



Lockheed Martin Management Association Retirees Newsletter

Looking Forward Towards A Wonderful Retiree Future!

MAY 2011

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PRESIDENT'S MESSAGE



I just returned from my vacation adventure to Thailand and a side trip to Singapore. I had quite an interesting and fun experience. I visited via a one hour plane flight, 1/2 hour taxi, and 1 1/2 hour ferry boat from Bangkok to Phi Phi Island, stayed in a grass shack bungalow. Snorkel diving and lots of partying on the beach every night. One of the many highlights was meeting up with 12 enjoyable people I befriended from New

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Carolyn Hobbs Our LMMAR Programs Chair

Carolyn has volunteered as our Programs Chair and served for 4 years. She worked for Lockheed and Lockheed Martin for 45 years and retired on July 7, 2007. Carolyn started as a summer hire for seven consecutive summers. She says, "It was a great experience; the pay was very good compared to other summer jobs. I gained invaluable insight into the dynamics of business and a vision into everyday business with the leading giant of the aerospace industry. This business was new territory and a very exciting time to be involved on a daily basis". She graduated from high school and earned an AA degree from San Jose Community College in Business Administration. Carolyn hired in the Gemini Program Office. She was in a position to meet all the astronauts when they visited Lockheed, John Glenn, Neil Armstrong, Gus Grissom, Frank Borman, John Young, Buzz Aldrin to name a few. She was able to collect all of the astronaut's signed photos. Carolyn worked on many programs, Gemini, HOE, ERIS, DMS, THAAD and with many great leaders. She held the position as Salary Admin in the executive office directly for George Scott, Retired General Little, Bill Loomis, Linda Reiners and supported Dan Tellep and Dave Montague. She says, "the programs were electrifying and very challenging. Along the way I met many accomplished and very nice people, both employees and customers". She was awarded the National Management Association "Outstanding Member of the Year Award" for the Lockheed Bay Area Management Association Chapter under MA President Joe Reickerd.



As LMMAR Programs Chair, she planned all luncheons for every other month. LMMAR President Ken Koga's vision for luncheons was a different theme for every luncheon and an exciting party/celebration atmosphere. Carolyn had many challenges to successfully accomplish the luncheons. This included picking the theme, entertainment, venue, food selection, meeting the time schedule, working with limited budget and promoting the luncheons. Carolyn has been an asset to LMMAR accomplishing the successful luncheons.

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Zealand, Britain, Germany, Australia, Guam and California to honor me with a birthday party at an evening open air restaurant. This beautiful Island reminded me of the old TV Show "Fantasy Island". Phuket Island, stayed in a room on the beach.

Toured the Island on motorcycle. After 11 hours of riding, I was glad to be alive. Chiang Mai. rode an elephant and river rafting in Thai bamboo river rafts. Singapore, rode the tallest Ferris Wheel in the World and toured the city. Bangkok, went swimming in the seven level water fall pools. This was a challenging walk up to all seven water fall levels, people partied every night. Met many friendly Thai and people from around the World. I had to pinch myself to believe what I was experiencing and not dreaming. I have a lot of cherished memories.

Back to my normal life. July 1, 2011, the start of the new LMMAR Administration Term is approaching fast. We have four important LMMAR Officer positions open, President, Secretary, Newsletter Editor and Web Master. This is an opportunity to share your new ideas, promote fellowship and support for fellow retirees. Please email or call me. Will you do it?

Our popular LMMAR Luncheon, "Aloha Hawaii" will be on 6/17/11 at Michael's At Shoreline Restaurant. Get in the island spirit! Signup early, this will be a fun event! See Activity Calendar or Flier.

Be Happy!

