



ASSOCIATES

Volume 28, Issue 2
April 2012

Sponsored by LOCKHEED MARTIN

MARS STAR



MARS Activities this Quarter:

- Senior Lunch: July 11, The Inverness Hotel



OFFICERS

President	Allen Sanders	303-973-4135
President-Elect	Duane Del Duca	303-904-9530
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VP Business	Bill Schrott	303-683-9566
VP Communication	Bob Snodgrass	303-660-8408
VP Membership	Barb Espinoza	303-338-0338
Treasurer	Bart Wright	303-771-2856
Secretary	Linda Stearns	303-797-3557
Historian (JAN)	Dr. Ben Clark	303-979-4178
Historian (APR)	Ed Bock	303-683-0766
Historian (JUL)	Jim Rivers	303-978-9971
Historian (OCT)	Bill Cossaboom	303-795-3226

MARS STAR

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CLUB CONTACTS

Bridge	Dave & Kathy Martz	303-683-9524
Dinner	Ralph/Carole Dergance	303-795-9475
Golf	Bob Demoret	303-933-3802
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EzyBytes	Paul Bingham	303-798-0865

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	Dave Martz (Chairman)	303-683-9524
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Director	Terrie Hamen	303-840-5426
Director	Larry Major	303-904-0439
Director	Al Nemes	303-972-1800

IMPORTANT PHONE NUMBERS

LM Employee Service Center	1-866-562-2363
Savings Information Line (ING)	1-800-444-4015
Aetna Plans	1-888-562-8111
CIGNA Point of Service (POS)	1-800-244-6224
(Hourly Only)	
Kaiser Permanente	303-338-3800
PacifiCare – Hourly only	1-800-877-9777
LMHealthworks Plan	1-877-458-4975
MEDCO Prescription Drugs	1-877-458-4975
Vision Service Plan	1-800-877-7195
Delta Dental of Colorado	1-800-610-0201
Kay Girodo	1-800-610-0201, x609
kgirodo@ddpco.com	
Peliton Benefits	303-850-4798
LTC/Vision/Dental	
Joann Beiler	x771
Janet Saxon	x776

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

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

Cover:

L: MARS Annual Meeting 2012 Officers

R: Cape Canaveral Air Force Station, FL. (Feb. 24, 2012)
A United Launch Alliance Atlas V rocket blasts off from Space Launch Complex-41 at 5:15 p.m. EST with the U.S. Navy's Mobile User Objective System-1 (MUOS-1) satellite. This is ULA's 2nd launch of an aggressive 11 mission schedule for the year and is the 200th flight of the Centaur upper stage. At nearly 15,000 pounds, MUOS-1 marks the heaviest satellite launched to date by an Atlas launch vehicle. MUOS-1, built by Lockheed Martin, is a next-generation narrowband tactical satellite communications system designed to significantly improve ground communications for U.S. forces on the move.



President's Corner

By Allen Sanders

alsal75@comcast.net

I want to express my deepest thanks and appreciation to Bo Rodriguez for his superb leadership as the President of MARS Associates these past two years. His dedication to grow and strengthen the organization has brought about much success. It has been my pleasure to have served with him as the President-Elect. As your new president, I look forward to serving you for the next two years. I am eager to accept the responsibilities and challenges of this new position, working with our team of officers, directors, clubs and volunteers to enhance social, recreational, and other beneficial opportunities for you.

Again this year the Annual Meeting was held at the Crystal Rose special event center in Littleton. I hope each of you in attendance at the Annual Meeting enjoyed the event as much as I did. For those MARS members who were not able to attend, I encourage you to attend this special meeting in future years to hear the year's summary of MARS activities/events, participate in recognition of the MARS Officers, Directors and Volunteers for the past year and the induction of the new ones for the upcoming year, join in the good food and fellowship, and to be informed and entertained by the guest Lockheed Martin speaker. Congratulations to Dale Benesch, Barb Espinoza, and the entire team for planning and conducting a successful Annual Meeting. Our featured presenter was Vernon Thorp, NASA & Commercial Program Manager for United Launch Alliance who gave us a presentation on ULA and NASA programs past, present, and future. As always with these annual guest presentations, Vernon did an outstanding job of bringing us up to date on the status of some of the vital areas of endeavor in our Aerospace community.

Special thanks and recognition were extended to members for the completion of their terms of office in service to the MARS as Officers or Directors:

- Bo Rodriguez for his service and leadership as President the past two years;
- Duane Del Duca for his four years as Treasurer;
- Dale Benesch (assisted by Al Hartford) for his two years of service as VP of Activities;
- Bob Lines for his year of service as a member of the Board of Directors.

Introductions and congratulations were extended to the new officers and Board of Directors, as well as our current incumbents. Duane Del Duca replaces me as President-Elect and will serve in this capacity for the next two years. Duane and I will be working closely together to keep your organization responsive to your needs and desires. Bob Lines is replacing Dale Benesch in managing the role and responsibility of VP of Activities. Bart Wright is rejoining the Officers by replacing Duane Del Duca as Treasurer. Larry Major is rejoining the Board of Directors as an appointment to complete the term for Bob Lines.

Congratulations to Ralph Dergance for being presented the Vernon B. Selby Memorial Volunteer of the Year Award, at our Annual Meeting, for his continued service to MARS and for his community work, including work in several youth educational initiatives and as President and a member of the Board of Directors of Optimist International in Littleton. Runners up for the award were Ed Dash and Lonnie Farmer.

A hard copy of the MARS Annual Report was made available at the Annual Meeting and can be viewed by all on the MARS web site. The report includes a copy of the annual budget, showing last year's actuals and the coming year's planning budget. In spite of rising costs paid by MARS for events, we are holding member prices down by continuing to subsidize a significant portion of the events through the MARS budget.

Our Senior Luncheon is the next Activity to be held by MARS on July 11. This year it is to be at the Inverness Hotel. Due to our increasing numbers of Senior status members in MARS (75 years of age or better as of the start of the FY in March), we expect a larger than ever turnout. Seniors, look for the invitation by separate, first class, mailing around the end of May.

We had a winner who identified her MARS membership number hidden in the STAR text this

past quarter. The winner was Joyce Halliday, who received a free year's renewal in MARS. Look for your number in this issue and call me or any officer and get a free year's membership renewal. Your membership number is on your STAR package mailing label.

I have been in MARS for most of my Lockheed Martin retirement years, and have served as a MARS officer for many of those years, the same as many of you. As President, I will strive to maintain the past excellence of our organization and significantly improve MARS wherever I can. But I need your help. Experience is a wonderful tool for any office or endeavor. But getting in a rut through experience is an easy trap to fall into. My phone number is in the inside cover of the MARS Star. My email address is at the top of this article, and is on the MARS website. If anything comes to mind about how MARS could be more responsive to your needs and desires in a retiree organization, get in touch with me, or any other MARS Officer or Director. Let us know what you think.



Next Up!!!

By Duane Del Duca
(ddelduca@comcast.net)

A new Fiscal Year for MARS is underway. New Officers, New Board Members, and a New Year; welcome to each and every one of you. However, let's not forget the outstanding job our past years leaders have done for MARS Associates. We will miss them all.

What a surprise when, as your Treasurer, I received a phone call and the person on the other end of the line; Allen Sanders said, "**We have a Winner!!**" Yes indeed we did have a Winner; Joyce Halliday had recognized her MARS membership number 2791 in last quarter's STAR. She immediately became eligible to receive her 2012 Dues paid.

