASH BAR** will be available prior to the luncheon.

The cost for members and one guest is \$35.00 per person. The cost for additional guests or non-members is \$45.00 per person. These prices include taxes and gratuities. Please specify your choice of entrée(s) on the reservation form below and mail it with your check (made payable to **MARS Associates**) to the address on the form below by **July 1, 2022**. Or, you can make your reservation by using the STRIPE link below:

STRIPE (ctrl+click): https://form.jotform.com/213634540089052

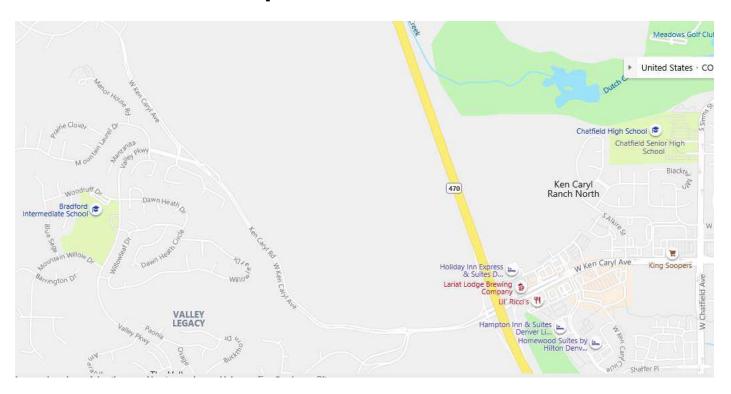
(If you need to edit your order, click the "Edit This Submission" link on the receipt.)

MARS Associates, P.O. Box 1128, Littleton, CO 80160-1128

Reservations must be received by Friday, July 1, 2022

If you make a reservation and later find you cannot attend, please notify Linda Duby at 303-249-1665 or lindaduby@comcast.net; or Charlie Haupt at 303-725-7595 or qcrfccoach@gmail.com; or Carl Kaminski at 303-726-1546 or carlkcol66@gmail.com no later than **Friday, July 1, 2022,** to receive a refund.

Map to The Manor House



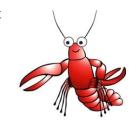
Lunch on Tuesday, May 24th, 2022

Join your fellow MARS Associates for a wonderful lunch at



Red Lobster

5656 S. Wadsworth Blvd., Littleton, CO 80123 (see map on back) 303-978-1416



Lunch will be served at Noon.

Featuring a delicious plated lunch of fresh Cheddar Bay biscuits, entrées and desserts. All drinks, including coffee, tea, sodas and alcohol, will be on a cash-only basis. (Tax and gratuity included.)

Seating is LIMITED to 60 \$30/person

If we have reached the seating limit prior to receiving your reservation, we will contact you about putting you on a waiting list.

Please complete the form shown below and mail it, along with your check, payable to MARS

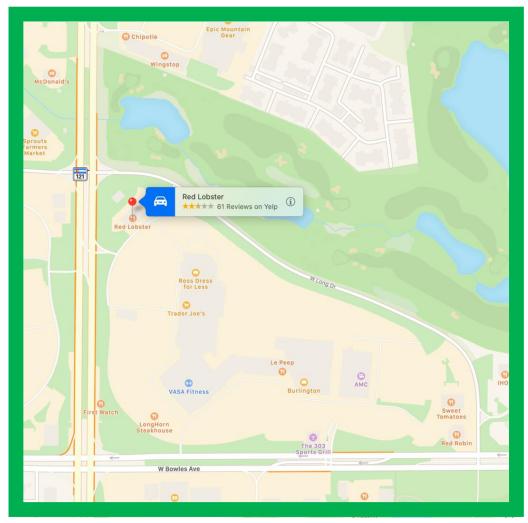
Associates Dinner Club by May 16th, 2022 to



If you need to cancel, please let us know no later than June 6th to receive a refund.

Lunch at Red Lobster on To	uesday, May 24th, 2022
Name(s):	Number of Attendees:
Address:	Amount of Check: \$
City/State/Zip:	
Phone Number:	Date:
Email:	
Jumbo Coconut Shrimp	7oz Sirloin
Walt's Favorite Shrimp	Kung Pao Noodles w/chicken
Garlic Shrimp Skewers	Kung Pao Noodles w/shrimp
Mussels	

Map to Red Lobster



5656 S. Wadsworth Blvd., Littleton, CO 80123 303-978-1416

Lunch on Monday, June 13th, 2022

Join your fellow MARS Associates for a wonderful lunch at



Zest

2740 S. Wadsworth Blvd, Denver, CO 80227 (see map on back) 303-984-4722



Lunch will be served at Noon.

