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- AH-64E APACHE
- EA-18G GROWLER
- KC-135R TANKERS
- KAMOV KA-52 ALLIGATOR
- BELL 406CS COMBAT SCOUT
- 747F AAC CONCEPT
- SCHWEIZER 333
- P-8A POSEIDON
- SIKORSKY S-92
- AIR FORCE ONE
- SEA HARRIER

THE POSEIDON ADVENTURE
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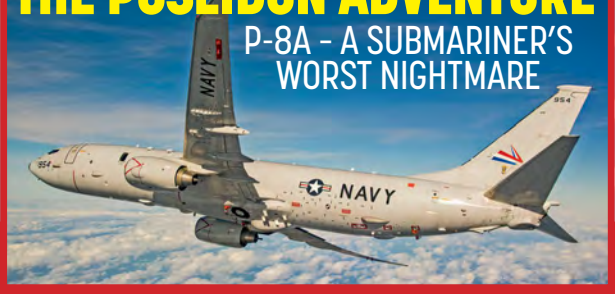

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AFTER BUDGET CUTS in 2013 led to the sundown of C-27J Spartan tactical airlift operations, the Mississippi Air National Guard's (ANG) 186th ARW ceased its conversion to the Italian transport and returned to in-flight refueling missions with the KC-135.

Along with providing tanker support, the wing also carries out Incident Awareness Assessment (IAA) tasks with the RC-26B Metroliner. Its Operations Support Squadron (OSS) provides all of the training for the ANG's RC-26 pilots and mission system officers. However, budgetary troubles are now threatening the existence of the Metroliner.

Key Field Air National Guard Base is named after Al and Fred Key, two brothers who brought the idea of in-flight refueling to reality in Meridian, Mississippi. In 1935, they managed to stay up in the air for 653 hours and 34 minutes because another aircraft supplied them with fuel through a flexible tube – an impressive feat the 186th ARW proudly remembers.

Lt Col Doug Manley, a KC-135 pilot, explained how an ANG unit differs from an active duty unit. "The biggest difference on active duty is that the 20 to 22 days out of the month, depending on their work schedule, they are going in and they are continuing their daily routine, Monday to Friday, just like a normal job," he told *CAJ*.

"In the Air National Guard, you have less time than your average hobbyist does to do his hobby, and we are expected to maintain a professional level of whatever it is that we do. Different career fields require different levels of commitment. Some have different time requirements and a different number of days that they come to work.

"Doing any task on a part-time basis and maintaining a level of proficiency that is required is a challenge. Fortunately, here, for this wing, we have some of the best people out there. They are able to come in and do what they need to do to maintain that level of proficiency, so that we can do the things that are needed to be done globally and not just here.

"Our reservists have full time careers, full time jobs, and they are doing that Monday through Friday, whatever their schedule is. But on their off days, they give a few more hours to us and that is a large sacrifice. But they are willing to do it and we are thankful for that."

The 186th has a large component of reservists but also has a selective section of full-time staff. "We fall under the State, but yet at times we are funded by or called up for the country," said Vice Commander, Col Britt A. Watson.

Dick Wels explores the multiple missions conducted by the 186th Air Refueling Wing from Key Field Air National Guard Base, Mississippi, and the challenges faced by the squadron known as the 'Magnolia Militia'

MISSISSIPPI MILITIA

The 186th Air Refueling Wing's squadron name, Magnolia Militia, refers to Mississippi's official nickname, the Magnolia State **All images by author unless stated**

"We have about 430 full-time personnel and they are a mix of different people. Some are funded by the State, but the majority are funded by the federal government. They have different statuses: some are civilians, some are military. Our total military population is about 1,130 and that is basically all the people that wear a uniform. A good 800-900 of them work somewhere else day to day, but they come out here and they are the ready reserves. Ready to go when they are called to."

More with less

The wing faces fiscal challenges. "The whole money budget – do more with less – I think it's constant," said Watson. "The big challenge we have is not that the money has shrunk, but what they ask of us has grown. You have seen that since 9/11; we are kind of moving from what they call a strategic reserve to more of an operational reserve. The old-day strategic reserve is 'We have got to do a big war, we call these guys up. But until we go to the big war, we don't really need them.' Now they are finding that they need us on a pretty regular basis.