Congratulations Joyce!

The STAR will continue to hold the hidden MARS membership number contest. If the number is yours, call me or any MARS Officer and your next membership renewal is free!! The numbers in the four 2011 STARs were for Arthur Whitmore, Jack Dennis, Dennis Perelman, and James Orem. None identified their number and cashed in on their free membership renewal. Recall, your membership number was assigned sequentially by the VP of Membership when you joined MARS and was provided on the Membership Card. If you have lost or misplaced the card, no problem, your number is printed for reference on the STAR package mailing label. If that wound up in the recycle bin, still no problem. Just call your Membership VP and she will gladly let you know your member number and provide you with a new card.

Welcome to those new members who are joining from the Colorado Springs area. We would be honored to have you join us for one or more of the yearly events and please contact our VP of Business for information regarding other MARS benefits.

As Al Sanders wrote last quarter, our community is always looking for help through volunteers. Check out the MARS web site at <http://www.marsretirees.org> under the Volunteer button or call me for details if you do not have internet access. The following organizations are in need of volunteer help/participation: Free Income Tax preparation for low/moderate income taxpayers: The Denver Children's Museum is in need of Exhibit Volunteers to help build, test, and perfect rockets, hovercrafts and other fascinating creations to teach children about the principle of flight; Link-To-Learn is seeking MARS member volunteers to participate in their live web video classes, interactively sharing field experiences in Aeronautical Engineering, Structural Engineering, Astrophysics, and Celestial Navigation; The Denver Museum of Nature and Science has opportunities for volunteering that include out-front and behind-the-scenes activities; ArtReach volunteers provide art and cultural experiences to at-risk and underserved populations; McLain Community High School Literacy Program needs volunteers to be evening tutors, after the short, free training session is completed, to raise students reading levels in order to take the GED test. Tutors are needed in reading, social studies, math, and language arts; Tutors are needed in math and science at Littleton, Dakota Ridge, and Green Mountain High Schools.

We continue to look for your suggestions on what more you would like from your MARS Associates

organization. The more you contact us, the more we will be able to shape your group the way you want it to be. Call or email one of the members of the Board, Officer, or your President. All the information on how to contact us is on the inside cover of the STAR.

From the Editor's Desk

Error Reporting

By Tom Pighetti

If you come across an error when studying your STARS, please contact us so corrective action can be taken. Send e-mail to tipighetti@q.com or shupel@comcast.net or snail mail to MARS Associates, Attn: Editor, Post Office Box 1128, Littleton, CO 80160-1128. Thanks in advance.

Special News

By Matt Grogan

(eaglebird_1@yahoo.com)

No article submitted this quarter.



Activities Updates

By Dale Benesch

(dalebenesch@yahoo.com)

The Annual Meeting was held at The Crystal Rose with Vernon Thorp, ULA/NASA guest speaker on March 14. We were given a brief history of Atlas and Delta launches and of what the future might hold. There were 187 members and guests signed up and in attendance. The food was very good as it has been in the past.

Planning ahead 2012 dates:

- Senior Lunch: July 11, The Inverness Hotel
- CO Rockies Game: August 15, picnic and game
- MARS Picnic: September 12, Clements Park

- Holiday Celebration Luncheon: December 5, Pinehurst Country Club

This is my last item upon the second retirement as VP Activities. My replacement will be Bob Lines. Welcome Bob!



Senior Fare

By William Schrott

(wmschrott@msn.com)

This year's Annual Meeting on 3/14/12 was well attended, even though the number that attended was slightly lower than last year. The food was very good and the guest speaker was outstanding.

It was my honor to announce this year's winner of the Vernon B. Selby Volunteer of the Year Award. There were seven members nominated for this year's award.

Ralph Dergance was the winner of the award. He was recognized for his volunteer work within the MARS Associates organization and his public contributions. After working 36 years at Lockheed Martin he retired in 1999. At that time he was the Director of Acquisition Management for LMA. His volunteer activities that he was recognized for included:

- Board of Directors for the MARS Associates
- President Elect/President of the MARS Associates
- Volunteer for the Science, Technology, Engineering, and Mathematics (STEM) program
- Optimist International member
- President of the Littleton Optimist International
- Board of Directors for the Littleton Optimist International

Several of our vendors also attended the Annual Meeting. There were representatives from Sam's Club, Peliton, Delta Dental, Kaiser Permanente, and Red Rocks Credit Union. Several members took

advantage of the vendors being there to ask questions and enroll in some of the programs offered. There were also several handouts.

In the next two months Delta Dental will identify what the rates will be for 2013. When the rates are communicated to me, I'll disclose them in the next STAR Newsletter.

I am working with different hearing aid businesses to seek possible discounts that can be provided to MARS Associates members. The hearing aid company have listed on the MARS Retirees page no longer exists.



Membership

By Barb Espinoza

(barb.j.espinoza@comcast.net)

Have you renewed your membership? Thank you to those who have and I look forward to seeing renewals soon from those who have not!

MEMBERSHIP STATISTICS

As of March 23, 2012 MARS Associates' active membership is 1,607 including 896 senior members (members who are age 75 and above). Please welcome the following new and returning members (*):

Colorado

Arvada	Mike & Gemmi Holland
Centennial	Dennis & Gayle Brown Myron Kuge
Colorado Springs	Bill & Judy Bragg Clyde & Caleen Garrison
Englewood	Chuck Hermes
Evergreen	Ken & Mary Richards*
Grand Junction	Al Wudell*

Lakewood Don & Amy Skinner

Littleton John & Veanessa Burbage
Doug & Cris Cook
Dave & Carol Zeller

Parker Donald & Scottie Erikstrup

Peyton Wayne & Linda Rasmussen

Other States

Irvine, CA Joyce Dowell

MARS Membership Unit

MARS membership is defined in the policy manual as a family unit consisting of the retiree and spouse (or significant other), although the membership card and mailing data are in the retiree's name. In the event the retiree dies, the spouse becomes the member in his/her own name and may remain a MARS member by continuing to pay the annual dues. Senior membership status (age 75 and above) is based on the retiree's date of birth, even for the surviving spouse member.

Membership Renewal

2012 renewal forms were mailed in the **January** mailing. On your renewal form please verify your personal information including your spouse or significant other information and email address. We will not post your email address on the website unless you give permission.

If you have friends who have recently retired or have not renewed their membership, please talk to them about MARS and the advantages of being a member.

Addresses & Phone Numbers

When you move please remember to include the MARS membership team in your list of people to contact. Notify me promptly by letter, e-mail or phone of any change to home address, phone number or email.

The United States Post Office will not forward bulk mail, therefore, each quarter a number of packages are returned. Not only does the USPS charge for any returned mail but, most importantly, you do not receive the STAR and other important information regarding MARS and Lockheed Martin.

If you regularly spend part of the year away from your address of record, let us know your alternate address and the dates you are there. We will send your STAR mailing to that address!

In Memoriam Data

This section includes published obituary reports and information received directly from MARS members or their families. Please contact me or Roy Kannady with any information regarding the passing of a member or their spouse. We want to make sure their passing is acknowledged in the **In Memoriam** section of the STAR.