Featuring a Hearts of Palm salad, choice of entrée and Tiramisu for dessert. Coffee and iced tea are included. Cash bar will be available for all other drinks. (Tax and gratuity included.)

Seating is LIMITED to 40 \$29/person

If we have reached the seating limit prior to receiving your reservation, we will contact you about putting you on a waiting list.

Please complete the form shown below and mail it, along with your check, payable to MARS

Associates Dinner Club by June 6th, 2022 to



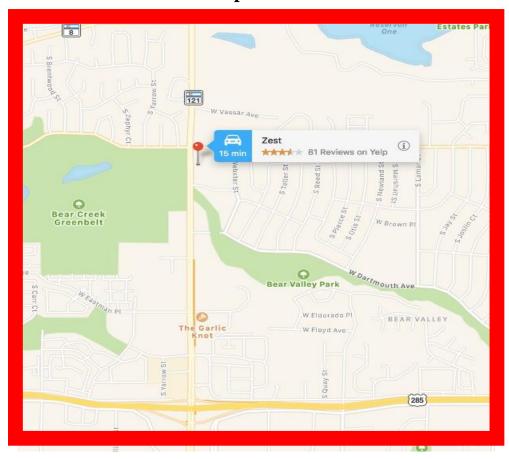
Becky and Gary Englebright 7855 S. Vance Ct. Littleton, CO 80128 303-941-3167 or 303-263-6457 englebright@me.com



If you need to cancel, please let us know no later than June 6th to receive a refund.

Name(s):	
Address: City/State/Zip:	Check Number:
Phone Number:	Date:
Email:	
Chicken Coq Au Vin with garlic,	, onion, carrots, red wine, bacon, cremini mushroom
sauce, mashed potatoes, green be	eans
, , , , ,	in, mushroom duxelle, puff pastry, brown gravy,

Map to Zest



2740 S. Wadsworth Blvd, Denver, CO 80227 303-984-4722

Lunch on Tuesday, July 19th, 2022

Join your fellow MARS Associates for a wonderful lunch at



Café Jordano

11068 W. Jewell Ave., Lakewood, CO 80232 (see map on back) 303-988-6863



Lunch will be served at Noon.

Featuring a choice of entree with soup or salad and a yummy dessert. All drinks, including coffee, tea, sodas and alcohol, will be on a cash-only basis. (Tax and gratuity included.)

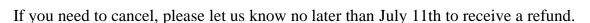
Seating is LIMITED to 45 \$30/person

If we have reached the seating limit prior to receiving your reservation, we will contact you about putting you on a waiting list.

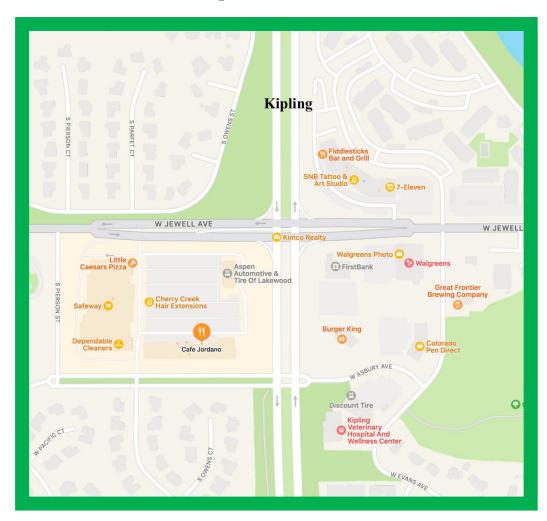
Please complete the form shown below and mail it, along with your check, payable to MARS Associates Dinner Club by July 11th, 2022, to



Becky and Gary Englebright 7855 S. Vance Ct. Littleton, CO 80128 303-941-3167 or 303-263-6457 englebright@me.com



Map to Café Jordano



11068 W. Jewell Ave., Lakewood 80232 303-988-6863



Rockies Picnic & Game July 27, 2022



Join your fellow MARS Associates for a Picnic (11:30 AM) & Rockies game (1:10 PM)

The buffet picnic includes all-beef hot dogs & brats, chicken drumsticks (GF), chips, potato salad, cookie, unlimited fountain drinks (nonalcoholic), and beer/wine cash bar.

*** Vegan patties (ordered in advance) available. ***

Prices are \$43 *each* for a MARS member and spouse <u>or</u> one companion and \$49 each for other non-MARS member guests.

Colorado Rockies vs. Chicago White Sox

Coors Field — Outfield Box Section 145 — In Shade



Tickets are Limited (<u>55 maximum</u>)

Requests to sit with a specific person or for special/handicap seating need to be <u>received</u> with your reservation

NO LATER THAN Friday, July 8, 2022!

