



# AIR FORCE MATERIALS AND MANUFACTURING ALUMNI ASSOCIATION (AFMMAA) NEWSLETTER

TWENTIETH EDITION

SPRING 2014

## AFRL/RX DIRECTOR'S MESSAGE

Greetings Materials and Manufacturing Alumni,

This is the first article I have put together for the AFMAA newsletter and as a new member I am extremely excited for the opportunity. I'm joining you from the acquisition and sustainment communities – specifically my last assignment working as the Deputy PEO for Tankers managing the Air Force's number one acquisition program the KC-46. I also worked on various aircrew training systems, ICBMs for the Nuclear Weapons Center, high performance computing for the DoD, homeland defense for NORAD USNORTHCOM, AFIT as a systems engineering practitioner, and deployed to Iraq in support of Operation Iraqi Freedom and New Dawn. I am thrilled to start my executive service at the beginning of the weapons system lifecycle here in AFRL. From everything I've experienced thus far in the Material and Manufacturing Directorate, I couldn't be in a better place than "one RX!"

I began my indoctrination to the new position at the end of February and have been thoroughly impressed with the organization. The legacy, impact, and professionalism are some of the strongest I have seen. I visited each division – functional, structural, manufacturing, and systems support – met the people, and realized how extensive the reach of this Directorate really is.

A question I receive frequently is, "What are you going to change?" I haven't seen anything requiring drastic change. All technology development areas are appropriately aligned with senior leadership strategy, so I'd like to leave things as they are. I am starting to focus in on several key areas: first and foremost is development of RX personnel with utilization of AFRL workforce development initiatives; next is our responsiveness to our people with Infrastructure and Integrated Computational Materials Science and Engineering environments; another area is our revolutionary technologies; and finally, our relevancy to our warfighter customer with affordability and sustainability. Another question is, "How long are you staying?" It is my intent to stay past the 100th anniversary in 2017. Unless the Air Force has other plans, I hope to celebrate this event with you all as the RX Director.

Col John Gloystein performed exceptionally as acting director. I echo AFRL Commander Maj Gen Thomas Masiello's comment that "I could not have asked for a better SES stand-in!" As I am sure you are all aware, he guided the directorate through challenging times and my hat is off to his amazing leadership. Things are better now, but we are not out of the woods yet. The Air Force continues to get leaner and we keep getting asked to do more with less and I know that the Materials and Manufacturing Directorate is up to the task.

I am a firm believer in transparent leadership. If you have any questions about ongoing activities in RX, please feel free to contact the front office. It may take a bit for me to get back to you, but I want to be sure we are all on the same page.

*Thomas A. Lockhart  
AFRL/RX Director*

## BIOGRAPHY OF THE NEW AFRL/RX DIRECTOR

The new Director of the AFRL Materials and Manufacturing Directorate has been selected. He is Mr. Thomas A. Lockhart. Mr. Lockhart was officially appointed to the position on 23 February 2014, and actually started the job on Wednesday 5 March 2014. He is moving into the Director position from the position where he has been working since September 2011 as Deputy AF Program Executive Officer for Tankers, Tanker Directorate, Air Force Life Cycle Management Center, Wright-Patterson Air Force Base, Ohio. In that position, he exercised oversight of developing, testing, fielding and supporting the replacement aircraft for the KC-135, the KC-46.



**Thomas A. Lockhart** Executive Officer for Tankers, Tanker Directorate, Air Force Life Cycle Management Center, Wright-Patterson Air Force Base, Ohio. In that position, he exercised oversight of developing, testing, fielding and supporting the replacement aircraft for the KC-135, the KC-46.

*(Continued on Page 2)*

*(Biography of the New AFRL/RX Director continued)*

financial manager, group director, and deputy director for both Iraq Security Assistance Management and the Office of Security Cooperation, Iraq (OSC-1) transition team. Prior to his assignment as Deputy AF Program Executive Officer for Tankers, Mr. Lockhart was the Deputy Director of the Office of Security Cooperation Transition Team, Baghdad, Iraq.

Mr. Lockhart received his Bachelor of Science Degree in Electrical Engineering with a minor in Computer Science in 1987 from the University of Wyoming. Since that time, he has completed Air Command and Staff College and Air War College in addition to several educational training programs. He has received the Meritorious Service and Joint Civilian Service Commendation Medals. Mr. Lockhart has also completed a number of Specialized Training Programs in Logistics, Program Management and Leadership. He has had a very broad career, working in a variety of important technical jobs for the Air Force.



**AFMMAA PRESIDENT’S MESSAGE**

As you may or may not know, the Materials and Manufacturing Directorate has a new Director, Mr. Thomas Lockhart. We have provided background information on Mr. Lockhart in this Newsletter and he has graciously provided an update message for the AFMMAA. Mr. Lockhart was the Deputy Director of the KC-46 Tanker SPO and will provide the Materials and Manufacturing Directorate with a leader with outstanding connections to the acquisition and sustainment parts of the Air Force.

Your AFMMAA Board had an excellent, recent meeting with Mr. Lockhart, at which he surprised us by handing us his COMPLETED membership application to become the newest LIFETIME MEMBER OF AFMMAA. Also at the meeting were Dr. Chuck Ward, the Acting Assistant Director; Mr. Dan Adducchio, the Assistant to the Director; and Wade Brower, the Facilities Chief for RX. Dr. Ward is in his current position until Colonel John Gloystein is able to return as the Assistant Director. Also accompanying the Board were George Schmitt, the RX liaison person to the AFMMAA; and Gary Waggoner, the immediate Past President of AFMMAA.

We invited Mr. Lockhart to provide an article for this issue of the Newsletter and to be the featured speaker at the 25 June meeting of the AFMMAA. He readily agreed to both actions.

We introduced AFMMAA to him by saying that we were there to listen and to support RX.