Please contact: Barb Espinoza,
VP, Membership, at: MARS Associates,
P.O. Box 1128, Littleton, CO, 80160-1128;
Phone 303-338-0338; or email
barb.j.espinoza@comcast.net

MARS Associates In Memoriam

By Roy Kannady
(kannadyr1@asme.org)

Members

Alpert, James W. "Jim" (D: Mar 2012)
(Survived by Deborah J. "Debbie")
Littleton, CO
[HTTP://TINYURL.COM/6WAOW55](http://tinyurl.com/6WAOW55)

Bertuzzi, Marybelle "Belle" (D: Mar 2012)
(Survived by Santo B.)
Fruita, CO
[HTTP://TINYURL.COM/6RRPQ4V](http://tinyurl.com/6RRPQ4V)

Cary, Lorna S. (D: Mar 2012)
(Preceded by Robert C. "Bob" (D: Nov 1999))
Littleton, CO
[HTTP://TINYURL.COM/7PTXH8K](http://tinyurl.com/7PTXH8K)

Dailey, Paul N. Sr. (D: Sep 2011)
(Preceded by Rosely Eckenfels-Dailey (D: Jul 2009))
Spokane Valley, WA
[HTTP://TINYURL.COM/7AHWK6X](http://tinyurl.com/7AHWK6X)

Evans, William E. (D: Jan 2012)
(Survived by Carol J.)
Seaford, DE
[HTTP://TINYURL.COM/7DLZB4W](http://tinyurl.com/7DLZB4W)

Hardwick, Roger G. (D: Jan 2012)
(Preceded by Margaret S. (D: Sep 2010))
Littleton, CO
No Obituary Published

Hillman, Robert S. "Bob" (D: Jul 2011)
(Survived by Patricia M.)
Gardnerville, NV
[HTTP://TINYURL.COM/7EFRTJJ](http://tinyurl.com/7EFRTJJ)

Hubert, Alexis (D: Aug 2011)
(Survived by Nadeschda "Nadia")
Centennial, CO
[HTTP://TINYURL.COM/7RCHEUY](http://tinyurl.com/7RCHEUY)

Hutchings, Dorothy "Dot" (D: Mar 2012)
(Survived by Curt)
Littleton, CO
[HTTP://TINYURL.COM/7CYLJNV](http://tinyurl.com/7CYLJNV)

Kroc, Richard J. (D: Oct 2011)
(Survived by Mary Lou)
Sun City West, AZ
No Obituary Published

Larison, Vito R. (D: Jan 2012)
(Survived by Ann)
Centennial, CO
[HTTP://TINYURL.COM/6MPHAZA](http://tinyurl.com/6MPHAZA)

McKinnis, Jo Marie (D: Feb 2012)
(Survived by James A. "Jim")
Littleton, CO
[HTTP://TINYURL.COM/7TJTYYC](http://tinyurl.com/7TJTYYC)

Monahan, Loretta Kay (D: Jan 2012)
(Survived by Terrance D. "Terry")
Lakewood, CO
[HTTP://TINYURL.COM/7TMSUR5](http://tinyurl.com/7TMSUR5)

Morgheim, Harvey Lee (D: Feb 2012)
(Survived by Carolyn A.)
Littleton, CO
[HTTP://TINYURL.COM/7PAZHE7](http://tinyurl.com/7PAZHE7)

Parsley, Bruce J. (D: Mar 2012)
(Survived by Patricia K.)
Centennial, CO
[HTTP://TINYURL.COM/7NNQT5Y](http://tinyurl.com/7NNQT5Y)

Zweygardt, Rudy R. (D: Feb 2012)
(Survived by Edith M.)
Westcliffe, CO
[HTTP://TINYURL.COM/7UPOVTG](http://tinyurl.com/7UPOVTG)

Non-Members

Corbin, James D. (D: Jan 2012)
(Survived by Jeanette)
Littleton, CO
[HTTP://TINYURL.COM/842JVEU](http://tinyurl.com/842JVEU)

Hoag, Cheryl "Sherry" (D: Jan 2012)
Titusville, FL
[HTTP://TINYURL.COM/CGKCMAE](http://tinyurl.com/CGKCMAE)

Kadlec, George Joseph Sr. "Joe" (D: Jan 2012)
(Survived by Fran)
Cocoa Beach, FL
[HTTP://TINYURL.COM/CXQR6LE](http://tinyurl.com/CXQR6LE)

Parsons, Rex D. (D: Oct 2011)
(Survived by Mary)
Littleton, CO
[HTTP://TINYURL.COM/6QOL9MX](http://tinyurl.com/6QOL9MX)

Prentiss, Nelson H. Jr. (D: Jan 2012)
(Survived by Ila L.)
Centennial, CO
No Obituary Published

Smith, Oscar Hoyt (D: Dec 2011)
(Survived by Alice)
Littleton, CO
[HTTP://TINYURL.COM/7F45K7U](http://tinyurl.com/7F45K7U)

Von Struve, Henry C. III (D: Mar 2012)
(Survived by Nora)
Westminster, CO
[HTTP://TINYURL.COM/C7873HK](http://tinyurl.com/C7873HK)

Wilson, Earl Robert "Bob" (D: Feb 2012)
(Survived by Margie Jo)
Littleton, CO
[HTTP://TINYURL.COM/899JYME](http://tinyurl.com/899JYME)

Historian's Corner

By Ed Bock
(bock10245@comcast.net)

Commercial Atlas

Atlas has evolved over a period of 55 years from an Inter Continental Ballistic Missile (ICBM) to, with its

Centaur upper stage, one of the world's premier expendable Space Launch Vehicles. It also involves the transformation of Atlas/Centaur from a Government managed program (USAF/NASA), into a Company managed Commercial program, to the current Atlas V EELV USAF managed program.

The Atlas ICBM was developed by General Dynamics Convair for the US Air Force. It first flew in 1957. Centaur, America's first liquid hydrogen/oxygen upper stage, was developed by Convair for NASA to launch seven Surveyor missions that soft landed on the Moon to assess surface conditions in preparation for the Apollo manned missions. Centaur's first successful flight was in 1963.

By the early 1970's, Atlas/Centaur had become one of the Nation's premier systems for launching geosynchronous satellites and planetary escape missions. Under management by NASA Lewis Research Center (LeRC, now Glenn), from 1971 through 1982 Atlas/Centaur launched 39 missions at an average of 3-1/4 missions per year at better than 92% mission success (total of 3 failures). 23 of these 39 missions (59%) were commercial communications satellites (Intelsat & Comstar) with launch services procured through NASA. During this period, Centaur (atop either Atlas or Titan boosters) successfully launched NASA missions to every planet in our Solar System except Pluto (NASA's Pluto mission was launched on an Atlas V in January 2006).

During the 1970's and early 1980's there was some limited evolution of the Atlas/Centaur launch vehicle to enhance performance. Specifically, the propellant tanks on the Atlas booster were lengthened to contain more propellant and booster engine thrust was increased. Centaur's avionics was updated from analog to digital systems. But with few exceptions, improvements to incorporate new mature technology, address quality issues of hard-to-build or install parts, and to streamline manufacturing and launch processes, were rejected based on the government/industry belief that non-mandatory changes increased the risk of flight failure.

The first Space Shuttle launch in April 1981 sounded the death knell for all US expendable launch vehicles; e.g., Atlas, Delta, and Titan. US National policy was to launch all future US missions using the Shuttle. The original Shuttle intent was to support up to 55 launches per year at a marginal payload launch cost of \$118 per pound (not including development and infrastructure costs). Influenced by the US Shuttle decision, the Ariane expendable

launch vehicle was developed by Europe to accommodate their launch needs.

