



ARSAG INTERNATIONAL

Aerial Refueling Systems Advisory Group

NEWSLETTER May 2018

From the desk of the Chairman:

ARSAG 2018 gathered military, government and industry experts from twenty nations to share plans, discuss lessons learned, report current status, and deliberate on cooperation and interoperability in aerial refueling. The three-day meeting included exhibits mounted by leaders in aerial refueling.

ARSAG was honored by and grateful for the participation of senior-level Guest Speakers who provided unparalleled insight into the status and future of aerial refueling. Lt Gen John Thompson presented an extensive and exciting overview of the rapidly emerging Air Force role in space and worldwide command and control systems. He described these pathfinding cyberspace programs as entering a dramatically new world and bringing about many changes in the way we do business in creating and managing these systems. Lt Gen Maryanne Miller, Chief of Air Force Reserve, provided an up-to-the-minute report of the critical role being played around the world by the US Air Force Reserves.

Unique features of ARSAG's annual meetings are the military aerial refueling status reports provided by representatives of allied nations and international organizations. At ARSAG 2018, the cooperation and sharing of the information that allows for interoperability was outstanding.

A highlight of the meeting was the Senior Military Panel Discussion. The session addressed a wide range of aspects of aerial refueling from equipment to the political ramifications of international operations. Among the topics reviewed by Major General Scott Zobrist, Commander 9th AF, USAF, was the perspective of receivers in Fighter operations. Air Commodore Bill Kourelakos, Commander, Air Mobility Group, RAAF, summarized the roles and issues of operating from down under with the available force structure over such extended distances, and Brigadier General Francesco Saverio Agresti, ITAF, Deputy Commander, European Air Transport Command, provided an assessment of European aerial refueling and airlift operations.

Prior to opening ARSAG 2018, the ARSAG Workshop/Joint Standardization Board (JSB) met. The JSB Chair, Deputy Chair and Working Group Leads recounted their progress in the Plenary Session on Tuesday. Among the highlights were reports of the ARSAG recommendation documents recently cleared and ready for clearance in the public domain.

The ARSAG Board of Directors met on Monday, 23 April. Ken Kota, Cobham, relinquished his Board position due to business commitments. I am pleased to announce that by unanimous vote, Air Marshall Greg Bagwell, RAF ret., Cobham, and John Gomez, Colonel. USAF, ret., Pratt & Whitney, were invited to assume seats on the Board. The support and guidance of the ARSAG Board of Directors contribute to ARSAG's strength and ability to fulfill its mission.

We were pleased to honor several members of the aerial refueling community with awards highlighted in the article following. I will again comment on the bravery and professionalism of the Royal Netherlands Air Force KDC-10 crew in refueling two low fuel F-22s over Iraq -- avoiding what might have been a critical situation in a combat zone.

The benefits provided to ARSAG 2018 attendees were built on the fine work and expertise of: all Presenters of Status Reports and Briefings; Moderators; Panel Chairs/Co-Chairs; Working Group leads; JSB Chair and Deputy Chair; Document Managers and Technical Advisors; Steering Group Members; Executive Director; Events Manager and Staff.

I continue to emphasize that our ARSAG collective objective, regardless of your nation and your military/industry affiliation, is to focus on the safety and mission efficiency of aerial refueling around the globe. ARSAG's independence and advisory role focused entirely on aerial refueling allow it to fulfill that firm obligation. It was a great meeting and I am looking forward to expanding our work and progress reports at our joint EU Aerial Refueling Meeting at Brussels in September. My deepest appreciation and gratitude go out to you all.



LIEUTENANT GENERAL JOHN T. THOMPSON

Lt. Gen. John F. Thompson is the Commander, Space and Missile Systems Center, Air Force Space Command, Los Angeles Air Force Base, California.



LIEUTENANT GENERAL MARYANNE MILLER

Lt. Gen. Maryanne Miller is the Chief of Air Force Reserve, Headquarters U.S. Air Force, Washington, D.C., and Commander, Air Force Reserve Command, Robins Air Force Base, Georgia.



MAJOR GENERAL SCOTT J. ZOBRIST

Maj. Gen. Scott J. Zobrist is Commander, 9th Air Force, Air Combat Command, Shaw Air Force Base, South Carolina.



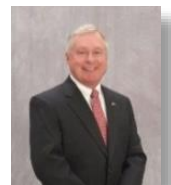
AIR COMMODORE BILL KOURELAKOS

AIRCDRE William Kourelakos, Royal Australian Air Force, is Commander Air Mobility Group, Senior Australian Defence Force Officer – Richmond.



