

For Northrop Grumman & TRW Legacy Retirees

VOL. XXV NO. 5

HAPPENINGS AT NORTHROP GRUMMAN

Aerospace Systems Sector (NGAS)

NAVAL AIR STATION PATUXENT RIVER, Md. – NGAS and the U.S. Navy have completed the first arrested landing of the X-47B Unmanned Combat Air System (UCAS)



carrier demonstration aircraft on the deck of the USS George H.W. Bush. The aircraft landed while the aircraft carrier was under way off the coast of Virginia. The X-47B aircraft took off from the Naval Air Station. A mission operator aboard the carrier took control of the aircraft and monitored the flight operations. During this landing, the

Frank Warren

X-47B completed the 35 minute journey to the carrier and caught the three-wire with the aircraft's tailhook. On May 14, the X-47B became the first unmanned aircraft to be catapult launched from a Nimitz class aircraft carrier. On May 17, the aircraft performed the first in a series of precision approaches and touchand-go landings on a carrier by an unmanned system.

Electronic Systems Sector (NGES)

LONDON – NGES has been awarded a contract by the United Kingdom Ministry of Defence (MoD) to support its Large Aircraft Infrared Countermeasures (LAIRCM) systems, which are designed to protect aircraft from infrared surface-to-air guided missiles. Under the terms of the five-year, \$120 million (£80m) contract, NGES will provide repair, engineering sustainment, logistics, and training services to the MoD. The work will be performed at Northrop Grumman's specialist diagnostic and technical support center in Chester, U.K., and at its U.S. repair facility in Rolling Meadows, Illinois. NGES's IRCM systems are now installed or scheduled for installation on more than 700 military aircraft to protect approximately 50 different types of large fixed-wing transports and rotary-wing platforms from infrared missile attacks. The system functions by

July/August 2013 Your Ballot is Inside **Please Vote!**

Annually the TRA Board nominates its Officers and Membersat-Large for the coming year. These names are then submitted to the members to either ratify or to nominate other candidates. By nominating just one candidate for each position, we avoid the disappointment that can happen when a person agrees to run, then does not win the election.

Officers serve for a one-year term, while the Directors-at-Large are elected for two years. These longer terms for the latter group help bring continuity to the management and daily operation of the TRA. Directors-at-Large are limited to six successive years (three terms) while Officers may serve only two consecutive terms, with the exception of the Treasurer, who may serve up to five consecutive terms.

Please take the time to vote. Your votes show that you support the nominating committee and those other hardworking individuals that help make TRA strong.

You can vote by e-mail or by completing the enclosed ballot and mailing it in. Just follow the instructions on the ballot.

Cal State LA Needs You

Since Ted Nye retired from NG in 2011, he has been teaching engineering at Cal State University, Los Angeles. He now has a combined engineering class of seniors, mechanical and electrical engineering students (about 120), that do applications oriented senior design projects (about 25 projects). With about 4-5 students per project, these one year efforts can be on anything from designing medical delivery devices to creating automated test equipment for spacecraft, to building hybrid automobiles.

If any retirees have an interest in spending an hour or so a week helping to mentor one of these projects, Nye would like to hear from you. "What I can promise is your time will be highly valued, your experience will affect the lives of students, and the university environment can provide you opportunities for learning too — with modern tools such as Matlab, Solidworks, LabView and others."

For more details, contact Ted Nye at 310-251-2502 or tnye@calstatela.edu.

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TRA for Northrop Grumman Retirees

<u>The Retirees Association (TRA)</u> welcomes the retirees of Northrop Grumman and TRW.

2013 OFFICERS

Darrell Ausherman	President
Dena Bouskos	Vice President
Bob Doll	Treasurer
Jay Seidman	Secretary
Jack Trost	Immediate Past President

2013 DIRECTORS-AT-LARGE

Budd Cohen, Ira Green, Rose Marie Keidel, Tony Gomez, Marcy Morrison, Carol Schamp, and Jack Williams.

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

Publication Staff:

Al Hausrath, Editor; Frank Warren, Contributing Editor; Tom Carroll, Kathy Hanken, Roger Harmon, Mary Holcomb, and Del Suarez, Photographers; Lee Rathbone, Carol Schamp, and Karin Petersen, Copy Editors.

