



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

TWENTY SEVENTH EDITION

FALL 2017

## AFRL/RX DIRECTOR'S MESSAGE

Is it really Autumn already? Around here, that means three things: SAB, SAB and SAB! Every two years, the Air Force Scientific Advisory Board brings a high-caliber panel in to review roughly half of our portfolio. This year, they will be assessing the following sub-Core Technical Competencies: Materials for Survivability and Protection; Materials for Man-Machine Interface; Materials for Intelligence, Surveillance and Reconnaissance and Electronic Warfare; Manufacturing for Sensors and Electronics; and Systems Support. Our review will be 30 October through 3 November.



**Col Charles Ormsby**

Our Chief Scientist, Dr. Tim Bunning, has assured me repeatedly, "Trust me, I've got this," and he's right. We're using the SAB to develop our people and highlight the great work the directorate does for our Airmen and our nation. As I've sat through the days of flip-throughs and dry runs in the last month, I've been impressed with how well our scientists, engineers and CTC leads have articulated the quality and value of their work. Big thanks go out to Dr. Bunning and Dr. Rich Vaia for building a great agenda and preparing our folks for a highly successful SAB. Even more thanks go to the dozens of people throughout the directorate who have worked long, hard hours on very impressive presentations and posters. Now, we are just anxiously awaiting our opportunity to shine for the panel.

With the arrival of October, we've also welcomed home our now former Director, Mr. Tom Lockhart. Mr. and Mrs. Lockhart returned safely from their deployment to Afghanistan on 9 October. After a week off, he returned to work in his new position as the Director of AFRL/XP. It's great to have him back home and I look forward to working with him in XP. Thank you, Tom and Jennifer for your sacrifice in service of our nation!

I'll end with an invitation, or more accurately, me asking you for an invitation. As the Acting Director of the Materials and Manufacturing Directorate, I really

enjoy the close relationship we have with our defense industrial base. Our partnerships with industry afford us an opportunity to stretch our taxpayers' dollars to achieve maximum effect for our Airmen. From everything I see, they also bring great value to our industry collaborators. I find it tremendously beneficial to visit our industry partners both in my office, and even better, in your manufacturing facilities and laboratories. Knowing that many AFMMAA members are also industry partners for us, my invitation is this: When you're in town, stop in and see me; and when you're not in town, invite me out to see you. I enjoy reviewing our joint work and seeing your facilities and look forward to continuing to team up with industry.

Thanks for all our alumni association does to support our Materials and Manufacturing Directorate. Thanks for the scholarships that are helping to develop our future workforce. You truly exhibit a trait we call "RXcellence"!

*Sincerely,  
Col Ormsby  
AFMMAA Lifetime*

## AFMMAA PRESIDENT'S MESSAGE

It is with great enthusiasm and passion that I accept the AFMMAA membership vote to serve as the Association's next president! My predecessor, Tobey Cordell, served superbly in this capacity for the past four years. Thanks, Tobey, for all that you did, your leadership and sincere contributions to making the AFMMAA a value to the RX Directorate and its alumni! I unpretentiously receive the "President's baton" and will strive to carry-on in your finest footsteps. And, let me also acknowledge Clay Harmsworth as the newly elected Executive Vice-President; welcome Clay as I and the returning Board members look forward to serving with you.

The AFMMAA is a wonderful organization! YOU, comprised its membership - individuals with undeniable contributions to Materials and Manufacturing that have enabled Air Force systems and the world's most powerful Air Force. We are many personalities, military and civilian, professionally representing scientists, engineers, and support staff, bonded together

*(Continued on Page 2)*

*(AFMMAA President's Message continued)*

by a common service and an organizational heritage that reaches back 100 years. As an Association, offering RX Directorate children scholarships as a hallmark tenet, we are one-of-a-kind within our domain supporting the Directorate, undertaking special projects and activities and providing an alumni forum to stay connected. To do this, AFMMAA relies on your continued membership, contributions, and voluntary efforts – Thank You! That said, please share the Newsletter with those non-member alumni peers and extend an invitation to become part of the AFMMAA community.

With this issue, we will be well into fall. There are many reasons to love fall, cooler weather, spectacular vistas of leaves turning colors, and the anticipation of holidays just around the corner. But probably most exceptional this fall is the 100th Anniversary of the Air Force Materials Laboratory/Air Force Materials and Manufacturing Directorate Capstone Banquet 7 November at the Kettering Presidential Banquet Center. RSVPs needed by 24 October (<https://invitations.afit.edu/inv/index.cfm?i=361258&k=0167430B7E5F>). The AFMMAA has done its best to get the word out to our membership and look forward to seating a couple of tables - it's always fun to see past acquaintances at a great social event! Cheers!

The AFMMAA Newsletter has as one of its objectives to keep you informed and connected. We hope we're meeting that goal and welcome your feedback ([matthew.dibiase@gmail.com](mailto:matthew.dibiase@gmail.com), 937-283-5614, [tobeyf1@gmail.com](mailto:tobeyf1@gmail.com), 937-287-1871). However, as a community, one aspect seems to be missing from our Newsletter; what have you been doing! Everyone has a story to tell or something to share and I would like to invite those to share. Beginning with the Spring edition, our Newsletter will debut an Alumni Corner. This section will be short anecdotal recounts of a great vacation, family milestone, favorite picture, or anything appropriate to share. Tobey and I look forward to your submittals.

