



ARSAG INTERNATIONAL

Aerial Refueling Systems Advisory Group

NEWSLETTER May 2017

ARSAG 2017 Historic success

From the desk of the Chairman:

Our Annual Meeting was opened in grand style by General Carlton D. Everhart II with an outstanding keynote address on the vast operations of global air mobility in the current world. AMC stands ready at the threshold of every free world wartime and humanitarian effort. Lt General Lee K. Levy followed with his review of the Air Force Sustainment Center's major role in enabling the mobility force structure to serve the world. Lt General Maryanne Miller reviewed the fully integrated role of the Air Force Reserve Command in fulfilling the global mobility mission. Major General Christian Badia's account of the growing European Air Transport Command highlighted the multinational cooperation and joint force deployment throughout NATO. Air Commodore Richard Lennon, RAAF, spoke of modernizing aerial refueling test techniques and illustrated the complex requirements of testing and clearances required among nations. Maj General Lawrence Martin, SAF/IA, presented the importance of building relationships and building airpower partnerships, capabilities and capacity among nations. On Wednesday morning, Maj General Kenneth Lewis, AFRC, drew on his considerable experience in international aerial refueling to discuss the integration of complex multi-force entities that can result in a successful mission. This leadership review presented to an international military and industry audience is unique in the world of aerial refueling. I was gratified by these senior officers accepting our invitations to speak and to participate in Wednesday morning's Senior Military Panel.

The international ARSAG team continues to attract the notice of the world with progress and continuous improvements in documentation and procedures making aerial refueling efficient, effective, and safe. The International Military reports provided vital status reports from eight aerial refueling nations, and from NATO IS/DI, NATO JAPCC, the European Defense Agency (EDA), the Movement Coordination Center Europe (MCCE) and contract aerial refuelers.

The International Military reports reached a new high this past year in content and quality coverage. The same is true for the Panel portions of the plenary session agenda. An ARSAG Workshop / JSB report outlined with their great progress in releasing ARSAG recommendation documents for publication. Prior to the start of the week's plenary session, NATO JAPCC met. On Thursday afternoon, special Focus Topic seminars were held to discuss Interoperability and Automated Aerial Refueling. We were pleased to welcome the USAF Tanker Program Office who held a special meeting on Thursday afternoon.

It was an outstanding annual meeting in all respects. I thank everyone for coming and participating. We were grateful, as always, for the leadership and management of ARSAG's Executive Director / Founder, Dexter Kalt.



John B. Sams, Jr. Lieutenant General USAF, ret
ARSAG Chairman / Chief Operating Officer

ARSAG 2017 Keynote and Guest Speakers



General Carlton D. Everhart II Commander
Air Mobility Command



Lieutenant General Lee K. Levy
Commander
Air Force Sustainment Center
Air Force Material Command



Lieutenant General Maryanne Miller
Commander
Air Force Reserve Command



Major General Kenneth D. Lewis, Jr.
Director, Air, Space and Information
Operations
Air Force Reserve Command



Major General Lawrence M. Martin, Jr.
Assistant Deputy Under Secretary
of the Air Force
International Affairs



Major General Christian Badia
German Air Force
Commander
European Air Transport Command



AIRCDRE Richard Lennon
Commander
Air Mobility Group
Royal Australian Air Force

Thank you

No ARSAG annual meeting could be successful without the organizational skills, applied experience and hard work of ARSAG's Panel Chairs. Under the guidance of ARSAG's Executive Director, Dex Kalt, they plan their panel agendas, gather the speakers and moderate their portions of the meeting week.

- International Military Status Reports Lt Col Laurent Donnet, BAF, ret., Skytech
- US Military Status Reports & Safety Reports Maj Gen Kenneth Lewis, USAFR, and Ed Schierberl, AFRC
- Operations Panel Col Greg Gilmour, 315 AW
- System Design Panel Tom Cavallaro, NAVAIR
- Test & Evaluation Panel Rob Tipton, Lockheed Martin
- Advanced Concepts Panel Farhad Choudhury, NAVAIR
- Reliability & Maintainability Panel Gregory Twyford, The Boeing Company
- Industry Panel / Studies and Analysis Panel Tom Swiderek, Omega Air
- Interoperability Panel Maj Victoria Thomas, USAF, JAPCC
- Seminar: Automated Aerial Refueling Dan Schreiter, AFRL/RQ, Ba Nguyen, AFRL/RQ, Steve McLaughlin, NAVAIR
- Seminar: Interoperability Discussions Maj Victoria Thomas, USAF, JAPCC

Report from ARSAG Workshop / Joint Standardization Board (JSB) for Aerial Refueling Systems

A report on the status of the ARSAG Workshops / Joint Standardization Board (JSB) for Aerial Refueling Systems was delivered in the plenary session on Tuesday. It noted that the progress during the past year in the ARSAG Workshop / JSB broke all records for release and publication of documents. ARSAG is the Joint Standardization Board (JSB) for Aerial Refueling Systems. Up to five additional documents may be ready for release this summer.