"So, while we are not at the same tempo that the active duty is, we stay busy. One of our big concerns – manning wise – is that we have to try to ensure we hang on to people, because they are getting pulled on both ends. We ask them to go away for a month or two a year; we ask them to come here one weekend a month; we ask them to spend multiple weeks a year – especially for our pilots coming out to fly – to stay current.

"After a while they are, like, 'You know what, I've got the minimums, I can retire from the military. I may not see it for years but that's okay. I want to go do that airline job, I want to go do whatever job and I am going to do that.' And that is a real challenge.

"Their departure from home, from their job, is felt. For us to manage, to perceive stress, is a constant challenge. For commanding officers, efficiency is a constant battle. We are trying to make their time well spent, and their training is valid. And that way, when they come here, they are not trying to stay caught up or trying to catch up, but are able to move ahead with both training and proficiency, and they will help the wing in return."

Training pilots

Regarding the training that pilots undergo once they join the 186th, Manley explained: "Sometimes we get people from active duty that want to transition to a more of a Guard/Reserve role. So, what we do with them is different than what

we do with somebody who would be an initial 'qual', starting from scratch. They first go through primary and secondary training and after that they go into their Major Weapons System training."

For the KC-135 crews, this involves the school at Altus Air Force Base (AFB), in Oklahoma. After completion, the pilots go to their operational squadron.

"When they arrive here, they are trained and qualified on paper and we have to take that and gain them experience to do what we do," Manley continued. "So, not only do we give them experience in the mission set that we do, but also in the way that we do it here. There are specifics operating in and out of Key Field and the way that we do things with our wings.

"I would say it is the equivalent of going to look at a brand-new car; you get to sit in it and push buttons, start it up and get the air conditioning to work. But then you have to get out at some point and drive into traffic, get more familiar with it.

Left: The 186th ARW emblem expresses the unit's global reach

Below: After 60 years, the KC-135 is still America's tanker fleet backbone

So, we take that approach. Same goes for the boomers as well."

The transition from co-pilot to pilot is made at Key Field itself. "Currently, it is the Mobility Pilot Development program, where we don't have to send the pilot back to a formal schoolhouse for that; we can do inhouse upgrades," said Manley. "There are a lot of factors that factor into progress. Whether it comes from flying hours and minimum training requirements to meet, we also look at your decision-making – how you manage and work with people. Because once we give you a multi-million-dollar asset, and people to go with it, we want you to bring it home safely.

"There is a lot of maturity we look for as well. Some qualifications are a one-time deal. Some qualifications may take a check ride, which is no different from any civilian pilot. And there is a currency with that. You have to repeat that in a certain frequency; like every 15 months you find yourself taking another check ride. And then we have currencies for take-off, approach, and landing. And we do have aerial refueling currencies; we have to do so many within so many months or days, depending on

> What we do is very different to almost anything in the air force. There is a lot more autonomy in the role of the pilot and the Mission Systems Officer

day and night, all of that type of stuff. The boom operators have to do that on contacts as well."

'Heavy' boomers

When the boom operators arrive from training at Altus AFB, they are not cleared on all types of aircraft a tanker can meet. MSgt Tim Garrison, a boomer/loadmaster with the 186th ARW, told *CAJ*: "Mostly when they come from Altus they are only 'heavy' qualified. Pretty much all they have seen are C-17s. Once they get here, we try to bring out with some other heavies. We get them heavy qualified and signed off on that first, for day and night, and then the same thing with fighters. Obviously, most of the time we have somebody with them on the first time they see an aircraft they haven't seen before.

"They also learn the drogue-system, which is when we hang the basket on for Navy and Marines aircraft. These are all separate qualifications. Once they get certified on one [type of aircraft], they are good for the rest. They don't have to get certified on each and every individual aircraft or category."

Above: On finals at Key Field, Meridian, Mississippi, to practise touch-and-goes

Right: After a mission, maintainers visually check for technical issues

Still, preparations don't stop after getting qualified.

