



ARSAG INTERNATIONAL

Aerial Refueling Systems Advisory Group

NEWSLETTER February 2018

ARSAG 2018

24 - 26 April Tucson Arizona

From the desk of the Chairman:

It is our honor to announce the Distinguished Guest Speakers who have accepted our invitation to address ARSAG 2018. We anticipate learning from them the most recent developments in aerial refueling and the evolving blueprints for its future.

ARSAG 2018 marks ARSAG's fortieth year. The anniversary will be celebrated with a strong agenda featuring briefings and status reports from military/government and industry experts in aerial refueling from around the globe.



ARSAG 2018 DISTINGUISHED GUEST SPEAKERS



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.



LIEUTENANT GENERAL GIOVANNI K. TUCK

Lt. Gen. Giovanni K. Tuck is the Commander, 18th Air Force, Scott Air Force Base, Illinois.



MAJOR GENERAL KENNETH D. LEWIS, JR.

Maj. Gen. Kenneth D. Lewis, Jr. is the Director of Air, Space and Information Operations, 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.



BRIGADIER GENERAL DONNA D. SHIPTON

Brig. Gen. Donna D. Shipton is the Air Force Program Executive Officer for Tankers, Tanker Directorate, Air Force Life Cycle Management Center, Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio.



AIR COMMODORE BILL KOURELAKOS

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

ARSAG is an autonomous not-for-profit body. It is chartered to serve allied aerial refueling technical and operations communities without bias, self-interest or prejudice. ARSAG's integrity and influence are strengthened by the broad range of expertise its participants provide and by its unwavering independence.

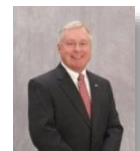
As ARSAG has matured during its forty years, it increasingly has facilitated the exchange of allied / coalition aerial refueling organizations' lessons learned, challenges and plans.

Appreciation often is expressed to me for the unmatched opportunities ARSAG meetings provide for networking and break-out meetings with so many members of the international aerial refueling community -- in one place and in one week's time.

ARSAG's 7 - 8 February Workshop / Meeting of the Joint Standardization Board (JSB) for Aerial Refueling Systems served as an example of its commitment to service. Military/government and Industry specialists in aerial refueling met in Working Groups that function in seven aerial refueling disciplines. We are grateful to the Working Groups whose aerial refueling guidance and recommendation documents are respected and consulted around the world.

ARSAG's 10 - 11 September 2018 ARSAG Workshop / JSB Meeting will be held in Brussels Belgium. We are indebted to our EU hosts; to Dion Polman, European Defence Agency; and to Donald Turnbull, NATO; for their valuable assistance in arranging this meeting.

We look forward to celebrating ARSAG's Forty Years of Service to Aerial Refueling with you in an exciting, productive ARSAG 2018 in April in Tucson.



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

ARSAG Planning Meeting for Panel Chairs and Steering Group 6 February 2018

ARSAG Panel Chairs, Co-Chairs and Steering Group met on Monday 6 February to plan the agenda for April's ARSAG 2018 annual meeting.

Steering Group members held an excellent meeting where they discussed the vital issues related to providing guidance for ARSAG's direction and goals.

Each of the ten Panels is apportioned a segment of time on the annual meeting's general assembly agenda. Panel Chairs fill their segments with presentations appropriate to that Panel's aerial refueling sphere.

Prior to the 6 February meeting, the Panel Chairs had received many excellent offers to brief from aerial refueling military/government and industry organizations across the globe.

Cooperatively, the Panel Chairs compiled an agenda for ARSAG 2018 that will be instructive, exciting and thought-provoking. Thank you to all the Panel Chairs who have arranged a fine agenda for April's ARSAG 2018.

ARSAG Workshop Meeting of Joint Standardization Board (JSB) For Aerial Refueling Systems 7 – 8 February 2018

Working Groups:

- # 1 Boom/Receptacle Components & Verification Methods
- # 2 Probe/Drogue Components & Verification Methods
- # 3 Formation Aids, Markings and Lighting
- # 4 Maintenance, Sustainment and Ground Support Equipment
- # 5 Clearance Processes and Procedures
- # 5A Automated Aerial Refueling
- # 6 Systems Requirements and Verification Methods

ARSAG Workshop / JSB participants are completing primary system-related documents worked at the 7 – 8 February meeting, including the Boom Receptacle Requirements Document which provides ARSAG recommended changes to the NATO ATP 3.3.4.5 (STANAG 7191). The recommended changes/additions to that document include Electromagnetic Environmental Effects Electromagnetic (E³) Interference protection for aerial refueling systems. A Boom / Receptacle Guide Document was completed and was released to the USAF for clearance and release for listing on DTIC as a support document for STANAG 7191.