*Personal regards,  
Matt Di Biase  
AFMMAA President  
AFMMAA Lifetime*

## JOHN J. WELCH EXCELLENCE IN ACQUISITION LEADERSHIP AWARD

Please join me in congratulating the Energy and Environment Team from RX who was recently selected as the Air Force winner for the John J. Welch Excellence in Acquisition Leadership Award.

This prestigious award is named after Mr. John J. Welch, Jr., Assistant Secretary of the Air Force for Acquisition from October 1987 to April 1992, in recognition of his significant contributions. This award recognizes teams comprised of Air Force military and/or civilian personnel demonstrating superior leadership in the acquisition area.

This is recognition of exceptional contributions and accomplishment. Congratulations and thanks for all you do for the AFRL and AF mission!

Respectfully,  
*Maj Gen William T. Cooley, USAF  
Commander, AFRL*

## AIR FORCE NEWS

Fellow "alumni," I'm very proud to relate that the AF has a new Lt. Griffith. My grandson, Brett, graduated from the AF Academy with a major in Computer Engineering and a minor in Chinese and received his commission on May 24th. He will be reporting to Vance AFB, OK for pilot training in August. In the meantime, he and a couple classmates are traveling to Peru to take in the Inca ruins @ Machu Picchu and then proceeding on to visit Australia and a fellow engineering Exchange Student with whom he shared a room last fall at a University in Singapore.

*Gordon Griffith  
[ghgriffith@tds.net](mailto:ghgriffith@tds.net)  
AFMMAA Lifetime*



*Fall is Here!*

## AF SENIOR TECH NAMED ACS FELLOW

Wright-Patterson Air Force Base, Ohio -- A principal scientific expert at the Air Force Research Laboratory was selected as a 2017 Fellow of the American Chemical Society for his outstanding achievements and contributions to science and professional leadership in the field.

Dr. Timothy J. Bunning, Chief Scientist, Materials and Manufacturing Directorate, is one of only 65 members of the 157,000 person society to receive this designation this year and one of only a handful of AFRL scientists to ever achieve this honor.

“I am certainly humbled by the recognition and sincerely thank those who felt strongly enough to nominate and advocate for me,” said Bunning. “I’ve spent my entire career in AFRL and love the mission-driven focus of the organization, knowing our work supports the Airmen. I am lucky to be surrounded by the best-of-the-best through the year, and any individual accolade is truly a reflection of this extended team. Any recognition in a peer community reaffirms that our work is of high quality, is peer accepted, and is relevant and important to the field.”

ACS is the world’s largest scientific society, established more than 140 years ago with the goal of transforming lives through the power of chemistry. The organization acts as a catalyst for information sharing, research and education with the aim of advancing chemistry and innovation through career development programs and product and outreach services across the globe.

Unlike many scientific society fellowships, the ACS Fellow honor recognizes members not only for their scientific expertise and professional contributions in the larger peer community but also strongly takes into account the strength of the individual’s volunteer service to the ACS community at large.

In addition to being acknowledged for his advancements to the science surrounding liquid crystal/polymer mixtures, optical sensing and laser beam control and filtering, Bunning is being recognized for more than 20 years of volunteer service to ACS. He has held



**Dr. Timothy J.  
Bunning**  
*AFMMAA  
Lifetime*

positions such as Technical Program Chair, Member-at-Large, and Treasurer, and his tireless involvement in Science, Technology, Engineering and Mathematics (STEM) programs have helped build the future scientific workforce.

Few achieve the fellow honor, further establishing Bunning as a foremost authority in the field.

“This fellowship for an AFRL scientific leader reaffirms that AFRL is a world-class research and development organization, on par with national labs, global universities and industrial leaders,” said Dr. Richard Vaia, Functional Materials Division Technical Director and ACS Fellow. “Tim’s contributions to the field are exemplary and set a high standard for the organization and community.”

Bunning began his career at AFRL in 1990 as a graduate student sponsored by a doctoral fellowship from the Air Force Office of Scientific Research and pursued his doctoral research on-site with AFRL. After graduating and conducting a short post-doctoral fellowship at Cornell University, he returned to the Materials and Manufacturing Directorate, spending six years as an on-site contractor before transitioning to civil service in 1998.

Quickly establishing himself as a subject matter expert in soft materials, Bunning spent the next few years in diverse positions across the directorate, honing his technical expertise while building skills in management and leadership. His titles ranged from in-house researcher to project engineer, team lead, branch chief, division technical director and division chief.

In 2015, Bunning was named a Senior Technologist for the Air Force, one of only 27 in the service, equivalent in rank to a brigadier general and member of the senior executive service corps. He also assumed the position of Chief Scientist at the Materials and Manufacturing Directorate where he leads and mentors a diverse technical staff of more than 1000, working all materials classes across the technical and manufacturing maturity levels for a variety of Air Force capabilities.

“The people of this laboratory make it special. The most satisfaction I have day-to-day is knowing I played a part in the recruiting and mentoring of a bunch of them. What we leave behind as scientists and engineers in terms of the people is the most important thing we can do. Part of that is the growth and development of them as practitioners within a technical peer community,” said Bunning.