The Atlas/Centaur program, still managed by NASA LeRC, was in a "going out of business" mode for the next seven years to launch previously planned missions. From 1983 to 1989, Atlas/Centaur launched eight times, with two failures (75% mission success). During this period, there was no incentive for NASA to invest in their expendable launch vehicles. Only "make it work" changes (to fix launch failures) were authorized; design improvement changes were not allowed.

The Challenger disaster in January 1986 changed everything. Based on the Shuttle's failure, the unanticipated high cost of Shuttle missions, and the success of Ariane, the US decided that their soon-to-be-terminated government managed expendable launch vehicle programs would instead be turned over to contractor management, and the government would procure their launch services commercially.

General Dynamics acquired the remaining Atlas/Centaur Program assets from NASA in exchange for performing one launch service (AC-69 CRRES). These assets included the Intellectual Property; one mostly completed vehicle, lots of parts, and the Launch Complex 36 ground support equipment at Cape Canaveral. The Commercial Atlas I configuration was essentially the same Atlas/Centaur used in the late 1980's by NASA, but with a larger all aluminum payload fairing. Eleven of these "commercial" Atlas I's were flown, but three of these suffered in-flight failures (73% mission success). As a result of these failures and industry consolidation, General Dynamics agreed to sell the Atlas Program to Martin Marietta in late 1993.

While Atlas I missions were ongoing, General Dynamics developed the Atlas II (MLV II) for the US Air Force and commercial users. Atlas II incorporated a large number of improvements that had been developed or prototyped over the past decade, mostly under government sponsorship. This funding was provided via Independent Research and Development activity and Technology Initiatives. Ironically, General Dynamics was not permitted to implement any of these improvements while Atlas/Centaur was a NASA program.

A common perception by the government (and perhaps also General Dynamics) was that launch vehicle changes which improved either performance or reliability would also increase recurring cost.

Atlas II proved the opposite; major performance and reliability improvements resulted in substantially reduced hardware, assembly, and launch processing costs. A good example was Atlas II's replacement of Centaur's jettisonable insulation panels with fixed foam insulation. This one change eliminated a complicated jettison event, significantly improving reliability. Vehicle weight was also reduced, improving payload performance. Launch vehicle processing time and complexity at Cape Canaveral was reduced. Both vehicle hardware and operations costs were significantly lowered. 1,100 part numbers were eliminated. Other changes incorporated into Atlas II provided similar benefits.

In addition to major configuration changes, a philosophy of continuous improvement was adopted and institutionalized by the Atlas commercial program. Continuous improvements primarily addressed parts availability problems, quality issues, assembly difficulties, and launch processing impacts. A straightforward, non-bureaucratic process for evaluating and accepting improvement changes was instituted, along with a rigorous Systems Engineering assessment and approval process. As a Commercial Program, Government approval and funding of changes was not needed, although customers were kept informed. Expendable launch vehicles offer the optimum platform for continuous improvement; each vehicle performs its mission, and then is discarded. Configuration control need only last until each vehicle is launched.

Starting with Atlas II, the vehicle evolved into Atlas IIA with upgraded Centaur engines and IIAS with strap-on solid rocket motors. At Lockheed Martin, evolution proceeded with the Atlas IIIA with a new Russian RD180 booster engine, IIIB with an upgraded Centaur, and the current Atlas V Evolved Expendable Launch Vehicle (EELV) family for the USAF with a new booster, new strap-on solid rocket motors, new Centaur avionics, and new payload fairings. In addition to these major evolutionary steps, component and subsystem changes to be used in the next family, were incrementally incorporated and flight proven on the current vehicles. From 1995 on to completion of the Commercial Program, probably no two Atlas vehicles flown were identical.

Both our government customers and LM company management were initially very dubious of the Atlas continuous improvement philosophy. However, as Atlas continued to fly successfully, this approach was at first reluctantly tolerated, and then finally embraced. US Government customers now very

much see the benefits of Atlas continuous improvement. The same NASA customer that would not consider flying a change for the first time in the 1990's, is now very supportive of flying major new systems for the first time on their Atlas missions.

How did this continuous improvement philosophy affect cost and reliability? During the 1990's, Atlas did become cost competitive with Ariane and other international launch vehicles of similar performance capability. And beginning with Atlas II, Atlas has achieved 100% mission success. This includes all 100 Atlas flights since March 1993, and encompasses at least 20 "first of a kind" vehicle configurations, where flight failures are more likely. Evolutionary development, coupled with a continuous improvement philosophy, has served Atlas very well. In late 2006, the Atlas V and Delta II & IV Programs were combined under a new company, United Launch Alliance (ULA). Although this signaled the end of the Commercial Atlas Program, the philosophy of continuous improvement has been retained at ULA. Now that the Space Shuttle Program has been completed, Atlas V is being man rated for delivering Astronauts using commercially provided spacecraft.

Bridge Club

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

A quote from Charles Goren appears to sum up the mindset of many bridge players:

"Bridge is not merely a game, as the more naïve of us had thought, but an institution, a neurosis, a compulsion, an obsession, a powder keg, a force for peace, a prime cause of evil, and several dozen other things."

Come join us at our monthly get together! All MARS members are welcome. We play on the **3rd Friday of each month at the Buck Community Recreation Center (Littleton) from 10 AM to 2 PM** (pack your lunch). The club provides the cards and all requirements for the games as well as coffee, tea, and hot water for your enjoyment.

We have couples, as well as singles, playing. If you don't have a bridge partner, the club can assist in finding one for you, if you let us know in advance.

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 1st Quarter 2012 winners are as follows:

January 20 (7 tables)

1st – Bill & Mavis Kacena

2nd – Ernie & Cecile Berliner

3rd – Trudy White & Mike Davis

4th – Fred & Mary Ems

February 17 (6 ½ tables)

North-South 1st – Fred & Mary Ems

2nd – Ed Cortez & Theodore
Bornhoeft

East-West 1st – Ernie & Cecile Berliner

2nd – Bob & Tina Crisler

March 16 (5 tables)

1st – Bill & Connie Lutes

2nd – Ed & Laurie Bock

3rd – Curt & Phyllis Brudos

4th – Ernie & Cecile Berliner

Dinner Club

By Ralph & Carole Dergance
(rhdergance@msn.com)

Your Dinner Club just keeps on enjoying very fine, cost-effective meals in 2012. Your level of participation just keeps increasing with each year. We also continue to receive suggested venues from our members.

We began 2012 with a luncheon at a new venue, **The Chinook Tavern**, on **January 16**, where **60** Associates enjoyed the superior food and ambiance at this wonderful restaurant. This successful event was followed by another private brunch for **61** folks at **Opus** on **February 19**. As usual, the food was great and VERY cost-effective at Littleton's only true five-star eatery. We then revisited the **Buckhorn Exchange** on **March 21** for lunch for **60** members and guests. This was our 10th consecutive year to partake of the unique atmosphere and menu of the historical landmark restaurant. On **April 11** we will have lunch at the new **Tavern** in downtown Littleton. There will be no event in May since your club presidents will be traveling at that time. We will then return to **Pinehurst Country Club** for yet

another superior dinner on **June 20** followed by our annual trek "up the mountain" for a buffet luncheon at **Mount Vernon Country Club** on **July 18**. Events for the remainder of 2012 have been booked:

- Dinner at **240 Union** on **August 22**;
- Luncheon at **Lucile's** in Littleton on **September 19** (new venue);
- Luncheon at **Café de France** (soon to be named "**The Bistro**") on **October 17**; and
- Luncheon at **Garden Terrace** at Inverness on **November 9**.
- #1770

Thanks to your continued enthusiastic support, many of our events reach capacity **well within a week or two of the STAR mailing**. Therefore, you are all advised to get your checks in early.