A Probe Drogue Guide Document has completed processing by the Document Review Team (DRT) and is in final editing for transferring from ARSAG to NAVAIR for security review, release for DTIC listing and forwarding as a recommended NATO SRD for support of ATP 3.3.4.6 (STANAG 3447).

Several other ARSAG documents are near completion. These achievements are the result of the work of Working Group Participants, Group Leads, Document Managers and Technical Advisors.

Dexter H. Kalt, ARSAG Executive Director, Founder



Air Mobility Command recently conducted a study to determine how best to protect its tankers in a contested environment. Here, four USAF F-16C Fighting Falcons and four Swedish Air Force JAS 39 Gripens fly in formation together behind a USAF KC-135 Stratotanker during aerial refueling training in Swedish airspace, Feb. 8, 2018. US Air Force photo by A1C Luke Milano.

KC-30A, Mission Accomplished and Back into Action



RAAF's KC-30A ready to take-off during Operation Okra

January 24th. Amberley AFB. Australia welcomed home the final contingent of the RAAF's F/A-18F Super Hornet and 1SQN personnel, marking the end of Australia's airstrike operations over Iraq and Syria. The return of the troops to their families was realized through the support of two RAAF's KC-30A and its crew.

Since their short-notice deployment in 2014, the KC-30A has offloaded more than 40 million tonnes of fuel in support of the coalition operations against ISIS in Iraq and Syria.

Having completed more than 1,200 sorties and 9,400 Flight Hours, the Tanker of Choice (as it is referred to by the coalition forces) refueled a wide variety of receivers from almost every nationality, including Rafale, AV-8B Harrier II, E-7A Wedgetail, F/A-18 (Super) Hornet, Tornado, EA-6B Prowler.

As the majority of the RAAF contingent returned home, the KC-30A went back in action. The Australian A330 MRTT will continue to ensure the coalition's air superiority in the region in the coming months.

Submitted by: Irene Barrio, Airbus

AMC Study Calls for Improved Communication, Battlespace Awareness, and Protection of Tankers

By Brian Everstine

Front-end fighters aren't the only aircraft that may face threats from near-peer adversaries in the future. Air Mobility Command is looking at specific ways to protect its fleet of tankers and airlifters in case they too will be called to fly combat missions in denied airspace.

AMC's High Value Airborne Asset Study looked at potential shortfalls within its fleet and what areas need to be addressed to ensure mobility aircraft can fly in the next generation of combat against adversaries that can deny airspace. The study, which is modeled after the Air Force's [Air Superiority 2030 Flight Plan](#) finds three major capability areas the command needs to develop: secure communication, battlespace awareness, and self-protection systems.

"We are committed to doing the hard and necessary work to ensure the guaranteed persistence tankers have always delivered in the past and apply capabilities to ensuring success in the future," AMC Commander Gen. Carlton Everhart said Tuesday.

The command needs leverage "both proven and existing capabilities," as well as new and emerging capabilities that will be fielded in the next several years, said Everhart. "Many of our systems, training, and how organizations function will look different by 2030 as we continue to evolve," he said.

AMC is looking to partner with industry and Defense Department labs to advance its communications systems. As an example, Everhart said AMC could seek to use Link 16 data systems, which have long been in use in fighter and bomber aircraft, to be able to securely communicate beyond line of sight with other aircraft.

For battlespace awareness, AMC is examining existing Radar Warning Receiver technologies that can provide a detailed view of the threat environment for aircrew in real time. For self-protection, AMC wants to partner with industry to develop relatively inexpensive systems with the goal to demonstrate on existing aircraft in the next few years.

From Air Force Magazine



Aviators Take Joint Training to New Heights

By Air Force Staff Sgt. William Hopper, 122nd Fighter Wing
FORT WAYNE, Ind., Feb. 14, 2018 —

The Indiana Air National Guard's [122nd Fighter Wing](#) recently completed Operation Guardian Blitz during a two-week joint training exercise at MacDill Air Force Base, Florida, which included air-to-air refueling, training alongside Navy rotary assets and joint terminal attack controllers.