Contacting TRA

TRA'S NN GAZETTE

TRA, P.O. Box 1276, Redondo Beach, CA 90278 **Bv Phone:**

310-833-5827

By Email:

By Mail:

<u>TRA@tra-spacepark.org</u> Your emails will be routed to the appropriate source. And, if we have your e-mail address on file, we send out special alerts to TRA members at infrequent intervals. To get on the TRA email list, just send us a brief email requesting to be added to it.

By Web Page:

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

For Membership:

TRA Membership is open to all Northrop Grumman and TRW legacy retirees at \$10 per calendar year. First year free. Application on web page or call 310-833-5827.

NG/TRW Retirees Meetings Around the U.S.

GROUP	MEETING LOCATION	TIME & DATE	OTHER INFO	CONTACT
TRA	Bldg. S/Cafeteria, Space Park	3rd Thurs. Monthly	Business Meeting 1:30 p.m.	No reservations needed. All Members Welcome
ATD Friends &	Hacienda Hotel	1st Monday in Nov.	Social, Nostalgia and Lunch	Don Reeves, Jack Trost, Carol Schamp cschamp@aol.com 310-377-2194
Colleagues	El Segundo	11 a.m. to 2 p.m.	Res Deadline: Fri. 10/25/2013	
Brevard Retirees	Various Locations in Brevard, N.C.	1st Wed. 8 a.m. 3rd Wed. 5 p.m.	Social	Al & Daughn Connarn 828-884-4993 aconnarn@yahoo.com
Central Coast Chapter	Various Locations in the Central Coast Area	Various days: call Zaiser for details	Social	George Zaiser 805343-2631 gzais@msn.com
Houston	Baybrook Denny's, 19212 Gulf Fwy	3rd Tuesday	Social	Gary Dinsmore 281-461-6270
Chapter	Friendswood, Tex.	8:30 a.m.		samngary@att.net
Huntsville	Ryan's Buffet	2nd Tuesday	Social	Jim Troy 850-797-0044
Chapter	1808 University Drive NW, Huntsville	11:30 a.m.		www.TRA-Huntsville.org
Las Vegas	Various Locations in Las Vegas Metro Area	Last Tuesday 11:30 a.m.	Social	Carol Noblet 702-889-6773 fiftysumthn300@yahoo.com
Northern	Old Brogue Pub	3rd Friday	Social	Bill Gehrke 703-759-0527
Virginia	Great Falls, Va.	11:30 a.m.		wgehrke@att.net
NW Riverside	The Church of the Good Shephard	4th Thursday	Social	Rosalie Moyer 951-925-1214
County, Hemet	Hemet, Calif.	11:00 - 2:00		Glenn Ortiz 951-679-1015
Ogden	Cracker Barrel Restaurant Layton, Ut.	1st Thursday Breakfast	Social	Fred Zeuthen 801-476-0656 fzeuthen@earthlink.net
San Diego	Event Dependent	3rd Tuesday	Social or Board Meeting	Jim Denton 858-385-0150
Chapter		Alternate Months	http://sandiego.tra-spacepark.org	JWDenton@san.rr.com
Temecula	Various Locations in the Temecula/Murrieta	2nd Wednesday	Social	Maureen Locken 951-244-7654
Valley	Area	Lunch		maureen_locken@yahoo.com
The Mountain Folks	Various Locations in the Denver Area	First week of each quarter	"We do have fun!"	Carl Winkelman 303-693-0034 winkelman@att.net
TRIN	Community Room, WFCU Western Way, Torrance, Calif.	2nd Thursday 1:00 p.m.	Investment Info based on monthy newsletter reviews	Mike Pauls 310-379-2707 Imikep@earthlink.net
Ventura	Mimi's Cafe	1st Tuesday	Social	Fred Blaich 805-499-0012 or
Romeos	Thousand Oaks	Lunch		Harry Stroud 805-653-5117