Please remember that you may send a single check if you choose to simultaneously reserve spaces for multiple Dinner Club events. Please do not combine Dinner Club events with other MARS events (i.e. Holiday Celebration, Annual Meeting, Senior Luncheon, Picnic, Dues, etc.) on a single check. Also, please remember to include the name(s) of guest(s) on the sign-up slips. This will greatly simplify preparation for your events.

We look forward to the continued success of the MARS Associates Dinner Club. We encourage all Associates and their guests to join us for very enjoyable, affordable, and satisfying culinary events.

As we have reported for the past four quarters, we have decided that it is time for us to step down and move on the other activities after 12 years of running the Dinner Club. As you can readily see, we already have booked all of the events for 2012, making the transition to the new presidents quite simple. With 12 years of history, we have developed a financial system, programs that prepare the monthly fliers, a data base of restaurants and associated contacts, a zero-cost checking account, a meal identification system when needed, name tag format and software, etc. All of this capability will be available to the new presidents thereby further simplifying the transition. Please contact us if you want to help your fellow MARS Associates by assuming the leadership of the Dinner Club. It is really quite simple to run and is very rewarding. It is still our plan to turn over the leadership of this club at the end of this calendar year. This really means that the new leaders must be on board by

September 1, 2012 to be able to support the membership mailing cycle in October.

Some more "food" for thought:

"I don't like food that's too carefully arranged; it makes me think that the chef is spending too much time arranging and not enough time cooking. If I wanted a picture I'd buy a painting." **Andy Rooney**

"Never order food in excess of your body weight." **Erma Bombeck**

Buono L'appetito!!!!!!!

Golf League

By Paul Boykin
(flashboykin@aol.com)

Well it's that time of year again! And thankfully so! Approximately 36 members met on March 22 at the Broken Tee Club House to open the 2012 Season; getting reacquainted, sharing the latest rules of golf updates and changes and electing this season's President and Vice President. Having ended the 2011 season with just over 50 active members, we are anticipating several new members this season and are hopeful that we will be adding a group of female golfers to the league before the season ends!

This year's President is Robert (Bob) Demoret, r_demoret@yahoo.com. Bob volunteered for the post and was unanimously voted in along with John Alfeld, jhalfeld@earthlink.net, who will serve as Vice President of the league this year, to succeed Bob in 2013. These two individuals will ensure that the league continues to provide a friendly but competitive golfing experience throughout the 2012 season. If you are interested in joining please give Bob or John a call or stop by one Thursday morning at either Broken Tee in Englewood or Common Ground, Aurora and check us out! We are typically on the course beginning at 9:00 AM.

The weather is looking good and the courses are sure to be in great condition when we begin play on April 5, at Broken Tee, alternating play at Common Ground on April 12 for the remainder of the season. Again we are planning our Championship Tournament for late August.

Photography Club

By John Flater

(jfflater@msn.com)

The MARS Photography Club meets the second Thursday of every other month at 1:30 PM in the Littleton Bemis Library meeting room. Sometimes room scheduling conflicts arise and the meeting date may have to be changed. The current schedule can always be found on the main MARS web site as explained at the end of this report. Normally scheduled meetings for the year are February, April, June, August, October, and December. Meetings always feature a program of projected images presented by members or invited guests. **Visitors are welcome even if they are *not* "photo geeks".**

At many meetings, the subject of the presentation is a TRAVELOGUE in which slides/video of a vacation where the presenter adds narration. If you enjoy seeing images and hearing experiences from others' travel vacations, give the MARS Photo Club a try. After the program we have a coffee break during which members share travel and photography tips.

Some programs are related to photographic techniques and tools and illustrated by slides, prints and/or equipment. **If you and/or your significant other are interested in film or digital photography** join us then for interesting programs, fascinating photos, and an opportunity to upgrade technical and creative photographic skills by sharing knowledge and experiences. New members and guests are always welcome at our meetings, so bring a friend if you like. Ideas, comments, and suggestions for programs are appreciated.

In addition to the presentation, our meetings usually include a competition of images taken by club participants. The image subject matter may be Open (any subject) or for some competitions a specific subject matter. The competition category may be in color and/or monochrome (usually black and white) prints. A participant may submit up to three prints. Awards for 1st, 2nd, 3rd and Honorable Mention may be made depending on the number of images entered. Entries are judged and critiqued by invited judges or club members. After each meeting competition, the **Photography Club** page (section) of the MARS web site <http://www.marsretirees.org> is updated to show thumbnail images of the winning pictures and future meeting topics.

February 9, 2012 rescheduled to **Thursday March 8, 2012** at Littleton Bemis Library, The program topic Australia and New Zealand was a **TRAVELOGUE** presented by Bob Knickerbocker. It was an impressive introduction to some of the most popular locations in these countries. He started in Auckland on the west coast of the North Island with some touring nearby, and then flew to Christchurch the major city on the east coast of the South Island. (Before the recent earthquake.) After a sightseeing cruise for several days it was on to Melbourne (Australia's major city on the southeast coast) and then to Cairns on the northeast coast where he toured nearby rain forest and coastal areas. Finally he finished his trip in Sydney, where a highlight tour was to the famous Opera House. Whew!!!

The meeting photo competition subject was "Open". John Chapter was the judge. Winners are listed below and may be viewed on the MARS website.

- 1st Place "Standing Watch" - Ken Richards
- 2nd Place "Red Tail Hawk Takeoff" - Larry Stearns
- 3rd Place "The Big One Got Away" - Ken Richards

Future meetings

April 12, 2012 – Thursday 1:30 PM Littleton Bemis Library meeting room, The program topic is "The Launch of the Mars Science Laboratory and the Florida Space Coast" a **TRAVELOGUE** presented by John Chapter. Competition subject "**Open**".

June 15, 2012 – Friday 1:30 PM Littleton Bemis Library meeting room, The program topic is "Cruise Trip Around the Horn of S. America" a **TRAVELOGUE** presented by Jim Kummer. Competition subject "TBD".

August 10, 2012 – Friday 1:30 PM Littleton Bemis Library meeting room, The program topic is "Trip to Mendoza Argentina" a **TRAVELOGUE** presented by Roger Giellis. Competition subject "TBD".

To verify meeting dates, competition subject and program topic: go the main MARS web site <http://www.marsretirees.org>, then - click "**Photography**" on the Clubs button at the lower left to get the photo club's webpage. Here you'll see **Check the Meeting Schedule below**. If the Program has the word **TRAVELOGUE**, it's a vacation show-and-tell; the Competition topic is also listed. Come and enjoy both.

Competition reminder: Meeting photo competition entries may be prints as small as 4"x 6" to make it more practical for those using digital

cameras to print images on their own printers. All submissions must be affixed to a matboard/ cardboard or foam backing of at least 8"x10" or as large as 16"x20" for ease of handling and display.