*(Continued on Page 4)*

*(AF Senior Tech Named ACS Fellow continued)*

Bunning's contributions to the scientific field through his career is at the cornerstone of his recognition with the ACS fellowship. To date, he has more than 260 refereed publications, 18 patents and has given or supported more than 700 technical peer community presentations. He is active in a number of professional societies, on the editorial boards of numerous journals and serves on the external advisory boards of numerous entities balanced across a unique, multidisciplinary technology landscape. He was previously recognized as a Fellow by the American Physical Society, International Society for Optics and Photonics, Optical Society of America, Materials Research Society, Royal Society of Chemistry and the Air Force Research Laboratory.

Though his career has led to many scientific achievements, Bunning is dedicated to the mission of the ACS, maintaining an active leadership role in the organization over the years. He was conferred the ACS Polymeric Materials Science and Engineering (PMSE) Fellowship in 2013 and recently became the PMSE Treasurer, the first office in the ACS organizational executive leadership sequence. As a chief advocate for the society, Bunning has helped attract a new generation of scientists to the organization, ensuring a strong base for multidisciplinary science problems of the future. He has also coordinated countless symposia on behalf of the organization, uniting hundreds worldwide on behalf of science.

While his accolade list continues to grow, Bunning stresses that the most rewarding aspect of his profession is the opportunities he has to mentor and work with young scientists across the spectrum.

"People, people, people-- recruit good ones, grow them, and get out of the way. This recognition is a testament to those that have lived and contributed to the journey with me through the years."

<http://www.wpafb.af.mil/News/Article-Display/Article/1232919/air-force-senior-technologist-named-acs-fellow/>

*By Marisa Alia-Novobilski, AFRL  
WPAFB News*

## 2017 AFRL FELLOWS FROM RX

To the Team AFRL, recently Dr. Stone and I had the pleasure of personally notifying 11 of your colleagues selected as AFRL Fellows or AFRL Science and Engineering Early Career Award recipients for 2017. I welcomed six into the cadre of AFRL Fellows and Dr.

Stone congratulated five as the newest class of Early Career Awardees. This is my first time performing this honor and the experience solidifies my belief that first and foremost our AFRL workforce is our singularly most important asset.

Since this medium does not allow me to adequately address the many accomplishments of the 2017 awardees, I will only introduce them and a couple of their achievements and invite you to visit the AFRL Fellows and AFRL Early Career Award sites at the links shown within the text below to see their nomination narratives and the letters provided by people external to AFRL who supported their nominations. Reading these will give you a much better appreciation of your colleagues efforts and allow you to see first-hand the testimonies from external endorsers that explain the impact AFRL has on a broad community.

Please congratulate the recipients on this significant milestone in their career and also set aside the evening of 26 Oct 2017 to attend a banquet in their honor at the National Museum of the U.S. Air Force. More information will be provided on the banquet at a later date.

### 2017 AFRL Fellows from RX

The AFRL Fellows program recognizes our most outstanding scientists and engineers in the following areas: (1) research achievements, (2) technology development and transition achievements or (3) program and organizational leadership. Conferred on AFRL's most distinguished and exceptional S&Es at the pinnacle of their careers, individuals selected for this honor represent the top 0.2% of AFRL's professional technical staff and join an elite professional cadre. In addition to recognition, each new AFRL Fellow receives a two-year, \$300K research grant (\$150K per year) to further their chosen research. The six Fellows selected this year bring the total number of AFRL Fellows awarded since 1987 to 191. Listed below are two RX individuals that were selected to the class of 2017:

**Dr. Allan Katz** is currently the Program Manager, High Temperature SiC/SiC Composites for Turbines in the Materials and Manufacturing Directorate. He has 39 years' experience at AFRL and is considered by many to be the "father" of ceramic matrix composite (CMC) materials for high temperature applications. He led pioneering research on high temperature behavior of CMCs in the early 1980s, which revealed several important mechanisms operative in composites, including

*(Continued on Page 5)*

(2017 AFRL Fellows From RX continued)

the criticality of fiber stability and interface behavior. He has led multiple development and technology transition efforts to bring advanced CMC materials to fruition for turbine engine applications. SiC/SiC CMCs with heritage to AFRL/RX and Dr. Katz were successfully demonstrated under the Versatile Affordable Advanced Turbine Engine Program and have transitioned for maturation to next generation engines under the Air Force's Adaptive Engine Transition Program. The Navy and Army have also adopted SiC/SiC CMCs as high pressure turbine shrouds for the T700 engine that powers their helicopters and the Pave Hawk. Rolls-Royce will be testing similar shrouds in its engines that power the C-130J, CV-22, and RQ-4.

**Dr. Ajit Roy** is currently the Principal Engineer and Group Lead for Computational Nanomaterials in the Nanoelectric Materials Branch of the Materials and Manufacturing Directorate. He has a total of 30 years' experience in AFRL (18 years as a government scientist). He is internationally recognized for exceptional scientific contributions and leadership in research and development of the structural, thermal, and electronic properties of carbon materials. He pioneered the development of carbon foam technology and matured it to establish the manufacturing technology base of 11 manufacturers and assisted in transferring the technology to XSS-11, XSAS-11 and Autonomous Nanosat Guardian for Evaluating Local Space satellites and heat exchangers in Boeing 787-9 aircraft. He recently connected the physics of the atomistic scale multi-phase material response to bulk performance, greatly reducing empiricism in materials design, thus enabling innovation, development, and accelerated tech transition of tailored materials functionalities. His peer metrics include >240 publications (~140 peer-reviewed), >400 presentations including numerous invited/plenary talks, several patents, >8500 citations and an h-index of 41. His technical peers have elected him as a Fellow in American Institute of Aeronautics and Astronautics (AIAA), American Society of Mechanical Engineers (ASME), and American Society for Composites (ASC).