ARSAG documents are released to NAVAIR or to the US Air Force for their clearance and release for publication on the Defense Technical Information Center (DTIC) website. ARSAG recommendation documents may be adopted for use by NATO to be used in STANAGs, SRDs, etc. ARSAG documents also may be adopted to become government specifications and standards. Published ARSAG documents may be accessed by going to the DTIC website and entering a search for ARSAG.

New projects proposed

As several ARSAG documents have been completed or are nearing completion, two new potential projects have been proposed.

Aerial refueling incident investigation In a special meeting on Thursday afternoon, this new Workshop / JSB project was proposed. The suggested project would develop a recommendation document to serve as a procedures guidance tool in aerial refueling incident investigation.

The meeting included multi-service and international military and industry representatives of the aerial refueling community. They reiterated the need for an effective method for gathering accurate, germane and timely information on any aerial refueling incident.

Neither the ARSAG Workshop / JSB nor the individuals working on the project would gather incident investigation data. The aim of the program would be to compile an ARSAG Guidance Document to aid individuals/organizations involved in incident investigation in employing the most effective methods for conducting their investigations, recording their findings and making the best use of pertinent lessons learned. The individuals participating in this project would be experts in aerial refueling and would have had experience in incident investigation. With the cooperation of the meeting attendees, the ARSAG Executive Director is considering implementation of an ARSAG Workshop / JSB incident investigation project and assignment to an ARSAG Workshop / JSB Working Group.

Aerial refueling and cyber-vulnerability In the ARSAG Board of Directors meeting, the issue of the vulnerability of modern aerial refueling equipment and methods to cyber-attacks was raised. The matter was referred to ARSAG's Executive Director. He is speaking with Working Group Leads and prospective Document Managers regarding this potential new project.

Thank you to ARSAG's Event Manager, Thomas Coggeshall, for another faultlessly run meeting. Also, thank you to Registration Assistants, Laura O'Gorman, Omega Air, and Dina Nocifora.

ARSAG is grateful to the staff of the Rosen Plaza Hotel in Orlando for their support.

Note from Martin Vukich, ARSAG Chairman Emeritus

As most of you know, I lost my wife Carol last month after a long and debilitating illness. At the last, she passed peacefully and was honored with a magnificent Service conducted by our daughter Dawn with our family and many, many friends in attendance. Carol was truly a special lady – the love of my life, the mother of our two daughters, and absolutely the most beautiful and most gracious person that I have ever known. I will miss her dearly.

Following my tragic loss, I have received innumerable calls and messages from my friends and colleagues from all around the world. You have no idea how comforting and healing these kind words and thoughts have been to me. Having spent virtually all my working life in the world of aerospace, it was so special to have such nice remembrances and gestures from all of you in ARSAG. You are absolutely family to me and I love you all. I thank you from the bottom of my heart. God Bless you one and all,

Martin Vukich

ARSAG 2017 Awards

Founders Award

Aerial Refueling Certification Agency (ARCA) Team

David Benson (CE)
Scott K. Regan
Jessica L. Graham
Andrew B. Ferguson

Mark S. Burket
Joshua K. Tokarz
David L. Hilker
Larry L. Strong



ARCA is the single group responsible for all USAF AR Certifications - a critical force enabler. Coalition Tanker/Receiver Aerial refueling has become the decisive lynch-pin in today's combat operations. A short summary of the past year's accomplishments:

