



ASSOCIATES

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July 2019

*Sponsored by LOCKHEED MARTIN*

# MARS STAR



## **MARS Activities This Quarter:**

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# MARS Associates: A Social Club for Retirees of Lockheed Martin & United Launch Alliance

## OFFICERS

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VP Activities	Linda Duby	303-249-1665
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VP Membership	Carl Kaminski	303-726-1546
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Secretary	Al Nemes	303-908-0157
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## MARS STAR

Editor	Tom Pighetti	303-979-7933
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Volunteers	Judy Nielsen	303-979-6772
<u>Reporting:</u>		
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
Dinner	Becky & Gary Englebright	303-973-4062
	Anita & Roy 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.**

*(Published quarterly by MARS Associates, Retirees of Lockheed Martin Corporation and United Launch Alliance, Denver, CO)*

## DIRECTORS

Director Chair	Don Purkey	303-973-0059
Director	John Janczy	303-973-3847
Director	Roger Rieger	303-912-6217
Director	Charlie Haupt	303-789-7113
Director	Bill Wise	303-771-4887
Director	Karen Paulson	303-932-7192

## IMPORTANT PHONE NUMBERS

LM Employee Service Center	1-866-562-2363
CitiStreet 401K Hotline	1-800-444-4015
Aetna Plans	1-888-562-8111
Anthem BlueAdvantage HMO	1-866-863-0484
CIGNA Point of Service (POS) (Hourly Only)	1-800-832-3211 1-800-224-6224
CIGNA Healthcare of Colorado for Seniors	303-782-9662
CitiStreet (PSP-SSP-CAP)	1-800-444-4015
Medicare Plus (Aetna)	1-888-562-8111
PacifiCare Secure Horizons	1-800-771-4347
CVS Caremark Prescription Drugs	1-888-562-3784
Vision Service Plan, Rancho Cordova, CA	1-800-877-7195
Kaiser Permanente	303-338-3800
United Dental Health	1-866-487-9301
	1-855-868-4955
Delta Dental of Colorado Individual Team	1-800-610-0201 1-877-516-6512
	<a href="mailto:Individual@ddpo.com">Individual@ddpo.com</a>
AssuredPartners of Colorado LTC/Vision/Dental	303-863-7788
Jon Elmore	<a href="mailto:jelmore@assuredptrco.com">jelmore@assuredptrco.com</a>
Via Benefits	1-844-596-0460

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

**MARS Website:** <http://www.marsretirees.org>

### **Cover:**

#### **L: Lockheed Martin Orion AA-2 launch –**

The Ascent Abort-2 flight test is a major test milestone that is enabling the safe passage of astronauts aboard Orion on the Artemis missions to the Moon and then Mars. See the Lockheed Martin (LM) article.

#### **R: Intern Rocket, 2017 / Decatur Process**

ABOUT THE INTERN ROCKET PROGRAM – Summer interns at many ULA sites have the option to design, build, refurbish and launch sport rockets. The tradition began in Colorado and branched out to interns across the company supporting multi-year rocket projects. See the United Launch Alliance (ULA) article.

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## **From the Editor's Desk**

Tom Pighetti ([tjpighetti@q.com](mailto:tjpighetti@q.com))

Linda Stearns ([linda80120@comcast.net](mailto:linda80120@comcast.net))

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 **in advance** to the V. P. of Communications. Articles will be included as time / space allows.



## President's Corner

By Dan Ellerhorst

([dan.ellerhorst@gmail.com](mailto:dan.ellerhorst@gmail.com))

May was a good month for our outreach to Lockheed Martin (LM) and United Launch Alliance (ULA)! On May 1, Bill Wise, Dick Sosnay, and I had lunch with Reese Reynolds, Director of HR at LM Space. Our discussion touched upon a number of topics, with the goal of identifying opportunities for MARS Associates and LM Space to engage in mutually beneficial activities. In the past, MARS Associates has provided volunteers to help man activities at LM such as the annual Fun Run and the Health Fair. LM, of course, provides us with tremendous support in the production, copying, and mailing of the MARS STAR. We asked about the possibility of small group tours of the plant – difficult, with the increased security posture. We also talked about supporting the Young Minds at Work Day (annually in late April), either with volunteers to be used as necessary or even to provide a MARS Associates-sponsored activity for the kids. Subsequent to our meeting, Reese forwarded a request to us to see if there are retirees interested in working with LM on a project called the “Challenge Box”. This is an activity that LM HR has used in the past at jobs fairs to generate interest in LM among applicants by presenting them with a variety of engineering problems to solve. Bill Wise is working with a select set of MARS retirees to see how we might help. If it works out, look forward to a future STAR article.

We also had a productive meeting with ULA in May. On May 31, Dick Sosnay and I met with Jennifer Eschenfelder, the Director of Benefits and Compensation at ULA. We have not had as much interaction with ULA as with LM, but we asked about supporting similar events as the Fun Run, Health Fair, or Young Minds at Work. Jennifer was interested in these possibilities and we will continue our dialogue to see what is possible. We also mentioned small group tours, and Jennifer was more encouraging on this subject, since ULA often invites outside groups to view launches. One immediate payoff of the meeting was that Jennifer was able to get an announcement about our upcoming MARS Happy Hour in the “Weekly Rundown” e-mail that is sent to employees. She is also ensuring that links to our information are included in the ULA websites for prospective retirees.

Speaking of Happy Hours! MARS Associates was pleased to sponsor its first ever (we think!) Happy Hour for new, prospective, and current members. This is a new kind of event for us and we were very pleased with the turnout. It was held on Wednesday afternoon, June 11, at the Lansdowne Arms pub in Highlands Ranch. Over fifty people attended and enjoyed appetizers provided by MARS Associates along with a cash bar. It was a lively event, with a mix of old members, new members (who hadn't attended other MARS events), and some new retirees (not yet MARS members!) Feedback was very positive, and I am sure we will try this again in the near future.

By the time you read this – we will have held our Senior Recognition Luncheon at Pinehurst. This annual event has recently been opened to all members but is held in recognition of our Senior Members (75 and older). This year we are having a speaker from LM, Beth Buck, who will talk about ongoing efforts in Deep Space Exploration. At the end of July, we will have our annual MARS Day at the Rockies, and in September, our popular Annual Picnic at Clement Park. Our clubs continue to be very active with loyal participants, including the newest club, the Car Club. So, I hope you will find something among these old and new activities that appeals to you and provides you with an opportunity to socialize with old and new friends in the LM/ULA retiree community.

Hope to see you at a future event!



## President Elect

By Dick Sosnay

([richardsosnay@gmail.com](mailto:richardsosnay@gmail.com))

Many of our members live outside the Denver metro area and find it difficult to participate in activities offered by MARS Associates. That is a problem we have long recognized, and it was reflected often in our survey results from last year. In our 2018 annual report, we noted that 1188 members lived in Colorado, and 215 lived out of state, with the largest populations in Arizona (29), California (31), Florida (21), Texas (16), and Washington (9). And out of the 1188 members in Colorado, many live outside the Denver area. That includes 85 in northern Colorado, 16 in eastern Colorado, 39 in Colorado Springs, 14 in southern Colorado, and 8 in western Colorado. Your

officers and BOD have reflected on it and would like to offer help to those who can't participate in MARS activities. If you live outside of Denver, and would like to get together with other MARS members and set-up dinners, golf games, happy hours, hikes, or any other activities, let me know, and we can send you the contact information for members who live in your zip code, or in your state, or in near-by zip codes.

In the last MARS STAR, I discussed opportunities for members to not only participate in MARS clubs and activities, but also in Lockheed Martin (LM) clubs and leagues. The Satellite Ski Club (SSC) is an LM club that has been around for over 50 years, and many of our members have participated in those activities while they were at LM. Like all other clubs it is also open to MARS members. An excellent opportunity for MARS members to learn more about the SSC and their upcoming plans for the 2019/2020 ski season is the annual fall picnic on Friday, September 13. The following information was provided by Paula Pinkley, a MARS member and also the SSC Membership officer.

Come join the SSC to kick-off their 2019/2020 season at their annual Fall Picnic this September as follows:

- What: Satellite Ski Club Fall Picnic
- Who: Anyone Who Wants to Become a Member or Just Check-Out the Club
  - Welcoming Renewing Members, New Members & Guests
- When: Friday 09/13 Starting at 5:00 PM
- Where: Applewood Park near Denver West
  - Map/Address will be available on the SSC Website by end of August
- SSC Website: Located on the MARS Homepage on the left side by clicking on LM Clubs & Leagues or directly at <https://www.satelliteskiclub.org> (Note: **The SSC Website is under maintenance this summer and may not be accessible at certain times.** Website will be updated for 2019/2020 season by end of August, although some events may still be in work and added to the schedule at a later date.)

The SSC Fall picnic details are still in work, but the club plans to have a representative from Loveland Ski Resort for discounts on 4-packs, representatives or at least info for discounts on other ski products and/or services, and a list of planned ski trips/activities. The club will also provide food and beverages, which will be free to renewing and/or new members (joining before or at the picnic) with a nominal fee for guests. The club welcomes and has skiers and boarders of all abilities in addition to some non-skiers, who just want to socialize and/or maybe snowshoe or engage in activities other than skiing. In the past, the club has traveled to various resorts, not only in Colorado, but also in other states, such as, Alaska, California, New Mexico, Montana, and Utah plus to resorts

outside the US in Canada, Chile, Europe (France/Italy/Switzerland) and Japan. In addition, the club plans to have their annual spring picnic (last year on the beach at A-Basin) and a summer party. Monthly meetings are held the 2nd Wed at 7 PM starting in October thru April. If you are interested in skiing and/or just socializing, come join the SSC. More information/details, including monthly meetings location, applications for membership, etc., can be found on the SSC Website. See 5th bullet above for SSC Website information. If you plan to attend the picnic, please let Paula Pinkley know.

Paula Pinkley  
Satellite Ski Club Membership Officer & MARS Member  
[paulapinkley@comcast.net](mailto:paulapinkley@comcast.net)  
(303) 973-8639



## Communications

Mike Carroll  
([mjcarroll78@gmail.com](mailto:mjcarroll78@gmail.com))

I hope you are enjoying this issue of the MARS STAR. Regrettably one of our STAR editors, Kathy Campbell, has resigned. We wish to thank Kathy for her years of service as an editor. But now there is an open position for a STAR editor. If anyone is interested in trying their hand at being an editor, please feel free to contact me regarding this rewarding position.





## Director's Notepad

By Don Purkey  
([don.purkey@comcast.net](mailto:don.purkey@comcast.net))

Breaking News!!! We have a volunteer for the "In Memoriam" position; Norma Emerson volunteered for this important activity. This will ensure continued notifications to our members and our honoring of those we lost. Thank you, Norma!

Next, I would like to thank those MARS members that have volunteered to participate in the MARS leadership and website groups and offer an open invitation to interested candidates to attend one of our Officers and Directors meetings. If you are interested in these positions, please call me or email me (303-973-0059 or [don.purkey@comcast.net](mailto:don.purkey@comcast.net)). You may also contact any other officer or director to express your interest.

If you are not ready for one of our current open positions, we would like to encourage you to let us know of your possible interest in the future. The 2020 slate of open positions is part of our Board of Directors' responsibilities for MARS succession planning. In 2020, we have the positions of President Elect, Treasurer and a director open. I would emphasize our need for filling these future positions with motivated MARS members and to using our diversity in enhancing the organization and our services. We have exciting plans for 2019 and the future but we *do* need your help.



## Activities Updates

By Linda Duby  
([lindaduby@comcast.net](mailto:lindaduby@comcast.net))

MARS Associates' first Happy Hour event was on June 12, 2019, at the Lansdowne Arms in Highlands Ranch. We had a great response for a new event. Look for more of

these types of casual events — we are planning to do more like this in the future and with notices posted through various media, i.e., MARS Facebook page, emails, and the MARS website.

This year the format of the Senior Luncheon was changed, and everyone was invited to attend the "Senior Recognition Luncheon." It was held on July 10, 2019, at Pinehurst Country Club. I will have more about the luncheon in the next issue of the STAR.

The picnic this year will be held on **Wednesday, September 11, 2019, at Clement Park.** Bennett's Bar-B-Que will be providing the food and we will have the vendor representatives in attendance. The new MARS Car Club is also doing a car show at the event. The picnic will be located on the east side of the park in Pavilions A, B, and C (same location as last year). The Pierce Street entrance will take you directly to the parking lot by the pavilions that have been rented. We are hoping for a large turn-out for this fun event! The flyer (page 25) with a map of Clement Park is enclosed with this issue.

The Rockies Picnic & Game is July 31, 2019. The flyer was included in the last edition of the STAR.

The Holiday Celebration is next up for 2019 and that is scheduled for December 4, 2019, at Pinehurst Country Club. More to come on that event in the October STAR.

If you have any questions about the upcoming events or feedback on events, please contact me. My email address is [lindaduby@comcast.net](mailto:lindaduby@comcast.net).



## Business

By Sherry Vargo  
([shervargo@comcast.net](mailto:shervargo@comcast.net))

**MARS Delta Dental Plan Open Enrollment During the Month of August (Only)** – The new contract is effective 9/1/19 – 8/31/21 - and **will include implant coverage** for the Medium and High options only. The monthly premiums are increased about 2%. Starting August 1, 2019, the new MARS Delta Dental Plan and applications will be on the MARS Website. If you are a current member of the MARS Delta Dental Plan and you are not making any changes, *you do not have to do*

*anything.* If you are making changes (for example: "medium to high") then *you do need to submit a new application.* This is also the time new applicants can apply to enroll in the MARS Delta Dental Plan. Changes must be submitted by August 31, 2019. If you have any questions, please call Avory Allmand at 303-889-8635 or Ron Rueger at 303-889-8616.