Planner's Report

By Dolph Hellman

(marblehead8hell9dw3@hotmail.com)

This month's article is contributed by Merriam Trube. Thanks a lot, Trube!

7th day skiing 2012

Great day but a different delight!

Up before six, on the road by six-thirty. No, not going duck hunting in February, but up to Loveland ski area for 8 inches of new snow.

C- 470 and I-70 were pretty clear that early and made good time.

Going up past Genesee the rear view mirror picked up the brilliant red orb of the sun peeking over the horizon. Redder than I've ever seen. Had to keep watching it and sure enough just as I topped out before the bridge to Mt Vernon Country Club the entire disk rose free of the prairie but still a bright orange yellow. That was the first treat.

Just past El Rancho I picked up lots of elk tracks on the left for a mile. Many were below my friend Tom Nelson's estate, or place, or home. No animals visible yet. The mountain above Floyd Hill was washed in a pink glow from the dawn. Any elk? Then off to the left there they were in the little grove of aspen just downhill from the stock tank that holds a little water. There must have been fifteen of the sacred creatures, heads high sniffing the dawn and ignoring the pounding trucks and cars flying by. That was the second treat.

Sunshine blessed us all the way to Georgetown and Silver Plume. But it was there you could see up the valley to the West clouds and blowing snow. 7:45 - Parked right up front, number seven on the 12th - should be a lucky day. It didn't look like it. Wind blowing 20 to 30 mph, snowing hard, cold, wind chill at zero or below. This old hand knows how to deal with it - Long Johns, Dockers, and windproof pants on the bottom, above wear a heavy shirt, down vest, heavy jacket and windproof shell. Hand warmers in the mittens, frog skin over the head, face mask, helmet, and goggles finish out the uniform. I took good care to have my Loveland Season Pass (\$35 for an old guy and a member of the Over-The-Hill-

Gang) and my OTHG identification. I figured I'd take at least a couple of runs with my friends in the OTHG and if it was still nasty I'd fold it and go home.

There were about 25 members slowly filtering into the cafeteria. Saw Jim Sapp and Jim Stooksbury that I've skied with for many years. They have altimeters and keep score of how many vertical feet in each day. Sapp recorded over a million verticals a few years ago before he had to have the knee replacement. - A nice group of new and old friends.

By 9:00 AM when we went out to our skis, a miracle had happened. The wind was down to 5 mph. The snow stopped and the sun came out. Wow! This was the third treat.

We did three groomed runs, then one in the new powder that made me work, but felt "sooo good" and then one down the steep, but groomed fire cut. I had a great run pretending I was running giant slalom. Right then my tin knee creaked to me. This is the new titanium knee they put in last year, Nov. 2010. It works fine, but the leg hasn't recovered all its strength. When I say it creaks I don't mean audibly, nor even spiritually, just that the muscle six inches above and to the outside begins to hurt. When it speaks, I listen. It says "want to go home." And so we do. All that fast skiing in the sunshine was the fourth treat.

I like to stop in Georgetown in the museum by the highway. They have great photos of the village, a mounted ½ curl Bighorn Sheep Ram, and a mounted White Mountain Goat. The sheep was found dead of a broken neck below a cliff, perhaps the result of a duel during mating. The Mountain Goat had a patch of fur you could examine. The guard hairs are six inches long and the inner fur is dense and at least an inch thick. The goats survive the winter at 12,000 feet living off the lichen on the rocks and the grass exposed by the high winds. My photo of one was in mid-winter above Arapahoe Basin. Remarkable animals. Coming back on the highway, I spotted a herd of 20 bighorn sheep just to the West of I-70 right down at the level of the road. Georgetown was the fifth treat.

Easy ride home got me there by noon for lunch with Dottie - treat number six.

That night we went to the Denver Symphony - A Brinkman Valentines Special. Treat seven.

Do I Love Colorado? You Bet !!

The Planners meet the first Thursday of each month at 11:15 a.m. at the Country Buffet on South Wadsworth, just north of Bowles. Call Dolph

Hellman at 303-794-0852 if you have questions or need directions.

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

See the Planners button for further info.

The MARS Associates Website

By Jim Kummer

(jkummer@comcast.net)

The MARS website committee divides the maintenance duties, each taking the number of pages within their comfort zone. The intent is that no one gets over-burdened. As webmaster, I have responsibility for the front page, the bridge club page, and the photo club page. The latter I do because I'm also an officer in the photo club.

I also do the Officers/Directors page. That normally gets updated just once a year, with the change in office holders. I just recently made the annual update to that page, and was struck by the realization of how many names keep repeating. Our MARS bylaws limit the number of consecutive terms one may hold office, but nothing stops a committed member from moving from one position to another. In accomplishing the update, in many cases I simply 'cut' the name from one position and 'pasted' that name in another position. Names like Allen Sanders, Linda Stearns, Bo Rodriguez, Duane Del Duca, Bob & Bonnie Snodgrass, Larry Major have all held more than one position over the years. I think that is commendable. It also says that a few individuals are carrying the leadership burden, one that should be shared by more of the membership.

These individuals do a fine job. The rest of the membership could benefit from their example and offer forth their candidacy for office. The officers meet but once a month and the directors but once every other month. There's very little in the way of homework assignments, so the burden is slight. You could bring some fresh insights and ideas to the organization. So, next fall, put your name in the hat for a vacant position - give me some new names to list on the Officers/Directors page.

Employ safe browsing on the web - don't open attachments from someone you don't know, or if there's anything strange, like misspelling for example. Keep your anti-virus software up-to-date, and be skeptical of any solicitation that asks for your personal information. For the browsing pleasure of MARS members, the website committee posts a

"website of the month" - an educational or amusing site to visit. Here are the monthly sites from the last quarter.

January - Spacecraft Designs of the Future

February - Tax Help and Forms

March - Enjoy Laughs Galore at humorlinks.com

See for yourself what's there; visit often the MARS website at <http://www.marsretirees.org>.

Your website committee members are: Paul Bingham, Bob Knickerbocker, Linda Stearns, Duane "Smitty" Smetana, and Jim Kummer (Webmaster).

Denver News /What's New

By Pat Kenning

(patamk@yahoo.com)

Do any of you really old timers remember Bill Dowe who retired in 1988 after 51 years with Martin Marietta/Lockheed Martin (LockMart)? (Suggested by Jerry Dodd, long time friend, fellow retiree, and MARS member).

After 50 years in 1987 Bill Dowe was honored at the prestigious Annual Awards dinner at the City Center Denver Marriott Hotel. His Operational Performance Award citation reads as follows - "For sustained outstanding performance in planning the Kinetic Energy Weapon (KEW) program and in the development and implementation of planning techniques and for continuing outstanding commitment to training junior and new employees." Through the years he received many awards including Planner of the Year. Bill retired the following year, LockMart being the only company he had ever worked for!

With Jeanne, his second wife, they began to travel the world. She brought four children to the marriage in 1977 and he had two. To date, they have 13 grandchildren and five greats!

An only child, born in Baltimore in 1917, after high school graduation, he went to work for the fledgling aircraft company the Martin Company in 1937 as a helper in their manufacturing section for 32 1/2 cents an hour. "A nickel raise was a big deal," he recalls. Still chipper, Bill confesses he quit smoking when cigarettes went from 2/25 cents to 15 cents a pack! Dowe served in the Navy during WWII for only 7 months when the war ended. He went back to Martin Marietta and continued his education,

graduating from Maryland Institute and Baltimore College of Commerce. In the early '50's, he was sent to England for five months to study the manufacturing techniques of the English bomber, The Canberra, similar to the Martin B-57. He recalls that was his favorite assignment.