BRIGADIER GENERAL FRANCESCO SAVERIO AGRESTI

Brigadier General Francesco Saverio Agresti, Italian Air Force, is Deputy Commander European Air Transport Command and Director of Operations.



***JOHN B. SAMs, JR, LIEUTENANT GENERAL, USAF, RET
CHAIRMAN OF THE BOARD & CEO, ARSAG INTERNATIONAL***

Appreciation

ARSAG 2018 Sponsors

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 ARSAG INTERNATIONAL Calendar of Events	
2018	
ARSAG Workshop / Meeting of Joint Standardization Board (JSB) for Aerial Refueling Systems 10 – 11 September	Brussels Belgium <i>Working Groups Meet</i>
2019	
ARSAG Winter Meeting 5 - 7 February	Holiday Inn Dayton (Fairborn) Ohio ----- Planning Meeting 5 Feb <i>Panel Chairs & Steering Group Meet</i> ----- ARSAG Workshop / Meeting of Joint Standardization Board (JSB) for Aerial Refueling Systems 6 - 7 Feb <i>Working Groups Meet</i>
ARSAG 2019 9 - 11 April	<i>ARSAG's Annual Meeting</i> Sheraton Charlotte Hotel Charlotte, North Carolina

ARSAG Workshop / JSB to be held in Brussels, September 2018

ARSAG has been invited to hold its September 2018 Workshop / JSB Meeting in Brussels, Belgium in coordination with the first joint NATO / EU Air-to-Air Refueling meeting.

ARSAG's Workshop will be held noon to 1700 on Monday 10 September and 0900 to 1700 on Tuesday, 11 September. The Workshop is open to representatives of NATO nations plus Australia.

All ARSAG Workshop / JSB meeting attendees are invited to attend the joint NATO / EU Air-to-Air Refueling meeting 0900 to 1700 on Wednesday, 12 September.

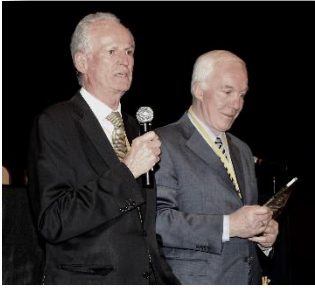
All meetings will be held at the World Customs Organization headquarters building conveniently located in downtown Brussels.

Lieutenant General John B Sams, Jr., USAF ret., ARSAG Chairman and CEO, will moderate all three days' meetings.

ARSAG expresses its appreciation for the invitation to meet in Brussels and looks forward to holding the ARSAG Workshop in Belgium where it will be easily accessible to European participation.

ARSAG AWARDS for 2018

Founders Award



Brothers **Ulick** and **Desmond McEvaddy**, founders and owners of Omega Air, turned a seemingly impossible vision into reality and created the first, and still the only, contracted aerial refueling service in the world.

Created 18 years ago, this new industry not only augments military tankers whenever and wherever the fuel is needed, it was able to fulfill unique roles in pioneering leading-edge aerial refueling technologies.

Always embracing a challenge, brothers Ulick and Desmond provided one of their modified Boeing 707 tankers to conduct the first-ever autonomous aerial refueling in 2006 in support of a DARPA program, refueling a NASA F-18. The success of this program led to Omega's build-up and eventual aerial refueling of the UCAS-D, Northrop Grumman X-47B for the first-ever unmanned autonomous aerial refueling in 2015.

Their innovative tanker designs employ simple yet reliable engineering including a tanker capable of deploying up to four different hoses on a single sortie using provisions for two wing pods and redundant centerline hose reels.

The truly unique and trail-blazing contributions to the global aerial refueling community and steadfast support of ARSAG International by Ulick and Desmond McEvaddy, made them our 2018 ARSAG Founder's Award recipients.

Exceptional Service to Aerial Refueling

RNLAF 334 Squadron Eindhoven Air Base Operation Inherent Resolve



This year ARSAG is proud to present the Award for Exceptional Service to Aerial Refueling to a flight crew that demonstrated sound airmanship and bold decision making in an act that truly demonstrated the importance of interoperability.

The Royal Netherlands Air Force KDC-10 crew consisted of: Jon O'Dell, USAF exchange pilot with the RNLAF, Aircraft Commander; First Lieutenant Mourad Bichr, Co-pilot; Adjutant John Korebrits, Flight Engineer; and Sergeant Major Lody Ruzette, Boom Operator.

During Operation Inherent Resolve, in the sky above Iraq, the crew overheard radio traffic from an American KC-10 tanker.