**Cyber Security & Identity Theft Presentation –** Steve Sande will present this very popular subject on September 17<sup>th</sup> at the Red Rocks Credit Union Corporate Office. **Please see the attached flyer** (page 27) inside this STAR with all the details. There will be light refreshments and a question-and-answer session at the end. Please RSVP asap as we can only accommodate 45 attendees.

**MARS Vendors at the MARS Picnic on September 11<sup>th</sup>** – Don't forget we will have vendor tables set up at our annual picnic again this year. This is a great time to meet and talk with our representatives from Delta Dental, VSP, Perfect Time Tours, Hearing Rehab Center and more. See you there!

Lakewood	Frank Krueger
Littleton	Darcy & Russ Barrows Todd & Debra Ann Beldon Trina Bibbero Mark & Ruth Brown Howard Flanders Gary & Kathy Hetzel Claudia Knox Rollin & Erika Schuler
Lone Tree	Allen & Linda Jones
Monument	Bob & Martha Aschenbrenner

**Other States**

NEVADA	
Reno	Shane Roskie

**Moving is such a Hassle!**

Yes it sure is, all the boxes and deciding what to keep, what goes, etc. However, did you know that even if you file a change of address with the post office MARS has to pay a fee when your MARS Star is forwarded and for the change of address notification! **We pay as much for this as for the original mailing!** Please help our budget and let us know in advance so we can get your address right the first time. Much appreciated!

**Change of email address or phone number?**

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 of your communications are timely.

**In Memoriam Changing of the Guard**

Each year, MARS Associates makes a donation to a charity in memory of our deceased members. Many thanks to Bev Baugher for her dedicated work handling the In Memoriam duties for 5 years. Great job, Bev! We are fortunate that Norma Emerson has succeeded Bev for these responsibilities. Norma, thank you for volunteering to fill this important role.

Carl Kaminski, VP, Membership  
Phone 303-726-1546; or email  
[carlcolo@centurylink.net](mailto:carlcolo@centurylink.net)



**Membership Report**

By Carl Kaminski  
([carlcolo@centurylink.net](mailto:carlcolo@centurylink.net))

**MEMBERSHIP STATISTICS**

As of July 1, 2019, there are 1,331 MARS Associates members, including 720 seniors.

Please welcome the following new members:

**Colorado**

Centennial	Fletcher & Dianne Bloch Bruce Bowman & Kit McPhail-Bowman
Elizabeth	Dale & Diane Varner
Evergreen	Daniel Rakes
Grand Junction	Gerard & Connie Carter
Highlands Ranch	Sam & Mary Lucas

## In Memoriam

By Beverly Baugher  
([bevbaugher@earthlink.net](mailto:bevbaugher@earthlink.net))

**NEW CONTACT:** Please contact me, **Norma Emerson**, at [emer801@msn.com](mailto:emer801@msn.com) or 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 In Memoriam section.

Beverly Baugher is stepping down from this position after many years. We all thank her for her services. Beverly put a large percentage of this issue's report together.

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 Board of Directors in their memory.

### Members

Crissman, Della I. (D: May 2019)  
(Survived by Paul C. Crissman)  
Centennial, CO  
<https://tinyurl.com/yy7hyev2>

Foley, Barry L. (D: May 2019)  
(Survived by Ruth G. Foley)  
Highlands Ranch, CO  
<https://tinyurl.com/y54pfmyy>

Gossanyi, Ann M. (D: April 2019)  
(Survived by Jules E. Gossanyi)  
Littleton, CO  
<https://tinyurl.com/y5tffg5s>

Grossart, Mary J. "Jackie" (D: May 2019)  
(Survived by Robert "Bob" Grossart)  
Lakewood, CO  
<https://tinyurl.com/y65aqmfl>

Jones, Lillian M. (D: April 2019)  
(Survived by Thomas "Tom" D. Jones)  
Littleton, CO  
<https://tinyurl.com/y3zb5pro>

Marcus, Eleanor "Ellie" M. (D: October 2018)  
Loveland, CO  
<https://tinyurl.com/y4pyrhdc>

Reynolds, Kathleen "Kathy" F. (D: May 2019)  
Lakewood, CO  
<https://tinyurl.com/y6zeyj78>

Rizza, Marian (D: November 2018)  
(Survived by Carl A. Rizza)  
Glendale, AZ  
No obituary published

Shapiro, Gary L. (D: January 2019)  
Bensalem, PA  
<https://tinyurl.com/yyu2t9oz>

Spencer, Joseph "Joe" C., Jr. (D: May 2019)  
(Survived by Theresa "Terri" T. Spencer)  
Tucson, AZ  
<https://tinyurl.com/y3uv2zs9>

Vowell, Dallas B. (D: June 2019)  
(Survived by Shirley Vowell)  
Littleton, CO  
<https://tinyurl.com/yxqod5qb>

Weisenhorn, Edwin "Ed" (D: October 2018)  
Holly, CO  
<https://tinyurl.com/y4gyvdcs>

### Non-Members

Barr, Edward T. (D: May 2019)  
(Survived by Ellie Barr)  
Denver, CO  
<https://tinyurl.com/y28ubtwp>

Bloom, Gordon E. (D: April 2019)  
(Survived by Judy Bloom)  
Castle Rock, CO  
<https://tinyurl.com/y68g2es7>

Brackin, Albert "Al" O., Jr., (D: May 2019)  
(Survived by Mary Brackin)  
Lompoc, CA  
<https://tinyurl.com/y32ktxm>

Burris, Barbara (D: February 2019)  
Santa Maria, CA  
<https://tinyurl.com/y2rkraor>

Loseke, Marvin (D: April 2019)  
(Survived by Marsha Edwards)  
Broomfield, CO  
No obituary published

Melatti, John J. (D: March 2019)  
(Survived by Sally Melatti)  
Lompoc, CA  
<https://tinyurl.com/y4xv8ctt>

Mertz, Charles W. (D: May 2019)  
Litchfield, Park, AZ  
<https://tinyurl.com/yxoxxcckh>

Scott, James C. (D: May 2019)  
Lompoc, CA  
<https://tinyurl.com/y67u928j>

Slack, Rick B. (D: November 2018)  
Santa Ynez, CA  
<https://tinyurl.com/y4w4j2wk>

Sparkhawk, H. Edwin "Ed" (D: April 2019)  
Littleton, CO  
<https://tinyurl.com/yy4bkwtg>

Thiesen, Gene D. (D: May 2019)  
Northglenn, CO  
<https://tinyurl.com/y23dq46j>

Valentine, Jarold "Jerry" C. (D: November 2018)  
St. George, UT  
<https://tinyurl.com/yytegy9b>

Wilson, Lisa (D: April 2019)  
(Survived by Steve Wilson)  
Morgan Hill, CA  
No obituary published



## **Volunteering with the American Legion and the Military Officers Association of America (MOAA)**

By Michael Watson

As do many of us who served in the Armed Forces prior to coming to work for Lockheed Martin (LM), I have continued to serve as a member of the American Legion and the Military Officers Association of America (MOAA) for more than 12 years providing support to our veterans, our active duty service members, and their families. And yes, I was serving as a volunteer while still working for LM. Much of the effort I provide utilizes the skills of project management attained while in the service and at LM to guide our members through the labyrinth of veteran assistance programs (namely the Veterans Administration), and to develop additional resources to provide for our young service members.

I became a member of the MOAA through my service as a Navy Officer, and though that service was almost exclusively during peacetime (if we call the Cold War peacetime), and qualified for the American Legion by being on active duty during a congressionally recognized period of conflict (namely Grenada, Lebanon, and the Global War on Terrorism). Both organizations are nonprofit veteran's associations dedicated to maintaining a strong national defense and ensuring that our nation keeps its commitments to currently serving, retired, and former members of the uniformed services and their families, and survivors.

The service in the American Legion provides opportunities to assist our veterans in getting the services they were promised by our nation, and providing a national voice heard by the government in fulfilling those commitments. We provide meals to our members, transportation to and from the VA care centers, access to scholarship programs (in addition to those provided by the GI Bill, and for use by qualifying family members), access to numerous programs for transition into the civilian world, fellowship with other veterans, and services for rendering military honors.

Two of our local programs here along the Front range of Colorado are the Redistribution Center Inc. (RCI), and the "Flower on Every Grave" functions.

- RCI is an organization established by the mother of one of our wounded veterans where the group collects goods and services for distribution to our service members assigned here in Colorado. Many of our "big box" stores and grocers provide clothing, furniture, and foodstuffs for our families as they transition into life here in Colorado and Wyoming, and RCI operates a center on Ft. Carson called "The Warriors Warehouse" (think Operation Santa Clause), and we hold an annual Christmas party to distribute gifts to the children. [place marker for photo below]



- A "Flower on Every Grave" is an adjunct of the Victory for Veterans foundation that collects roses from national floral distributors to be placed on the headstones at our national cemeteries on Memorial



Day. This last Memorial Day, we placed 12,507 roses on headstones at Ft. Logan National Cemetery. We continue to grow this event with our goal for next year at Ft. Logan to exceed 20,000 roses (there are at last count 106,000+ resting at Ft. Logan). Similar events were held in Arizona, Wyoming, Texas, New York, and Florida.

Anyone who is interested in more information about volunteer opportunities with the American Legion can contact me at [mdwatson145@gmail.com](mailto:mdwatson145@gmail.com) or the American Legion directly at [www.legion.org/](http://www.legion.org/).

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## MARS Car Club News

By Roger Rieger  
([rrieger10731@gmail.com](mailto:rrieger10731@gmail.com))  
303-912-6217

Welcome to the newest MARS Club! We held our initial club kickoff and planning meeting May 15th at "Living the Dream" brewery in Littleton and already have 27 MARS members who have joined the club! Our club is open to all interested MARS members, whether you drive a 2-or 4-wheeled vehicle, the only requirement is that you are "car crazy" (my wife's term for me), and you like to have fun! The club is modeled after the Hiking Club (thank you Sue for letting me steal your ideas!) with a club member organizing each (hopefully) monthly club event. [place marker]



for photo below]

**Carol Lovelace and Karen Paulson**

Our first club event was organized by Carol Lovelace and Karen Paulson. After an initial reschedule due to bad weather - weather seems to be a club nemesis, 14 MARS members met at the Dairy Queen on S. Pierce and Ken Caryl in Littleton on Sunday, June 30th. Besides enjoying each other's company, and delicious DQ ice cream treats, members were able to walk around and see many nice cars from not only club members, but other cars that were

on display there. Thank you, Carol and Karen, for setting up that first event!

Our next currently planned club event is the annual MARS Car Show which this year will be held in conjunction with the MARS annual picnic on 11 September. There is a sign-up flyer (page 37) in this issue of the MARS STAR. Please sign up and show off your "baby" to fellow MARS members!

Stay tuned for July and August club functions. You may follow us on the MARS website, or on the MARS Associates FaceBook page where we have also set up a MARS Car Club group page.

If you have any questions or would like to join our club, please call or email me!

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## Historian's Corner

By Barb Sande  
MARS Facebook Page Historian  
([barbsande@comcast.net](mailto:barbsande@comcast.net))

### Program Profiles

The profiles included here are of the second two "dress rehearsal" crewed missions for the Apollo program (Apollo 9 and Apollo 10). There is also a short profile of a difficult month for Lockheed Martin (April, 1999).

#### Apollo 9 Mission

Launched: 03/03/1969 11:00:00 EST LC-39A  
Splashdown: 03/13/1969 12:01:00 EST, Atlantic,  
USS Guadalcanal recovery ship  
Saturn V AS-504 Launch Vehicle  
Orbit: 118 nm at 32.5 degrees (numerous orbital changes during mission)

The Apollo 9 mission came back to Earth orbit with the more mundane, but critical tasks of demonstrating key requirements for the Lunar Module and Command/Service Module, such as rendezvous and docking, backup abort procedures, and movement of the Saturn IVB into an earth-escape trajectory. The CSM main engine was fired five times during these maneuvers and the commander and LM pilot entered the LM and moved away from the command module. The LM ascent and descent engines fired for orbital change patterns to simulate lunar orbit rendezvous and backup abort procedures. A rescue maneuver for a "dead" LM was also performed.

[place marker for photo below]



**Apollo 9 Crew -- Commander: James A. McDivitt (left), Lunar Module Pilot: Russell L. Schweickart (right), Command Module Pilot: David R. Scott (center) (Photo Credits: NASA)**

Schweickart suffered from nausea for most of the mission, so some EVAs were truncated. All mission objectives were successful, however, including the earth landmark tracking. Two call signs were now required for Apollo missions due to two separate spacecraft.

[place marker for photo below]



**Apollo 9 LM "Spider"**

"Gumdrop" and "Spider" were not imaginative, but they worked for this first "full-up" mission.

### **Apollo 10 Mission**

Launched: 05/18/1969 12:49:00 EST

Launch Complex LC-39B

Splashdown: 05/26/1969 12:52:53PST, Pacific,

USS Princeton recovery ship

Saturn V AS-505 Launch Vehicle

Lunar trajectory and return with 31 orbits of the moon

CSM Call Sign: Charlie Brown

LM Call Sign: Snoopy

Apollo 10 was the true dress rehearsal of the Apollo 11 mission except for the actual landing, with all features of the CSM and LM checked out in lunar orbit. [place marker for photo below]



**Apollo 10 Crew -- Commander: Thomas Stafford (right), Lunar Module Pilot: Eugene Cernan (left), Command Module Pilot: John Young (Center) (Photo Credits: NASA)**

This mission included rendezvous and docking maneuvers similar to those needed for an actual lunar landing. On the 12th lunar orbit, LM "Snoopy" undocked from CSM "Charlie Brown" and fired the descent engine, resulting in a 9.7 by 70.5 nm elliptical orbit; this was done over the first landing target of the Sea of Tranquility. The LM descent stage was jettisoned so that the ascent stage engine could be tested; after the jettison, the ascent stage gyrated in an uncontrollable fashion due to an error in the flight-plan checklist. Cernan and Stafford were able to regain control, then fired the main engine to gain altitude. RCS (Reaction Control System) thrusters circularized the orbit and the rendezvous "ballet" with "Charlie Brown" began and was successfully completed



106 hours into the mission. [place marker for photo below]  
**Apollo 10 CSM Lunar Orbit**

The crew did detailed lunar landmark photography on the remaining orbits, then fired the CSM engine on the far

side of the moon for their return to earth. This was the first mission with live color TV from space.