"Before we go out to refuel an aircraft, we are going to sit down and talk about restrictions, airspeeds and altitudes," said Manley. "There are distinctions between each aircraft, like a C-5 and a C-17. There are differences in refueling the two, like what happens to the aircraft with aerodynamic effects. As a boom operator, they are going to be more in depth with systems knowledge, with the air refueling systems, both on the tanker and the receiver.

Below: Folding up the 'red carpet' that allows the crew to board

Bottom: Captured in one shot, both aircraft types that the 186th ARW operates

"There are a lot of times, I look to the boomer for guidance and say, 'You tell me what we need to do next.' We will talk about every receiver. If we receive a C-17 every day for the next four days, we will talk about the dynamics and the specifics to refuel it every time that we go, so we are on the same page. There are different challenges and there are different dangers with different aircraft. For me, none is really harder than the other; you just have to be aware of what you are dealing with because it can be very different.

"Weather also influences the circumstances. Visibility is the biggest thing, being able to see each other. When you start dealing with restricted visibility, there comes a point – and of course we have rules and regulations and we have to follow them as well – you have to decide what are we doing today, why are we doing it today, and is it worth continuing to do what we do?

"Turbulence can be a factor as well. In theory, the aircraft are so close that you share the same pocket of air. So, if our aircraft is bouncing, the other one – in theory – is bouncing with it. But what I do to recover my aircraft in turbulent air is not necessarily what the receiver is going to do with his aircraft. You can wind up in situations where it can be extremely challenging, but then you can also wind up in situations where, no matter how great the challenge is, it has to happen. Without fuel, we can only go so far."

The crews not only practise during flights, but also in the simulator. The 186th has its own Boom Operator Simulator System (BOSS). MSgt Garrison explained: "Boomers go over there every half year and do so many different profiles and with different types of receivers under different conditions. It usually takes three to four hours per session, and of course that is also another tool we use when we are getting guys fresh from Altus.

"We will take them to the sim and let them see some aircraft they haven't seen. They will play around, so when they tear something up, it will not really tear something up. And we give them challenges, like go through different system malfunctions."

Wing exercises

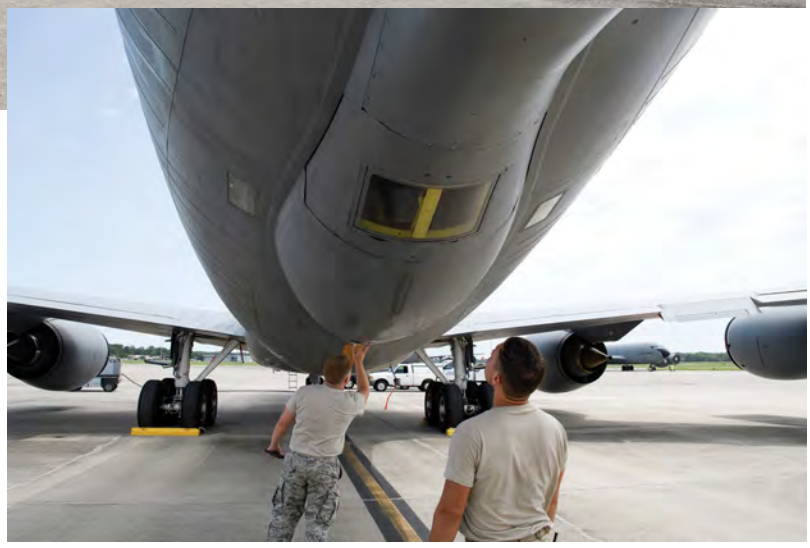
Besides routine daily missions, the wing also participates in larger exercises. "The nice thing about what we do, both the RC-26 and the KC-135, is that we are able to support several local exercises," said Lt Col Will Fowler, commander of the RC-26B training. "We have refueling, we have a cargo piece that we can do with the KC-135, some medevac stuff, and of course the capability that the RC-26 brings.