The link to the 2017 AFRL Fellows site for more information on each Fellow is <https://cs2.eis.af.mil/sites/11469/SitePages/2017%20AFRL%20Fellows.aspx>.

## AFMC PROMOTION

Former RX Director, Timothy J. Sakulich, AFMMAA Lifetime, received an AFMC promotion.

FROM: DR-IV, Vice Director, 711th Human Performance Wing, Air Force Research Laboratory (AFRL), AFMC, Wright-Patterson AFB, OH.

TO: DR-V, Vice Director, 711th Human Performance Wing, Air Force Research Laboratory (AFRL), AFMC, Wright-Patterson AFB, OH.

*Congratulations!*

*Jim Mattice*

*[jjmattice@sbcglobal.net](mailto:jjmattice@sbcglobal.net)*

*AFMMAA Charter*

## DR-V ANOUNCEMENT

Please join me in congratulating Mr. Darrell Phillipson on his selection as the DR-V, Senior Scientific Technical Manager (SSTM) in AFRL/RC and Mr. Timothy Sakulich on his selection as the DR-V, SSTM in 711th HPW/DV. Their backgrounds and experience make them excellent selections for these SSTM positions. This is a major honor as the DR-V has just been established for senior positions in AFRL.

Congratulations, Mr. Phillipson and Mr. Sakulich, on your promotion to these positions.

Respectfully,

*Maj Gen William T. Cooley, USAF  
Commander, AFRL*

## 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	- Airman Systems
HP	711HPW/HP	- Human Systems Integration
RI	RI	- Information
RV	RV	- Space Vehicles
RW	RW	- Munitions
RX	RX	- Materials and Manufacturing
RY	RY	- Sensors
AFOSR	AFOSR	- Air Force Office of Scientific Research (AFOSR)

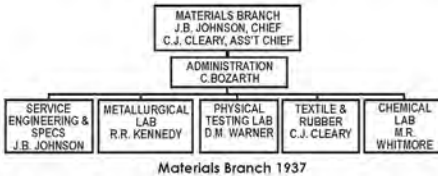
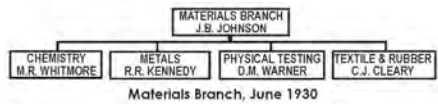
**RX - A CENTRY OF SCIENTIFIC EXCELLENCE**

The picture below shows what they look like. You can order them by emailing me at amy.whitney-rawls@us.af.mil. The coins are \$10 apiece. You can also buy additional RX Centennial apparel here: <http://www.companycasuals.com/WrightPatAFB/start.jsp>.

*We have placed another order for the RX Centennial coins.*



Since the last newsletter we have had several Centennial events. On 9 June, we held an RX Centennial picnic at Bass Lake. A few alumni members joined RX employees and their family for the event. The below brochure was passed out at the picnic.



The organizational structure of the Materials Branch in 1930 showed a significant change in material study; metal had superseded wood as the most important structural material in aircraft. Wood research had been reduced to the point of being absorbed by the Physical Testing Unit. This structure remained essentially unchanged until 1937, when an assistant was assigned to the branch chief for the first time, an indication that the workload was building at the executive level.



1917 Chalmers automobile. Chalmers merged with Maxwell in the 1920s, the forerunner of Chrysler.



Maxwell House Coffee, one of dominant mass market American coffees, was the creation of Joel Owsley Cheek, a rural Kentucky native and traveling salesman.



Wright Flyer 1st flight



J.B. Johnson was a charter member of the Material Section at McCook Field and has the distinction of being its first civilian director and serving in that capacity from 1922-1949. Throughout his years of leadership he guided the lab through participating in all technical and administrative decisions of consequence and earned the title of "Mr. Materials of the Air Force." He served an additional nine years in the Aeronautical Research Laboratory, leaving as Chief Scientist. Mr. Johnson completed 39 years of service at McCook and Wright Fields, and a total of 42 years as a civil servant prior to his retirement in 1958.



Mr. Thomas A. Lockhart  
2017  
Director, Materials and Manufacturing Directorate



Col. Charles D. Omsby  
Acting Director, Materials and Manufacturing Directorate

AIR FORCE RESEARCH LABORATORY



**Historic Facts 1917-2017**



Engineering Division, Air Service, McCook Field.



McCook Field was established in Dayton, Ohio in 1917 to meet the Army Signal Corps' aviation engineering and experimental needs as a result of the United States' entry into World War I.

Dayton was selected because of its central location with respect to such other cities as Indianapolis, Detroit, Buffalo, Cleveland, Chicago, and Pittsburgh, and it represented a good industrial area with an abundance of skilled personnel.

Materials and Manufacturing Directorate

*(RX - A Century of Scientific Excellence continued)*

Several shortcomings at McCook, including its small size, were recognized in the 1920s. A group of local businessmen formed the Dayton Air Service Committee to keep aeronautical research in the area. Upon government approval of a plan to provide a new field, Dayton citizens raised \$450,000 and several tracts of farmland were purchased and deeded to the government without cost. President Calvin Coolidge accepted the land gift from Mr. F.B. Patterson on 9 August 1924. As a tribute to Dayton's air pioneers, the new land was named Wright Field.