The next issue of STAR will profile the Apollo 11 mission; the heritage company contributions for Apollo will also be highlighted.

References:

[https://www.nasa.gov/mission\\_pages/apollo/missions/apollo9.html](https://www.nasa.gov/mission_pages/apollo/missions/apollo9.html)

[https://www.nasa.gov/mission\\_pages/apollo/index.html](https://www.nasa.gov/mission_pages/apollo/index.html)

[https://www.nasa.gov/mission\\_pages/apollo/missions/apollo10.html](https://www.nasa.gov/mission_pages/apollo/missions/apollo10.html)

<https://history.nasa.gov/afj/ap10fj/as10-image-library.html>

PROFILE BONUS - A VERY difficult month for Lockheed Martin:

If you look at the milestone list for April - June, 1999, you will see three failures in April. It started with the loss of the Titan IVB-27 mission carrying a DSP satellite. The failure was due to incomplete separation of the Boeing IUS upper stage segments due to mechanical interference. The DSP Satellite was stranded in a geo-transfer orbit. TIVB-27 was the first Titan launch since a spectacular failure during early ascent of TIVA-20 (the last TIVA) in August, 1998.

On April 20, Denver employees were shocked and many directly affected when the horrific Columbine High School massacre occurred. Twelve students and one teacher were murdered, and the perpetrators committed suicide; many more were injured and the death toll was planned to be much higher.

On April 27, an LM Athena II commercial vehicle launched from VAFB failed because the payload fairing did not separate, resulting in the loss of the IKONOS-1 satellite (built by LM for Space Imaging). And the month ended very badly when Titan IVB-32, with a Centaur upper stage, failed to deploy the LM-built Milstar-3 satellite in the proper orbit; this was due to Centaur software parameter error that was missed by numerous tests and verifications. LM work life was quite "interesting" after these failures and the Columbine tragedy, but we were not alone during this time. A Delta III upper stage failed on May 5, 1999, resulting in the loss of a Loral commercial satellite. This was prior to the ULA formation, so that launch is not listed in the milestones. Boeing only flew three Delta III vehicles, with two failures. In a rapid recovery, the first successful Titan IVB launch from VAFB occurred in May, 1999, (booster software processes were quickly cleared) and a Titan 23G mission flew successfully in June.

## On This Date in History

This section has milestones retrieved from publicly available information for LM, ULA and heritage programs from 10 to 60 years ago. Delta launches prior to the formation of ULA, unless it included an LM or heritage company payload or upper stage, are not listed. No classified programs are identified, even if the program is now considered unclassified. The events reflect milestone activity in the quarter before the release of the MARS STAR -- where appropriate, key press releases are also included; significant milestones are in bold. The order has been changed since the last MARS STAR to show decadal events under each month heading. There will be gaps if no events occurred in that decadal year for that month (e.g., no relevant milestones were found for April, 1989 and April, 1979). The list is not intended to be all-inclusive.

NOTE: There is an addition to the last milestone list in the second quarter MARS STAR. Thanks to MARS member Ernie Berliner for pointing out the launch of SCATHA (MM) on January 30, 1979, on Delta 2917, LC-17B, CCAFS.

### *Events in April (10 to 60 years ago)*

- 04/04/2009: USA-204 launched by ULA Atlas V 421, LC-41, CCAFS
- 04/09/2009: LM Press Release: Lockheed Martin Rolls out First THAAD Launcher in Camden, Arkansas
- 04/27/2009: LM Press Release: MILSTAR Constellation built by Lockheed Martin Achieves 50 Years of Combined On-orbit Operations
- **04/09/1999: DSP-19 launched by LM Titan IVB-27 (402/IUS), LC-41, CCAFS. IUS stages failed to separate (mission failure); last LC-41 Titan launch.**
- 04/12/1999: Eutelsat W3 launched by GD Atlas IIAS, LC-36A, CCAFS
- 04/15/1999: LM Landsat-7 launched by Delta II 7920, SLC-2W, VAFB
- 04/26/1999: Two LM Trident D5 missiles launched, ETR
- **04/27/1999: LM IKONOS-1 launched by LM Athena II, SLC-6, VAFB. Payload fairing failed to separate (mission failure).**
- **04/30/1999: LM Milstar-3 launched by LM Titan IVB-32 (401/LM Centaur), LC-40, CCAFS. Mission failure, Centaur software parameter error.**
- 04/13/1969: Classified launch by GD Atlas SLV3A/Lockheed Agena, LC-13, CCAFS
- 04/14/1969: RCA/GE Nimbus3 launched by Thorad-SLV2G-Lockheed AgenaD, SLC-2E, VAFB



- 04/15/1969: Classified launch by MM Titan IIIB-21, SLC-4W, VAFB
- 04/03/1959: Martin Titan I HGM-25A launched, LC-15, CCAFS
- 04/04/1959: Martin WS-199B Bold Orion II launched, B-47, CCAFS
- 04/13/1959: Discoverer 2 launched by Thor DM-18, Lockheed Agena-A, LC-75-3-4, VAFB
- 04/14/1959: GD Atlas SGM-65C launched, LC-12, CCAFS (failed)
- 04/20/1959: Lockheed UGM-27 AX Polaris launched, LC-25A, CCAFS

### ***Events in May (10 to 60 years ago)***

- 05/05/2009: USA-205 launched by ULA Delta II-7920, SLC-2W, VAFB
- **05/11/2009: STS-125 (Atlantis) launched, LC-39A, KSC; final servicing mission to the LM Hubble Space Telescope**
- 05/26/2009: LM UGM-133 Trident II D5 launched by Royal Navy
- 05/20/1999: LM Nimiq-1 launched by ILS Proton-K, 81/23 Baikonur, Kazakhstan
- **05/22/1999: Classified launch by LM Titan IVB-12, SLC-4E, VAFB (first VAFB Titan IVB)**
- 05/27/1999: STS-96 (Discovery) launched, LC-39A, KSC (SpaceHab, STARSHINE)
- **05/04/1989: MM Magellan Venus Orbiter launched by STS-30 (Atlantis), LC-39B, KSC**
- 05/04/1979: FLTSATCOM-2 launched by GD Atlas SLV 3D, LC-36A, CCAFS
- 05/28/1979: Classified launch by MM Titan IIIB/Lockheed Agena, SLC-4W, VAFB
- 05/02/1969: Classified launch by Thorad-SLV2G-Lockheed AgenaD, SLC-3W, VAFB
- **05/18/1969: Apollo 10 mission launched, LC-39B, KSC**
- 05/23/1969: VELA, Technology Demonstration launched by MM Titan IIIC-15, LC-41, CCAFS
- 05/04/1959: Martin Titan I HGM-25A launched, LC-15, CCAFS
- 05/08/1959: Lockheed UGM-27 AX Polaris launched, LC-25A, CCAFS
- 05/18/1959: Lockheed UGM-27 AX Polaris launched, LC-25A, CCAFS
- 05/19/1959: GD Atlas SGM-65-D launched, LC-14, CCAFS (failed)

### ***Events in June (10 to 60 years ago)***

- 06/02/2009: LM Press Release: US Air Force Awards \$1.5 Billion Contract to Lockheed Martin for SBIRS Follow-on

- **06/17/2009: LM Press Release: Lockheed-Martin Built GPS Satellites Exceed 100 Years of Combined On-Orbit Service**
- 06/18/2009: Lunar Reconnaissance Orbiter, LCROSS launched by ULA Atlas V 401, LC-41, CCAFS
- 06/27/2009: GOES-O (14) launched by ULA Delta IV-M+, LC-37B, CCAFS
- 06/10/1999: LM THAAD missile launched, WSMR, New Mexico
- 06/11/1999: Two LM Iridium satellites launched by Long March 2C, Taiyuan LC-1, China
- 06/20/1999: QuickSCAT launched by LM Titan 23G-7, SLC-4W, VAFB
- **06/14/1989: DSP-14 launched by MM Titan IVA (402/IUS), LC-41, CCAFS; Maiden flight Titan IVA**
- 06/06/1979: RCA DMSP-5D1 F4 launched by Thor DSV-2U, SLC-10W, VAFB
- 06/10/1979: DSP-11 launched by MM Titan 23C 13/MM Transtage, LC-40, CCAFS
- 06/27/1979: RCA NOAA-6 (A) launched by GD Atlas F, SLC-3W, VAFB
- 06/03/1969: Classified launch by MM Titan TIIIB-6, SLC-4W, VAFB
- 06/05/1969: OGO-6 launched by Thorad-SLV2G-Lockheed AgenaD, SLC-3W, VAFB
- 06/03/1959: Discoverer 3 launched by Thor DM-18 /Lockheed Agena-A, LC-75-3-4, VAFB (Agena failed)
- 06/06/1959: GD Atlas SGM-65-D launched, LC-13, CCAFS (failed)
- 06/08/1959: Martin WS-199B Bold Orion II Launched, B-47, CCAFS
- 06/12/1959: Lockheed UGM-27 AX Polaris launched, LC-25A, CCAFS (failed)
- 06/25/1959: Discoverer 4 launched by Thor DM-18 /Lockheed Agena-A, LC-75-3-4, VAFB (Agena failed)
- 06/29/1959: Lockheed UGM-27 AX Polaris launched, LC-25A, CCAFS

Reference websites:

<https://nssdc.gsfc.nasa.gov/planetary/chronology.html#2014>

[https://en.wikipedia.org/wiki/Timeline\\_of\\_spaceflight](https://en.wikipedia.org/wiki/Timeline_of_spaceflight)

<https://www.ulalaunch.com/missions>

<https://news.lockheedmartin.com/news-releases?year=2019>

<https://space.skyrocket.de>

<http://www.astronautix.com>

## **History on the Road**

The second feature of "History on the Road" describes our 2018 visit to the Trinity site, located on White Sands



Missile Range, New Mexico. Future inputs for History on the Road are solicited from MARS members!

As most of us recall from history, the first atomic bomb test occurred before dawn on July 16, 1945, in central New Mexico, in a remote northern location of the newly established White Sands Proving Grounds (now White Sands Missile Range). The Trinity test was of a plutonium-configuration bomb, similar to the "Fat Man" used at Nagasaki, Japan, on August 9, 1945. The Manhattan Project developed two types of atomic bombs, a simple uranium gun bomb, ("Little Boy" used at Hiroshima), and the more complex plutonium bomb that required lens-shaped charges to create a core implosion. It was decided to test the plutonium design before its use; the plutonium core for the "Gadget" was fabricated at the Hanford reactors in eastern Washington. Several sites were evaluated for the test before settling on the New Mexico Proving Ground site.

Without the dawn of the nuclear age that began at Trinity and the subsequent Cold War nuclear arms races, the future of our predecessor companies would have been quite different. Because of this historical milestone, the needs quickly developed to create UGM (Underwater-Launched Guided Missile) and ICBM technology to carry nuclear payloads. The costs and infrastructure of developing ICBMs paved the way to a variety of launch vehicle families and established the Martin Waterton facility.

The Trinity site held its first public open house in September, 1953, and became a National Historical Landmark in 1965. Advanced planning is required to visit the site, as it is only open to the public on the first Saturdays in April and October. Public events have also been held on major anniversaries of the test, but July is extremely hot in this region, so the spring and fall open houses are the best options for a visit.

We visited the site on October 6, 2018, coming from the north through the Stallion gate off Highway 380 (this is the self-drive option); if you come from the south (Alamogordo), you must meet up with a caravan to cross the Missile Range, although you can drive out of the Stallion gate on your own. It is recommended that you reserve a hotel well in advance of the open houses, either in Socorro, which is 22 miles northwest of the Stallion gate or in Alamogordo. The Stallion entry gate opens at 8:00 AM on the days of the open house and closes at 2 PM (the site closes at 3:30 PM). A government-issued ID and car registration are required and no weapons are allowed. Arriving mid-morning avoids the longer lines at the gate. After entry, it is 17 miles to the Trinity Site. At the site, there are ample parking, port-a-potties, information kiosks, food and drink vendors, souvenir stands, a few test artifacts and the 1/4-mile gravel path to Ground Zero. Golf carts are available to transport disabled visitors. A

stone obelisk was placed at the precise Ground Zero location in 1965, next to the remains of the test stand. The WSMR museum brings a full-scale model of "Fat Man" to the site and there are pictures along the fences depicting the test. Visitors to the site are also welcome to take a bus to the historic McDonald Ranch house, where the plutonium core was assembled. A one-hour visit to the site results in an exposure of only 1/2 mrem (millirem) of radiation; a visitor who lives in Denver receives 47 mrems a year from Cosmic background radiation alone.

After your visit to the site, a small town close to the Stallion gate is San Antonio, New Mexico, and it is a great place for a post-tour lunch. San Antonio has two competing taverns (Buckhorn and Owl Cafe) that each claim to have the "best" green chili cheeseburgers; we've tried both and the burgers are delicious. Visitors to Socorro on the day of the fall Trinity open house can also attend the open house at the Very Large Array (VLA) Radio Telescope facility, located 40 miles west of Socorro



on Highway 60. Socorro has their Oktoberfest celebration that same fall weekend and the Albuquerque balloon festival usually occurs in early October. Plenty to see and do!

[place marker for photo below]

**Three photos from our Trinity Site visit: Trinity site plaque at ground zero, a green chili cheeseburger from the Owl Cafe (San Antonio, NM) and a view of the crater site. (Photo credits: Steve and Barb Sande)**

Visit <https://www.wsmr.army.mil/Trinity/Pages/Home.aspx> for more information or to see if special events for the 75th anniversary are planned in 2020.