We described the AFMMAA Charter and how we have been interacting with RX:

**The AFMAA Charter is:**

- 1) To foster recognition of the importance of the Directorate’s contributions to the mission of the Air Force and the US industrial base.
- 2) To provide a structure for the exchange of information related to AFRL/RX, its past and present personnel, its past accomplishments, its current activities, and future needs.
- 3) To promote the activities of persons currently or formerly assigned to AFRL/RX.
- 4) To support the current AFRL/RX organization by undertaking special projects and activities.
- 5) To provide a vehicle to promote interaction among AFRL/RX and Association members.

I reminded him of the activities that AFMMAA has accomplished in addressing these goals:

- 1) Completing the RX/AFMMAA Heritage Initiative – leadership, technologies, AND people (historical repository at UTC);
- 2) Producing the Newsletter (Director’s message), attending and supporting RX personnel award meetings;
- 3) Having FUN via monthly luncheons and the growing biannual meetings; and
- 4) Continuing to provide valuable SCHOLARSHIPS; creating the Astronaut Cady Coleman exhibit; and providing gentle reminders (and support) related to whatever the Directorate decides to do for the 100th Anniversary Celebration (2017).
- 5) Suggesting a possible restart of the career chats, brown bag luncheons, and travelogues.

We showed Mr. Lockhart the group picture taken at the last June meeting of AFMMAA. We indicated that we would like to formally present it to the Board at his next Director’s Call. He was in agreement with that action and asked Dan Adducchio to make sure it was on the schedule. Neil Ontko was instrumental in arranging for the printing and framing of the photograph. Currently the plans in AFRL/RX are to hang the photograph in the Heritage Hallway in RX (between buildings 653 and 652) and we included a guide as to who are all the people in the picture.

*(Continued on Page 3)*

*(AFMMAA President's Message continued)*

We said we felt that Mr. Lockhart's strong connections with the acquisition and sustainment elements of the Air Force would be very valuable in conveying the, sometimes not self-evident, vital role that materials and manufacturing play in the development, acquisition, and operation of weapons systems.

As I mentioned in the Fall 2013 Newsletter, Tom Cooper, who has always done an excellent job with the Newsletter has agreed to stay on, but he has requested that we find a person to replace him. So my continuing request as your President is to find someone who would volunteer to take over the challenging, but important, position of being the newsletter chairperson, with Tom's support and guidance. As you know, the newsletters come out twice a year, fall and spring, and are a very important way to connect with each of you.

Matt Di Biase has recently finished the arduous task of completing the annual AFMMAA qualifying application for the Combined Federal Campaign. Matt and I plan on representing the AFMMAA at the annual kickoff celebration for the CFC in October. The CFC contributions will continue to be utilized entirely for the scholarship awards.

We are continuing to have very successful AFMMAA member monthly luncheons. I would continue to encourage each of you, if possible, to attend at some point.

We still have an opportunity for you to purchase an RX coin. They are reasonably priced at six dollars apiece and AFMMAA still has multiple coins for resale to you. Don't miss this opportunity.

I also want to again briefly remind you of the new structure of the Materials and Manufacturing Directorate. There are now four operational divisions. The Functional Materials Division works on nano electronic materials, photonics materials, and soft matter materials. The Structural Materials Division has the areas of materials state awareness and supportability (the former NDE branch), composite materials, and metals. The Manufacturing and Industrial Technologies Division is focused on electronics and sensors and on propulsion, structures and the manufacturing enterprise. The Systems Support Division includes materials integrity, acquisition systems support, and logistics system support.

The AFMMAA will continue to provide support to RX and its employees as possible and to meet the goals that I mentioned earlier. Please feel free to call me (937-287-1871) with any suggestions you might have. And

don't forget that we need a volunteer to take over the Newsletter.

*Tobey Cordell, AFMMAA President*

## AFRL MATERIALS AND MANUFACTURING DIRECTORATE RECOGNIZES ANNUAL AWARDS WINNERS

The Air Force Research Laboratory Materials and Manufacturing Directorate recognized its top performers during the 61st Annual RX awards ceremony at the Hope Hotel on Jan. 24, 2014. The award recipients are as follows:

### **Engineering Expertise Award**

F135 Blade Investigation Team of John Brausch, Dr. Jeffrey Calcaterra, Jeremy Knopp, Dr. Jonathan Miller, and Robert Ware

The team reacted to the failure of a F135 third stage turbine blade during flight testing and their engineering expertise helped quickly restore an aircraft fleet to flight status and ensured safe operations.

### **International Award**

Dr. Reji John

Dr. John led efforts to establish technology collaborations with Australia and India to share U.S. technology and leverage international research. His expertise and world-class research catalyzed state-of-the-art lifing technology across the globe.

### **R. Lee Kennard Science and Technology Manufacturing Heritage Award**

Dilip Punatar

Mr. Punatar led an affordability program to develop innovative manufacturing processes to produce the first-ever low cost common data link tuneless diplexer for Remotely Piloted Aircraft communication systems.

### **Program Management Award**

Dr. Jennifer Fielding

Dr. Fielding is recognized for her management of America Makes, The National Accelerator for Additive Manufacturing and 3D Printing, a \$70 million public-private partnership and "flagship" for other new institutes of manufacturing innovation.

### **Supervisor Excellence Award**

Dr. Katie Thorp

Dr. Thorp is responsible for management and supervision of a diverse team, including 24 civilian scientists and engineers, three Company Grade Officers, *(Continued on Page 4)*

*(AFRL Materials and Manufacturing Directorate Recognizes Annual Awards Winners continued)*

and 60 on-site contractors.

**Vincent J. Russo Award**

Dr. Michael Caton

Dr. Caton was recognized for his leadership and impact on RX’s pathfinder Foundational Engineering Problem for nickel residual stress, a key part of RX’s strategy for Integrated Computational Materials Science & Engineering initiative.

**Mission Support Award**

Robert Ellis

Mr. Ellis is a skilled member of the business operations and administrative team; he resolved work support issues quickly ensuring uninterrupted service across the Directorate.