The only group photo to be made of all McCook Field personnel was taken on 10 September 1925.

From its inception, the Material Section stressed the importance of materials research and characterization as critical to many aspects of the fledgling Air Service. The section's leader, Lt Col H.C.K. Muhlenberg exerted much of his efforts in achieving proper recognition of the Material Section by the other Sections on McCook Field and the Air Service.

The Material Section at the time was composed of the following branches: Liaison, Chemical, Physical Testing, Metallurgical, Wood, Textile, and Rubber.



Probable earliest group photograph of the Material Section.



Materials Laboratory Military Personnel, 7 October 1955.



foreshadowed shortage of airplane lumber.

In the early years there was a heavy concentration of work associated with wood as one of the major materials entering into airplane construction. Not only were plain woods being investigated, but also laminated wood structures due to a



In 1917, a can of Campbell's Tomato Soup cost 10¢ and two pounds of hamburger cost 35¢. In August 1917, the Food and Fuel Control Act was passed which allowed the government to restrict and set prices of food. It also asked people to not waste any food.

The Materials Branch heavily researched processes and finishes to protect structural aircraft materials in the 1930s. Exposure and tidewater racks were set up at Chapman Field, Florida, to obtain accelerated exposure



Typical test station to study corrosion resistance of various materials under salt air conditions. This particular setup is Point Judith in Rhode Island, 1936.

performance data for organic aircraft finishes—three months' exposure in Florida was equivalent to one year in Dayton. The intensified effort resulted in zinc chromate primer, which became the principal protector of aluminum alloys throughout the military departments. Due to its toxicity, the use of zinc chromate has greatly diminished in recent years.



Zinc chromate being applied to various aircraft parts.

6 October was the McCook Field Site Commemoration. We got rained out on the 5th but still had around 100 base and community partners attend the unveiling of an Ohio Historical Marker at McCook Field. If you are ever down at the Kettering Softball Fields, check it out.

<http://wdtn.com/2017/10/06/local-military-field-celebrates-100-anniversary/>

Our final major event of the year is happening on 7 November. This is definitely going to be the party of the century. You don't want to miss out! Please RSVP by 24 October at <https://invitations.afit.edu/inv/index.cfm?i=361258&k=0167430B7E5F>.

**100 Years**

MATERIALS & MANUFACTURING DIRECTORATE

*Flying Through Time*  
1917-2017

**Don't miss the PARTY of the Century!**  
Join us at the  
**RX Centennial Celebration!**

Dinner Buffet

Cocktails, Soda, Coffee

Improv Entertainment by Dayton's Black Box Theatre Company

Gift Basket Raffle - 9 chances to win!

Air Force Jazz Band

Caricature Artist - free!

Commemorative gift to fill with sweet treats from the candy bar!

RSVP by October 24<sup>th</sup>, 2017  
\$30 per guest  
Contractors and spouses welcome!

Tuesdays, November 7, 2017  
5:30-9:00

Presidential Banquet Center  
4572 Presidential Way  
Dayton, OH 45429

For more information, contact:  
Josh Forbes @ 937-255-9505

**YOUR AFMMAA OFFICERS AND COMMITTEE CHAIRS**



**Matt Di Biase**  
President



**Clay Harmsworth**  
Exec. Vice President



**Neal Ontko**  
Vice President,  
Membership



**Dennis Naughton**  
Treasurer



**Don Shrader**  
Secretary



**Jim Malas**  
Scholarship

**100 YEAR ANNIVERSARY - RX BASS LAKE PICNIC**

To commemorate the upcoming 100th Anniversary, a fun picnic was held at the Bass Lake Lodge on WPAFB with current military and civilian employees and their families and AFMMAA alumni in attendance. Following are some pictures from inside the Lodge. There were also many fun events for kids and parents in the beautiful area surrounding the Lodge and Bass Lake.



**Socializing, Good Food, and Fun was Enjoyed by All!**

**LUNCHEON SCHEDULE**

Please mark your calendar now for the following AFMMAA scheduled luncheons.

- Oct 19 (Thursday) – Osaka (near Golden Coral)
- Nov 15 (Wednesday) – Red Lobster (near Walmart, Beaver creek)
- Dec 14 (Thursday) – Brios (Greene Center)

The monthly luncheons are arranged by John Williamson. An RSVP is typically not necessary, but if you think you are coming, it would be helpful so John can let the restaurants know how many tables are needed. Please respond to [johnw13@earthlink.com](mailto:johnw13@earthlink.com) and also let him know where you would like to eat for next years planning! Every year we have excellent participation in these events. Mark your calendar now for these 11:30 am luncheons.

**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 2017 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.**





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

**P.O. Box 341413, Dayton, Ohio 45434-1413**

**MEMBERSHIP APPLICATION AND SCHOLARSHIP DONATION FORM**

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

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

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

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

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

Check here if we **CANNOT** release your information, i.e., address or e-mail.

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 2018 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).

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

\$\_\_\_\_\_ **Annual Membership Dues** (for CY 2018, i.e., 1 Jan - 31 Dec '18) are \$10.