### Test Your Knowledge

Here is one brain-teaser question to test your knowledge. The quiz will be moved to the Facebook page in the future to save room in the MARS Star.

The LM-built Juno spacecraft arrived at Jupiter in July 2016. This spacecraft orbits the planet in an elliptical orbit; each Jovian orbit is \_\_\_ days. The original plan was for 14-day orbits, but a possible concern for valves on the spacecraft resulted in a much longer orbital duration. This extended the mission for 40 months]

Contact me at [barbsande@comcast.net](mailto:barbsande@comcast.net) or 303-887-8511 or find MARS Associates on Facebook.

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### Bridge Club

By Dave & Kathy Martz  
([martz20@comcast.net](mailto:martz20@comcast.net))

*"If you focus on playing good bridge then good results will come. If you focus on trying to get good results then you won't play good bridge."*  
— Robert S. Todd

Come join us for our monthly game of bridge! All MARS members and their guests are welcome. We play on the **3<sup>rd</sup> Friday of each month at the Buck Community Recreation Center (Littleton) from 10 AM to 2 PM.** You'll need to pack a lunch, as we stop midway to eat. 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 to the Buck Center, as well as a small fee to the club (which helps with supplies and the year-end party in December).

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

If you 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

Secretary:

Theodore Bornhoeft, 303-933-9730

The 2nd Quarter 2019 winners are as follows:

### April 19 (3 ½ tables)

- 1<sup>st</sup> - Dave & Kathy Martz
- 2<sup>nd</sup> - Bill Kacena & Trudy White
- 3<sup>rd</sup> - Lee & Mark Hendrick
- 4<sup>th</sup> - Theodore Bornhoeft & Jerry Baab

### May 17 (4 tables)

- 1<sup>st</sup> - Ernie & Cecile Berliner
- 2<sup>nd</sup> - Loman & Pat Park
- 3<sup>rd</sup> - Ed & Laurie Bock
- 4<sup>th</sup> - Bill & Mavis Kacena

### June 21 (4 ½ tables)

- 1<sup>st</sup> - Bart & Diane Wright
- 2<sup>nd</sup> - Ed & Laurie Bock
- 3<sup>rd</sup> - Curt & Phyllis Brudos
- 4<sup>th</sup> - Bill & Mavis Kacena

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### Dinner Club

By Becky and Gary Englebright  
([englebright@earthlink.net](mailto:englebright@earthlink.net))  
303-941-3167 (Gary)  
303-263-6457 (Becky), and  
Anita and Roy Kannady  
([anitakannady@yahoo.com](mailto:anitakannady@yahoo.com))  
303-794-9210

The dining schedule has been set for the rest of year and we are doing some old favorites and some relatively new restaurants that have been popular. Cinzzetti's has always been popular because of the low price, plus it also means that our friends to the north do not have the normal long drive. Plan on seeing the changing colors of fall in September while we enjoy the view from Mt. Vernon. In October, we will be enjoying a multi-course meal at Red Lobster and filling up on the wonderful cheese biscuits. If you haven't tried the biscuits, they are wonderful. We are finishing the year with an Italian delight at Angelo's Taverna.

If you are wondering what the new year will bring, we are contemplating having a lunch at Benihana in January.

We still have room for additional reservations at all venues, including Cinzzetti's and Mt. Vernon. If you have friends who have been retired for a period of time, have recently retired or are thinking of retiring, bring them along. Please remember, venues have attendance limits, so you should make your reservations sooner rather than later if you wish to attend.

The restaurants scheduled for the rest of 2019 are as follows:

- August 20<sup>th</sup> – Cinzzetti's (Northglenn), page 29

- September 25<sup>th</sup> – Mt. Vernon Canyon Club (Golden), page 31
- October 15<sup>th</sup> – Red Lobster (Littleton), page 33
- November 12<sup>th</sup> – Angelo’s Taverna (Littleton), page 35

When you receive the STAR, the flyers are now embedded inside the STAR. We know some people have had problems finding the flyers in the last few months. The MARS directors assure us that the flyers will now be in the same place in the STAR each time. Our suggestion is to just keep looking until you find them. If, however, you don’t have a copy of the STAR, you can always go to the MARS website to the Dinner Club selection to find copies of the flyers.

Check the calendar on the back of the STAR for additional luncheon dates that are scheduled. We continue to explore the restaurant scene looking for new and interesting places to have lunch. If you have a suggestion for a new venue, please let us know; by email or phone (if we aren’t home, please leave a message).

We have scheduled restaurants each month with the goal of keeping our costs in check, recognizing that increases are likely. In addition, we will continue to strive to provide luncheon opportunities that are on the lower end of the scale to help balance the cost. Remember, the luncheon prices always include the tax and a 20% tip.

*"The only time to eat diet food is while you're waiting for the steak to cook."* *Chef Julia Child*

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## Golf League

By Bo Rodriguez  
([boandpat@comcast.net](mailto:boandpat@comcast.net))

The golf league season started with some very unpredictable weather. Through week thirteen of our thirty week golf season, we have had three cancelations due to the weather. A cold front with rain and snow moved into the area prior to April 11<sup>th</sup>, closing the golf course. On May 9<sup>th</sup>, the golf course was closed; we had so much snow on the course you would have needed snowshoes and glow golf balls. On May 23<sup>rd</sup>, the golf course was open, but the temperature was well below 50 degrees and the golf course gave our scheduled members the okay to cancel. The remaining ten weeks to date have been near perfect. The league skipped the 4th of July holiday week. Our remaining season that continues through the month of October will include two special events. On August 15<sup>th</sup> and 22<sup>nd</sup> we will have our combined two-week annual championship tournament paying low net winners and awarding the Medalist Trophy to the low gross score player. On Thursday, September

12<sup>th</sup>, we will have our weekly league play at Homestead Golf Course featuring a 4-man team scramble.

Our league has 67 members this season and typically we have nine and sometimes eight tee times. Considering our MARS golf club has been around since 1985, we usually lose members each year for a variety of reasons. This year, we lost a few; however, we recruited eleven new members which increased our membership by three over last year. Thanks to our MARS leadership team, they have invited all MARS clubs to participate at the annual MARS picnic and the MARS Annual Meeting by staffing a table to promote the clubs for the purpose of recruiting new members. Our golf club will be encouraging you to join our league.

**Was it divine intervention?** On May 16<sup>th</sup>, Ken McDowell aced a hole-in-one on the #7 green at Broken Tee Golf Course. Now mind you, Ken carries a not-so-shabby 23+/- handicap. According to Ken and verified by Don Williams, Ken hit his tee shot on this par three hole right at the pin situated toward the front of the green. His shot landed short of the green by an estimated ten yards and continued to roll up the two-foot elevation onto the green and then some short distance into the cup. With this feat, Ken cleaned out the hole-in-one jackpot pool. When play was finished, Ken bought each foursome a pitcher of beer at the grill — often referred to as the 19<sup>th</sup> hole. After Ken collected his money and paid his bar tab, I’m sure the thought went through his mind suggesting to himself that when his ball rolled into the cup, he should have declared it an unplayable lie.

If you and/or your spouse enjoy playing golf and would like to join our league, or experience play as a guest player, please feel free to contact me at [boandpat@comcast.net](mailto:boandpat@comcast.net) or at 303-798-9157. I encourage you to log on to our MARS website: [www.marsretirees.org](http://www.marsretirees.org) and click on “Golf” to get a complete update on our league activities, membership and much more. You will see that our past weekly result shows women and men throughout our high to low handicap index system have won prize money in varying flight categories.

[place marker for photo below]




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**Answer to Historian’s Test Your Knowledge Brain Teaser:** 53 days.

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## Hiking Club

By Sue Janssen

([susan.g.janssen@gmail.com](mailto:susan.g.janssen@gmail.com))

The rain and snow this spring has challenged us on the trails! We did not hike in April, but May and June were nice outings.

Two members had an adventurous hike in Antarctica! Girish & Vibha Patel took a voyage in a small expedition boat of about 150 guests and made five zodiac landings. The weather during the trip was very nice as it usually is in December and January. There are several research centers from various countries. The wildlife and the beauty are exceptional. [place marker for photo below]



**You can't chase after penguins, but penguins can approach you. (Photo by Girish Patel)**

Mike Bartlett organized a hike at Dawson Butte Ranch Open Space in Douglas County on 15 May. [place marker for photo



below] **The weather Sunshine for the MARS hiking club at Dawson Butte: Ellen Albert, Vall Gregory, Vicky Eberhardt, Pat Albert, Cindy and Lee Alexander, Mike Bartlett**

was perfect (upper 70's) and seven hikers enjoyed a nice five mile loop through pines and meadows. Several

followed up the hike with a nice lunch at Pegasus restaurant in Castle Rock.

Sue and Lee Janssen missed the Dawson Butte hike because they were hiking in New Mexico. Their favorite spot was Chaco Canyon (officially Chaco Culture National Historical Park). The drive alone is an adventure over unmaintained dirt road, but the ruins and the wildflowers made the drive worthwhile. The park is much quieter than the likes of Mesa Verde and is quite different. The Chaco pueblos have many, many rooms and kivas arranged in "D" shapes. The differences in masonry tell a story of craftsmanship as well as culture and trade between people.

[place marker for photo below]



**Penasco Blanco sits high on the West Mesa. It is about a 4-mile one-way hike through Chaco Wash to reach the ruins. (Photo by Lee Janssen)**

Linda Duby and Sherry Vargo hosted the June 19th hike. It turned out to be a beautiful day with no rain. The group of 11 met at the West Trailhead at Alderfer/Three Sisters Park in Jefferson County at 8:30 AM. Most of the trails were "intermediate" with a few "beginner" trails throughout the hike. The hike turned out to be 4 1/2 miles and took about 2 hours. One of the hikers spotted a doe on "Hidden Fawn Trail" which was appropriate. After the hike the group headed into Evergreen and squatted at Lariat Lodge on the hill to have lunch and, of course, Beer! It was a great hike and great food. [place marker for photo below]



**Back Row: Mike Bartlett, Mike McKaig, Al McKinney Middle Row: Sherry Vargo, Dick Sosnay, Pam Alstott, Anne Baker (friend), Vicky Eberhardt Front Row: Paula Pinkley & Sue McKaig (Picture taken by Linda Duby)**

One of the "10 essentials" for hiking is sun protection. Colorado has especially intense sun so if you are on the trail you need to take precautions: sunglasses, hat, and sunscreen for exposed skin. Don't forget the top of your ears!

Dust off your hiking boots and join us for a hike this summer. There is a rumor that we will climb a 14er in August! If you wish to join the MARS Hiking Club, contact Sue Janssen at [susan.g.janssen@gmail.com](mailto:susan.g.janssen@gmail.com) who will add you to the club distribution list. Please provide your email address, home phone and cell phone for the roster. The schedule of hikes is posted on the MARS website (<http://www.marsretirees.org/>). Even if you have never gone snowshoeing or hiking you are welcome to join in the fun.

Happy trails!

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## The MARS Associates Website

By Jim Kummer  
([jkummer@comcast.net](mailto:jkummer@comcast.net))

Hopefully many MARS members have visited the new MARS Facebook group. The MARS website and the MARS Facebook group are complementary. Both provide information to MARS members. The information on the website is factual and lasting – one can check back to find documents, announcements and events. The website changes when new or revised information is available. Facebook posts also contain some announcements about MARS. However, Facebook's strength is the ability for MARS members to discuss MARS topics and interact with each other by sharing opinions. The postings "age" off the page but can still usually be retrieved. Both the Facebook group and the website serve valuable purposes.

The MARS Facebook group access is restricted to MARS members.

The Car Club now has a button on our website in the CLUBS list. Click on the CAR CLUB button to see the point of contact, pictures, events and the club roster.

Pay appropriate attention to the MARS website, [www.marsretirees.org](http://www.marsretirees.org), where you will find excellent information resources for MARS members. Here are the websites of the month from the last quarter.

- Apr – Strange Unexplained Stuff at <https://coolinterestingstuff.com/>
- May – Amusing Trivia at [www.boredpanda.com/](http://www.boredpanda.com/)
- Jun – At [thefreedictionary.com](http://thefreedictionary.com) you'll find the new medical dictionary, as well as dictionaries for legal, financial, etc., and foreign languages

Your website committee members welcome your suggestions for improvement, and for proposed websites of the month. Email them to me at [jkummer@comcast.net](mailto:jkummer@comcast.net). Your website committee members are Duane "Smitty" Smetana, Al Butvidas, Bob Knickerbocker, Linda Stearns, and Jim Kummer (Webmaster).

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## Photography Club



By John Chapter  
([johnchapter@msn.com](mailto:johnchapter@msn.com))  
303-986-8277

### Photography Club Background

The MARS Photography Club's goal is to provide a common meeting place for like-minded people interested in photographic arts. Our club hopefully endeavors to provide helpful comments coupled with an opportunity for members to share their images.

The MARS Photography Club meets at the *Littleton Bemis Library*, located at 6014 S. Datura Street, in Littleton, Colorado, from 1:00 PM to 3:30 PM, in the downstairs meeting room. We normally meet the second Thursday of the month. Our meeting schedule is January, February, March, April, May, September, October, and November.

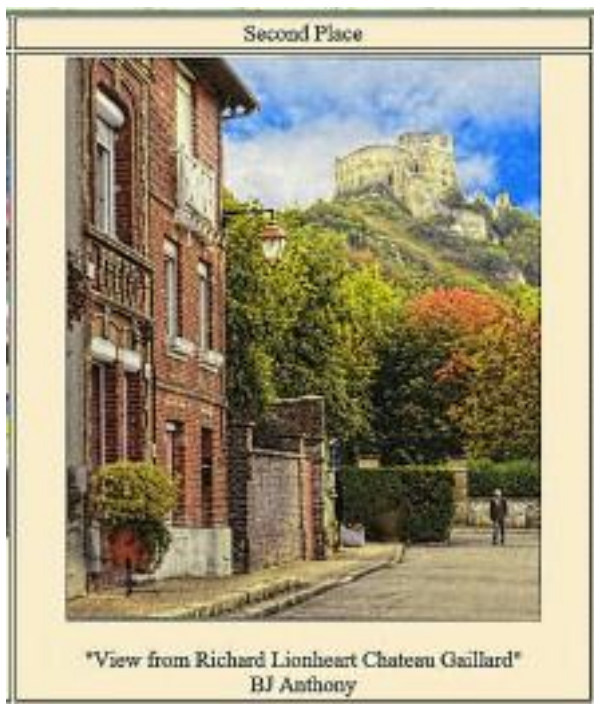
**Please note that we do not meet in June, July, or August for summer vacation. In addition, there is no regular meeting in December, as we have a Holiday Luncheon at a local restaurant.**

Each meeting also includes a friendly print competition and the selected winners appear on the *MARS Retirees Website in the Photography Club* section.