Bill married the girl next door, Mary and they adopted two children before being transferred to Denver in 1956. His new job was heading Production Control Operations for the new Titan I ICBM. He joined the Plans & Program Department upon his return from Huntsville in 1970. He then worked on SkyLab, Peacekeeper, and the KEW program among others.

Bill recalls his most demanding assignment challenge was establishing the Configuration Management System for the Titan I program, the first of its kind in the aerospace industry.

Dowe's most recent and unique honor happened earlier this year when he was awarded his 65 year pin from Friendship Masonic Lodge #185, an extremely rare prize!. Both he and Jerry are El Jebel and Consistory members, though not as active as they were formerly.

Bill's hobbies include collecting stamps and coins, playing cards with remaining friends, and keeping up his scrapbooks. He has lived in the Littleton area since first moving here. Yup, he's had a few joint replacements, but he keeps on keeping on. Way to go, Bill Dowe!

RAMM - Baltimore News

By Dottie Ruth
(dotruth725@comcast.net)

Mother Nature fooled us again! The RAMM organization decided last winter to have no meetings in January or February due to snow or icy conditions in the past and instead have those meetings in July and August. Well, this has been the 5th warmest winter we have had here in Baltimore since they have been keeping records. For those that love snow, it has been disappointing and for the school children, who look forward to "snow days," it is devastating and that goes for their teachers as well.

We aren't complaining too much as we have saved on fuel bills and less doctor visits for back injuries due to shoveling that horrible, nasty white stuff. Stores have been having gigantic sales on snow

shovels and bags of salt. Let's see what mom has in store for the summer.

Though we had no meetings the officers have been busy planning the Spring Fling dance for May and our picnic in June. Our first meeting of 2012 is March 28th and we are looking forward to seeing our fellow members again. Some faces will no longer be with us and how we miss our buddies of so many years, but those members at the meeting will be full of stories, still talking of the old Martin Plant and how great it was working for Glenn L. Martin. We never tire of hearing of the "good old days."

We hope to have more news in the next Mars report. We wish you a happy and enjoyable spring. Take care and stay healthy!

Cape Canaveral News

By Dick Olson
(Olsons5145@aol.com)

George Joseph (Joe) Kadlec, Sr., 82, was called to heaven on Thursday, January 26th by his Lord and Savior Jesus Christ from his home in Cocoa Beach.

Born on January 3, 1930 in Norfolk, VA to George and Estelle Kadlec. He moved his family to Cocoa Beach in 1957 to work as a propulsion technician on the Atlas program for Convair, General Dynamics and Lockheed Martin. He retired in February 1996. He remained active with the Rickity Rocketeers, the First United Methodist Church, and his community. He loved tending to his many fruit trees and crabbing in the river. He never met a stranger and made everyone he met feel special!

Donations may be made to First United Methodist Church Memorial Fund or Hospice of Health First, Dairy Rd, Melbourne, FL 32904.

Cheryl (Sherry) Hoag passed away Friday, January 20, 2012. She was a really nice gal and will be missed. Born in Dayton, Ohio, she remained in Ohio for many years until the love of her life brought her to Florida in the spring of 1984.

Sherry made a career at Lockheed Martin, working on several different launch projects, retiring in 2007 to spend more time with family. She never lost her passion for space and accepted a position as a Public Relations Specialist with the US Spacewalk of Fame Foundation.

In lieu of flowers, the family recommends donating to the [American Cancer Society](#).

Had about 25 people attend the Feb. luncheon. Hal Castleton, Jerry Moskkovitz, Abe Smith, Joe K., Hank Ambrose, Harry Holmes Jack Johnson, Chris Huchmacher, Nick Geso, Roger Schmidt, Ken Hawes, Herb Pugh, Roger Barickman, Bob Anderson, Don Anderson, Brooks Kilgore, Larry Gleason, Bill Rhode, Ed and Guy McMechen, Delmar Henry and Kenneth Webb. Jack Johnson is down from North Carolina and is thinking about selling his home in Cape Canaveral and moving to Chattanooga to be closer to their daughter. If you want to live close to the beach go for it.

Had about 25 retirees show up for the March luncheon. Regulars Hal Castleton, Nick Geso, Don Anderson, Harry Holmes, Jim Weddle, Bill Rhode, Abe Smith Joe K., Cal Mosier, Larry Cuppett, Walt Starkey, Bob Rodamer, Dick Hinshaw, Brooks Kilgore, Ken Hawes, and a few we haven't seen for awhile, Ray Caldwell, Rich Tennis down from up north, Roger Wright, Bill Case, Bob Maschner, Ray Hall, and Sylvia and John Sansing.

Want to congratulate the Atlas V crew on their successful launch last month. Pretty launch.

If you worked on any of the Martin or Titan programs at the Cape, Denver, Vandenberg, or where ever, come join us for lunch at Kay's BBQ located on SR 520 just west of Clearlake Road in Cocoa on the first Thursday of each month. You should be there between 11:00 and 11:15 AM. You will meet many of your old friends.

I'm not sure if you remember, but Mike Chambliss was a PAGE technician back in the Titan days. His wife Penny was just transferred to hospice where she is expected to pass in the near future. Please pass onto the team an email from Mike...

All,

I wanted to send this out to my joke group letting y'all know that for the next 3 weeks I will not be at work because of my wife Penny. As some of you know in 2010 she was diagnosed with stage III C ovarian cancer. She had a major surgery, and the chemo treatments, and the cancer was in remission until about Thanksgiving when her CA125 (ovarian cancer marker number) numbers started doubling, She was well enough to ride the toys for tots run, but then she tried one set of chemo treatments (they wanted to run 6 sets) in Jan. They made her even sicker (1 week in the hospital), and the doctors

told her that the chemo treatments would help her for only 2 to 4 months. She decided her quality of life was not worth being sick every day for an extra 4 months. Up until last week she was doing good, with at home hospice care for her pain. This past Friday they wanted to admit her at a hospice house, which is where she is at. I will be gone until probably April 2.

So please keep the prayers going for her that she continues to have no discomfort.

My home email is blwn392@yahoo.com

Thanks ahead of time for everything,
Mike

REALM (Orlando News)

(realm.fl.news@gmail.com)

By Andrea Lawrence
(andrea.j.lawrence@gmail.com)

No article submitted this quarter.

Martin Marietta Retiree's Club (Vandenberg News)

By Charlie Radaz
(fcmjradaz@aol.com)

We started 2012 with a rousing program from our tax accountant member, Bill Hughen, Sr. on the latest and greatest income tax law changes. He provides a handy handout each year summarizing the tax news for the year and explains the "in's and out's" of things. The meeting was held at Embassy Suites in Lompoc on 26 January with 33 attendees. President Neil Baker presided and welcomed new Board of Directors April Hardy and Doug Gilman. Mrs. Bud Gurney (Carol) repeated her lucky ways by winning the 50-50 drawing of \$33 after having won at our Christmas Luncheon!!!