**Advanced Mission Support Award**

Donald Piddock

Mr. Piddock is an Environment, Safety, and Occupational Health System Administrator providing crucial support to emergency management and continuity of operations.

**Director’s Team Award**

The Corporate Communications Team of Robyn Mack, Jeremy Gratsch, Sheila Boyer, and Mary Ann Klos

The team impacted communications efforts, increasing overall awareness of the Directorate’s accomplishments offering dynamic insight into mission of the research organization.

**Director’s Junior Workforce Award**

Dr. Jonathan Miller

Dr. Miller has displayed leadership from exploratory research to enhancing Air Force system capability as a researcher and rapid responder in a diverse range of casting technology and solidification issues.

**Director’s Individual Award**

John Brausch

Mr. Brausch distinguished himself as an expert in Nondestructive Inspection (NDI) across DoD and industry, applying NDI materials and processing knowledge, quick reaction, inspection consultation, and technical transition to improve aircraft availability and prevent grounding.

**Senior Noncommissioned Officer**

Senior Master Sgt. Andrew Hayes

Sgt. Hayes responded to a field request for assistance procuring a discontinued machine lubricant that prevented 51 Computer Numerical Control milling

machines from being shut down.

**Company Grade Officer**

1st Lt. Jacob Heitzman

Lt. Heitzman’s ingenuity and leadership achieved Directorate goals through critical technology demonstration and transition to the warfighter.

**Field Grade Officer**

Lt. Col. Scott Fitzner

Lt. Col. Fitzner orchestrated a 200-member government and contractor team across more than 70 Congressional Interest Item programs and a \$120 million portfolio to ensure technology maturation and transition in the energy, environmental, and pollution prevention arenas.

**Robert T. Schwartz Engineering Achievement Award**

The PT6 Fuel Nozzle Evaluation Team of Dr. Patrick Golden and Robert Ware

The team quickly identified the root cause of the nozzle cracking during T-6 training operations. Their quick thinking and novel engineering approach prevented a grounding of the T-6 fleet, allowing the Air Force to continue primary pilot training.

**Charles J. Cleary Scientific Achievement Award**

The BioNano-Energetics Team of Dr. Rajesh Naik and Dr. Jonathan Spowart

The team demonstrated the potential of biomaterial (protein cages) for Air Force capabilities as safer energetic materials with higher reaction kinetics and enhanced exothermic behavior.

**DO YOU REMEMBER?**

Shown below are the photographs of several RX (then ML) engineers, scientists, and employees taken in the 60’s. How many do you recognize and remember?

For the answers, see page 8.



A



B



C



D

## SPRING 2014 SCHOLARSHIP PROGRAM UPDATE

The Fall 2013 newsletter contained the detailed information on our 2013 scholarship recipients. To summarize, we awarded three scholarships - two were made in the Chief Scientist's category for science, math or engineering; one was made in the Alumni Association category for a non-technical business major. Due to the generosity of those supporting the Association through last year's CFC and other special donations, the association was able to increase the award amount to \$1500 for each. The recipients were:

### **Chief Scientist's Scholarship – Nicholas Woodward.**

He is attending Worcester Polytechnic Institute, majoring in Robotics Engineering and Computer Science. His father is Chris Woodard in RXCM.

### **Chief Scientist's Scholarship – Krysta Moser.**

She is attending Utah State University, majoring in Physics. Her father is Kirt Moser in RXS.

### **Alumni Scholarship – John Tollefson.**

He is attending the Ohio State University, majoring in business administration. His mother is Gina Tollefson in RXSSO (CTIO).

The AFMMAA was able to recognize these awardees and their families at the RX Awards Luncheon held 24 January 2014 at the Hope Hotel.

The 2014 Scholarship cycle has officially been kicked off with the Call for Applications being released by the RX Director in early March. Award information is available at [afmmaa.org](http://afmmaa.org) <<http://afmmaa.org>> website <http://afmmaa.org/Default.aspx?pageId=1222528> or from Dr. Charles Browning, Scholarship Committee Chairman, at 937-229-2625 or [cbrowning1@udayton.edu](mailto:cbrowning1@udayton.edu).

Applications must be completed and postmarked by 20 June 2014 to be eligible for this cycle. Awards are planned to be announced in the fall time frame for application to fall 2014 academic semester/quarter tuition and general fees.

Thanks again to everyone for their kind generosity. The students and their families are very appreciative of your contributions.

*Charles E. Browning, Scholarship Chairman*

## AWARDS / RECOGNITION

The 2013 Air Force Materiel Command General Lester L. Lyles Award is presented the Scientist and Engineer Training Overhaul Team, Air Force Corrosion Prevention and Control Office, Air Force Research Laboratory, Robins Air Force Base, Georgia. From 1 January 2013 through 31 December 2013, the Scientist and Engineer Training Overhaul Team sponsored and trained 21 Lieutenants providing fully prepared engineers to System Program Offices 150 days sooner. Their highly effective supervisory skills resulted in the highest Lieutenant morale since the development of the Replacement Training Unit. Their achievements leaned in-processing requirements by 86 percent, reallocated 303 thousand dollars, and saved 17 thousand man-hours at Robins AFB. Their enhanced orientation process was lauded by the Air Force Sustainment Center Engineering Director and adopted at Tinker AFB and Hill AFB. In 2014, their efforts will reduce downtime by 83 percent, salvage 99 thousand man-hours, and will save the Air Force 1.8 million dollars. The superior performance of the Scientist and Engineer Training Overhaul Team reflects great credit upon themselves, the Air Force Materiel Command, and the United States Air Force.

Congratulations to RXSSR's Lt. Loren Bryant and Lt. Carlos Horner for winning the the General Lester L. Lyles Award!