Please complete the form below, and mail it along with your check payable to "MARS Associates" to MARS Associates (Rockies) * P. O. Box 1128 * Littleton, CO 80160-1128

If you are subsequently unable to attend, contact Linda Stearns (303-797-3557 or linda80120@comcast.net) or Linda Duby (303-249-1665 or lindaduby@comcast.net)

NO LATER THAN Friday, July 8, 2022, to receive a refund.

CUT AT DASHED LINE ----

Member: Spouse or Or	ne Companion /guest:
Non-member(s) guests:	
Member & Companion/guest x \$43 each:	Non-MARS Guests @ x \$49 each:
*** Vegan pattie (1 per person) - number requested: _	***
(Attach a list of non-members' names for name tags)	
*Address:	Amount of Check: \$
City/State/Zip:	Check Number:
Telephone Number:	
Special Seating Request:	

Mail to: MARS Associates (Rockies) * P. O. Box 1128 * Littleton, CO 80160-1128

^{*} PRINT CLEARLY! Tickets will be mailed on July 15, 2022, to this address.



Tickets and field info will be mailed to address on reservation form in advance of the game.

Access to Picnic Area opens at 11:30. Picnic Area closes shortly after game starts.

Engineering Building Tour, March 7, 2022





Entry Lobby (Credit: S Petty)

Entry Lobby, View 2 (Credit: S Petty)

If you currently receive a printed copy of the MARS STAR, you will continue to receive a printed copy. If you wish to receive hard (printed) copies in the future, contact Carl Kaminski at 303-726-1546 or via email at carlkcol66@gmail.com).

Schedule Addendum (See last page)

NOTES:

- 1. BOD meets as required
- 2. Officers/Directors meet 1st Wednesday of every month at 09:30 am.
- 3. Bridge Club meets 3rd Friday of every month at 10:00 am at Buck Recreation Center.
- 4. Car Club meets as noted on their website and periodic newsletter.
- 5. Dinner Club (All events are lunch unless otherwise noted): Check website for details
- 6. Golf club meets every Thursday from April through Oct of each year.
- 7. Hiking Club: Outings on 3rd Wednesday of the month. Check website for Point of Contact for each hike.
- 8. Photo Club meets 2nd Thursday every month (except Jun, Jul & Aug) at 1:00 pm on Zoom
- 9. Web Committee normally meets on last Tuesday of month, prior to BOD/Officer mtg, at a designated restaurant or by email.
- 10. Marketing Committee meets on a monthly basis as determined by members with guests invited (Typically last Thursday)
- *11. 2022 Happy Hour Dates and Locations are tentative; MARS website will have details when available
- 12. 2022 Senior Recognition Luncheon July 13, 2022 Ken Caryl Manor House
- 13. 2022 Rockies Game July 27, 2022
- 14. 2022 Annual Picnic Sep 14, 2022 at Clement Park
- 15. 2022 Holiday Celebration Dec 7, 2022 at Wellshire Events Center
- 16. 2023 Annual Meeting is TBD
- 17. See MARS website (https://marsretirees.org) for addittional information on these events.

Please review dates and times and notify Ken Marts (martshouse2@aol.com) if you have any changes or additions.



PRESORTED STANDARD US POSTAGE PAID LITTLETON, CO PERMIT NO. 245

ADD	KE22	SEKV	ICE	KEQ	UES	IED

EVENT/MONTH	2022									2023		
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Officers/Directors	6	4	1	6	3	7	5	2	6	4	1	1
Bridge Club	22	20	17	15	26	16	21	16	15	20	17	17
Car Club												
Dinner Club	25	24	TBD	TBD	TBD	TBD	TBD	-	-	-	-	-
Golf Club	Thur	Thur	Thur	Thur	Thur	Thur	Thur	-	-	-	1	-
Hiking Club	18	20	15	20	17	21	18	16	21	18	15	15
Photo Club	12	14	-	-	-	14	13	10	8	12	9	9
Web Committee	26	31	28	26	30	27	25	29	27	31	28	28
Marketing Committee	30-Mar	28-Apr	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBE
MARS Events												
Happy Hour	27*			20*			19*			TBD		
Senior Recognition Luncheon				13								
Annual Rockies Game				27								
Annual Picnic						14						
Holiday Celebration									7			
Annual Meeting												ТВІ
MARS Extra Events												
Denver Museum		25										
Durango-Silverton Train			6									
WingsOver The Rockies				20								
Royal Gorge Train					17							
Estes Park Observatory					TBD	TBD						
MARS STAR Schedule												
Items due for MARS STAR												
STAR Input to Editor	5			5			4			TBD		
STAR Repro. Deadline	18			18			17			TBD		
STAR Mailing	27			27			26			TBD		