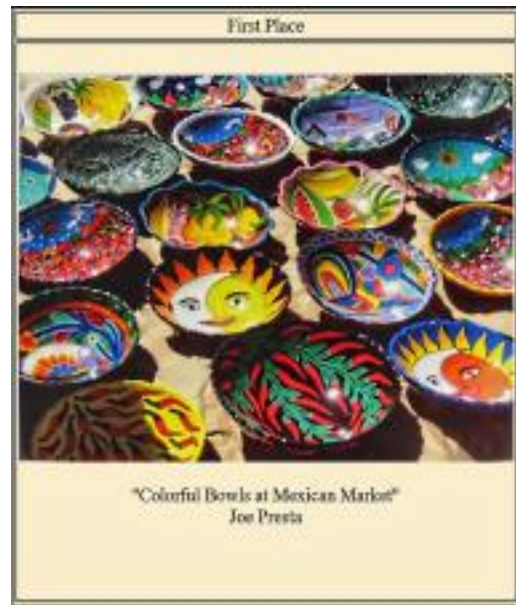
Please go to the *Mars Retirees* website ([www.marsretirees.org](http://www.marsretirees.org), under *Photography Club*) to check for a summary of our upcoming programs. Our next program is by *Jim Kummer*, who will give a presentation at our September 12, 2019, meeting, on two photography programs that are free and available online.

### Meeting Presentations

Our April 11, 2019 meeting was cancelled because of a snowstorm. Our May 9, 2019, program was by *BJ Anthony* who presented a wonderful DVD that she made entitled "Just Say Bonjour." The DVD was a thoughtful pictorial about a river cruise thru France. She used many advanced tools including the addition of sound. Her image won our competition's second place at the May meeting.



Joe Presta's image below won the First Prize for our Competition at the May 2019, meeting with his colorful image of Mexican pottery.



Intrigued by our programs? You can become a member of the MARS Photography Club by just stopping by one of our meetings and we would love to have you be a part of our club. Membership is fun, and the only requirement is that you are a MARS Retirees club member.

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## **Colorado Springs Lockheed Martin Retiree Group News**

By Doug Tomerlin  
([douginc@aol.com](mailto:douginc@aol.com))

The retiree group sponsored a luncheon on May 15, 2019, at the Golden Corral Buffet and Grill in Colorado Springs. The weather was very nice this year and we had an excellent turnout with approximately 75 in attendance.

Doug Tomerlin, the Colorado Springs Lockheed Martin Retiree Group Coordinator, provided a short briefing to the group, including welcoming new retirees and first-time attendees. The group was very appreciative to have Dan Ellerhorst, the president of MARS Associates in Denver attending. Mr. Ellerhorst provided an excellent briefing explaining the many activities and benefits of joining the group. Many retirees stayed and visited after the luncheon.

We welcome the following retirees who have joined the Colorado Springs Lockheed Martin Retiree Group since the last newsletter:

- Barry Patterson
- Larry Anderson
- Julie VanBrunt
- Bill Poulton
- Joe Robinson



- Larry McMillin
- Jay Merritt

We were fortunate, as far as we know, none of the members of our retiree group passed away since the last newsletter.

If you would like more information about the Colorado Springs Lockheed Martin Retiree Group or luncheons, please contact Doug Tomerlin at [douginc5@aol.com](mailto:douginc5@aol.com).

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## MARS Associates Volunteer with the Lockheed Martin Fun Run

By Judy Nielsen

([nielsen\\_129@q.com](mailto:nielsen_129@q.com)) [place marker for photo below]



**MARS Volunteers: Mike Danaher, Dave Beach, Larry Major, Lucy Ellerhorst, Dan Ellerhorst, Karen Paulson, Judy Nielsen**

Every year, Lockheed Martin Recreation sponsors a Fun Run and Walk at the Waterton plant for employees who wish to participate. The event is held to raise money for Operation Santa Claus. This year the Fun Run was held on a cool and cloudy Wednesday, May 22<sup>nd</sup>. Despite the cool weather, there were about 40 participants along with volunteers from Operation Santa Claus and MARS Associates. Lunch was provided by Kaiser Permanente.

MARS Volunteers helped in several areas: manning the start/finish desk and operating the timer; providing guidance to the racers along the course; and helping to prepare and serve lunch.

It was a successful and fun event. If you are interested in participating as a volunteer at next year's Fun Run, or at future LM and ULA events, please contact Judy Nielsen or any officer or director. We will be happy to add your name to our volunteer list.

## Cape Canaveral News

By Dick Olson

([Olsons5145@aol.com](mailto:Olsons5145@aol.com))

### Luncheons

**April** -- Another light turnout this month; must be spring fever. Present were: Wendell McDaniels, Bob Anderson, Walt Starkey, Abe Smith, Frank Indihar, Jerry Moskovitz, Jimmy Weddle, Danny Molin and Don Anderson with his daughter, Roxanne. Don has missed the past few months due to a hospital stay for heart problems.

Along that same line, I heard from Dave Kintigh and he is slowly recovering from his bout of heart attacks but isn't able to get out on his own yet.

Bob Anderson said he was contacted by LMCO and that they are transferring his retirement account to an annuity. Has anyone else been contacted with this information? I will forward a CNN report that talks to this but would recommend you get financial advice if the company contacts you in this regard.

**May** -- Still a pretty small turnout today, only eleven of us. Present were: Wendell McDaniels, Ken Hawes, Jimmy Weddle, Jerry Moskovitz, Frank Indihar, Bob Anderson, Cecil Snipes, Danny Molina, Bob Matschner, Don Anderson and yours truly. Don is getting around with the help of a walker and says the healing progress following his heart problems is pretty slow.

Bob Anderson reported that he and Mike Hammon went over to visit Hank Ambrosch. Hank is recovering from a stroke and while in pretty good spirits his recovery is also going slow.

Several people have reported their retirement account has been transferred to an annuity and they are not having any problems. They still get their check for as long as they live and their wife's kicks in after they pass. I guess as long as the checks keep coming, it doesn't matter where they come from.

Remember that Mother's Day is this month and I hope everyone has a great spring.

**June** -- Everyone wanted to know where Dick was! (EN: I missed the luncheon to help a friend pick up his grandson up in Valdosta.) A small bunch again this month. I advised them of Wes's situation and wishes and also told them of Cecil's problem – a pinched nerve in his spine. He is seeing an orthopedist this week to determine if it can be treated with therapy or will require surgery.

Following is the list of attendees: Abram Smith, Wendell McDaniels, Jimmy Weddle, Frank Indihar,



Larry Gleason, Walter Starkey, Bill Masterson, Roger Wright, Ken Webb (escorted by Randy Bushee), Cal Moser, Don Anderson, and Danny Molina.

See you next month!

### Recent Obituaries

**Jack Baltar**, 93 — Jack passed away March 17<sup>th</sup>. Jack, a graduate of the Naval Academy, went to work for Martin in the Titan II days. He was a Test Conductor on the Gemini Program and later went to NASA where he was an Engineer on the Viking Program.

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## **Martin Marietta Retiree's Club (Vandenberg News)**

By Charlie Radaz  
([fcmjradaz@aol.com](mailto:fcmjradaz@aol.com))

Absence of input from Vandenberg can be attributed to this reporter being hospitalized for lung fibrosis and inflammation (lifetime NON-smoker??) for almost two months. Recovery is going well with in-home care & therapists.

Meanwhile, our Vandenberg Retirees have enjoyed monthly luncheons with 20 to 30 attendees. We are indebted to Eunice Souder for such good participation for her reminders and coordination. Meetings were at Mission Club (formerly Village CC), Rooney's Irish Pub (now being converted to Blast Pizza Pub) and IHOP/SM.

Don Buck, in our group, has created a collection of Martin Marietta photos from the past on his computer. Don has these on "slide show" at the luncheons; each photo provides audience comments!

If you have any photos to contribute to his historical collection or need more info, contact Don Buck.

We are very sad to report the passing of Bob Scolari (Graphic Artist) on June 26<sup>th</sup> after an extended illness. Bob's insight and innovation was without equal in both comical art and serious creations.

Those of us that live in distant locations and don't get a chance to see Denver retirees certainly appreciate the names under the photos (saw that there is a Roger Rieger and he looks good, like he did 20 years ago!!!).

We normally meet the last Thursday of each month at noon. All former employees, their spouses and associate contractors are welcome to attend, visit and share Informal stories.

Please call Eunice Souder (805) 218-7605 for meeting location and reservations.

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## **Lockheed Martin (LM) News**

### **Ensuring Astronaut Safety: Lockheed Martin and NASA Successfully Demonstrate Orion Launch Abort System in Flight Test**

KENNEDY SPACE CENTER, Fla., July 2, 2019 /PRNewswire/ -- The critical launch abort system for NASA's Orion spacecraft was put to its hardest test today, and it demonstrated its capability to pull the crew module and future astronauts to safety during a launch if there is an emergency. Lockheed Martin (NYSE: LMT) designed and built the launch abort system for the test and is also the prime contractor building the Orion spacecraft for NASA.

During the test this morning from Cape Canaveral Air Force Station, Florida, the Orion launch abort system, with a mock-up Orion capsule, was launched on a modified Peacekeeper missile. At 31,000 feet, or about six miles up, into the flight, the on-board computers initiated the abort sequence. The launch abort motors, generating 400,000 pounds of thrust, then pulled the Orion capsule away from the rocket which was already traveling nearly 1,000 mph. Using its attitude control motor, the abort system then reoriented itself and jettisoned the Orion capsule using its jettison motor. The total test took less than three minutes.

"The test flight performed perfectly, not to mention it was really exciting to watch," said Mike Hawes, Orion program manager for Lockheed Martin Space. "Hopefully this will be the last time we see this launch abort system ever work, but this test brings confidence that if needed on future Orion missions, it will safely pull the crew module and astronauts away from a life threatening event during launch."

The Orion launch abort system is the highest thrust and acceleration escape system ever developed and is the only system of its kind in the world. It's a major system that makes the Orion exploration-class spaceship the safest spacecraft ever built.

This is the second time the Orion launch abort system has been put to the test. The first flight test was in 2010 simulating a static abort from the launch pad. AA-2 is the final test and demonstration of the full-up launch abort system.

NASA's Orion spacecraft for the uncrewed Artemis 1 mission to the Moon is being developed at the NASA Kennedy Space Center and will soon head into environmental testing—all in preparation for a 2020 launch.

For more information about Orion and AA-2:

AA-2 animated video:

<https://www.youtube.com/watch?v=6HK9G7feXEK>

AA-2 test footage:

<https://www.youtube.com/watch?v=4rfsDMGplZU>

Lockheed Martin Orion page:

<https://www.lockheedmartin.com/orion>

NASA Orion page: <https://www.nasa.gov/orion>

## **Small Spacecraft, Big Universe: Lockheed Martin Selected for the Next Phase of a Small Spacecraft Mission**

*Lockheed Martin is the industry partner on the Janus mission, recently selected as a part of NASA's SIMPLEX program*

DENVER, June 19, 2019 /PRNewswire/ -- Lockheed Martin (NYSE: LMT) has been selected to design dual small deep space spacecraft to visit near-earth asteroids in a mission called Janus, led by the University of Colorado Boulder. One of NASA's Small Innovative Mission for Planetary Exploration (SIMPLEX) finalists, Janus is designed to fly by two binary asteroids, or asteroids orbiting a common center of mass, to image the system using both visible and infrared cameras. These small satellites will launch in 2022 to reach the asteroid system in 2026.

"We are excited to partner with University of Colorado on this challenging mission to be among the first small sats to return science data from beyond Earth orbit," said Chris McCaa, Janus program manager at Lockheed Martin Space. "Janus will provide the opportunity to blend our long heritage of mission success in deep space with the small sat paradigm, helping to pave the way for a new generation of deep space explorers. Combining our track record of delivering on principal investigator-led missions and the caliber of this science team will give us all a greater understanding of the working of our Solar System."

Downselected for this next phase of NASA's SIMPLEX program, Lockheed Martin will be working toward preliminary design review. SIMPLEX is a cost-capped program focusing science investigations on any Solar System body, except for the Earth and the Sun, using small spacecraft lighter than 180 kg. The Janus mission is designed to meet these requirements. The mission will investigate how binary asteroids form and evaluate

existing theories of how these constantly changing systems evolve.

Deep space missions present challenges beyond what the typical small sat mission encounters in low-Earth orbit. For example, power systems must handle a range of Sun distances and telecommunication systems need to be able to transmit over long distances and be compatible with the Deep Space Network. Lockheed Martin brings the experience of deep space exploration system integration into the design of these ESPA-class, dual small satellites weighing in at about 40 kg each.

"All deep space missions require a balance of reliability and schedule assurance to be successful and, unlike a mission to low-Earth orbit, you must meet the planetary launch window. The asteroids won't wait for us," said McCaa. "To meet those challenges, we will be applying proven methods from missions such as OSIRIS-REx and Lucy as well as leveraging lessons learned while developing other small sat missions such as LunIR."