## AFMMAA SCHOLARSHIP FUNDING 8 APRIL 2014

The AFMMAA is very fortunate to have a solid membership and contributor base to support our Scholarship Program. The AFMMAA receives scholarship funding from member dues, Life memberships, RX contributors to the Combined Federal Campaign (CFC No. 85464), and friends of the AFMMAA. Since 2001, the AFMMAA has received funds and contributions of approximately \$33,500 from members and friends which enabled us to award 29 scholarships totaling \$30,500. Three \$1500 scholarships were awarded in 2013 to Nicholas Woodward, Krysta Moser, and John Tollefson. Your dues and scholarship contributions are essential to support and grow our annual scholarships in the areas of science and engineering for the children and grandchildren of AFRL/RX employees. At our annual winter 2013 member's meeting we approved making the children and grandchildren of AFRL/RX employees eligible for the scholarship program.

## YOUR AFMMAA OFFICERS AND COMMITTEE CHAIRS



**Tobey Cordell**  
President



**Matt Di Biase**  
Exec. Vice President



**Neal Ontko**  
Vice President,  
Membership



**Dennis Naughton**  
Treasurer



**George Slenski**  
Secretary



**Tom Cooper**  
Newsletter Editor



**Charles Browning**  
Scholarship

## AFMMAA MERIT SCHOLARSHIP PROGRAM

The AFMMAA merit scholarship program assists high achievement, educationally oriented children and grandchildren of the current AFRL/RX civilian and military workforce.

Two types of merit scholarship are now granted: Alumni Association Scholarship and Chief Scientist Scholarship. The funding of these scholarships currently comes from the dues paid by AFMMAA members, member donations to the scholarship fund and AFRL/RX employee contributions to the Combined Federal Campaign (CFC No. 85464). In 2001, contributions by members of the ML Executive Group, MLO, MLB, and MLLMN initially funded the program. As of April 15, 2014, twenty-nine scholarship totaling \$30,500 have been awarded.

### Scholarship Winners:

- 2013 Nicholas Woodward, Chief Scientist, \$1,500; Krysta Moser, Chief Scientist, \$1500; John Tollefson, Alumni Association, \$1500
- 2012 Stephan Bolan, Chief Scientist, \$1,000; Seth Cazzell, Chief Scientist, \$1,000; Shayta Roy, Chief Scientist, \$1,000; Nicholas Woodward, Chief Scientist, \$1,000
- 2011 Seth Cazzell, Chief Scientist, \$1500; Scott Schwenker, Chief Scientist, \$1500
- 2010 Anastasia Voevodin, Chief Scientist, \$1000; Erika Johnson, Alumni Association, \$1000; David Baumgartner, Alumni Association, \$1000
- 2009 Julia Sizek, Chief Scientist, \$1000; Shuvro Roy, Chief Scientist, \$1000; Grace Stearns, Alumni Association, \$1000
- 2008 Andrew Rosenberger, Chief Scientist, \$1000; Mary Hanna Sanders, Alumni Association,

\$1000; Travis Busbee, Alumni Association, \$1000

- 2007 Margaret Ann Hay, Chief Scientist, \$1000; Jaison Nainaparampil, Alumni Association, \$1000
- 2006 Jeffrey Zabinski Jr., Chief Scientist, \$1000; Justin Spitzer, Alumni Association, \$1000
- 2005 Samantha Brown, Chief Scientist, \$1000; Jeffrey Zabinski Jr., Merit Scholarship, \$1000
- 2004 Catherine Shelley, Chief Scientist, \$1000
- 2003 Michael Grant, Chief Scientist, \$1000; Dan Peterson, Merit Scholarship, \$1000
- 2002 Ankit Punatar, Chief Scientist, \$500; Morgan Webb-Yeates, Merit Scholarship, \$500

## RECENT INFORMATION ABOUT AFMMAA MEMBERS

During the year many of our members have provided comments for the AFMMAA Newsletter and website regarding their current activities and interests. Here are their recent comments we received since the last Newsletter.

**Stanley Schulman**, Married 54 years, plans to fully retire in July 2014 at 79 years young. I have a grandson in the US Navy and another one attending Ohio State. My granddaughter graduated from Case Western Reserve. I have traveled extensively to Europe, Asia and the Caribbean area.

**John Tanzola**, johntanzola@sbcglobal.net, moved to Georgia to be near our granddaughter.

We would like to hear from you! If you wish to share your recent activities or interest with others on the AFMMAA website(s) [afmmaa.com](http://afmmaa.com) or [afmmaa.org](http://afmmaa.org), please send an email to Tom Cooper at [TCooper@utcd Dayton.com](mailto:TCooper@utcd Dayton.com) or Dick Engman at [dkengman@msn.com](mailto:dkengman@msn.com).

## SCHAFRIK RETIRES

AFMMAA member Dr. Bob Schafrik recently retired from GE Aviation, where he was the general manager of the Materials and Process Engineering Department. Bob was elected to the National Academy of Engineering in 2013, in recognition for his more than 40 years of innovation in materials for gas turbine engines. "It is an exciting time to be in material development for gas turbine engines," said Schafrik. "The technology advances that have greatly enhanced the performance and capabilities of aircraft engines are made possible in large part by the advances in materials."



**Dr. Bob Schafrik**

Bob served on active duty from 1968 to 1988 (retiring as a Lieutenant Colonel), which included multiple assignments over the course of 8 years within the predecessors of AFRL/RX. When he was a graduate student at AFIT from 1973-1974, he worked with the Metals and Ceramics Division in the Aerospace Research Laboratory in Harry Lipsitt's group on the beginnings of the titanium aluminide program. After graduating from AFIT, Bob joined Harry's group as a materials research engineer and continued to work on titanium aluminides. He subsequently moved to the Metals Branch in the Manufacturing Technology Division as assistant branch chief to Hank Johnson. During this time, he was selected to attend Ohio State University full time for a PhD program in Metallurgical Engineering, spending 15 of his 24 months in the PhD program back with the high temperature metals group to conduct his PhD research in understanding fatigue damage accumulation in superalloys. After graduating in 1979, he returned to the Manufacturing Technology Division, then led by Jim Mattice, to serve in the newly formed Integrated Computer Aided Manufacturing Branch, first as the assistant branch chief, and then as acting branch chief. From 1980-1981 he was the Chief of the Systems Support branch, with Warren Johnson as his Division Chief, before being selected by Brigadier General Steere to be the F-16 engine project manager within the ASD Deputy for Propulsion.