- The ARCA team completed forty-eight Technical Compatibility Assessments (TCAs) in 2016, several associated with Operations against ISIS
- From urgent USTRANSCOM requests to Technical Compatibility Assessment supporting "warheads on foreheads":
- Technical Compatibility Assessments supported aerial refueling test/operations of aircraft from all US services, NATO, and seventeen allied countries
- Execution agency for Warfighter Senior Integration Group (W-SIG) requirement for maximum aerial refueling interoperability in CENTCOM Area of Responsibility
- Developed/implemented methods for aerial refueling certification by similarity for camera-equipped tanker systems
- Critical sub-group in AFRL development of automated aerial refueling systems; agents of tech transition
- Reducing scope of testing for fuel system compatibility across multiple new tankers and receivers through use of innovative analytical approaches
- Using a fuel system test rig simulating receiver aircraft fuel systems, candidate tankers will be tested and characterized against legacy tankers, establishing technical basis to eliminate costly (time and money) instrumentation of every receiver fuel system prior to aerial refueling ground/flight testing
- KC-46: 1 ½ years and \$6.5M avoidance through use of the tool; similar for foreign tankers
- Once implemented, complemented by advanced modeling, larger savings possible for KC-Y/Z, future foreign tanker programs using simulator as a design baseline for tanker developers
- Deployed USAF Airworthiness directives codifying the Aerial Refueling Certification process within the overall Airworthiness Process
- ARCA members drive ARSAG outputs as panel chairs - 2016 ARSAG publications include: Aerial Refueling Test Methodologies, multiple aerial refueling STANAGs, and a new aerial refueling coupling component spec

Back row: Dave Benson, CE; Dave Hilker; Larry Strong; Mark Burket.

Front row: ARSAG Executive Director / Founder, Dex Kalt; Jessica Graham; Andrew Ferguson, Scott Regan. (Josh Tokarz not present)

Outstanding Service to ARSAG

Joseph T. Rohret, Colonel, USAF, Ret., Rockwell Collins

Joseph T. Rohret, Colonel, USAF, Ret., Rockwell Collins, served on the ARSAG Board of Directors from 2010 through 2016. He was an exceptional leader on the ARSAG Board of Directors, showing the way in fulfilling the responsibilities of a member of the Board, serving as an outstanding example in stepping up first, year after year, to offer support to ARSAG, while presenting an unequivocally positive image of his organization. His extraordinary competence and integrity always have been evident.

During his twenty-six years in the U.S. Air Force, Colonel Rohret was assigned to the Strategic Air Command (SAC) and Air Mobility Command (AMC) where his last assignment was Deputy Chief AMC Standardization and Evaluation Division, Scott AFB, IL. He also served as Commander, 451st Air Expeditionary Group, Kandahar, Afghanistan, Deputy Group Commander 19th Air Refueling Group, Robins AFB, GA, and Commander 911th Air Refueling Squadron, Grand Forks AFB, ND. He was certified in both the Pacer CRAG Block 30 and Block 40 (GATM) navigation systems. Colonel Rohret has over 5500 hours in KC-135 and 707 aircraft, having retired as an instructor/evaluator pilot in the KC-135R KC-135T and KC-135E. He retired from the USAF in November 2007.

After joining Rockwell Collins, Colonel Rohret's primary focus was on programs affecting legacy tankers (KC-135 and KC-10) and increasing their warfighting effectiveness. He served as Principle Marketing Manager for Legacy Tanker programs with responsibility for responding to Air Force Legacy Tanker requirements and evaluating and proposing solutions to meet those requirements.

Colonel Rohret holds a Bachelor of Science in Education from the University of Iowa, a Master's Degree in Education Administration from The South Dakota State University and a Master's Degree in Pastoral Studies/Counseling from St. Ambrose University. Joe will be ordained this year as Deacon for the Catholic Church. His new career reflects his deep humanitarian concerns.

Outstanding Service to ARSAG

George N. "Nick" Williams, Major General, USAF, Ret., Pratt & Whitney

The Aerial Refueling Systems Advisory Group International is honored to recognize Major General George N. "Nick" Williams, USAF, Ret, for his highly productive contributions to ARSAG.

Maj. Gen. George N. Williams was Commander, 21st Air Force, McGuire Air Force Base, N.J. In addition, he served as Director of Operations for Air Mobility Command at Scott AFB, commanded a tactical airlift squadron, a tactical airlift wing, two air mobility wings and a numbered air force. He was a command pilot with more than 5,000 flying hours. During operations Desert Shield and Desert Storm, he managed the historic airlift of the U.S. Army's XVIII Airborne Corps from Pope Air Force Base, N.C. and later served as the first air component commander for the humanitarian relief efforts in Kenya and Somalia. During Operation Iraqi Freedom, General Williams served as the Director of Mobility Forces for U.S. Central Command and oversaw the largest air mobility operation since the Gulf War. At the peak of Operation Iraqi Freedom, General Williams directed the employment of more than 350 airlift and tanker aircraft engaged in combat operations across the U.S. Central Command area of responsibility.