\$\_\_\_\_\_ **Lifetime 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 form to:**

**AFMMAA, P.O. Box 341413, Beavercreek, OH 45434-1413**

## AFMMAA MEMBERSHIP

We continue to reach out to many in RX who are nearing retirement and also RX industry friends in the Dayton community. In 2017 **Robert Ault, Dr. Curt Fielder,** and **Don Hyden** became members. Eleven others became Life Members in 2017: **Dr. Dale Chimenti, Bob Denison, Robert Drerup Jr., Gordon Griffith, Anthony Jensen, Charlotte McConnell, Dr. Melvin Ohmer, Colonel Charles Ormsby, Dr. Shashi Sharma, Dr. Chuck Ward and Dr. Wayne Ward.**

Our current membership now consists of approximately 160 alumni. This includes 12 Charter members, 99 Life members and 84 members who pay yearly dues. Another 100 alumni currently receive the Newsletters, but have not joined or recently paid dues.

If you need to pay your 2018 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.

## THE RX EMBLEM: SYMBOLIC OF OUR DIRECTORATE AND MISSION

The gold circle of arrows projecting outwards signifies the extension of knowledge beyond present boundaries. The three arrows represent materials research, application, and manufacturing technology. The inward pointing arrows portray the extensive efforts contributing to the circle of knowledge. The emblem bears the Air Force colors, gold and ultramarine blue. Against a background of blue, depicting the sky, the primary theatre of the Air Force operations, the central atom represents the building block of all materials.



## AFMMAA SCHOLARSHIP DONORS AS OF 10 OCTOBER 2017

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 over **\$31,500** to the Scholarship Fund. Additionally, many RX individuals have contributed over **\$21,000** to the AFMMAA through the Combined Federal Campaign. We thank all for their generous giving. It is very essential to make our scholarship program so successful. The 2017 donor amount changes/increases are shown in **bold**.

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

Dr. Wade Adams	Ms. Kay March
Tobey Cordell	Mrs. Julia Millham
<b>Robert Denison</b>	<b>Paul Propp</b>
Dr. Thomas D. Fiorino	<b>Dilip Punatar</b>
<b>Dr. Ed Kuhl</b>	John Williamson
Dr. Alan Lovelace	

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

Lyn Brown	Dr. Douglas Hutchens
Tom Cooper	<b>Kenneth Kojola</b>
Gordon H. Griffith	Gary Waggoner
Dr. Jack Henderson	

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

AFRL/MLO	Drs. Meir & Ruth
AFRL/ML Exec. Group	Pachter
Dr. Larry Butkus	John Rhodehamel
Dr. and Mrs. Ronald Eby	Dr. George St. Pierre
Ken Elbaum	Don Tarazano
Warren Johnson	

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

AFRL/MLB	Bobby McConnell
AFRL/MLLMN	Charlotte McConnell
Dr. Larry Bidwell	Zoe Dell Nutter
Maj. Gen. (Ret.) Terry L. Drake	Paul Sampson
<b>Robert Drerup, Jr.</b>	Robert T. Schwartz
Dick Engman	<b>Joe Sciabica</b>
Dr. Barry & Sharon Farmer	Don Shrader
<b>Robert J. Gran</b>	Dr. Kathy Stevens
Ron Grogan	Dr. Edwin L. Thomas
Jacques Hemes	Hardy Trolander
Jim Huffman	Dr. Andrey Voevodin
<b>Dr. Frank Kelley</b>	<b>Roland Watts</b>
<b>Dr. Ronald Kerans</b>	<b>Dr. Benjamin A. Wilcox</b>
Lou Luedtke	Dennis E. Wisnosky
Rich Lusignea	Bill Woody

## SEMIANNUAL JUNE BUSINESS AND MEMBER MEETING

This past June, the Semiannual AFMMAA member meeting was held at the Engineers Club of Dayton, with 40 friends in attendance. Dr. Tim Bunning, the RX Chief Scientist and a Lifetime member of AFMMAA, presented an interesting briefing on his history in the Directorate. Bernie Chasman's son, Dr. Jon Chasman, and his wife Janice came from Minnesota and again brought some of the items from Bernie's lengthy career in the Lab. It was great fun for all in conjunction with the ongoing 100th Anniversary celebration of the Materials and Manufacturing Directorate, for which Amy Whitney-Rawls, the RX Director's Assistant, updated the planned events.



**Attendees were: First row: Fred Meyer, Bill Woody, Dr. Tim Bunning, Amy Whitney-Rawls, Tobey Cordell, Ken Elbaum, George Schmitt. Second Row: Jim Mattice, Dr. Vince Russo, Tom Cooper, Roland Watts, Dennis Naughton, Neal Ontko. Third Row: Dr. Walt Griffith, Warren Johnson, Dr. Bob Cochoy, Dr. Jim Malas, Janice Chasman, Jim Kampe, Don Shrader. Fourth row: Bill Lampert, Dr. Terry Ronald, Joe Kolek. Fifth row: John Williamson, Dr. John Maguire, Dr. Jack Henderson, Dr. Jon Chasman, Don Tarazano. Sixth row: Dr. Bob Albrecht, Dr. Merrill Minges, Al Gunderson, Clay Harmsworth, Dr. Sonny Pierce. Seventh row: Bob Gran, Ron Decker, Bob Drerup, Dr. Bob Crane, Bob Rapson, Dr. Larry Fehrenbacher, Dr. Charlie Browning.**

### RECENT MEMBER INFORMATION

During the year many of our members have provided comments for the AFMMAA Newsletter and website regarding their current activities and interests. We did not receive comments for this edition of the Newsletter. We would like to hear from you! Please use the Membership and Scholarship Donation Form, Recent

Information About Yourself, or email to AFMMAA attention of Dick Engman, membership information at [dkengman@msn.com](mailto:dkengman@msn.com).