The Janus mission is led by Principal Investigator Dan Scheeres of University of Colorado Boulder in Boulder, Colorado. If selected in the final stage, Lockheed Martin Space will design and build the spacecraft and provide mission operations after launch. Malin Space Science Systems will provide the instrument suite including visible and infrared cameras. The selected investigations will be managed by the Planetary Missions Program Office at NASA's Marshall Space Flight Center in Huntsville, Alabama as part of the Solar System Exploration Program at NASA Headquarters in Washington.

SOURCE Lockheed Martin

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## **United Launch Alliance News**

### **United Launch Alliance Announces K-12 Student Rocket Launch Payloads**

### **Hands-on STEM Project Culminates with Launch on 50<sup>th</sup> Anniversary of Apollo 11 Moon Landing**

**Centennial, Colo., (June 20, 2019)** -- United Launch Alliance (ULA) has selected K-12 student "payloads" to launch atop its intern-built sport rocket at this summer's Student Rocket Launch. The event, sponsored by ULA and Ball Aerospace, offers a unique, hands-on science, technology, engineering and math (STEM) experience centered on inspiring the next generation of rocket scientists. ULA and Ball selected the July 20 launch date in honor of the 50th anniversary of the Apollo 11 moon landing.

The Student Rocket Launch program offers students from kindergarten through graduate school hands-on experience working with rockets and payloads. Payloads are objects, experiments or instruments launched on and deployed (if desired) from the rocket. A payload can be almost anything a team can create within the provided guidelines. Projects this year include data sensors, drones, rovers and a scale model of the Apollo 11 Lunar Module.

ULA intern volunteers design, build and refurbish the high-power sport rocket – dubbed “Future Heavy Super Sport” – while volunteer interns from Ball Aerospace and K-12 students design and build payloads that launch on the rocket.

“Today’s students are tomorrow’s scientists, engineers, explorers, innovators and entrepreneurs,” said Tory Bruno, ULA president and CEO. “The Student Rocket Launch gives students from kindergarten through graduate school hands-on experience designing, problem-solving and innovating with the added experience of launching their work thousands of feet above the ground.”

The 2019 Student Rocket Launch will take place July 20 at Fort Carson, Colorado, which is located south of Colorado Springs. The payloads will launch on the Future Heavy Super Sport rocket, a high-power sport rocket built and refurbished by ULA interns.

Since 2009, ULA’s summer interns built and launched high-power sport rockets carrying payloads designed and built by Ball Aerospace interns as part of the Ball Intern Remote Sensing Team (BIRST) program. In 2010, ULA opened the opportunity up to K-12 student teams, and the company introduced a competition element in 2018. ULA and Ball interns volunteer to participate in the program in addition to their “day jobs” at the aerospace companies.

“The Ball Aerospace interns are an exceptional group of diverse students from 44 colleges and universities, who are pursuing careers in STEM fields that are of importance to the aerospace industry,” said Rob Strain, president, Ball Aerospace. “The BIRST program and our long-standing partnership with ULA enable our interns to experience a real-world mission from the design phase of a payload all the way to launch.”

When submitting their proposals, teams chose whether they wanted to compete for a chance to win up to \$5,000 for their school or sponsoring nonprofit organization by guiding their payload closest to a designated ground-based target. Teams choosing not to compete create a payload with a mission objective of their choosing.

## 2019 Student Rocket Launch K-12 Payload Teams California

- Ann Sobrato High School (Morgan Hill, CA)
  - o Generic Drone Name\*
- Destiny Christian Elementary School (Rocklin, CA)
  - o Roaring Chicken
- Brookside Elementary School (Oak Park, CA)
  - o The Order of the Eggs
- Downey High School (Downey, CA)
  - o The RC Paraglider\*
- Newport Christian School (Newport Beach, CA)
  - o NCS Weather Radar

## Colorado

- Boulder High School (Boulder, CO)
  - o Curio\*
  - o The Sky Crane\*
  - o Cole\*
- Impact Tae Kwon Do (Highlands Ranch, CO)
  - o In-flight Dynamic Environments Measurements
- Monarch High School (Louisville, CO)
  - o Tanky McTankface\*
- Peak to Peak Charter (Lafayette, CO)
  - o Capturing the Moment
  - o Greenhouse Gas Assessment Apparatus
  - o Kinderducks\*
  - o Operation Falling Weather
  - o Smorgasbord
- Ralston Valley High School (Arvada, CO):
  - o The Fruits of Labor
  - o The Egg-Ceptional Payload
- Silverton School (Silverton, CO)
  - o Can You Dig It?
- Smoky Hill High School (Centennial, CO)
  - o Apollo LM Tribute
- STEM School Highlands Ranch (Highlands Ranch, CO)
  - o Gone Home\*
  - o Lookout Below
- Florida
- Edgewood High School (Merritt Island, FL)
  - o ELT-1\*
- New Mexico
- Santa Fe Composite Squadron (Santa Fe, NM)
  - o Civil Air Patrol Autonomous Emergency Delivery System\*
- Oregon
- Catlin Gabel School (Tigard, OR)
  - o CGSMAP\*
- Texas
- Team Astrocube (Austin, TX)
  - o Astrocube

\* Denotes a competition team

# ULA Completes Final Design Review for New Vulcan Centaur Rocket

## First Flight on Schedule for 2021

**Centennial, Colo., May 20, 2019** – United Launch Alliance leaders and engineers completed an important milestone with the conclusion of the system Critical Design Review (CDR) for the company’s new Vulcan Centaur rocket. The system-level CDR is the final review of the design for the overall rocket.

“This is a tremendous accomplishment for the ULA team and a significant milestone in the development of a rocket – signaling the completion of the design phase and start of formal qualification,” said Tory Bruno, ULA’s president and CEO. “Vulcan Centaur is purpose built to meet all of the requirements of our nation’s space launch needs and its flight-proven design will transform the future of space launch and advance America’s superiority in space.”

The system CDR was a week-long detailed review of the entire Vulcan Centaur system with the primary focus to verify all of the elements will work properly together as a system. As part of the certification process with the U.S. Air Force, Air Force representatives are included as part of the design review.

“ULA’s Atlas and Delta rockets have served as the backbone for American space launch for decades and our

next-generation rocket will advance this rich heritage,” said Bruno. “Vulcan Centaur will provide higher performance and greater affordability while continuing to deliver our unmatched reliability and precision.”

When the first Vulcan Centaur rocket flies in less than two years, a high percentage of the rocket will have flown before on ULA’s Atlas launch vehicle including the fairing, upper stage engines in a dual configuration, avionics, software and solid rocket motors.

“Vulcan Centaur brings together the best of Atlas and Delta technology, and we are flying all of the major components that we can on Atlas V first to reduce the risk for our customers on the first flight,” said Bruno.

ULA and its suppliers have invested in and modernized the factory in Decatur, Alabama, bringing in state-of-the-art manufacturing technologies. Flight hardware is already being built for the first flight, and the production is on schedule for the initial launch in 2021.

With more than a century of combined heritage, ULA is the world’s most experienced and reliable launch service provider. ULA has successfully delivered more than 130 satellites to orbit that provide Earth observation capabilities, enable global communications, unlock the mysteries of our solar system, and support life-saving technology.



## Happy Hour, July 7, 2019





# Car Club June 30, 2019

[place marker for photo below]



**Les Burns**

[place marker for photo below]



**Bob Paulson**

[place marker for photo below]



**Bob Wessels, Don & Linda Purkey**



**Bob Wessels  
Dwight & Terry Eckert**



**Eric & Cindy Georges**





Join Us for the Annual Rite of Summer....



## MARS ANNUAL PICNIC

It's time once again to enjoy the MARS Annual Picnic. The Officers and Directors of MARS Associates invite you, your spouse or companion, and your friends to celebrate the end of summer with an old-fashioned barbecue picnic complete with BBQ ribs, pork, and chicken plus all the trimmings, provided by Bennett's Bar-B-Que. There will also be water, wine and beer, and door prizes. The event will be *Wednesday, September 11, 2019*, and will be held at **Clement Park**. The event will be in Pavilions A, B, and C located on the east side of the park (map of park is on the reverse side). The event will be held rain or shine. **The BBQ line will open at 12:00 noon.**

The cost of the picnic is \$18.00 for members and spouse/companion and \$28.00 for non-MARS guests. Make checks payable to **MARS Associates** and mail the check and the reservation form (below) to:

**MARS Associates, PO Box 1128, Littleton, CO 80160-1128**

**Reservations and cancellations must be received by September 3, 2019.** If you must cancel, please notify Linda Duby at 303-249-1665 or [lindaduby@comcast.net](mailto:lindaduby@comcast.net); Carl Kaminski at 303-726-1546 or [carlco@centurylink.net](mailto:carlco@centurylink.net); or Larry Stearns at 303-797-3557 or [mars-larry-treas@comcast.net](mailto:mars-larry-treas@comcast.net). Notify one of these persons by **September 3 to receive a refund**. MARS Associates must commit to an exact number of attendees and we must pay for that number as a minimum. Admission is by reservation only. Pick up name tags and drawing tickets as you enter the picnic area. The name tags will be available at 11:00 a.m.

----- Reservation Form (detach here) -----

**2019 Annual Picnic Reservation Form – September 11, 2019. Please print clearly.  
Mail to: MARS Associates, PO Box 1128, Littleton, CO 80160-1128**

Member \_\_\_\_\_ Spouse/Companion \_\_\_\_\_

Non-MARS Guests \_\_\_\_\_

Member Phone No. \_\_\_\_\_ E-Mail address \_\_\_\_\_

Member/Spouse or Companion @ \$18.00/person = \$ \_\_\_\_\_

Non-MARS Guests @ \$28.00/person = \_\_\_\_\_

Total enclosed \$ \_\_\_\_\_ Check Number \_\_\_\_\_

Special dietary needs? Contact Linda Duby at 303-249-1665 or [lindaduby@comcast.net](mailto:lindaduby@comcast.net) with the details.

# Robert F. Clement Park

7306 W. Bowles Avenue • Littleton, CO • 80123



Foothills

Park & Recreation Dis



**The picnic will be held in Pavilions A, B and C.**





# Cyber Security and Identity Theft: Staying Safe Online



**MARS**

*Sponsored by LOCKHEED-MARTIN*

A good portion of our modern lives is spent online. Whether it's sending emails to friends, buying products from Amazon, hooking up a video doorbell or security camera in your house, enjoying social networks like Facebook, or doing online banking and investments, many of us enjoy the benefits of a connected world. But for every positive of being online, there's the potential downside of your personal information and even your identity being used by criminals to steal money and property.

Join MARS Associates member Steve Sande for an informative and educational free presentation on cyber security and identity theft. Learn how to identify common methods used by cyber thieves to trick you into giving up just enough information to gain access to accounts, passwords, and other personal data online. Find out how to keep yourself and your property safe from hackers, and what to do if an account or your identity is compromised.

Steve is an accomplished information technology author and educator, having started writing online in 1986. He taught a popular data security course for Arapahoe Community College's Workforce and Community Program, and previously worked as an IT manager for Public Service Co. of Colorado and as a project manager for IBM before making writing about technology his full-time occupation.

<b>WHEN</b>	September 17, 2019   9:30 AM - 12:00 PM
<b>WHERE</b>	Red Rocks Credit Union Corporate Office 8195 SouthPark Lane   Littleton, CO 80120

**Max capacity is (45) so please sign up soon!**

**Please RSVP to Sherry Vargo, VP of Business,  
at [shervargo@comcast.net](mailto:shervargo@comcast.net) by September 13, 2019.**

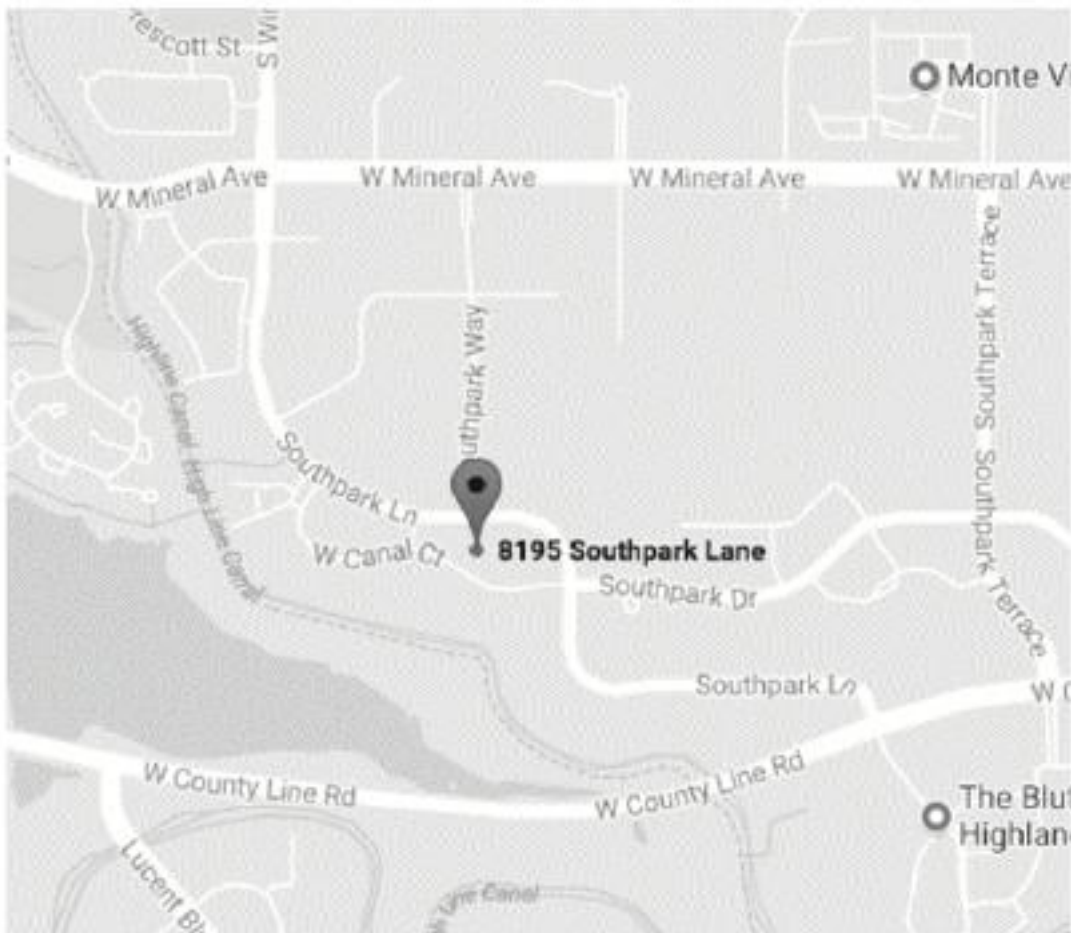
**A map for Red Rocks Credit Union Corporate Office is on the back of this flyer.**





## RED ROCKS CREDIT UNION CORPORATE OFFICE

8195 SouthPark Lane | Littleton, CO 80120



# ***Lunch on Tuesday, Aug 20<sup>th</sup>, 2019***

Join your fellow MARS Associates for a wonderful lunch at



## ***Cinzzetti's***

281 W. 104<sup>th</sup> Ave., Northglenn, CO 80204  
(see map on back)  
303-451-7300



Lunch will be served at 12:00 noon.  
(Doors open at 11:30 am)

Featuring a delicious Italian buffet including salads, entrées,  
desserts and non-alcoholic beverages. Cash bar will be available.