Our February 23rd meeting was held at the Santa Maria Inn with 33 members participating. Three former directors of Vandenberg Operations were in attendance, Bob Rhodus, Otha Jones, and Tom Heter. Our guest speaker was Mr. Bernard (BJ) Jones, President, Allan Hancock, Joint Community College District Board of Trustees (Lt. Col., USAF, Ret., SLC-4 Site Commander, Titan IV). He addressed the growth and makeup of the college, as

well as the newest and ongoing upgrades to the Santa Maria and Lompoc campuses. 50-50 drawing winners were Mrs. Bert Heter (\$18) and Charlie Radaz (\$20).

The next meeting will be at Pea Soup Anderson's in Buellton on 29 March.

Our club normally meets the last Thursday of each month at noon. We rotate between Santa Maria, Lompoc and Buellton. All former employees, their spouses, and associate contractors are welcome to attend, visit, and share informal stories.

Call Aubrey Collins (805) 937-8299 or Neil Baker (805) 733-1847 for location and reservations.

United Launch Alliance News

By Christa Bell

(christa.m.bell@ulalaunch.com)

United Launch Alliance Atlas V Rocket, with 200th Centaur, Successfully Launches Mobile User Objective System-1 Mission

American Hero Sen. John Glenn Reflects on History of Atlas Program

Cape Canaveral Air Force Station, FL., (Feb. 24, 2012) – A United Launch Alliance Atlas V rocket carrying the Mobile User Objective System-1 (MUOS-1) for the United States Navy lifted off from Space Launch Complex-41 at 5:15 p.m. EST. This was ULA's 2nd launch of an aggressive 11 mission schedule for the year and at nearly 15,000 pounds, MUOS-1 marks the heaviest satellite launched to date by an Atlas launch vehicle.

"ULA is honored to serve with our mission partners in the preparation and launch of this important mission for the U.S. Navy and for our U.S. Air Force customer," said Jim Spornick, ULA vice president, Mission Operations. "This integrated team is singularly focused on ensuring that these critical MUOS satellites are safely delivered, providing vital communications capability to the women and men protecting our freedom around the world."

Sen. John Glenn, who attended the first launch attempt for MUOS-1 at ULA's Atlas Spaceflight Operations Center, reflected on his flight aboard an Atlas vehicle in 1962.

"The program has come a long way since 50 years ago when I launched on an Atlas launch vehicle,"

said Glenn. "I'm just glad the latest version is still doing such important work for our nation."

This mission was launched aboard an Atlas V Evolved Expendable Launch Vehicle (EELV) 551 configuration vehicle, which includes a 5.4-meter diameter RUAG Space payload fairing along with five Aerojet solid rocket motors attached to the Atlas booster. The Atlas booster for this mission was powered by the RD AMROSS RD-180 engine and the Centaur upper stage was powered by a single Pratt & Whitney Rocketdyne RL10A engine.

"The 200th flight of the Centaur is a very big milestone for the ULA team, as Centaur has been pioneering space launch for the last 50 years," said Spornick. "It took 33 years for Centaur to accomplish those first 100 flights. The next 100 Centaur launches have been accomplished in just 17 years."

The first Centaur launches in the early 1960's demonstrated the extremely high performance that can be achieved with a liquid hydrogen/liquid oxygen rocket stage. The technologies developed and verified were subsequently used for the Saturn I, Saturn V, Space Shuttle, Titan, and Delta programs.

MUOS is a next-generation narrowband tactical satellite communications system designed to significantly improve ground communications for U.S. forces on the move. MUOS will provide military users 10 times more communications capability over existing systems, including simultaneous voice, video and data, leveraging 3G mobile communications technology.

Developed by the United States Air Force to assure access to space for Department of Defense and other government payloads, the EELV Program supports the full range of government mission requirements, while delivering on schedule and providing significant cost savings over the heritage launch systems.

ULA's next launch is the Delta IV NROL-25 mission for the National Reconnaissance Office scheduled in March 29 from Space Launch Complex-6 at Vandenberg Air Force Base, CA.

ULA program management, engineering, test, and mission support functions are headquartered in Denver, CO. Manufacturing, assembly and integration operations are located at Decatur, AL., and Harlingen, TX. Launch operations are located at Cape Canaveral AFS, FL., and Vandenberg AFB, CA.

For more information on ULA, visit the ULA Web site at www.ulalaunch.com, or call the ULA Launch Hotline at 1-877-ULA-4321 (852-4321). Join the conversation at www.facebook.com/ulalaunch and twitter.com/ulalaunch.

Following photos were taken at the MARS Annual Business Meeting.

MARS ASSOCIATES EVENT SCHEDULE

EVENT/MONTH	2012									2013		
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Board of Directors		2		3		5		7		2	6	6
Officers	4	2	6	3	7/31	5	3	7	5	2		6
Bridge	20	18	15	20	17	21	19	16	21	18	15	15
Dinner	11	NONE	20	18	22	19	17	9	NONE	TBD	TBD	TBD
Golf	Thu	Thu	Thu	Thu	Thu	Thu	Thu					
Photo	12		15		10		11		13		14	
Planners	5	3	7	5	2	6	4	1	6	3	7	7
EzyBytes	27	25	29	27	31	7	26	NONE	7	25	22	29
Web Committee	3	1	5	2	7/30	4	2	6	4		5	5
Sr. Luncheon				11								
CO Rockies Game					15							
Annual Picnic						12						
Holiday Celebration									5			
Annual Meeting												TBD
Items due for MARS STAR			25				1			TBD		TBD
STAR Mailing	18			8/1			24			TBD		

DATED: Apr, 2012

Notes:

1. BOD meets the first Wed of every other month at The Egg & I near Southglenn at 09:30 AM.
2. Officers meet the first Wed of every month at The Egg & I near Southglenn at 09:30 AM.
3. Bridge meets the third Fri of every month at 10:00 AM at the Buck Recreation Center.
4. Dinner Club: 4/11/12 - The Tavern @ 11:30 AM; 5/12 - No event; 6/20/12 - Pinehurst Country Club @ 5:30 PM; 7/18/12 - Mount Vernon CC @ 11:30 AM; 8/22/12 - 240 Union @ 5:30 PM; 9/19/12 - Lucile's @ 11:30 AM; 10/17/12 - Café de France @ 11:30 AM; 11/9/12 - Garden Terrace at Inverness @ 11:30 AM; 12/12 - No event; 1/13 - TBD; 2/13 - TBD; 3/13 - TBD
5. Golf meets every Thu from Apr through Oct of each year.
6. Photo meets the second Thu of every other month at 1:30 PM at the Bemis Public Library in Littleton.
7. Planners meet the first Thu of every month at 11:15 AM at the Country Buffet on S. Wadsworth.
8. EzyBytes computer volunteers meets at 1:00 PM the last Fri of the month except Nov when we meet on the first Fri in Dec - all meetings at the Buck Recreation Center.
9. Web Committee meets on Tue prior to the BOD and/or Officers meeting at noon at Sweet Tomatoes.
There will be no meeting Jan, 2013
10. 2012 Annual Senior Luncheon is Jul 11, at Inverness.
11. 2012 CO Rockies Game is Aug 15. Lunch @ 11:30 AM, game @ 1:10 PM, against the Milwaukee Brewers.
12. 2012 Annual Picnic is Sep 12 at Clement Park.
13. 2012 Holiday Celebration is Dec 5 at Pinehurst CC.
14. 2013 Annual Meeting is TBD.

This schedule is maintained by Duane Del Duca, MARS President Elect