IN MEMORIAM

Name	Date of Death
John A. Christie	August 6, 2012
Irwin J. Groce	DOD Unknown
William "Kieth" Hartel	June 6, 2013
Robert J. Lano	May 15, 2013
Earl Burgess MacCuish	May 2, 2013
Harrison C. Mondy	February 16, 2013
Eva G. Morrow	DOD Unknown
William Veaize Murphy	June 20, 2013
Thomas Raynard (Ray) Powe	ell April 18, 2013
Archie S. Riggins Jr.	June 5, 2013
Emily H. Stallings	May 5, 2013
Robert Dean Wanselow	August 6, 2012
Kathleen Wilkinson	June 21, 2013
James Wolfinger	July 3, 2013

The first step in notifying Northrop Grumman of a retiree's death is to call the Benefits Service Center at 800-894-4194. For many retirees, there is a Burial Benefit which will be paid to the beneficiary upon proper notification of death. The Benefits Center does NOT notify TRA of the death due to privacy laws.

If you know of a deceased retiree that should be included in the "In Memoriam" column in future NNGs, please submit the following by mail or email to the TRA office: name of the deceased; date of death; and the name of the person submitting the information.

Important Contact for Retirees

Northrop Grumman Benefits Center

www.benefits.northropgrumman.com Select "Retiree Connection" Or by phone: 800-894-4194

Here you can get help on health benefits, pensions, savings, and to report a death. It's all voice activated, so just listen to the instructions and answer the first few questions to reach a representative.

Future TRA Events

TRW Day at WMoF Tour of JPL **Holiday Party** Alice Lord Spring Fling August 10, 2013 October, 24, 2013 **December 6, 2013** Mid April, 2014

HAPPENINGS

Continued from Page 1

automatically detecting a missile launch, determining if it is a threat, and activating a high-intensity, laser-based countermeasure system to track and defeat the missile.

ROLLING MEADOWS, Ill. - NGES has been awarded a \$173 million performance-based logistics contract to provide support and sustainment services for the LIT-ENING advanced targeting system. Under the five-year agreement, NGES will provide logistics support, technical support to the field, aircrew and maintenance training, depot repairs, and other associated services. NGES will support the LITENING targeting systems operated by the Air Combat Command, Air Force Reserves, Air National Guard, Marine Corps, and Marine Corps Reserves. NGES will also provide support services to the Italian and Spanish navies. LITENING's forward-looking infrared, charged-coupled device, laser imaging sensors, advanced image processing, and digital video output provide superior imagery, allowing aircrews to identify and engage targets under a wide range of battlefield conditions. LITENING has been integrated on a wide variety of Coalition aircraft.

► LONDON — NGES has been selected by the Metropolitan Police Service (MPS) to provide its CommandPoint[™] application as the core solution for the MPS' new command and control requirements. The framework agreed between the MPS and NGES will enable the MPS to use the CommandPoint[™] application at the core of its new command and control system, which is planned to go live in October 2015. Currently, the MPS handles between 12,000 and 15,000 emergency and nonemergency calls per day. There are more than 2,000 operators employed to answer calls and dispatch officers to incidents.

Recent New Members

We welcome the following new members in July.

Gordon A. Dressler Maren Kennedy Linda A. Lipscomb Bill J. Moulton Mary Robinson Marianne Saraceno **Robert B. Stokes** Andrew Thompson Manhattan Beach, CA Tehachapi, CA El Segundo, CA Torrance, CA Los Angeles, CA Gardena, CA Rancho Palos Verdes, CA Corona Del Mar, CA

We hope these new members will send a note to us for the Mail Pouch, telling us a little about themselves and where they worked at Northrop Grumman. Send to tra@tra-spacepark.org or to TRA, P.O. Box 1276, Redondo Beach, CA 90278.

TRA'S Annual Business Meeting was held on June 21, 2013, in the Patio Café, with more than 200 retirees and guests present. The key presentation was a video of Si Ramo's witty rememberances

at his 100th birthday party. Information tables from the Credit Unions, TRA Membership, and The Company Store were also available. Outside on the patio many Art and Craft exhibits offered their wares. These photos are by Mary Holcomb. To see the complete set of her photos, go to the TRA web page: www.tra-spacepark.org.