The team of over 200 airmen and 10 A-10C Thunderbolt II aircraft were able to take advantage of the favorable weather conditions and ability to work with other units at MacDill, and were afforded opportunities to practice close air support, forward air control and combat search and rescue.

Unique Training Opportunity

"My favorite part of training here at MacDill has been the combined force training operations that we don't have an opportunity to do at home," said Air Force Lt. Col. Joshua Waggoner, the 122nd Fighter Wing Operation Guardian Blitz detachment commander. "We are here training with our A-10 aircraft, two Navy MH-60S helicopters and refueling tankers overhead. During missions we are on station for

over two hours integrating with all these assets while also coordinating with [joint terminal attack controllers] on the ground. The opportunity to work with these other agencies to accomplish missions has been invaluable.”

Operation Guardian Blitz was unique in allowing different branches and squadrons to integrate in a way not typically found during a joint training exercise. “The ability to have helicopters out of Virginia, tankers out of Niagara, and A-10s out of Fort Wayne, all operating in the same sortie and off the same ramp is something you usually don’t get elsewhere,” Waggoner said. “Even at Snowbird or other trips in the past, we’ve never been collocated with all our other assets. Here at MacDill for Guardian Blitz, we’re all located in the same place and able to interact face-to-face on a daily basis. It’s a luxury you just don’t get anywhere else.”

“We were able to match our objectives with the other unit’s objectives to make it all happen at the same time,” he said. “This is by far the most aggressive training schedule we have set, and it never would have been able to happen at home this time of year due to weather and other circumstances.”

Air Force Refueling

One of the many training opportunities made possible by Guardian Blitz was the refueling mission completed by the Air Force Reserve’s 914th Air Refueling Wing from Niagara Falls, New York.

“The 914th ARW from Niagara is in the process of transitioning from the C-130 [Hercules cargo planes] to KC-135 [Stratotanker refueling] tankers,” Waggoner said. “They were excited to be a part of Guardian Blitz because it gave them the opportunity to get in plenty of refueling sorties with our A-10s while getting training from MacDill instructors. They have completed 41 air-to-air refueling sorties in the last two weeks, which is about what they usually fly in six months.”



An A-10C Thunderbolt II pilot from the 163rd Fighter Squadron, and crew chiefs from the 122nd Fighter Wing, prepare for takeoff during Operation Guardian Blitz at MacDill Air Force Base, Fla., Jan. 23, 2018. Guardian Blitz is a two-week joint exercise to improve service interoperability for combat search and rescue and close air support. Indiana Air National Guard photo by Staff Sgt. William Hopper

 ARSAG INTERNATIONAL Calendar of Events	
2018	
ARSAG 2018 24 - 26 April	<i>ARSAG's Annual Meeting</i> Hilton Tucson El Conquistador Tucson Arizona
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

“We just made the transition to the KC-135 from the C-130 about six months ago,” said Air Force Lt. Col. Chris Pfeil, a pilot with the 914th Air Refueling Wing. “It’s a little different than what we are used to.”

“Once we get a little more proficient with the KC-135 our unit will become operational,” he said. “More and more, air-to-air refueling is becoming in-demand to carry on the mission of the Air Force.”

Navy Search, Rescue

Also joining the training were two MH-60S Seahawk helicopters operated by the Navy’s Helicopter Sea Combat Squadron 22 from Naval Station Norfolk, Virginia. During missions, the HSC-22 provided recovery assets for the search and rescue training and were also utilized for additional close air support to strike targets on the ground.

“The MH-60S Seahawk is primarily used for search and rescue operations and logistics,” said Navy Petty Officer 2nd Class Nicholas Glass, a door gunner with HSC-22. I am looking forward to working with other branches of the military during Guardian Blitz to get a better idea of how we can work together to improve mission success.”

“We train to the point that we can execute our mission in any environment,” Waggoner said. “The time we put in training at places like MacDill and back home in Fort Wayne really pays off when it comes time to execute the mission.”

From US Department of Defense News

Register for ARSAG Meetings at www.arsaginc.com

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