# AFMMAA LUNCHEONS

John Williamson continues his excellent job as the volunteer planner for the AFMMAA monthly luncheons. He keeps providing an ever-changing mix of area restaurants. All the attendees appreciate his hard work. He says the number of alumni attending has ranged from 10 to 22. Please come and join your friends. It's always fun to catch up and reminisce.

## April Luncheon Olive Garden (Beavercreek)



In attendance were: Bill Lampert, Al Gunderson, John Williamson, Tom Cooper, Ken Kojola Dr. Terry Ronald, Tobey Cordell, Dr. Bob Cochoy, Dr. Jack Henderson, Kay March



## May Luncheon Wandering Griffin (formerly Quaker Steak near Home Depot, Beavercreek)

(1) →



(2) ←



(3) →

In attendance were: (1) George Schmitt, Fred Meyer, Tom Cooper, Dr. Terry Ronald, Clay Harmsworth, Ken Kojola; (2) Bob Drerup, Bill Lampert, John Williamson, Ron Grogan, Dr. Bob Cochoy, Dr. Dan Miracle; and (3) Tobey Cordell, Dr. Jack Henderson, Kay March

(Continued on Page 13)

## AFMMAA LUNCHEONS (CONT'D)

### August Luncheon at China Garden Buffet



In attendance were: Dr. Bob Cochoy, Dr. Wayne Ward, Bill Lampert, George Schmitt, Dr. Jack Henderson, Al Gunderson, Gary Waggoner, Ron Grogan, Tom Cooper, Roland Watts, John Williamson, Ken Kojola, and Tobey Cordell (Taking the Photo)

## SPRING NEWSLETTER STUFFING PARTY

We would like to thank all those who graciously helped with the preparation of the Spring Newsletter for mailing. If you would like to be part of this fun in the future please contact Matt Di Biase or Tobey Cordell.



Above is a Picture of the Group that Convened at UTC: Ron Grogan, Dr. Bob Cochoy, Tobey Cordell, John Williamson, Dick Engman, and Dr. Jim Malas.

## COMBINED FEDERAL CAMPAIGN KICK OFF CELEBRATION

Matt Di Biase, President; Clay Harmsworth, Executive Vice President; and Tobey Cordell represented AFMMAA at the Kick Off of the 2017 Combined Federal Campaign.

Representatives from many of the WPAFB organizations stopped by the table and picked up information about the scholarships that AFMMAA provides for college-bound students. They also handed out copies of the AFRL/RX 100th Anniversary History, "Celebrating a Century of Scientific Excellence."



**Matt Di Biase, Clay Harmsworth, and Tobey Cordell (right to left) at the Kick Off of the 2017 Combined Federal Campaign that was held at the Nutter Center on 11 October**

## FALLEN COMRADES

Ed Morrissey passed away on 4 July 2017. He had retired in 1992. He started working as a civilian employee in 1967 and worked at the Materials Lab as a chemist for most (all?) of his career (information provided by his son, Matt).

Dr. Bob Craig passed away on 30 August 2017.

## ALBERT SAUVEUR ACHIEVEMENT AWARD

Special congratulations to Dr. Lee Semiatin, who was recently recognized by ASM with the Albert Sauveur Achievement Award for 2018, "for seminal research and development that has established the discipline of Processing Science and spurred related work in academia, industry, and government laboratories worldwide." This is a prestigious award, which was established in 1934, and boasts a long list of outstanding luminaries in the field of materials science as previous recipients. Please congratulate Lee when you see him.

*Dr. Tim Bunning,  
AFMMAA Lifetime*

## AFMMAA BOARD MEETING 6 OCTOBER 2017

Board meeting – Matt Di Biase, Clay Harmsworth, Dennis Naughton, Don Shrader, Dick Engman, Tobey Cordell, George Schmitt.

### CFC (Matt)

- New OMB charity approval process
- 11 October CFC kick-off

### Newsletter (Tobey)

- Publish mid-October

### Scholarship (Jim)

### Finance (Dennis)

### Membership (Dick)

- E-mail/ mailing list

### 100th Anniversary

- 7 Nov Capstone Banquet
  - 24 October RSVP
  - AFMMAA contribution
- RX Family Appreciation Contest

### AFMMAA Calendar (Dick)

### Additional Topics

- Update pictures
- Christmas card
- others

**AFMMAA CHARTER AND LIFE MEMBERS AS OF 10 OCTOBER 2017**

We currently have 99 Life Members. Eleven (shown below in **Bold**) recently became “Lifers” – **Dr. Dale Chimenti, Bob Denison, Robert Drerup, Jr., Gordon Griffith, Anthony Jensen, Charlotte McConnell, Dr. Melvin Ohmer, Colonel Charles Ormsby, Dr. Shashi Sharma, Dr. Chuck Ward and Dr. Wayne Ward.** If you are not a “Lifer” we encourage you to sign up now. 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 [www.afmmaa.org](http://www.afmmaa.org) website. Your memberships and scholarship contributions are very necessary for our mission and to grow our annual scholarships. A list of the Charter and Life Members is shown to the right. ➡

**WE WANT TO BE INFORMED**

Are you receiving email from the AFMMAA? We try our best to keep everyone informed of the monthly luncheons, annual meetings, other current events and your personal replies/”Recent Membership Information” to our Newsletters. We want you to be informed of all these special RX events.