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Candidate Biographies

DARRELL AUSHERMAN: Darrell grew up in Columbia, Missouri where he was active in Boy Scouts and Sea Scouts. He joined TRW's Aerosciences Lab in 1969 with a Ph.D. in Aerospace Engineering from the University of Missouri. He worked in the Applied Technology Division for both the Hardness and Survivability, and Fluid & Physics Lab. Darrell retired in 1998 and volunteers for several community organizations including the TopSail Youth Program, which provides character-building, and sail-training for at-risk kids. He is Chairman of the TRA Archives Committee, and served for three years as President of TRA.

DENA BOUSKOS: Dena retired from Aerospace Systems Sector in January 2011 after almost 38 years of service. During her career in Human Resources she held a number of senior HR positions supporting Program, Functional, and Sector staff organizations. While she served as the Space Technology Sector Director of Compensation, Benefits, and HRIS, the TRA organization reported to her for five years which gave her an understanding of the benefit that retirees offer the company. For the past two years, Dena has served on the TRA board as Membership Chair and VP for the last year. She enjoys the freedom of retirement, travel, catching up with friends, and the never ending projects around the house!

CHARLIE CLENDENING: Charlie retired from NGC in 2012 after 35+ years at TRW/NGC. He joined the TRW ATD Engineering Sciences Laboratory after a short Air Force tour following receiving a Ph.D. in Physics at Cornell University and a B.S. degree from Case Institute of Technology. He supported a number of diverse programs, primarily in laser related areas. His final assignment was as a Technical Fellow and the chief scientist on the ABL Program.

ROBERT DOLL: Bob spent most of his 30 years at TRW/NGC in the Grounds Systems Department of the Hardness and Survivability Laboratory. More recently he has supported cryocooler flight vibration testing and dynamic loads analysis for Titan IV and Delta IV boost vehicles for Launch Systems Integration. He obtained his BSME from CSULA, MSME from USC, and PhD from UC Berkeley. He retired in 2004 and has served 2 terms as President of TRA and is currently serving his second term as treasurer.

IRA GREEN: Ira began work in the Space Sciences Lab in STL in 1964 in Space Physics and was involved with numerous space craft launches and experiment data analysis of spacecraft data. Forty years later in 2004 found Ira managing the group providing network security and computer networking and busy integrating that function into the Northrop Grumman infrastructure and retiring. After retiring from NGC, he became involved in property management and is now assisting in managing 55 units. He is active on the finance committee of the Palm Springs Tennis Club, Treasurer and Manager of the Tract 2578 Condominium Association, Vice President of the Surfside III Condominium Association, and Vice-president of the Northrop Grumman Recreation Club Space Park Video Association. He is also on the Board of the American Czech Association. He loves to travel. Ira is currently on the TRA Board.

MARCY MORRISON: Retired in 1998 (kind of); but worked as editor/coordinator on proposals for 10 more years. Chairman of Activities committee for TRA helping to make the Holiday party, Spring Fling, and Summer Reunion enjoyable gatherings for our retirees. Introduced some day trips for TRA members. Helped form the fund raising arm of 1736 House. Was 1 of 5 winners for Woman of the Year award. Active in garden club, square dancing, traveling, hiking, plays.

CAROL SCHAMP: Carol has been a TRA member since retiring 15 years ago, after 28 years at Aerojet Electro-Systems (DSP sensors), Northrop Electronics (CCD arrays) and TRW (FleetSatCom, TDRSS, M4/R5). She held various technical and management positions in hardware development and systems engineering & test, including those of Director and Program Manager. Carol has a B.S. in mathematics/physics and a MSEE in solid state electronics and communications; she was a member of IEEE, Tau Beta Pi (President), IAE (Fellow) and SWE (President and still active). Carol serves on the board of the Peninsula Symphony Association. She is currently a Director-at-Large for TRA.

JACK WILLIAMS: Jack retired in 1991 after 33 years of service. Most of his years at TRW were spent in Facilities management and as an Executive Administrator in DSG/SIG. He has been active in TRA, serving as a President, Secretary, Treasurer, and is a member of the Archives Committee. Jack and his wife Ann are active in church, are members of the South Bay Genealogy Society and a ski club. They enjoy traveling and gardening, as their time permits.

