

ARSAG INTERNATIONAL

Aerial Refueling Systems Advisory Group

NEWSLETTER

November 2012



Note from the Desk of the Chairman

I was pleased to see so many of you at the 2012 A/TA & AMC Symposium in Anaheim earlier this month. It was another grand gathering of eagles for the airlift and tanker communities with airmen assembling from around the globe.

ARSAG stood tall in presenting the Keynote Seminar before the entire audience in the General Session. Lieutenant General James Jackson, Chief of AF Reserve, and Commander, Air Force Reserve Command, introduced Brigadier General Kenneth Lewis and his team of action officers – Colonel Doug Planer, 4AF A/3/5; Major Doug Foster, 64th Air Refueling Squadron, Pease AFB, NH; and Major Joshua Frakes, Major Ed Schierberl, and Captain Jim Blech, all of the 509th Weapons School, Fairchild AFB, WA. This Lewis lead team tore into their first-hand story of the multinational tanker scheduling hurdles and issues in supporting Operation UNIFIED PROTECTOR at NATO's Combined Air Operations Center in Italy during the Libyan regime change mission. The aerial refueling mating of all the various national assets – tankers and receivers – was a painstaking, complex, manual process to ensure meeting all the clearance requirements, restrictions, and anomalies. The long legs from European operating bases, clearance confirmations, type fuel, fuel loads, and priorities were all major factors in scheduling and meeting the critical high mission needs throughout the operation. They described the problems and limitations in conducting these operations and identified the needed tools and solutions to resolve all the issues. It was just an outstanding briefing which generated huge interest with the entire audience. General Kross, A/TA Chairman, extended unstinting appreciation to Kenny and his team for bringing this vital message to the international tanker and receiver world, a story that originated at ARSAG '12.

The opening address by General Mark A. Welsh III, the 23rd Chief of Staff of the United States Air Force, was absolutely riveting. He highlighted the future role of airpower and the continued leadership principles to maintain our commitments with NATO and our Allies all over the world. General Welsh paid great tribute to the outgoing Chief Master Sergeant of the Air Force, James A. Roy, whose major address was equally uplifting and stimulating. Our US Air Force leadership is in fine hands, indeed.

There was some adjustment to the conference this year to comply with the new DOD guidelines and restrictions on US Government participation in conferences. However, the effort was seamless and totally workable. As most of you are aware, our own John Sams, Bob Dawson, and Bob Ford all play key roles in conducting the A/TA Symposium.



Brigadier General Kenneth D. Lewis, Jr., USAFR, addresses 2012 A/TA & AMC Symposium with his Team: Colonel Doug Planer, 4AF A/3/5; Major Doug Foster, 74th Air Refueling Squadron; and Major Joshua Frakes, Major Ed Schierberl, and Captain Jim Belch all of 590th Weapons School

Photo by Tech. Sgt. Christine Jones.

Our entire ARSAG Staff is working at full speed to prepare everything for the Winter Meeting and ARSAG '13 in Orlando. With the size, scope, and importance of ARSAG's role and mission to the international tanker and receiver communities, we expect no issue at all with formal DOD/USAF approval of our annual conference. Our long standing controls and procedures fall right in line with all the Pentagon guidance and direction for conducting joint Military-Industry forums. We are certainly pleased with that and look forward to another great aerial refueling meeting at ARSAG '13.

*Martin L. Vukich, Chairman
Board of Directors, ARSAG International*

Telling the World through ARSAG '13

ARSAG's annual meetings are a unique, international forum dedicated to aerial refueling. They offer opportunities for communicating in many ways with the players in that circumspet community, the world of aerial refueling. ARSAG has worked for thirty-five years to advance safe, efficient aerial refueling. This will continue to be ARSAG's primary goal.

At ARSAG's annual Meetings, the latest in aerial refueling developments and plans is presented by high level representatives of military and industry organizations. ARSAG participants represent military and industry organizations from eighteen nations.

You can take advantage of ARSAG's annual meeting to get your aerial refueling story out, absorb the ideas of your colleagues and work with those individuals whom you might next meet in a vital aerial refueling operation over a remote area of the globe.

At ARSAG meetings opportunities abound for: briefing the latest in aerial refueling; special meetings such as NATO, EATC and EACC; exhibits; special topic seminars; break-out meetings; and networking.

You are invited to participate in ARSAG '13, to be held 23 – 25 April, at the Rosen Plaza Hotel in Orlando FL.