Ken Koga
President
kkoga04@sbcglobal.net

MEMBERSHIP

New Members:

none

Changes:

None

Point Of Contact For Address

Changes And Other Member Concerns:

Lmmar
P.O. Box 3847
Los Altos, Ca 94024

Norm_Dhom@Earthlink.Net

Norm Dhom,
Membership Chairman

BRIDGE

Apr 5, 2011 individual duplicate – No Game

Apr 7, 2011 pairs duplicate - 1st place – Chet Hayes & Ted Hinshaw, 2nd place – Angie Schynert & Bob Vigeant , 3rd place – Tom Counihan & Jerry Vaughan.

Apr 12, 2011 individual duplicate – No Game...

Apr 14, 2011 pairs duplicate 1st place – Tom Counihan & Jerry Vaughan, 2nd place – Angie Schynert & Bob Vigeant 3rd place – Chet Hayes & Ted Hinshaw..

Apr 19, 2011 individual duplicate - 1st place – Dan Sloan, 2nd place – Chuck Schmidt, 3rd place – Roger Abegg.

Apr 21, 2011 pairs duplicate— 1st place – Angie Schynert & Bob

Vigeant, 2nd place – Gary Bea & Chuck Schmidt, 3rd place – John Parker & Tony Zadel.

Apr 26, 2011 pairs duplicate - 1st place – Chet Hayes & Ted Hinshaw, 2nd place Angie Schynert & Bob Vigeant, 3rd place - Gary Bea & Chuck Schmidt

Apr 28, 2011 pairs duplicate - 1st place – (tie) Angie Schynert & Bob Vigeant and John Parker & Tony Zadel, 3rd place - Gary Bea & Chuck Schmidt

TRAVEL

Travel Chairman Vern De Vincenzi
916-408-4852

Talbot Tours: 800-662-9933

SEPTEMBER 24–29, 2011. Get your cowboy hats and boots! We are headed out to Custer State Park. We will spend five nights near Mt. Rushmore where you will enjoy the outdoors in South Dakota. Inclusive tours are; Crazy Horse Memorial, Mount Rushmore, Boot Hill, Badlands National Park, Wall Drug, Buffalo Roundup Steam Train ride, Deadwood, Art Festival and the Journey Museum in Rapid City. Price per person dbl occ. \$1490.00 Single \$1740.00 includes Roundtrip Air, Shuttle service to and from San Jose, taxes and driver/guide gratuities, **SOLD OUT** WAIT LIST IS AVAILABLE

OCTOBER 23 –25 HOLLOWEEN AT THE RANCH. Board the motor coach for a trip to the Wonder Valley Ranch your home for the next two nights. Nestled on 75 Acres in the Foothills of Sierra National forest in Central California. Enjoy the great outdoors, Horse drawn Trolley Tours, Square Dancing, Hayride with a Cowboy Singer, Horse Race, **HOLLOWEEN PARTY AND MUCH MORE.**

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\$455 per person double occupancy

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DECEMBER 30, 2011–JANUARY 3, 2012. NEW YEARS EVE IN TUCSON. So much to do and see Price per person \$1575.00

MARCH 19-APRIL 2, 2012 SAN FRANCISCO TO THE HAWAIIAN ISLANDS TO AND FROM SAN FRANCISCO. This is a trip to lay back and relax as you will not have to use the airlines. Enjoy all the activities that are available aboard ship, including a Casino, Spa, pool also you may like to have a massage. You will be spoiled when you return to your home. Cabin prices start at \$2095.00. Brochures are available Cabin space is going fast

Press Release

Lockheed Martin Announces First Quarter 2011 Results

BETHESDA, Md. , April 26th, 2011 –

- Net sales of \$10.6 billion
- Earnings from continuing op-

erations of \$548 million

- Earnings per share from continuing operations of \$1.55
- Cash from operations of \$1.7 billion
- 2011 outlook for earnings per share and cash from operations increased due to a favorable resolution of certain tax matters

Lockheed Martin Corporation (NYSE: LMT) today reported first quarter 2011 net sales of \$10.6 billion, compared to \$10.3 billion in 2010. Earnings from continuing operations for the first quarter of 2011 were \$548 million, or \$1.55 per diluted share, compared to \$519 million, or \$1.38 per diluted share in 2010. Cash from operations in the first quarter of 2011 was \$1.7 billion, compared to \$1.6 billion in 2010.