His thirty-four years in the U.S. Air Force were followed by eleven years with Pratt & Whitney Military Engines. He served as general manager of Pratt & Whitney's operations in O'Fallon, Illinois.

Major General Williams was a prominent member of the ARSAG Board of Directors for the past ten years of the dramatic expansion of ARSAG into a truly international military-industry organization with the integration of NATO and Allied Nations of the Western World. He was a major force on the Board, working closely with the Board Chairman to assure the organization's financial stability.



ARSAG Chairman, John B. Sams, Jr. presents award to Nick Williams.

Outstanding Service to Aerial Refueling

Rickey E. Kahler, MSgt, USAF, Ret, The Boeing Company

Rickey E. Kahler, currently serves as Chief Air Refueling Operator for International Programs at the Boeing Company.

As a young non-commissioned officer (NCO) boom operator at Wright Patterson AFB, Ohio, Rick led the development and building of the first Boom Operator Parts Task Trainer (BOPTT) a tool that has been replicated and used to train countless boom operators for more than 35 years. From Wright Patterson AFB, Rick went to Grissom AFB Indiana, an assignment provided the operational experience that prepared him for his career.

Mr. Kahler was part of the first crew qualified in the RT, the beginning of the Special Ops for tankers. He worked as a flight instructor in Europe, the Far East, the Indian Ocean, the Middle East, the Pacific and in Greenland, Iceland, and Alaska. While at Grissom, Rick flew with a young Captain named Mark Pillar -- everyone called him Pill.



ARSAG Executive Director, Dex Kalt, presents award to Rickey Kahler.

Mr. Kahler remembers arriving at Edwards AFB on 4 July 1982 at 4 am. By noon of that day, he had witnessed a shuttle vehicle landing on the lake bed and another, on the Shuttle Carrier 747, taking off, heard a rousing speech given by President Ronald Reagan and been bumped into by Senator Barry Goldwater. His first day at Edwards was a memorable one.

During his early days at Edwards, he was advised to be on the lookout for a cranky engineer from Wright Patterson AFB -- Dexter Kalt. Over the next three decades Rick enjoyed and valued his expertise and counsel. In 1986 and 1987 he worked with Dex on the first international aerial refueling clearances with the KC-135 and KC-10 in Germany.

Mr. Kahler's numerous contributions to the aerial refueling community are truly noteworthy. Rick performed Shuttle Carrier Proximity Testing and the initial contact testing for the B-1B, B-2, C-17A, F-15E, YF-22, and YF-23. He was instrumental in completing tanker / receiver clearances for the C-5B, F-117, and VC-25.

At The Boeing Company, he was chosen to be the Lead/Chief Boom Operator for the KC-767A International Tanker Program. Rick has supported multiple programs from design and test through delivery, while, at the same time, training boomers. His career has included

KC-135, KC-10, KC-707, KC-767 and KC-46. His has been responsible for design, test, and crew training for both the Italian and Japanese tankers and worked to bring the Head Mounted Display (HMD) to service.

Rick is an ARSAG veteran, providing valuable contributions to ARSAG since 1984.

Throughout his service in both the military and civilian sectors, he has made immeasurable improvements to how the tanker community flies and tests airplanes. ARSAG is proud to honor Mr. Rickey E. Kahler with this award for Outstanding Service to Aerial Refueling in recognition of his lifetime contributions to the global aerial refueling community.

Outstanding Service to Aerial Refueling

Victoria Thomas, Major, USAF, JAPCC



ARSAG Executive Director, Dex Kalt, presents award to Maj Victoria Thomas.

Major Victoria Thomas, USAF, JAPCC, is recognized by ARSAG for Outstanding Service to Aerial Refueling. Working as an airlift and air-to-air refueling subject matter expert at the Joint Air Power Competence Centre (JAPCC) in Kalkar (Germany) since June 2015, Major Thomas rapidly became a leading force in the AAR community as well as a very active member in all AAR events, always stepping forward to take more work on her shoulders.