SM Lody Ruzette
John Korebrits, AOO
Maj Jon O'dell
ILT Mourad Bichr (*not pictured*)
are congratulated by:

Lieutenant General Dennis Luyt, RNLAF

This tanker had a major problem with its refueling installation and was unable to give fuel to the allocated receivers that had already joined with it. The aircraft that needed the fuel were approaching their tanker bingo and needed fuel without any more delay to avoid having to divert to a disadvantageous airfield location which would hamper subsequent campaign support in days to follow.

Major O'Dell and his crew made quick calculations and were able to offer fuel to these aircraft. They were, in fact, unaware of the type of aircraft since they were not mentioned in the tasking orders of that day.

The receiver pilots didn't hesitate; they flew towards the Dutch tanker. Only when in visual range, the crew became aware that it was a pair of F-22 Raptor Stealth fighters.

This is where sound judgment and swift decision making came into play. Without delay the crew had to decide whether to take a calculated risk and refuel these aircraft for which they were not officially cleared.

Major O'Dell was familiar with F-22 refueling operations, and Boom Operator Ruzette, had experience in refueling F-35 aircraft. Flight Engineer John Korebrits made the necessary fuel calculations to offload this unexpected amount of fuel, guarding the minimum fuel needed for their own aircraft to fly back home safely.

The easy way out would have been to deny fuel to these aircraft which would result in a divert of these highly classified aircraft to an unsecured airfield nearby in hostile territory.

The crew decided to use the combined knowledge and experience of the team and gave both fighters the fuel they needed to fly back to their home base.

With this act they have demonstrated to be exceptional airmen. Their actions were in keeping with the highest traditions of the Royal Netherlands Air Force.

ARSAG was proud to recognize this crew for their exceptional service in aerial refueling.

Awards for Exceptional Service to ARSAG



Tom Swiderek is President, Omega Air, Inc, San Antonio TX. He previously served 22 years in the US Air Force with 12 of those years served overseas.

Tom graduated with a Bachelor of Science degree in Engineering from the US Air Force Academy in 1985 and went on to pilot training. He later earned a Masters Degree in Aeronautical Sciences from Embry Riddle Air University. He has piloted more than 3,000 flying hours in various aircraft and served as the Chief Pilot for the prestigious USAF Combat Flight Instructor Course for KC-135s. His broad aerial refueling operations expertise in both the Pacific and European theaters led to his selection to stand up NATO's first-ever strategic-level air to air refueling office at the Reaction Forces Air Staff in Kalkar, Germany and then organized its restructure into the Joint Airpower Competence Centre.

After joining the Omega Air team in 2007, Tom has helped manage several aerial refueling and jet engine related programs including his role as Deputy Program Director for Joint STARS Re-Engining program as well as coordinating Omega's aerial refueling support for the X-47B UCAS program.

In addition to his military service and business experience, Tom has held numerous leadership positions with the Aerial Refueling Systems Advisory Group International (ARSAG) and the US DoD Joint Standardization Board Aerial for Aerial Refueling Systems for more than 17 years. Tom actively supports the ARSAG workgroups to recommend written procedures improving standardization and interoperability.

Within ARSAG, Tom can be counted on to lend his valuable advice and support any time he is asked. Tom's unselfish readiness to lend his steady hand and organizational acumen accompanied by his technical and operational experience has made ARSAG stronger and enhanced its standing in the aerial refueling world.



Col Gomer Custer, USAF, ret. is a native Texan and earned a degree in Petroleum Engineering from Texas Tech University where he was commissioned and entered the US Air Force upon graduation. He served a thirty-year military career predominately in energy and logistics. He served tours in England, Germany, Viet Nam, and Taiwan along with stateside assignments in Texas, Arkansas, Massachusetts, Nebraska, Virginia, and the Pentagon. Following retirement from the Air Force in the grade of Colonel, he entered the Aerospace Industry as an Engineer and Marketing Manager with a West Coast firm that manufactured valves, pumps, and fuels system components for military and commercial aircraft around the world. He subsequently became active in ARSAG and ultimately became a Member of the ARSAG Board of Directors and continues to serve in that body as Secretary.

Gomer holds a key position in ARSAG, advising and implementing in virtually every aspect of the organization's work. Gomer lends his experience, energy, management skills and integrity to ARSAG's work. In addition to his roles as Secretary and a member of the Board of Directors, and Site Selection Committee, he is a leader in the Planning and ARSAG Workshop / Joint Standardization Board (JSB) meetings and in the annual meeting. ARSAG has been extraordinarily fortunate to benefit from the high-quality of his leadership for more than twenty-five years.