In 1984 Bob moved to Washington, DC to serve as chief of the Air Superiority Division, DCS Systems at Air Force Systems Command Headquarters. In 1987 he moved to the Office of the Secretary of Defense in the

Pentagon as chief of the long term planning division for the Strategic Defense Initiative Organization before retiring in 1968.

After retiring from the Air Force, Bob served as the VP, R&D for Technology Assessment and Transfer, Inc, for 3 years, and then served as staff director of the National Materials Advisory Board and the Board on Manufacturing and Engineering Design within the National Research Council from 1991-1997 before moving to GE Aviation, where he served for 15 years.

He was elected to the National Academy of Engineering in 2013. He will receive ASM's William Hunt Eisenman Award in October 2014 in recognition of his accomplishments for leading efforts that successfully developed and introduced a number of advanced materials into GE's aeronautical engines.

## JUNE LUNCHEON MEETING SCHEDULED

The AFMMAA Annual Luncheon Meeting will be at the Engineers Club of Dayton, 110 E. Monument Ave., Dayton, OH 45402 on Wednesday, 25 June from 10:30 am to approximately 1 pm. We plan to start at 10:30 am with a social hour. This will be followed by the President's welcome, the latest developments in the Materials and Manufacturing Directorate, the luncheon, and the business meeting. Join us for the fun!

A buffet luncheon will be served at the price of \$20 each, which will be payable to Tobey Cordell. The \$20 cost includes the meal, tax, and the club gratuity. Any balance will be applied to the AFMMAA scholarship fund. Cash is preferred.

**Reservations are required by the Engineers Club. Please email your RSVP to George Slenski (g.slenski@ameritech.net) NLT Wednesday June 18th.**

You do not have to be a current AFMMAA member to attend and may "re-up" your membership at the meeting. Current RX military and civilians, RX alumni, and friends are welcome.

## NOTICE

In order to control our costs and optimize our service to RX and our members, we are considering only mailing Newsletters in the future to AFMMAA Members (Charter, Life and Annual). If you have not already done so, please take advantage of this opportunity to fill out the membership form (Page 9) and continue to enjoy our Spring and Fall Newsletters.

**AFRL/RX AWARD WINNERS**

AFRL Annual Award winner from RX for Senior NCO of the year - SMSgt Andrew M. Hayes from the RX corrosion office at Robins AFB, GA.

Dr. Ryan Justice, RXSS was honored with the Category III Civilian Award at the 2013 Team Wright Patterson Awards Banquet.

*Congratulations to both!*

**CURRENT RX WORKFORCE**

The current size of the RX government workforce includes the following as of 28 February 2014:

a) Civilian Employees		361
WPAFB	347	
Hill	6	
Tinker	6	
Robins	2	
b) Military		43
WPAFB	31	
Robins	7	
Hill	4	
Tinker	1	
c) Pathways (COOP) Interns		9
WPAFB	9	
d) Contractors		344
WPAFB	336	
Robins	7	
Hill	1	
	<b>Total</b>	<b>757</b>

**LOSSES FROM THE RX (ML) FAMILY**

We regret to inform you of the following losses from the RX Family that we have heard of since our last Newsletter.

- Dr. (Mrs.) Dallis Hardwick      5 January 2014
- Ms. Geri Robinson                24 February 2014

If you know of any others and would care to share this information, please contact us.

**PHOTO IDENTIFICATION**

**Answers for Page 4**

A) Gerard Loughran; B) Robert Schwartz; C) Christ Tamborski; and D) James Weaver.

**AFFILIATE SOCIETIES COUNCIL  
AWARD WINNERS FROM RX**

Congratulations to Dr. Dean Evans and Dr. Reji John as newly named recipients of the Affiliate Societies Council 2014 Outstanding Engineers and Scientist Award! Dean was selected in the category of Technical Leadership and Reji in the category of Research. Please wish them well on this great honor.

They were recognized at a banquet on April 24, 2014 held at the University of Dayton River Campus. Dean Nate Klingbeil, an RX alum, gave a talk at the dinner.

*Congratulations to both!*

*Dr. Daniel B. Miracle,  
Chief Scientist (Acting)  
Materials & Manufacturing Directorate  
Air Force Research Laboratory*

**TEN "LOST" ALUMNI FOUND,  
MANY STILL MISSING**

Thanks to the help of several members we were able to locate the addresses or emails of 10 alumni. We still need your help for the addresses, emails, and/or phone numbers for the following "lost" alumni. Most have recently retired. However, some have moved and the Post Office will no longer forward our mail to them. If you know any information for these "lost" alumni please contact Membership Chairman Neal Ontko at nontko@utcd Dayton.com.

- |                     |                      |
|---------------------|----------------------|
| Corey Boltz         | John L. Lindsey      |
| Julius R. Brodeck   | Virginia A. McMillan |
| Reynaldo Carranza   | Ernest E. Meyer      |
| Thuy D. Dang        | Millard G. Mier      |
| Leland Demeritt     | Robert J. Ondercin   |
| Emily G. Ellithorp  | Joseph J. Orłowski   |
| Nils C. Fernelius   | Bonnie J. Payne      |
| Frank F. Findlay    | Renee D. Randolph    |
| Michael Halliwell   | Jessica Salyers      |
| Barbara J. Johnson  | John R. Sizelove     |
| Philip Julian       | Rose Marie Snow      |
| Dr. William Lampert | Terry L. Stewart     |
| Robert R. Lewis     | Lynn M. Williams     |

*Spring Greetings  
From Your Friends  
at AFMMAA!*







**AIR FORCE MATERIALS & MANUFACTURING  
ALUMNI ASSOCIATION (AFMMAA)**

**MEMBERSHIP APPLICATION AND  
SCHOLARSHIP DONOR FORM**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone -- Home: \_\_\_\_\_ Work: \_\_\_\_\_

E-mail: \_\_\_\_\_ Is E-mail new? \_\_\_\_\_

Check here if we CAN NOT release your information, i.e., address, e-mail, etc.