(Tax and gratuity included)

**Seating is LIMITED to 65**

**\$16.00/person**

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

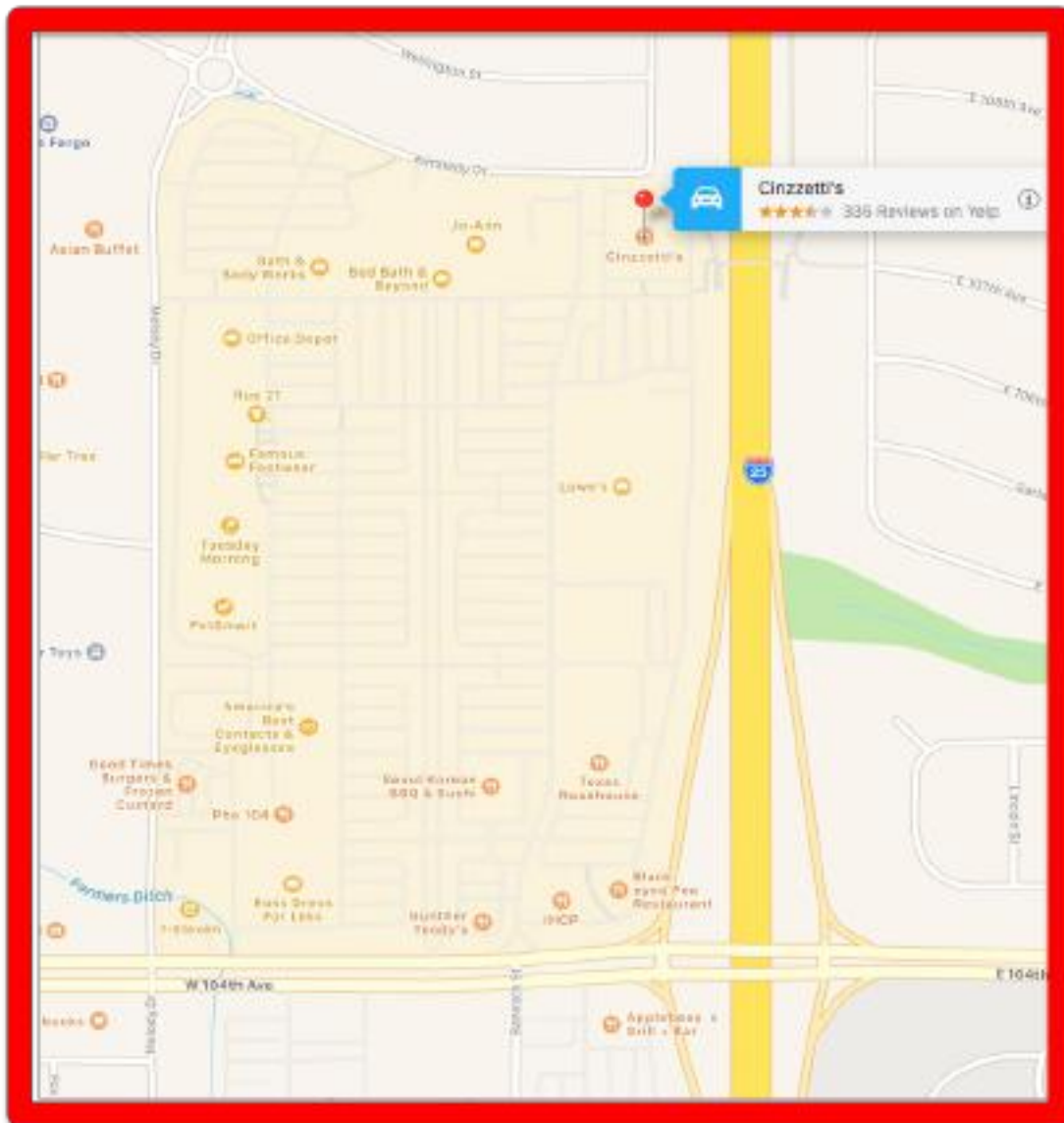
Please complete the form shown below and mail it, along with your check payable to "*MARS Associates Dinner Club*", by Aug 12<sup>th</sup>, 2019 to

	<p>Becky and Gary Englebright 7855 S. Vance Ct. Littleton, CO 80128 303-941-3167 or 303-263-6457 englebright@earthlink.net</p>	
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If you need to cancel, please let us know no later than Aug 11<sup>th</sup> to receive a refund.

### ***Lunch at Cinzzetti's on Tuesday, Aug 20<sup>th</sup>, 2019***

Name(s): \_\_\_\_\_ Number of Attendees: \_\_\_\_\_  
Address: \_\_\_\_\_ Amount of Check: \$ \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_ Check Number: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Date: \_\_\_\_\_



Map to Cinzzetti's  
281 W. 104<sup>th</sup> Ave., Northglenn, CO  
303-451-7300

# ***Lunch on Wednesday, Sep 25<sup>th</sup>, 2019***

Join your fellow MARS Associates for a wonderful lunch at

## ***Mt. Vernon Canyon Club***

24933 Club House Circle, Golden CO 80401

(see map on back)

303-526-0616

Lunch will be served at 12:00 noon.



Featuring a lovely buffet of Salads, Entrées, Desserts, coffee, iced tea and hot tea. Cash bar will be available for all other drinks. (Tax and gratuity included)

**Seating is LIMITED to 130**

**\$29.50/person**

If we reach 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 September 12<sup>th</sup>, 2019 to

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

If you need to cancel, please let us know no later than September 12<sup>th</sup> to receive a refund.

### ***Lunch at Mt. Vernon Canyon Club on Wednesday, Sep 25<sup>th</sup>, 2019***

Name(s): \_\_\_\_\_ Number of Attendees: \_\_\_\_\_

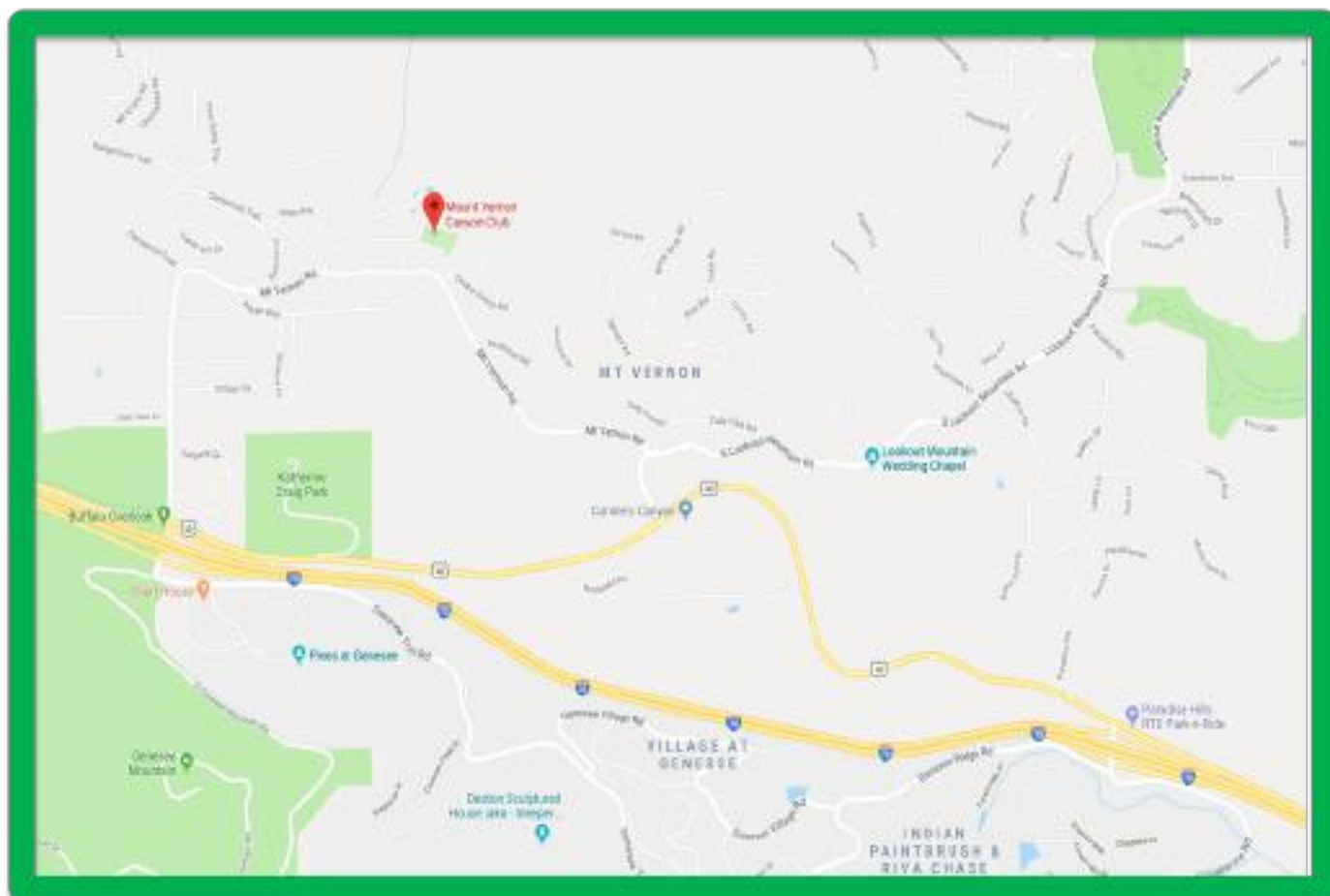
Address: \_\_\_\_\_ Amount of Check: \$ \_\_\_\_\_

City/State/Zip: \_\_\_\_\_ Check Number: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Date: \_\_\_\_\_



## *Map to Mt. Vernon Canyon Club*



Directions: From I70, take exit 256 toward Lookout Mountain. Turn right onto S. Grapevine Rd/County Hwy 45. Turn left onto Highway 40. 1.4 mi turn right onto S. Lookout Mountain Rd. Take 1<sup>st</sup> left onto Mt. Vernon Road. Turn sharp right onto Club House Circle. Mt. Vernon Canyon Club is on the corner.

*24933 Club House Circle*

*Golden CO 80401*

*303-526-0616*

# ***Lunch on Tuesday, Oct 15th, 2019***

Join your fellow MARS Associates for a wonderful lunch at



## ***Red Lobster***



5656 Wadsworth Blvd, Littleton, CO 80123

(see map on back)

303-978-1416

Lunch will be served at 12:00 noon.

Featuring a plated lunch that includes Soup, Salad, Cheddar Bay Biscuits, Entrée, Dessert, Coffee and Tea. Cash bar will be available for sodas and alcoholic drinks. (Tax and gratuity included)

**Seating is LIMITED to 80**

**\$24.00/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 Oct 7th, 2019 to

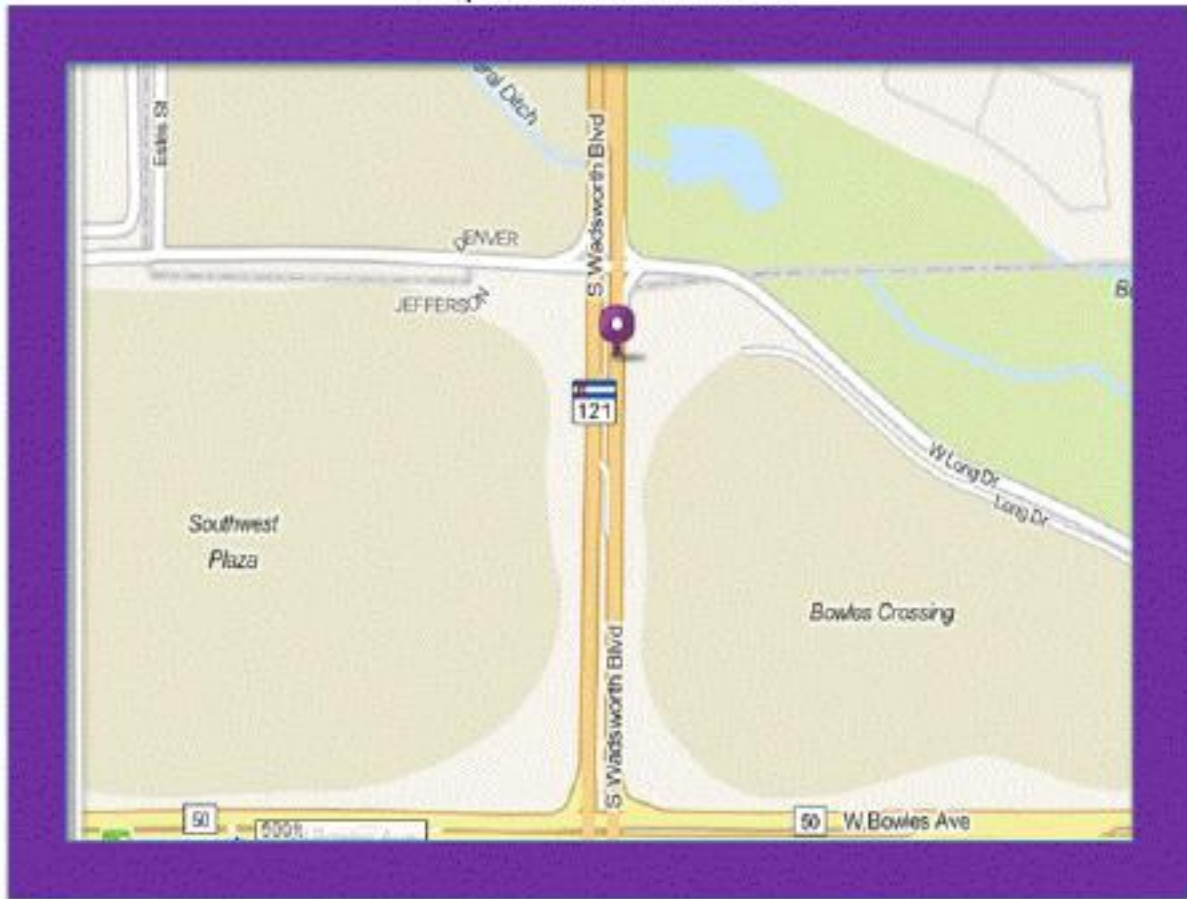
<p>Becky and Gary Englebright 7855 S. Vance Ct. Littleton, CO 80128 303-973-4062 englebright@earthlink.net</p>
--

If you need to cancel, please let us know no later than Oct 7th to receive a refund.