The first quarter of 2011 included a FAS/CAS pension adjustment of (\$231) million, which reduced earnings from continuing operations by (\$150) million, or (\$0.43) per share. The first quarter of 2010 included a FAS/CAS pension adjustment of (\$110) million, or (\$0.19) per share, and an unusual tax charge of (\$96) million, or (\$0.25) per share resulting from legislation that eliminated the tax deduction for benefit costs reimbursed under Medicare Part D, which together reduced earnings from continuing operations by (\$168) million, or (\$0.44) per share.

“We had a solid operating and financial start to 2011,” said Bob Stevens, Chairman and CEO. “We focused on

executing on our programs while continuing to find affordable solutions, because we and our customers need to make every dollar count. In this new reality shaped by an increasingly complex global security environment and an uncertain economy, we remain committed to providing value to our customers while achieving strong financial results for our shareholders.”

The Right Way to Drink Wine

JoAnn E. Manson, MD, DrPH

Harvard Medical School

Should you raise a glass "to your health" – and if so, is red wine best?

What we know now...

Pros vs. cons. Consuming moderate amounts of alcohol may lower a woman's risk for heart disease by 20% to 40%, primarily by raising HDL "good" cholesterol, reducing clotting and decreasing inflammation. *But:* Drinking increases the risk for cancers of the breast, larynx and digestive tract and for hemorrhagic (bleeding) stroke. *What tips the scale:* For women below age 50, who are more likely to get breast cancer than heart disease, alcohol carries a net risk. For women in their 50s and beyond, who are at higher risk for heart disease than for breast cancer, there may be a net benefit to drinking alcohol in moderation.

Red wine and resveratrol. Some research suggests that red wine delivers greater health benefits than other alcoholic beverages – possibly due to its high levels of antioxidants called

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polyphenols. In studies with mice, the polyphenol *resveratrol* extended life span and slowed signs of aging by turning on normally inactive longevity and vitality genes called *sirtuins*. However, you would need to consume 1,000 bottles of red wine per day to get a resveratrol dose equal to the amount tested in mice! What's more, other studies suggest that health benefits derive from alcohol itself, not from red wine specifically. *My opinion:* If you do drink, choose whichever type of beverage you prefer.

Heavy metal warning. A recent study found potentially toxic levels of heavy metals in some wines. Heavy metals have been linked to cancer and neurological disorders, such as Parkinson's disease. Though more research is needed, it may be prudent to limit consumption of wines from Austria, Eastern Europe, France, Germany, Greece, Portugal and Spain. Wines from Argentina, Brazil and Italy were found to have safe levels of heavy metals. No US wines were studied.

What moderation means. Due to metabolic differences, women generally can tolerate only half as much alcohol as men before becoming intoxicated. Moderate drinking for women means no more than one drink – five ounces of wine, 12 ounces of beer or 1.5 ounces of liquor – per day. *But:* Even this amount can boost cancer risk, so I recommend a limit of one drink three to four times per week or half a drink per day.

The case for abstinence. If you don't drink, there's no reason to start. There are safer ways – exercising, watching your weight, eating healthfully, not

smoking – to protect your heart. Avoid alcohol if you have a personal or family history of alcoholism or a type of cancer linked to alcohol... have liver disease or ulcers... take a blood thinner, such as *warfarin* (Coumadin)... or are pregnant.

Bottom Line/Women's Health interviewed JoAnn E. Manson, MD, DrPH, professor of medicine and women's health at Harvard Medical School and chief of the division of preventive medicine at Brigham and Women's Hospital, both in Boston. She is one of the lead investigators for two highly influential studies on women's health – the Harvard Nurses' Health Study and the Women's Health Initiative. Dr. Manson is the author, with Shari Basuk, ScD, of *Hot Flashes, Hormones & Your Health* (McGraw-Hill).