Harry Slusher is a native of St. Louis Missouri. He earned a degree in Aeronautical Engineering from Parks College of Aeronautical Technology. He moved to California to work as an engineer for Lockheed Aircraft and later North American Aviation. He went on to work as a stress engineer at Douglas, McDonnell Douglas and Boeing, for 50 years. Harry worked on the DC-10 landing gear, Blue Angels A-4, on the Advanced Aerial Refueling Boom program, the KC-10 program, the MD-11 and C-17, the RNLAf KDC-10, the International Tankers for Japan and Italy, and the KC-46.

Harry has been a member of ARSAG for 20 +years on the Systems Design Panel. He has taken leadership roles in the ARSAG Workshop / Joint Standardization Board's Working Groups. He has been provided key technical inputs and organizational management in the development of ARSAG Documents. Harry currently is the document manager for two top priority ARSAG Documents, the Guide and Recommendation revision to the Boom/Receptacle method for AR. As a result of Harry's leadership, the AR Boom/ Receptacle Guide Document, recently was released, listed on Defense Technical Information Center (DTIC) and recommended to NATO-JAPCC as an SRD.

Harry's cooperative spirit, his willingness to take on challenging projects and to exercise extraordinary tenacity in seeing them through to completion are qualities to be emulated.

Harry has set an example of hard-work, dedication and application of his outstanding engineering skills in benefitting ARSAG and the world of aerial refueling.

ARSAG DOD Joint Standardization Board (JSB) for Aerial Refueling Systems Charter Renewed

ARSAG was chartered as the DOD Joint Standardization Board (JSB) for Aerial Refueling Systems in 2006. That charter was renewed in 2010. We are pleased to announce that the charter was again renewed on 10 April 2018.

Among the directives for ARSAG are:

- *Develop and improve joint processes and procedures to facilitate aerial refueling initiatives; and establish and manage the development and maintenance of specifications/standards (IA W DODM 4120.24, Defense Standardization Program Procedures);*
- *Recommend joint doctrine, tactics, techniques and procedures, and recommend DOD policy for effective and efficient deployment of aerial refueling systems;*
- *Establish a comprehensive, integrated structure necessary to achieve interoperability, promote standardization, and conserve resources in support of Joint Service and Multinational Operations;*
- *Establish an effective, Department-wide forum for interoperability coordination, planning, and decision-making.*

ARSAG is proud to fill this important role in aerial refueling and appreciates the guidance and coordination of Lloyd Thomas, OSD/DSPO.

The New Standard of the A330 MRTT is ready for Take-Off

Having successfully completed the New Standard Certification process and thanks to a close collaboration with our customers, 2018 will be another crucial year for the Airbus tanker programme; as the first New Standard A330 MRTTs will be delivered to Republic of Singapore, France and the Republic of Korea in the coming months.

At the end of 2017, Airbus Defence and Space achieved the Military Technical Certificate from INTA for the New Standard version of the A330 Multi Role Tanker Transport (MRTT). This followed the grant issue of the Supplemental Type Certificate by EASA in September 2017 that covers the installation of the new equipment.

The New Standard A330 MRTT features a series of upgrades on of the basic A330-200 platform, such as modifications to provide civil and military operators with an even lower fuel consumption rate, as well as the latest updates on avionics and military systems.

Submitted by: Irene Barrio, Airbus

International Aerial Refueling

A French Air Force KC-135 Stratotanker, refuels a U.S. Air Force B-52 Stratofortress over Europe. The Stratofortress is deployed from Barksdale Air Force Base, La., to RAF Fairford, England, in support of bomber assurance and deterrence operations. (U.S. Air Force photo by Tech. Sgt. Joshua J. Garcia)



ARSAG CEO to Lead The Citadel

Lt Gen John B. Sams, Jr., USAF ret, ARSAG Chairman / CEO was recently selected to serve as Interim President of one of the country's leading military academic institutions, The Citadel, in Charleston, South Carolina. John will serve in this post from 30 June until early November when the new President reports for duty.

John will continue his stewardship and management role of ARSAG and will be moderating the NATO/EU aerial refueling meeting and ARSAG Workshop in Brussels as initially planned.

His leadership at The Citadel has included serving as Chairman of its Board of Visitors. We are pleased and proud that ARSAG's own Citadel alumnus, John Sams, is taking on this new role.

Submitted by Janet C. Kalt, Administration Officer, ARSAG