As co-founder of the Global AAR Strategy (GAS) team and co-chairman of the NATO AAR WG Victoria's work at the JAPCC resulted in substantial improvements to aerial refueling. Examples include the management of the ATP 3.3.4.2 and the further development of the AAR clearance and compatibility data base, known as the AAR matrix. In addition, she was a driving element in the organization of the first AAR clearances Table Top Exercise that was held in Eindhoven, The Netherlands, in November 2016.

Major Thomas has been active in ARSAG, serving as a Working Group Lead and as a Panel Chair. She has organized the JAPCC meeting at ARSAG annual meeting sites including for ARSAG 2017.

ARSAG is delighted to recognize Major Victoria Thomas's exceptional contributions to the aerial refueling community and proud to honor her with this award for Outstanding Service to Aerial Refueling.

Thank you to ARSAG 2017:

Exhibitors

Rockwell Collins

Cobham

Pratt & Whitney

Boeing

Jeppesen

Northrop Grumman

Field Aerospace

Airbus

Skytech/CASS

GE Aviation

Chromalloy

Northstar

Future Engineering, LLC

Embraer S.A.

Elbit Systems of America

Sponsors

Boeing

Omega Air

Pratt & Whitney

Rockwell Collins

GE Aviation

FlightSafety, International

Looking ahead



ARSAG INTERNATIONAL Calendar of Events

2017

ARSAG Workshop / JSB
12 - 14 September
Holiday Inn
Dayton (Fairborn) Ohio

2018

ARSAG Winter Meeting 2018
6 - 8 February
Holiday Inn
Dayton (Fairborn) Ohio
Panel Chair, Steering Group Planning Meeting, 6 February
Workshop / JSB Meeting, 7 - 8 February

ARSAG 2018
24 - 26 April
ARSAG's Annual Meeting
Hilton Tucson El Conquistador
Tucson Arizona

22nd Air Refueling Wing

MCCONNELL AIR FORCE BASE, Kan. (AFNS) --

When the F-35A Lightning II deployed to Europe for the first time April 15, it was made possible by the backbone of the aerial refueling fleet, the KC-135 Stratotanker.

"The mission of the 22nd Air Refueling Wing is to refuel the fight," said Col. Albert Miller, the 22nd Air Refueling Wing commander. "This particular flight was a significant milestone of the F-35 program, and demonstrates the U.S. Air Force's global reach, something our total force team at McConnell (AFB) enables every day, making rapid, global mobility a reality."

The F-35 deployed to Europe for the first time from the 388th and 419th Fighter Wings at Hill Air Force Base, Utah. The multi-role fighter is deployed to maximize training opportunities, affirm enduring commitments to NATO allies and deter any actions that destabilize regional security.

The KC-135 from McConnell AFB was just a first step in building an air bridge to deploy the Air Force's newest weapon's platform for a training exercise with U.S. allies in Europe. Multiple refueling aircraft from four different bases provided more than 400,000 pounds of fuel for the fighters' flight from the U.S. to Europe.

"It was exciting being able to contribute to the mission directly," said Capt. Ben Hessney, a 349th Air Refueling Squadron aircraft commander for the flight.

Hessney added that a large amount of effort went into planning the success of the mission.

While this effort was a historic one, Miller stressed the value aerial refueling adds to all joint flying missions.

"The tip of the spear is not thrown, but carried by a tanker," he said. "The might of our Air Force is in our ability to deliver effects anywhere in the world in a matter of hours. It's the KC-135, and soon to be the KC-46 [Pegasus], which allows the United States to carry aid to our allies or deliver kinetic power to our enemies in a short amount of time."



An F-35A Lightning II refuels over North America en route to its deployed location in Europe April 15, 2017. The U.S. Air Force deployed the F-35A Lightning IIs, approximately 250 Airmen and associated equipment, to Royal Air Force Lakenheath, England, on a long-planned training deployment to conduct air training with other Europe based aircraft. (U.S. Air Force photo/Tech. Sgt. Nathan Lipscomb)



An A-10 Thunderbolt II departs after receiving fuel from a 340th Expeditionary Air Refueling Squadron KC-135 Stratotanker during a flight in support of Operation Inherent Resolve April 19, 2017. The 340th EARS, part of U.S. Air Forces Central Command, is responsible for delivering fuel for U.S. and coalition forces, enabling a persistent 24/7 presence in the area of responsibility. (U.S. Air Force photo/Senior Airman Trevor T. McBride)