Press Release Lockheed Martin Scientists Discover Mechanism That Could Feed Solar Explosions

PALO ALTO, Calif., April 14th, 2011 – Coronal Mass Ejections (CMEs) are violent solar explosions that can propel up to 10 billion tons of the Sun's atmosphere – at a million miles an hour – out through the corona and into space. These fast, powerful ejections can take as little as 18 hours to reach Earth and give rise to geomagnetic storms, which can disrupt radio transmissions, induce large currents in power lines and oil pipelines, seriously disrupt spacecraft and be extremely hazardous to astronauts. New instruments on advanced spacecraft have provided fresh insight into these

cataclysmic phenomena, and illuminated a path toward predicting space weather.

In a paper published today in the journal *Nature*, researchers from the Solar and Astrophysics Laboratory (LMSAL) of the Lockheed Martin [NYSE: LMT] Advanced Technology Center (ATC), along with colleagues at the Harvard-Smithsonian Center for Astrophysics, Kyoto University, and the High Altitude Observatory of the National Center for Atmospheric Research (which is sponsored by the National Science Foundation) – have discovered a turbulent convective flow system in solar "quiescent" prominences suspended in the corona – the Sun's outer atmosphere – that point to a mechanism by which hot coronal plasma (and presumably magnetic flux) are injected upwards into the coronal cavity system. Coronal cavities are large magnetic flux ropes suspended in the corona, typically in the polar regions of the Sun. These flux ropes all eventually erupt in the form of CMEs that can impact the interplanetary and terrestrial space environments.

"How these large flux ropes erupt is a poorly understood fundamental process in the science of space weather. Our discovery points to a way in which intermittent 'bubbles' in solar prominences can inject new mass and magnetic flux into the flux ropes, thus slowly building up their magnetic buoyancy over time. These 'bubbles', which can be as wide as several Earth diameters, are analogous to the blobs of material in a Lava Lamp that are

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heated by a light from below, become buoyant, and rise to the top to deposit their energy, then drop back down again. By this mechanism coronal cavity flux ropes could grow slowly until they are able to exceed the 'tethering' forces of overlying magnetic fields and thus erupt as CMEs," said Dr. Thomas Berger, lead author of the Nature paper, and solar physicist at the Lockheed Martin Solar and Astrophysics Lab at the ATC. "If we can show in further research that the prominence bubbles are indeed magnetic flux emergence events taking place below prominences, we can verify that we've found a new mechanism for transferring magnetic flux from the convection zone into the corona, and perhaps establish a predictive tool for the eruption of CMEs based on the rate of observed flux injection."

The researchers used observations from the Atmospheric Imaging Assembly (AIA) on NASA's recently launched Solar Dynamics Observatory (SDO) and NASA's Focal Plane Package for the Solar Optical Telescope (SOT) on the Japanese Hinode satellite. Both instruments were designed and built at the ATC.

It was the high spatial and temporal resolution of SOT, combined with the broad temperature coverage of AIA that unlocked the mystery. SOT movies from 2006–2009 reveal dark "bubbles" forming below 10,000 K prominence material. These bubbles go unstable and form turbulent upflow plumes that rise into the prominence and the 1,000,000 K "coronal cavity" above the prominence. SOT images

alone couldn't identify the source of the bubbles' buoyancy—was it magnetic field concentration or thermal energy that led to the buoyancy relative to the heavy prominence above? In August 2010, using a simultaneous prominence observation by SOT and the newly launched AIA instrument suite, Berger and his team discovered that the bubbles were heated to temperatures of at least 250,000 K and more likely 1,000,000 K before rising into the prominence. This is 25-100 times hotter than the overlying prominence and implies that in addition to any magnetic buoyancy in the system, there is significant thermal buoyancy as well.