TRA's NN GAZETTE

TRW Technology Major Firsts

This list of TRW Technology First is from the TRA Archives. Its source is unknown.

(The organization became TRW, Inc. in 1965. The organizational names of the company prior to this date are listed in italics following each item.)

- Two piece automotive engine valve (1903) *Cleveland Cap Screw Co.*
- Silcrome aircraft engine valve (1921) *Electric Welding Products Co.*
- Sodium-cooled engine valves for transatlantic flight. Spirit of St. Louis (1927) *Steel Products Co.*
- Production sodium-cooled engine valve (1941) *Thompson Products, Inc.*
- Automobile power steering (1952) *Thompson Products, Inc.*
- Automotive ball-joint suspension system (1953) *Thompson Products, Inc.*
- Private company to build a spacecraft, Pioneer 1 (1958) *Thompson Ramo Wooldridge, Inc.*
- Overseas ground station for NASA (1958) *Thompson Ramo Wooldridge, Inc.*
- Spacecraft to transmit pictures of Earth (1959) *Thompson Ramo Wooldridge, Inc.*
- TTL integrated circuit (1962) Thompson Ramo Wooldridge, Inc.
- Spaceborne nuclear detonation detection system, Vela (1963) *Thompson Ramo Wooldridge, Inc.*
- Operational hydrazine spacecraft attitude control system (1968)
- Deep throttleable (10 to 1) rocket engine for manned space flight, Apollo Moon landing (1969)
- U.S. satellite system for strategic defense, Defense Support Program (1970)
- Global military communications network, DSCS (1971)
- Spacecraft to explore Jupiter (Pioneer 10, 1973) and Saturn (Pioneer 11, 1979)
- Biological laboratory in one-foot cube to search for life on Mars, Viking (1976)
- Megawatt-class continuous power laser (1980)
- One micron VLSI circuit (1981)
- Ground-based deep space surveillance system (1982)
- Spacecraft to leave our solar system. Pioneer 10 (1983)
- Functional very-high-speed integrated circuit chip (1983)
- Low thrust lift of satellite to proper orbit, TDRS (1983)
- Automotive seat belt pretensioning device (1987)
- Automotive remote keyless entry system (1988)
- Complete frontal air bag and sensor system (1989)
- Millimeter microwave monolithic integrated circuit

chip (1989)

- Functional 0.5 micron very high speed integrated circuit super-chip containing several million transistors (1989)
- High temperature superconductive logic gate (1989)
- Dual mode spacecraft thruster for attitude control (1990)
- Computer system for use in the battlefield (1993)
- Aircraft avionics produced on an automotive electronics assembly line (1994)
- Spacecraft to operate continuously for 30 years, Pioneer 6 (1995)
- Gallium arsenide wireless integrated circuit for under \$1.00 (1995)
- Hyperspectral instrument in space, SSTI (1996)
- Pulse tube minicryocooler in space (1996)
- Patent (1994) and production of gas-fueled inflator for air bags (1997)
- Single source production of complete occupant restraint system (frontal and side impact air bags and sensor-diagnostics and seat belts) (1997)

TRA Would Like your Email Address

To improve our communication with our members, the TRA Board has decided to make increased use of email. While the NNG will still be a primary source of information, use of email will be more effective in announcing last minute program changes, interesting meetings of other aerospace groups, and other events available on short notice.

Currently, about 80% of the members have given us their email addresses. But since this list has rarely been used, many of the email addresses are no longer valid. In a recent test mailing to all the TRA members in the South Bay of Los Angeles, 20% of the emails came back as invalid addresses.

Were you one of the TRA members that received the email update on the August meeting at the Western Museum of Flight? Great! Your email address is correct and you do not need to respond.

But if you live in the South Bay of L.A. and DID NOT receive the message, please send us a brief email. Include just your name and membership number (from your address label) and send it to emailfix@tra-spacepark.org.

TRA guards the privacy of its email list and does not publish it at any time. Current TRA members may request an email address of close associates and we do honor those requests.