"Southern Strike is a large exercise we do yearly. It is a wing-wide effort with all of the flying assets that we have. Emerald Warrior is an exercise we have done in the past. We supported them with KC-135s or on the airlift side back when we had the C-27s a couple of years ago. We also go to [NATO air base] Geilenkirchen, in Germany, to support the NATO E-3 mission over there. That's an ongoing thing. We were away from the KC-135 for a while and now we are back in, so we are able to pick that mission up and we are looking forward to doing it."

RC-26 training

Fowler detailed more about the RC-26B operations at Key Field. "This wing operates two RC-26s of the 11 that exist," he told *CAJ*. "The RC-26 is different in

> "The majority of our folks have 10 to 15 years of flying experience and 99% come with the maturity and experience that we don't have to teach



almost every way from any air force flying program. For example, it's only in the Guard, and each operational unit has only one aircraft. They are part of the wing, but they are a very small entity along with whatever that wing's primary flying mission is, whether it be tankers, whether it be F-15s like California or RPAs [remotely piloted aircraft] in Texas. This wing was selected about three years ago to create an OSS, which is the RC-26 schoolhouse, so we do all the formal training for the RC-26 crewmembers for the entire Air National Guard. That's why we have two units here: one operational unit and the OSS with an aircraft as well."

Fowler explained the RC-26 training: "If we were to take a student straight out of Undergraduate Pilot Training – which we have never done and that's another aspect the program does different – we would need that student for three to three and a half months. But most of our pilots, and our operators, the Mission Systems Officers, all come from having been in the air force for a good number of years flying another aircraft.

"The majority of our folks have 10 to 15 years or more of flying experience and 99% come with that airmanship – the decision-making process, the maturity and the experience – that we don't have to teach. We are also very selective in who we bring in. The different units are in charge of their own hiring, but are always looking for people who have done something similar to what we do. What we do is very different than almost anything else in the air force. There is a lot more autonomy in the flight, in the role of the pilot and the role of the Mission Systems Officer (MSO), to guide and direct whatever it is that you're involved in.

"We look for a mature decision-maker. We don't have a lot of room for a young guy who can't think through a complex situation quickly and make that right decision, because that is a crew of three people: two pilots, one MSO. And usually it is the MSO who is making a lot of decisions very fast and that can have significant impacts on the ground. It's a high level of responsibility."

Above: After inspection, the generator that powers the Stratotanker on the ground is packed

Right top to bottom: Checking whether a previous oil leak has been properly resolved

The KC-135R is powered by four F108/CFM56-2 series turbofan engines

RC-26 missions

Talking about RC-26 missions, Fowler explained in detail: "There are only three aircraft in the US Air Force that are similar in their configuration, that's the MC-12, the U-28 and the RC-26. The MC-12 and the U-28 live 100% in

the special operations world. The most forthright thing we do is natural disaster response, like hurricanes, earthquakes and wildfires. As a matter of fact, right now we've got one of our aircraft out at Washington, working together with the National Interagency Fire Center, and they coordinate all the wildfire response in the north-west. Our guys are working with them and they are directing firefighting teams on the ground to where the fire is.

"They are also providing rescue vectors. Sometimes the firefighting teams will get almost surrounded by the fire and nobody can see where that fire is going, especially when it is at night. But the aircraft can, with the sensor on board, and so they vector the firefighting team out of that, saving those lives."

Over the last few years, the RC-26s were also involved in several hurricane response missions. Lt Col Fowler explained: "We fly every single one of them. Last year, we were in North Carolina and South Carolina. And the previous year in Florida, Puerto Rico and Texas. At first it is doing search and rescue, and then it evolves more into property damage assessments, road assessments, that kind of thing. After a couple of weeks or so, you don't need an airplane anymore, you can see everything from the ground.

"The other thing we do – and we try not to operate too much in the forefront – is counterdrug support. That really entails every individual operational unit, across the nation partnering with local state and federal agencies to support whatever they have going on. We have a significant number of laws and regulations that constrain our actions.

"The Posse Comitatus Act is a thing we have to be very concerned about, where the military cannot perform law enforcement on US citizens. We have to be very careful not to cross that line and the agencies will understand that. They will handle it; that is their legal authority.