Year departed/retired from RX: \_\_\_\_\_

Recent information about yourself (for the website): \_\_\_\_\_

\_\_\_\_\_

In what areas would you like to support AFMMAA?

\_\_\_\_\_

Your are invited to join (\$10/yr annual CY 2014 dues), become a Life Member (\$150) and/or make donations to the Alumni Association Scholarship Program.

\$ \_\_\_\_\_ Alumni Association Scholarships (open to students pursuing a degree generally related to the Air Force Science & Technology program, with emphasis on materials sciences, manufacturing technologies or associated management specialities (financial, logistics, administrative, etc). AF Science & Technology programs).

\$ \_\_\_\_\_ Chief Scientist Scholarship (open to students pursuing an accredited degree in a field of science, math, engineering or technology)

\$ \_\_\_\_\_ Annual Membership Dues for CY 2014 (1 Jan - 31 Dec '14) are \$10.

\$ \_\_\_\_\_ Life Membership is available for \$150 (one time fee).

\$ \_\_\_\_\_ \*Total Amount Enclosed

**\*NOTE: Scholarship contributions and membership dues are tax deductible.**

**Membership Category:**

\_\_\_\_\_ Annual (\$10.00/year)

\_\_\_\_\_ Lifetime (\$150.00 one time fee)

**Make check payable to: AFMMAA and send this form to the following address:  
AFMMAA, P.O. Box 341413, Beavercreek, OH 45434-1413**

**AFMMAA 2013 AND 2014 LUNCHEONS HELD IN DAYTON, OH**



AFMMAA meeting held at TGI Fridays on Thursday, Nov. 21, 2013. Left side, front to back: Jim Malas, Ed Morrisey, Ken Kojola, John Williamson, Terry Ronald, Tobey Cordell, and George Schmitt. Right side, front to back: Dick Engman, Don Tarazano, John Speers, Bob Cochoy, Tom Cooper, and Roland Watts.



AFMMAA meeting held at Olive Garden on Tuesday, Dec. 17, 2013. Left side, front to back: Bob Rapson, Ken Kojola, John Williamson, Vince Russo, and Terry Ronald. Right side, front to back: Tom Cooper, Matt Di Biase, Bob Cochoy, Jim Mattice, and Al Gunderson.



AFMMAA meeting held at the Golden Coral on Wednesday, April 16, 2014. Left side, front to back: Tom Cooper, Jerry Petrak, Bob Cochoy, Bob Rapson, Jack Henderson, and John Williamson. Right side, front to back: George Schmitt, Jim Kampe, Dick Engman, Kay March, and Tobey Cordell.



**JANUARY 2014 SEMI-ANNUAL MEETING OF THE AFMMAA**



The January 2014 Semi-Annual Meeting held at the Dayton Engineer's Club welcomed Dr. Chuck Ward, the Acting AFRL/RX Director, who stopped by to answer questions about the Directorate. Dr. Karla Strong provided an opportunity for the members to review and comment on an AFRL/RX promotional video. In the picture: Front Row: Dr. Karla Strong, Dick Engman, Tobey Cordell, Dr. Chuck Ward, Neal Ontko, George Slenski, Dr. Charlie Browning, John Williamson. Back Row: Bob Rapson, Don Shrader, Roland Watts, Al Gunderson, Dr. Terry Ronald, Dr. Jack Henderson, Jim Mattice, Jerry Petrak, Dr. Vince Russo, Kay March, Bill Woody, Dr. Bob Schafrik

## RECENT MEMBER INFORMATION AS OF 15 APRIL 2014

During the year many of our members have provided comments for the AFMMAA Newsletter and website regarding their current activities and interests. Here are their recent comments we received since the last Newsletter.

**Robert A. Drerup, Jr.**, radj57@sbcglobal.net. Retired from Manufacturing Division in 2011 and joined UTC in 2014.

**Gordon Griffith**, ghgriffith@att.net. Nothing new, still volunteer to help maintain "green space" in Big Canoe and singing in two chapel choirs and doing handbells.

**Thomas Lockhart**, Thomas.Lockhart@us.af.mil. Recently became new Director of RX and AFMMAA Life Member.

**Jim Malas**, jmalas@woh.rr.com. Retired from AFRL in 2013. Joined Universal Technology Corporation.

**Joseph M. Manter**, jmanter@utcd Dayton.com. Still supporting RX as a contractor.

**Nicholas J. Pagano**, njpgano@yahoo.com. Recently became a AFMMAA Lifetime Member. I am now 80.9 years of age and I am studying at Bluffton Bible College to get an associate degree in Biblical Studies. I have discovered the truth of the Gospel.

**Paul Propp**, pmpropp@sbcglobal.net. Doing reasonably well and healthy. Have new hearing aids so people can't talk behind my back. Old AF Space Division nearly now built out as high density condo's. My praise goes to the most productive Alumni Association. Send RAIN! [Paul's plea was answered in March].

**William Rice**, wlrrice@alum.mit.edu. I have survived heart/thyroid surgery and I am doing well.

**Donald Schmidt**, ohioschmidt@aol.com. I am busy taking care of wife (Johnni) who is recovering from a stroke.

**Mike Soboroff**, mike@rockcreekstrategies.com. Now a Senior Advisor with Rock Creek Strategies. www.rockcreekstrategies.com.

**Paul Smith**, PSmith9@woh.rr.com. Owner and President of Smith Aerospace Marketing and Consulting, LLC.

**Charles R. Valley**, c.valley@earthlink.net. Sr. Engineering Consultant for F-15 International New Business Office at Wright-Patterson AFB.