"This discovery is significant because it revises the common view that the magnetic field in the corona dominates the gas pressure and allows only simple, laminar, flows along magnetic field lines. Here we establish that the prominence bubbles and resultant plumes are a form of the Rayleigh-Taylor instability, a buoyant turbulent flow system that, combined with the cool downflowing plasma in quiescent prominences, represents a form of convection, or overturning motion in the prominence/corona system – the first confirmed discovery of convection in the solar outer atmosphere," added Berger. "It is apparent that our understanding of basic forces at work in the corona must be revised to include turbulent motions that can deform the magnetic field lines and produce novel flow and mixing systems."

The Solar and Astrophysics Laboratory at the ATC conducts basic research into

understanding and predicting space weather and the behavior of our Sun including its impacts on Earth and climate. It has a 47-year-long heritage of spaceborne solar instruments including the Soft X-ray Telescope on the Japanese Yohkoh satellite, the Michelson Doppler Imager on the ESA/NASA Solar and Heliospheric Observatory, the solar telescope on NASA's Transition Region and Coronal Explorer, the Focal Plane Package on the Japanese Hinode satellite, the Solar X-ray Imagers on GOES-N, -O and -P, the Extreme Ultraviolet Imager instruments on NASA's twin STEREO spacecraft, and the Helioseismic and Magnetic Imager and the Atmospheric Imaging Assembly on NASA's Solar Dynamics Observatory. The ATC is currently building both the science instrument and spacecraft for NASA's Interface Region Imaging Spectrometer (IRIS), a Small Explorer Mission scheduled for launch in late 2012.

The ATC is the research and development organization of Lockheed Martin Space Systems Company (LMSSC). LMSSC, a major operating unit of Lockheed Martin Corporation, designs and develops, tests, manufactures and operates a full spectrum of advanced-technology systems for national security and military, civil government and commercial customers. Chief products include human space flight systems; a full range of remote sensing, navigation, meteorological and communications satellites and instruments; space observatories and interplanetary spacecraft; laser radar; ballistic missiles; missile defense systems; and nanotechnology research and development.

May 2011

Activity Calendar

1. **LMMAR Executive Board Meeting.** First Monday of each month unless holiday conflict, then second Monday. 9:30 a.m. Bldg. 157-Front Lobby Conference Room. Contact Ken Koga (408) 946-7292.
2. **LMMAR Newsletter Mailing Session.** Volunteers needed. Second Thursday of each month. 9:00 a.m. Bldg 157-Litrium. Contact Norm Dhom (408) 732-2742.
3. **LMMAR Travel.** Cruises and Tours. See Travel Section of Newsletter.
4. **LMMAR Bridge Card Players.** Join the fun! Every Tuesday and Thursday, 12:00 noon. Moved to new Palo Alto Elks Lodge. Contact Chuck Schmidt (408) 253-4965.
5. **Lockheed Martin Blood Bank.** Second Wednesday of each month. 8:00 a.m.- 3:00 p.m. Bldg. 163. LMMAR Contact Norm Dhom (408) 732-2742.
6. **Lockheed Martin Toys-For-Tots.** Donations Accepted. **LM Toys-For-Tots Cookbooks are available: \$8.00 Ea. or four for \$25.00.** LMMAR contact Carolyn Hobbs (408) 248-3348.
7. **Lockheed Martin Second Harvest Food Bank.** Donations Accepted. LMMAR contact Carolyn Hobbs (408) 248-3348.
8. **Join the Fun! LMMAR "Aloha Hawaii" Luncheon.** Friday, June 17, 2011, 11:30 am. Michaels At Shoreline Restaurant, 2960 N. Shoreline Blvd, Mountain View, Ca. \$24 per person. Contact Carolyn Hobbs (408) 248-3348 or Lucille Wilson (408) 225-9566. RSVP by 6/13/11. Cancellation policy on flier. See Flier.

LMMAR NEWSLETTER

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