"Narcotics, human trafficking and so on, are very tied together now. A lot of our guys see cases and situations that are pretty horrendous. I can't go too much into details, but we have had pretty significant activities that we have been honored to support. We'll go and fly, although it is the agencies' job. We are helping them out because it is expensive to fly airplanes and the agencies can't afford what is needed. We are able to help out in those areas."

The daily operations are different for every unit. "Right now, for example, we do have three aircraft flying in support of the South West border operations, supporting Customs and Border Patrol," said Lt Col Fowler. "They are there every day of the week. They are looking for specific things, and we are, again, constrained legally to what we can and can't do; and we have to be very specific within those constraints.

"On average, a unit is going to fly three to four times a week. It is an interesting challenge for us, with such a small unit which has typically on average three pilots and two MSOs – five full-time guys. They've effectively got a crew and a half, and they are flying two to three times a week. So, when one guy is sick, that means

Above: The USAF currently has 11 RC-26B Condors in its inventory

that the others are flying every single sortie, and that's a lot of time. And a lot of times, you don't fly from home station. You have guys going up to 700 miles away for three days."

Flying the RC-26 is, in the opinion of Lt Col Fowler, one of the best mission assignments. "Everything is important: the F-16, the A-10, the KC-135. They are all very necessary. But our mission is one of the most intriguing. I had an F-16 pilot – a colonel – who became an RC-26 pilot, and he told me: 'F-16 flying was the funnest flying I ever did in my life, but RC-26 flying is the most rewarding, and if I had to choose between the two, I would choose the RC-26.' That means a lot coming from an F-16 pilot with 15-20 years' experience."

A risky future?

Looking to the future, Fowler points out that the RC-26 program right now is at great risk, programmatically. "It could be shut down," he explains. "There are efforts, ongoing now in Congress to decide whether that will or will not occur. The entire program is the only one in the US that can do what we do because there is a lot of uniqueness about the program that doesn't fit into a normal Air Force program. It is not funded the same way; it doesn't operate with all of the same mission requirements. It is not easy for the leadership of the Air Force to say to continue to fund.

"Now, on the operational side you have got multiple agencies throughout the US that scream for it – 'We absolutely have to have it, we can't do without it' – but within the Air Force you don't have the very clear purpose direction and funding.

Below: Mississippi KC-135 deployed to Geilenkirchen Air Base, Germany, to support NATO's AWACS E-3 mission
Henk de Ridder

So that's the conversation that is going on right now within Congress and within the Air National Guard and Air Force senior leadership. In the grand scheme of things, it is a very inexpensive program, but it is still money."

Fowler added: "The program has been living with that kind of conversation ongoing for a few years and particular this year it is all kind of coming to a head."

The US Air Force tried to retire the RC-26 program in the fiscal year 2020 budget, but Congress has refused that for now.

The Secretary of the Air Force first has to submit a report to the congressional defense committees, including – among other things – a survey of any requirements for the Air Force to provide ISR support to other military forces and civil authorities that the USAF and ANG meet using the RC-26B.

The submitting of this survey to the congressional defense committees will include an assessment of the extent to which such requirements are appropriate for the Air Force to fulfill and the manner in which the Secretary would meet such requirements if the RC-26Bs were to be retired.

"Fortunately, we've had a good number of representatives who have been engaged with people around the nation and in our program," said Fowler, regarding the Secretary of the Air Force's survey of requirements, and its assessment.

"There is a lot of spoken support and we'll see if that translates into written support. It is very similar to the discussion about the A-10, a lot of different factors, but the same struggle. As an operator, we see the benefit every day and there is nothing else out there right now that does what we can do. There is a lot of passion for it, so let's hope it translates into reality."

Time will tell if the outcome of the investigation will have any influence on the decision-making process on the Air Force's proposal to retire the RC-26B program.

Combat Aircraft Journal would like to thank Lt Col Bradley J. Crawford and TSgt Adam L. Vance from the 186th ARW for their help with this feature.

> "Once we give you a multi-million-dollar asset, and people to go with it, we want you to bring it home safely