We would like to hear from you! If you wish to share your recent activities or interest with others on the AFMMAA website [www.afmmaa.org](http://www.afmmaa.org), please send an email to Tom Cooper at TCooper@utcd Dayton.com or Dick Engman at dkengman@msn.com.

## AFMMAA SCHOLARSHIP DONORS

Since 2001, members of the Air Force Research Laboratory Materials and Manufacturing Directorate, AFRL/RX alumni, and friends of the Air Force Materials and Manufacturing Alumni Association have contributed **\$17,317** for college scholarship to the children of civilian and military employees. Additionally, many RX individuals have contributed **\$16,192** to the AFMMAA through the CFC and United Way Programs. We thank all for their generous giving which is very essential to make our scholarship program so successful. New donor changes are shown in **bold**.

### Platinum Donors (\$1000 and over)

Walter W. Adams	Paul Propp
Alan Lovelace	John Williamson
Mrs. Julia Millham	

### Gold Donors (\$500 to \$999)

Robert L. Denison	Gary Waggoner
Dr. Thomas D. Fiorino	

### Silver Donors (\$200 to \$499)

AFRL/MLO	Kenneth Kojola
AFRL/ML Exec. Group	G. Edward Kuhl
Lawrence Butkus	Meir and Ruth Pachter
Tom Cooper	George St. Pierre
Dr. and Mrs. Ronald Eby	<b>John Rhodehamel</b>
Gordon H. Griffith	Warren Johnson
Douglas Hutchens	

### Bronze Donors (\$100 to \$199)

AFRL/MLB	Charlotte McConnell
AFRL/MLLMN	Zoe Dell Nutter
<b>Lyn Brown</b>	Paul Sampson
Ken Elbaum	Robert T. Schwartz
Barry and Sharon Farmer	Dr. Kathy Stevens
Jacques Hemes	Don Tarazano
Jim Huffman	Dr. Edwin L. Thomas
Ronald J. Kerans	Hardy Trolander
Lou Ludtke	<b>Andrey A. Voevodin</b>
Rich Lusignea	Dennis E. Wisnosky
Bobby McConnell	Bill Woody

## DR. FARMER RETIRES

Dr. Barry Farmer retired as Chief Scientist in the Materials and Manufacturing Directorate, Air Force Research Laboratory, Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio. He joined AFRL in 1998 as Senior Scientist, Polymeric Materials in the Polymer Branch of the Materials and Manufacturing Directorate, where he led and performed research in polymeric materials, primarily focusing on structure-property relationships. He became Chief Scientist of the AFRL Materials and Manufacturing Directorate in 2002 and was recognized as a Presidential Meritorious Senior Professional in 2008.



**Dr. Barry L. Farmer**

Prior to joining AFRL, Dr. Farmer was a Professor of Materials Science and Engineering at the University of Virginia. He was on the faculty in the Departments of Materials Science and Engineering at Washington State University and at the University of Virginia for 11 years each. Dr. Farmer was also a National Research Council Postdoctoral Research Associate in the Polymer Division at the National Bureau of Standards (now NIST), a Visiting Research Staff Member at IBM Almaden Research Center and the Thomas Jefferson Visiting Fellow at Downing College, University of Cambridge.

Dr. Farmer is a Fellow of the American Chemical Society and of the American Physical Society serving on the Executive Committee and as Secretary-Treasurer of the APS Division of the Polymer Physics for 20 years. He has also served as Chair, Executive Board Member, and Alternate Councilor for the American Chemical Society Division of Polymer Chemistry.

Dr. Farmer conducted research in polymer physics for more than 40 years. He is known for his research in computational molecular modeling and X-ray diffraction studies of semi-crystalline and liquid crystalline polymers, addressing the interrelationships between molecular-scale interactions and macroscopic behavior. He has authored more than 200 publications and co-edited a book and two journal issues on these topics.

## PERKINS RETIRES

A very festive party was held at the AFRL/RX Cafetorium on Friday 28 February 2014 to celebrate the retirement of Larry Perkins, RX Systems Support Division

Chief Engineer. A large crowd assembled to recognize Larry's 27 years of service to RX. He did not want a formal retirement ceremony to commemorate his many years of service, but wanted to have an informal party for which Larry provided the food (pizzas) and drinks, to say goodbye.

His Government service actually started in December 1983 at the Army Materials and Mechanics Research Laboratory in Watertown MA, followed by two years service in AFLC/MAXT prior to joining RX in 1987. Larry received his BS in 1982 in Welding Engineering at the Ohio State University and an MS in Materials Science and Engineering at the University of Dayton in 1987. Over the years, he received a large number of Awards and Appreciations, including the AFRL/RX Directors Team Award in 2008, the Air Force Civilian Achievement Award in 2007, the F-22 Program Officer Letter of Commendation from Brig. Gen. Moore in 2006, the Boeing Corporation Silver Eagle Award in 2005, was named an AFRL Fellow in 2004, the AFRL/ML Engineering Expertise Award in 1992 and over 200 Letters of Appreciation, including one from the NTSB for working the TWA 800 Accident investigation, among others.



**Mr. Larry Perkins, Systems Support Divisions Chief Engineer, being congratulated on his retirement by Dr. Larry Butkus, Chief Engineer for the Materials and Manufacturing Directorate**

Jorge Gonzalez from the AF Life Cycle Management Center served as Master of Ceremonies and invited numerous attendees to come forward and make presentations on Larry's outstanding accomplishments over the years. Mr Perkins was responsible for the technical accuracy and completeness in the division including accident investigations, aircraft safety issues as well as technology transition programs for the directorate. He authored many sections for the ASM Handbook and wrote over 150 technical reports. Most notable was his passion for the Air Force and mentorship.

A large number of presentations were given by those in attendance. Well over 200 people filled the RX Cafetorium to participate in this informal but very elegant party.