ARSAG CALENDAR OF EVENTS

Winter Meeting

29 – 31 January 2013

Planning Meeting for ARSAG '13

Steering Group and Panel Chairs

29 January

ARSAG Workshop /

DoD Joint Standardization Board for
Aerial Refueling Systems (JSB) Meeting

30 – 31 January

Rosen Plaza Hotel

Orlando FL

ARSAG '13

23 – 25 April

Rosen Plaza Hotel

Orlando FL

Autumn Meeting

19 – 22 November 2013

Planning Meeting for ARSAG '14

Steering Group and Panel Chairs

19 November

ARSAG Workshop /

DoD Joint Standardization Board for
Aerial Refueling Systems (JSB) Meeting

20 – 22 November

BAE Systems

Dayton OH

ARSAG '14

7 – 9 March

Hyatt Regency

Denver CO

ARSAG Calendar of Events Up-Dated

We are looking forward to ARSAG '13, 23 – 25 April, and anticipate a productive, informative meeting at the Rosen Plaza in Orlando.

The ARSAG leadership is ever alert to arranging events to accommodate the majority of participants. In planning for 2013 and 2014, the increasing burden of travel fund restrictions for both government and industry attendees was considered.

One of ARSAG's planning points has been consideration of a more compact conference week. News regarding this effort will be shared as soon as plans are confirmed.

Another important item is the number of meetings held annually. Consequently, the Calendar of Events for 2013 and 2014 will be slightly different from that of recent years:

- The ARSAG '14 conference will be held in early March, necessitating an earlier Planning Meeting, a part of the Winter Meeting.
- The Winter Meeting usually is held at the end of January or early February and includes:
 - a one day ARSAG Steering Group/Panel Chairs Planning Meeting for the next conference; and
 - a two day Workshop / JSB meeting
- The Autumn Workshop / JSB usually is held in September.
- The 2013 Autumn Workshop and the 2014 Winter Meeting have been combined into one meeting for so that attendees will have only one week's trip expenses.
 - The combined meeting will be held during the week of 18 November '13 at BAE Systems in Dayton was the best option.
 - The Planning Meeting for ARSAG '14 for Steering Group and Panel Chairs would be held on Tuesday, 19 November, '13.
 - The Workshop / JSB Meeting would be held on Wednesday – Friday, 20 - 22 November '13, and likely would adjourn at about noon on Friday.

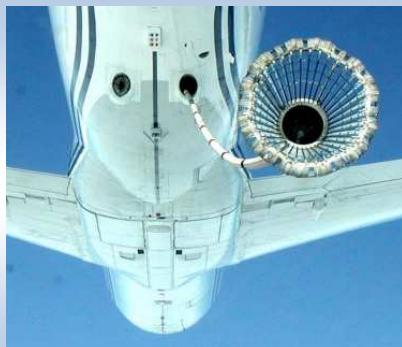
Please note that the **Winter Meeting for 29 – 31 January will be held as scheduled. See updated Calendar of Events.**

Aircraft Identification Contest



Last time around, we did not have anyone correctly identify the photo of the FJ-1. It was definitely the most difficult contest yet, as we had only two responses. Better luck to all this month. The first correct response received at arsag2@aol.com will win a fabulous prize.

Thomas Coggeshall
ARSAG International



News from Boeing

Boeing opens 1st System Integration Lab for KC-46 Tanker program

Boeing has opened the first KC-46 Tanker System Integration Laboratory. It supports testing and reduces risk in the development of the U.S. Air Force's next-generation aerial refueling tanker.

"Opening this lab says a lot about Boeing's commitment to executing on this contract," said Maj. Gen. John Thompson, Air Force Tanker program executive officer and KC-46 program director. "My congratulations to the entire team."

The lab, known as "SIL 0," which opened three weeks ahead of schedule on Sept. 12, is located at Seattle's Boeing Field and will be used to test commercial avionics and software for integration in the KC-46A Tanker.

"Our five System Integration Labs will help keep us on track to deliver the first 18 KC-46A Tankers by 2017," said Maureen Dougherty, Boeing KC-46 vice president and program manager. "Accelerating system integration will drive out issues prior to flight testing and mitigate any potential risks to our schedule."

Four of the five KC-46 SILs will be located at Boeing Field while the fifth will be established at Everett, Wash. All will be operational by the end of 2013. Boeing Field also is home to the Boom Assembly Center, which opened on Oct. 16, and the Finishing Center, scheduled to open in late 2013, where military hardware and software will be installed on the commercial 767 airframe, on which the tanker is based.



Four of the five KC-46 System Integration Labs will be located at Boeing Field in Seattle while the fifth will be established in Everett, Wash. All will be operational by the end of 2013. In this Boeing illustration, a KC-46 refuels F-16s in flight. (Boeing illustration)



An F-22 Raptor from Elmendorf Air Force Base, Alaska, receives fuel from a KC-135 Stratotanker from the Kansas Air National Guard's 190th Air Refueling Wing May 26, 2010. The refueling took place over Alaska. (U.S. Air Force photo/Staff Sgt. Brian Ferguson)

KC-46 Boom Assembly Center opens in Seattle

Boeing Military Aircraft's KC-46 program began assembling this week the first refueling boom for the U.S. Air Force's next-generation aerial refueling tanker aircraft in the KC-46 Boom Assembly Center. The center opened Tuesday at Boeing Field in Seattle.