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The next NNG will be mailed in mid September

THE MAIL POUCH

✦✦✦Janet Clements and Patricia de la Cuesta know how to live it up. They started in New Orleans for 5 days, followed by a 16 day transatlantic cruise to Copenhagen. From Denmark they flew to Istanbul where they visited many ancient sights like Ephesus and Troy. They were safely back home by the time all the turmoil broke out in Turkey✦✦**Delaine Bleich** makes it into Mail Pouch two months in a row. His technique? Politely pointing out the error in last month 'Pouch. He's a him, not a her. My apologies✦✦Another TRAer joins the ranks of authors. **Gordon Hull**, who retired from TRW in 1988, is a co-author

of *Rock Art at Little Lake*, which was just recently published by the UCLA Cotsen Institute of Archaeology. The book contains the results of 15 years of study and recording of over 4,000 petroglyphs and petrographs at Little Lake, CA. It represents the high point of his retirement years. The book is available on Amazon \clubsuit Since his retirement over three years ago, **Gordon Gerson** has been a volunteer tutor in math and physics at his alma mater, Los Angeles Senior High School, and also at

Palisades Charter High School, usually one day a week at each school. At LAHS, he also has coached science students in various competitions, including the JPL Invention Challenge and in the MESA Day (Math Engineering Science Achievement) competitions. MESA is a nine state organization started in California that fosters pre-college education in technical subjects. Gordon coached five teams from the LAHS MESA club in this year's MESA Prosthetic Arm Challenge, one of which placed first in the Los Angeles Metro Region high school competition and went on to win the California State Finals. They represented California in the National Finals in Portland, Oregon *** * Harry Fornwalt** lost his wife to cancer in 2010 and has since remarried. Claudia is a professor at Northern Arizona University (Flagstaff) and he manages the Desert Palms RV Resort in Salome, AZ. Neither wants to retire and the two towns are almost four hours apart. Stay tuned to see who flinches first +++ Optomist Al Petraitis renewed his TRA membership for two more years, up to his 100th birthday $\Rightarrow \Rightarrow$ It's been 20 years since **Gene Petzold** retired from *good ole TRW*, but his fascination with spacecraft design and missions has not left him. The information in the NNG continues to feed this interest $\Rightarrow \Rightarrow \Rightarrow$ It takes some people a long time to get their 30 years in. **Robert Eshbaugh** reports that his wife, **Shirley Dornoff Eshbaugh** took 50 years to reach 30 years at NG. (She joined STL in '61 and took 19 years off to raise their kids.) In 2011 she finally joined Robert in retirement $\Rightarrow \Rightarrow$ Did you smell birch, anise, or cloves when driving through Nipomo, CA? That's just **M. Jean Mitchell** training her young pup in the exciting new

dog game of nosework searching where the dogs learn to search out specific odors. Two other dogs and lots of gardening keep Jean busy and happy *** * Jerry and Cheri Steinker** have a very active life helping their daughter and son-in-law with the Destiny Church in Indio. Jerry is the Finance Director and Cheri is Dean of Students at Destiny Leadership College. An added benefit, enjoying having two of their g'kids close by. Their other two daughters and their 5 g'kids come to visit from L.A.*** * Norm**

Redlich retired in '91, and spent the first years of his retirement giving seminars on Cost Estimating world-wide. Health issues caught up with both of them about 10 years ago, and his wife died in 2010. He no longer drives and depends on Caregivers. The happy news? His youngest g'son is on the JV basketball team at Santa Monica High + + Talk about career diversity! Guy Welch went from his career at TRW to farming the family farm back in Illinois. But he is also a Lt. Col. in the Sons of Union Veterans of the Civil War. Wife Danae's health keeps her house bound, which is tough because their four kids and families are all in California. Youngest son, Troy, is following in dad's footsteps; he's an engineer at Space Park **+ + Cecil Goins** (Formerly a QA guy at TRW) is still hanging out in Granbury, TX, (pop. 7978) near Ft. Worth. He loves the slower pace there. But he does admit that he's still adjusting to the Texas style four seasons, hot summers, cold winters, and a tornado last May. In spite of the weather, email does get through: cecsnbon@att.net