**AFMMAA CHARTER AND LIFE MEMBERS**

We currently have **70 Life Members** and hopefully that number will continue to grow each year. If you are not a “Lifer” we encourage you to join now. **Dr. Bob Cochoy, Colonel John W. Gloystein, Mr. Thomas Lockhart, Dr. Nicholas Pagano, and Dr. Jim Malas** recently became “Lifers”. If you are currently a Life Member we encourage you contact fellow alums who aren’t “Lifers” and encourage them to “upgrade.” If you wish to become a Life Member, pay yearly dues or contribute to the scholarship fund please use the membership and scholarship donors form in the Newsletter or on the **afmmaa.org** website. Your memberships and scholarship contributions are very essential to continue our mission and grow our annual scholarships in the areas of science and engineering for the children of AFRL/RX civilian and military employees. A list of the Charter and Life Members is shown to the right.

AFMMAA Charter and Lifetime Members - 16 April 2014		
Charter Members		
Wade Adams	Craig Hartley	Bob Rice*
Bernard Chasman	Bill Kessler	Lynn Trainor
Tom Cooper	Jim Mattice	Ben Wilcox
Gary Denman	James Myers	John Williamson
Lifetime Members		
Mark Anderson	James A. Hall	Terry M. Ronald
Tia Benson-Tolle	John Henderson	Vince Russo
Phil Bouchard*	Rob Hull	Timothy J. Sakulich
Charles E. Browning	Henry Johnson	Paul Sampson
Lawrence Butkus	Warren Johnson	Robert Schafrik
John Christian	David Judson	Stan Schulman
Bob Cochoy	Bob Kincaid	George Schmitt
Dennis Corby	John Koenig	Don Shrader
Tobey Cordell	Edward Kuhl	Jerry Sieron*
Ren Decker	William V. Lampert	George Slenski
Mathew DiBiase	Cole Litton*	James Snide
Ken Elbaum	Thomas Lockhart	John Speers
Dick Engman	Jim Malas	George St. Pierre
Kathleen Falensky	Kay March	Katherine A. Stevens
Frank Fochek	Michael McCabe	Donald Tarazono
Larry Fehrenbacher	Bobby McConnell	Scott Theibert
Thomas Fiorino	James L. Mullineaux	Jon Tirpak
David W. Fischer	Dennis Naughton	Gary Waggoner
Donald M. Forney	Neal R. Ontko	Roland Watts
Harold Gogel	Nicholas Pagano	Dennis Wisnosky
John W. Gloystein	Larry Parsons	Bill Woody
Henry C. Graham	Cyril (Sonny) M. Pierce	Carol Yamall
Alten (Skip) Grandt	Bob Rapson	
Lois J. Gschwendler	John Rhodehamel	*Deceased

**MEMBERSHIP STATUS**

We are reaching out to contact many in RX who nearing retirement and also RX industry friends in the Dayton community. Recently we have been fortunate to have 8 new members join and 5 members became “Lifers.” The new Members are: **Lyn Brown, Robert Crane, Robert Drerup, Jr., Jim Holland, Jim Kampe, Mike Lander, Mike Soboroff and Charles Valley.** New Life Members are: **Dr. Robert Cochoy, Mr. Thomas Lockhart, Dr. Jim Malas, Col John W. Gloystein, and Dr Nicholas Pagano.**

Our current membership now consists of approximately 160 alumni. This includes 12 Charter members, 70 Life members and 79 members who pay yearly dues. Another 100 alumni currently receive the biannual Newsletters, but have not joined or recently paid dues. As of April 15, 2014, only 72% of our 79 members have paid their 2014 yearly dues.

If you have not paid your 2014 dues or want to become a member please use the Membership Application and Scholarship Donor Form in the Newsletter. Also,

please give some serious thought to becoming a Life member. Your membership dues, Life Memberships and scholarship contributions are tax deductible. All are very essential for us to continue a successful program. Please contact me, Neal Ontko, at [nrontko@yahoo.com](mailto:nrontko@yahoo.com) if you have any recommendations on how we can better reach out to our alumni base.

*Neal Ontko, Vice President, Membership*

**ARE YOU A CURRENT AFMMAA MEMBER?**

The annual dues are \$10.00, or a Lifetime Membership is available for \$150.00. If your dues lapse for one year, your membership will become inactive. Our records indicate there are still a number of members who have not paid their 2013 membership dues. We don’t want to lose a valuable resource to the Association – YOU!

**Please give serious consideration to joining us. Enclosed is a form that can be returned to become an active member.**

AFMMAA  
P.O. Box 341413  
Bevercreek, OH 45434-1413

**COMBINE FEDERAL CAMPAIGN**

Your AFMMAA, as a local independent charity, has submitted its application package to participate in the 2014 Miami Valley Combined Federal Campaign (MVCFC). We expect, once again, to be an approved charity and to participate in the MVCFC Kickoff scheduled for 8 October at the Wright State University Nutter Center. During the calendar year 2013, AFMMAA received \$2730.15 from the CFC. All CFC pledges to AFMMAA's fund number (85464) go to support our Scholarship Fund! AFMMAA expresses sincere appreciation to those that have pledged in the past and welcome continued support and consideration for the 2014 campaign. New for this year is Matthew Di Biase assuming the role as AFMMAA's Combined Federal Campaign Leader from John Williamson. John has done an outstanding job as Leader administering our charity's CFC participation and sustaining a valued source of scholarship resources for the sons, daughters, and grandchildren of the current AFRL/RX government employees (civilian and military).

**NEW AFRL TECHNICAL DIRECTORATES OSCs**

<u>Former</u>	<u>New</u>	<u>Directorate</u>
RB	RQ	- Aerospace Systems (Combined with RZ)
RZ	RQ	- Aerospace Systems (Combined with RB)
RD	RD	- Directed Energy
RH	711HPW/RH	- Human Effectiveness
RI	RI	- Information
AFOSR	RS	- Air Force Office of Scientific Research (Still goes by AFOSR)
RV	RV	- Space Vehicles
RW	RW	- Munitions
RX	RX	- Materials and Manufacturing
RY	RY	- Sensors
RO	RO	- Chief of Staff (This one is never used.)

Change effective as of October 2012.