"We're pleased that this facility opened on schedule," said Maureen Dougherty, vice president and KC-46 program manager. "The KC-46A will feature a modernized fly-by-wire boom based on the proven system on the U.S. Air Force's KC-10 tanker, which will give it advanced refueling capabilities, allowing it to refuel any fixed-wing receiver aircraft anytime and on any mission."



Tanker teammates Chris Johnson, Jim Prideaux and David Dean examine the first KC-46 boom skins that will undergo assembly.

(Jim Anderson photo)

Boom assembly marks the program's shift to production from design activities.

"It's a big day for the KC-46 Tanker program and the U.S. Air Force," said Maj. Gen. John Thompson, U.S. Air Force Tanker Program executive officer and KC-46 program director. "Boeing continues to make good progress toward delivering the KC-46 Tanker on schedule."

The first boom will enter testing during the third quarter of 2013 at a System Integration Lab (SIL) known as SIL 0. It is one of five labs designed to reduce risk for avionics and aerial refueling integration. Boeing invented the air refueling boom and has been building, upgrading and modifying them for more than 60 years.

The KC-46 program remains on track to deliver 18 combat-ready tankers by 2017. It also is on schedule for the next major Air Force contract milestone, the Critical Design Review, set for the summer of 2013.

Production of the KC-46 aircraft begins next summer in Boeing's Everett, Wash., factory. The aircraft will be a 767-2C variant of the commercial 767-200ER airplane. Boeing is contracted to build 179 next-generation aerial refueling tanker aircraft to begin replacing the Air Force's aging KC-135 tankers.

By Jerry Drelling

Boeing news articles and photos submitted by Alan Burch, Boeing

**Join us for ARSAG '13
ARSAG's Thirty-Fifth Year
serving the Military and Industry
Aerial Refueling Community**

Second Airbus MRTT Users Group Annual meeting

The 2nd annual meeting of the Airbus MRTT Users Group (AMUG) was held on 26 and 27 September in Getafe, Spain with significant attendance from the users and 50 representatives.

A key part of the meeting was the presentation of the national reports from each customer with details of their operations and issues. Airbus Military presented several topics of interest including new developments within the MRTT system, the military parts pool, ARO training evolution, details on the MRTT Electronic Flight Bag, and A330 MRTT product development.

At the closing ceremony, Philipp Galland, SVP Customers Services, thanked the attendees for the information presented and confirmed Airbus Military's commitment to the successful entry into service of the A330 MRTT.



Thanks to its versatility, the A400M is not only a perfect airlifter (37 tonne-payload) and troop transporter. It can also very easily be converted into the most capable air-to-air refuelling tactical tanker. It has been conceived from the outset for this dual role and means an enhanced utilization of the aircraft, especially in the theatre of operations. The A400M carries up to 50 500 kg/111 330 lb of fuel in its wings and centre wing box. Two additional cargo hold tanks can also be installed, providing an additional 5700 kg/12 550 lb of fuel each. To refuel probe-equipped receivers (fighters, large aircraft & helicopters), it can be fitted with a pair of under-wing hose and drogue pods and an Hose and Drum Unit (HDU) derived from the A330 MRTT's AAR systems.

October also saw UK AAR test and evaluation continuing with a RAF C-130J Hercules successfully conducting receiver trials behind the RAF's A330 MRTT 'Voyager' aircraft. The aircraft performed both wet and dry contacts in a highly successful test mission as illustrated in the dramatic photograph below:



Second annual conference of the Airbus MRTT Users Group. More than fifty representatives from A310 and A330 MRTT customers attended the meeting in Spain

Air-to-Air Refuelling Trials Continue Apace for both A400M and A330 MRTT

October was a busy month for air to air refuelling activities within Airbus Military. The A400M continued its AAR test and evaluation trials as a receiver by successfully conducting aerodynamic proximity trials and dry contacts behind a French Air Force C160NG Transall tanker.

The future met the past as the A400M has been designed to replace among other aircraft types the C160 Transalls in service with French, German and Turkish Air Forces.

The A400M has now successfully performed refuelling contacts with a Royal Air Force VC10, the French Air Force C160NG and an Airbus Military A330 MRTT. Wet contacts behind the C160NG Transall are planned for early 2013.

The two aircraft conducted 20 dry contacts, including one lasting 12 minutes - representative of a normal refuelling operation.

The A400M is an all-new military airlifter designed to meet the needs of the world's Armed Forces in the 21st Century. Thanks to its most advanced technologies, the only 5th Generation Airlifter is able to fly higher (level 400), faster (Mach 0.72) and further (ferry range 4700 nm), while retaining high manoeuvrability, low speed, and short, soft and rough airfield capabilities (CBR-4/6). It combines both tactical and strategic/logistic missions.

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