### ***Lunch at Red Lobster on Tuesday, Oct 15th, 2019***

Name(s): \_\_\_\_\_ Number of Attendees: \_\_\_\_\_  
Address: \_\_\_\_\_ Amount of Check: \$ \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_ Check Number: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Date: \_\_\_\_\_  
Email: \_\_\_\_\_

## Map to Red Lobster



Red Lobster is located 1/2 Block north of West Bowles Ave,  
just off Wadsworth Blvd to the East

**5656 S. Wadsworth Blvd**

**Littleton, CO 80123**

**303-978-1416**



## Lunch on Tuesday, Nov 12th, 2019



Join your fellow MARS Associates for a wonderful lunch at

### Angelo's Taverna

6885 S. Santa Fe Dr., Littleton, CO 80120

(see map on back)

720-532-1389

Lunch will be served at 12:00 noon.



Featuring a customized Family Style menu of House and Caesar salad, Grilled Salmon & Risotto (GF), Penne Bolognese, cheesecake and non-alcoholic beverages including sodas, coffee, hot & iced tea and lemonade. Cash bar will be available. (Tax and gratuity included)

**Seating is LIMITED to 60**

**\$30.00/person**

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

Please complete the form shown below and mail it, along with your check payable to *"MARS Associates Dinner Club"*, by Nov 4th, 2019 to

Becky and Gary Englebright  
7855 S. Vance Ct.  
Littleton, CO 80128  
303-973-4062  
englebright@earthlink.net

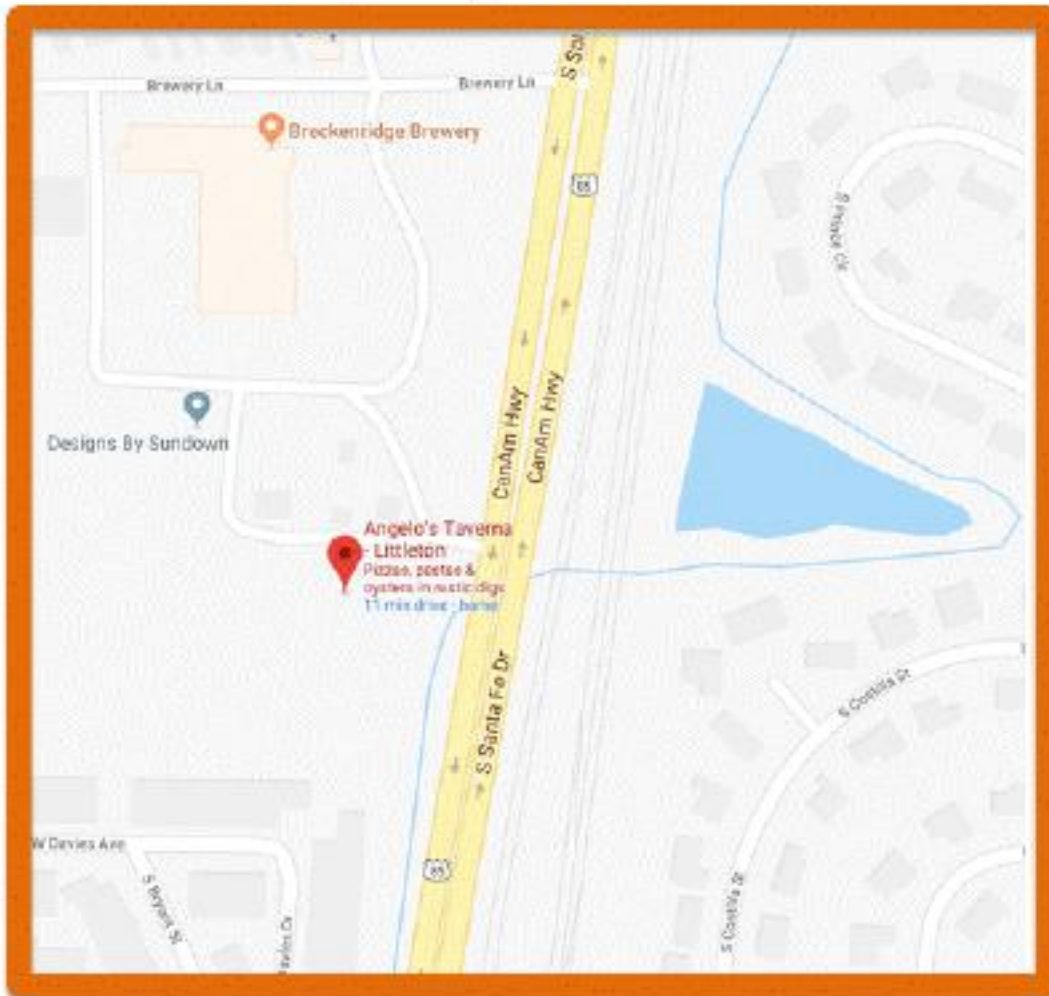
If you need to cancel, please let us know no later than Nov 4th to receive a refund.

### Lunch at Angelo's Taverna on Tuesday, Nov 12th, 2019

Name(s): \_\_\_\_\_ Number of Attendees: \_\_\_\_\_  
Address: \_\_\_\_\_ Amount of Check: \$ \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_ Check Number: \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Date: \_\_\_\_\_  
Email: \_\_\_\_\_



## Map to Angelo's Taverna



From Northbound Santa Fe: Make a U-turn at Brewery Ln. light (street to Breckenridge Brewery) and then make 1<sup>st</sup> right.

From Southbound Santa Fe: Straight through light at Brewery Ln., then make 1<sup>st</sup> right.

**6885 S. Santa Fe Dr.**

**Littleton Co 80120**

**720-532-1389**



**2nd Annual MARS Car Club Show**  
**Wednesday, September 11**  
**11am until 3pm**  
**Clement Park**

Please join us for the 2nd annual MARS Car Club show! This year the show will be held in conjunction with the annual MARS picnic so bring your cool ride (2, 3, or 4 wheel) and share it with fellow MARS members!

As per our 'tradition' we will ask car show participants for a \$10 entrance, this money will be used to provide a small prize for the "People's Choice" and "Judge's Choice" award winners. Any leftover entrance fees will be provided as a donation to the Toys for Tots program. As we approach the show, additional information will be provided via email as well as posted on the MARS webpage and the Facebook MARS Associates and Car Club pages.

If you have any questions you may either call me at 303-912-6217 or email me at [rrieger10731@gmail.com](mailto:rrieger10731@gmail.com).

*Roger*

Please fill out the below form, and include your \$10 entrance fee (check payable to "MARS Associates") and mail to:

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

----- CUT HERE -----

MARS Club Member Name: \_\_\_\_\_

Phone number: \_\_\_\_\_

Email address: \_\_\_\_\_

Type/Model/Year of vehicle to be Displayed: \_\_\_\_\_

\_\_\_\_\_

Check # \_\_\_\_\_

## Senior Recognition Luncheon, July 10, 2019

More Photos are on the [MARS Associates Website](#)



**MARS President Dan Ellerhorst and Beth Buck, LM**



**Guest Speaker Beth Buck, Lockheed Martin**



**Bill Cox**



**Bob Kelley & Pauline Daniels**





**Ardie & Dave Steele**



**Gary & Beverly Warren**



**Bonnie & Gerald Mason**



**Helen & Gary Wilson**



**Hazel Chapman & Beth Maes**



**Lee & Bill Raymond**





**Janice & Tom Redfield**



**Norma & Bob Crosby**



**Linda & James Craig**



**Norma Croucher & Sylvia Dinges**



**Joan & Gene Horak**



**Sid & Caryl Russak**





**Vi Hall & Sherry Vargo**



**Boots & Martha Boothroyd**



**Ardy Baker & Susan Baker**



**Clare & Linda Haag**



**Barb & Duane Del Duca**



**Diane & Bart Wright**





**Eleanor & Fritz Berns**



**Margaret & Ray Ziehm**



**George Dameron & Charyl Rose**



**Margie & Cheng Lin**



**Jackie & Chuck Bird**



**Maureen & Ron Gedeon**



**Super Seniors** (left to right): **Front**—Dale Benesch, Bill Cox, Gary Wilson, Hazel Chapman, Jo Ann Bagg, Tom Jones, Fred Luhman, "Boots" Boothroyd, Pauline Daniels. **Middle**—Bob Baker, Clare Haag, Vi Hall, "Fritz" Berns, Leo Maloney, Joe Presta, Norma Croucher. **Back**—Ralph Mueller, Ray Ziehm, Jack Kimpton, Horace Clair, Gerald Mason, George Dameron, Perry Thornton, Randy Stites, Bill Raymond, Bob Cooke

### **Schedule Addendum (See last page)**

1. BOD meets 1st Wednesday of every other month at The Egg & I, Highlands Ranch at 09:30 am.
  2. Officers meet 1st Wednesday of every month at The Egg & I, Highlands Ranch at 09:30 am.
  3. Bridge Club meets 3rd Friday of every month at 10:00 am at Buck Recreation Center.
  4. Dinner Club (All events are lunch unless otherwise noted): Jul 16-Hickory House BBQ (Parker);  
Aug 20-Cinzetti's (Northglenn); Sep 25-Mt. Vernon (Golden); Oct 15th - Red Lobster (Littleton);  
Nov 12th - Angelo's Taverna (Littleton)
  5. Golf club meets every Thursday from April through Oct of each year.
  6. Hiking Club: Outings on 3rd Wednesday of the month. Check website for Point of Contact for each hike.
  7. Photo Club meets 2nd Thursday every month (except Jun, Jul & Aug) at 1:00 pm at the Bemis Public Library in Littleton
  8. Web Committee meets at 12:00 noon at Sweet Tomatoes, West Bowles, Littleton, on Tuesday prior to BOD/Officer mtg
  9. 2019 MARS Senior Recognition Luncheon- Jul 10 at Pinehurst Country Club
  10. 2019 MARS Day at the Rockies -Jul 31
  11. 2019 Annual Picnic - Sep 11 at Clement Park
  12. 2019 Car Show - Sep 11 at Clement Park (At Annual Picnic)
  13. 2019 Cyber Security Seminar - Sep 17 - Red Rocks Credit Union Corporate Offices
  14. 2019 Holiday Celebration - Dec 4 at Pinehurst Country Club
  15. 2020 Annual Meeting -TBD
- Please review dates and times and notify Dick Sosnay (richardsosnay@gmail.com) if you have any changes or additions.



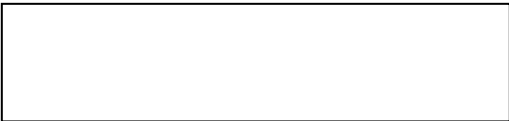


**ASSOCIATES**

P.O. Box 1128  
LITTLETON, CO 80160

**ADDRESS SERVICE REQUESTED**

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



DATE: Jul 2019

**MARS ASSOCIATES EVENT SCHEDULE**

EVENT/MONTH	2019						2020					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Board of Directors	3		4		6		8		4		6	
Officers	3	7	4	2	6	3	8	5	4	1	6	3
Bridge Club	19	16	20	18	15	20	17	21	20	17	22	19
Dinner Club	16	20	25	15	12	-	TBD	TBD	TBD	TBD	TBD	TBD
Golf Club	Thur	Thur	Thur	Thur	-	-	-	-	-	Thur	Thur	Thur
Hiking Club	17	21	18	16	20	18	15	19	18	15	20	17
Photo Club	-	-	12	10	14	12	9	13	12	9	14	-
Web Committee	2	6	3	1	5	2	7	4	3	3/31	5	2
<b>MARS Events</b>												
Senior Recognition Luncheon	10											
CO Rockies Game	31											
Annual Picnic			11									
Car Show			11									
Cybersecurity Seminar			17									
Holiday Celebration						4						
Annual Meeting									TBD			
<b>MARS STAR Schedule</b>												
Items due for MARS STAR												
STAR Flyers Due to Comms	1		22				2			1		
STAR Input to Editor	2		23				3			2		
STAR Repro. Deadline	15			7			14			15		
STAR Mailing	24			16			23			24		