However, we have a problem. Some members have moved or changed their email address to a new provider. If you are not receiving our emails and want to be informed of AFMMAA and RX events, please send your new email address to Neal Ontko, Membership Chairman ([nontko@utcdayton.com](mailto:nontko@utcdayton.com)).

**AFMMAA Charter and Lifetime Members**

**Charter Members**

Dr. Wade Adams  
 Bernard Chasman\*  
 Tom Cooper  
 Dr. Gary Denman

Dr. Craig Hartley  
 Dr. Bill Kessler  
 Jim Mattice (SES Ret)  
 Dr. James Myers

Bob Rice\*  
 Lynn Trainor  
 Dr. Ben Wilcox\*  
 John Williamson

**Lifetime Members**

Robert Albrecht  
 Mark Anderson  
 Dr. Tia Benson-Tolle  
 Dr. Larry Bidwell\*  
 B/Gen (Ret) Phil Bouchard\*  
 Lyn Brown  
 Dr. Charles E. Browning  
 Dr. Tim Bunning  
 Dr. Larry Butkus  
**Dr. Dale Chimenti**  
 Dr. John Christian  
 Dr. Bob Cochoy  
 Dr. Dennis Corbly  
 Tobey Cordell  
 Lt Col (Ret) Ron Decker

Dr. Jim Hall  
 Dr. John Henderson  
 Ed Hermes  
 Rob Hull  
 Dr. Kumar Jata  
**Anthony "Tony" Jensen**  
 Henry Johnson  
 Warren Johnson  
 David Judson  
 Dr. Frank Kelley (Honorary)  
 Bob Kincses  
 John Koenig  
 Dr. Ed Kuhl  
 Dr. Bill Lampert  
 Cole Litton\*  
 Tom Lockhart (SES)  
 Dr. Jim Malas  
 Kay March  
 Dr. Michael McCabe  
 Bobby McConnell  
**Charlotte McConnell**  
 Dr. Enrique Medina  
 Dr. Dan Miracle  
 Dr. Tom Moran  
 Jim Mullineaux  
 Dennis Naughton  
**Dr. Melvin Ohmer**  
 Neal R. Ontko  
**Col Charles Ormsby**  
 Dr. Nick Pagano  
 Larry Parsons  
 Jerry Petrak  
 Dr. Cyril (Sonny) Pierce  
 Dilip Punatar

Bob Rapson  
 John Rhodehamel  
 Dr. Terry Ronald  
 Dr. Vince Russo  
 Col (Ret) Tim Sakulich  
 Paul Sampson  
 Dr. Bob Schafrik  
 Stan Schulman  
 George Schmitt  
 Joe Sciabica  
**Dr. Shashi Sharma**  
 Don Shrader  
 Jerry Sieron\*  
 George Slenski  
 Dr. Jim Snide  
 John Speers  
 Dr. George St. Pierre  
 Dr. Katherine Stevens  
 Donald Tarazano  
 Scott Theibert  
 Jon Tirpak  
 Angie Tymofichuk  
 Dr. Andrey Voevodin  
 (SES ret)

**Bob Denison**  
 Matthew DiBiase  
**Robert Drerup, Jr.**  
 Ken Elbaum  
 Lt Col (Ret) Dick Engman  
 Kathleen Falensky  
 Frank Fechek  
 Dr. Larry Fehrenbacher  
 Dr. Thomas Fiorino  
 David W. Fischer  
 Don Forney\*  
 Dr. Hal Gegel  
 Col John W. Gloystein  
 Henry C. Graham  
 Dr. Alten (Skip) Grandt  
**Gordon Griffith**  
 Dr. Walt Griffith  
 Lois Gschwender  
 Jeffery Guthrie

Gary Waggoner  
 Dr. Dave Walker  
**Dr. Chuck Ward**  
**Dr. Wayne Ward**  
 Roland Watts  
 Dennis Wisnosky  
 Bill Woody  
 Col (Ret) Carol Yarnall

\*Deceased



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

## AFMMAA WEBSITE

Dr. Terry Ronald is the new AFMMAA Webmaster. He has, with AFMMAA Board approval, been rethinking the design of the AFMMAA web site. The idea is both to bring it up to date in terms of its content but also to create a more pleasing design for its layout. We invite you to view the latest version of the site and, in particular, to provide suggestions that might enhance its overall effectiveness. In general, it seems the web site should provide information about the alumni association—its history, purpose, activities and so on—but it should also serve as a useful tool for members. The site has been reduced to just one public section, which is intended to be an information source for anyone wanting to know more about AFMMAA.

Terry is soliciting input regarding the site. What could be done to improve it and to make it more useful? What could be added? What should be changed? What would make it more attractive? It is a work in progress and is not yet fully up to date in some areas, so if you have any ideas that might lead to improvements in its

style, content, function and usefulness, please feel free to contact him at: [webmaster@afmmaa.org](mailto:webmaster@afmmaa.org).

## 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.

