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2018 AIR SPACE & CYBER SPECIAL EDITION

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CONTENTS

Air Force Feels the Need for Speed

By John A. Tirpak

USAF wants fast weapons, fast aircraft, and fast acquisition. Fast.

One if by Land, Two if by Sea, Three if by Air, Four if by Space, Five if by Cyber

By Amy McCullough

Multi-domain warfare turns up the heat on the enemy.

Fast Facts about the Air, Space & Cyber Conference

Setting Sights on a Bigger Air Force

By Brian W. Everstine

"The force we need:" 386 operational squadrons.

Space Planning

By Steve Hirsch

Wilson maps the way ahead for a 6th service.

Wingman: AFA Teacher of the Year and Chapter News

ASC 2018 Technology Exposition

By Mike Tsukamoto

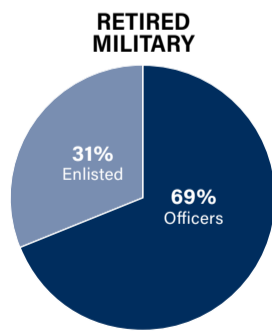
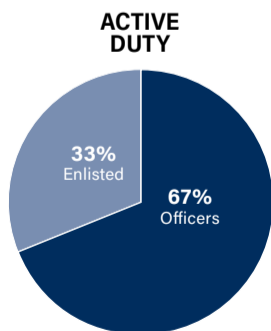
The Technology Exposition in photos.

Invictus

By Jennifer-Leigh Oprihory

Wright's rallying cry for resilience.

Namesakes: Clinton Vincent



ON THE COVER

A brief video spotlighting the mission of the 51st Fighter Wing at Osan AB, Korea.

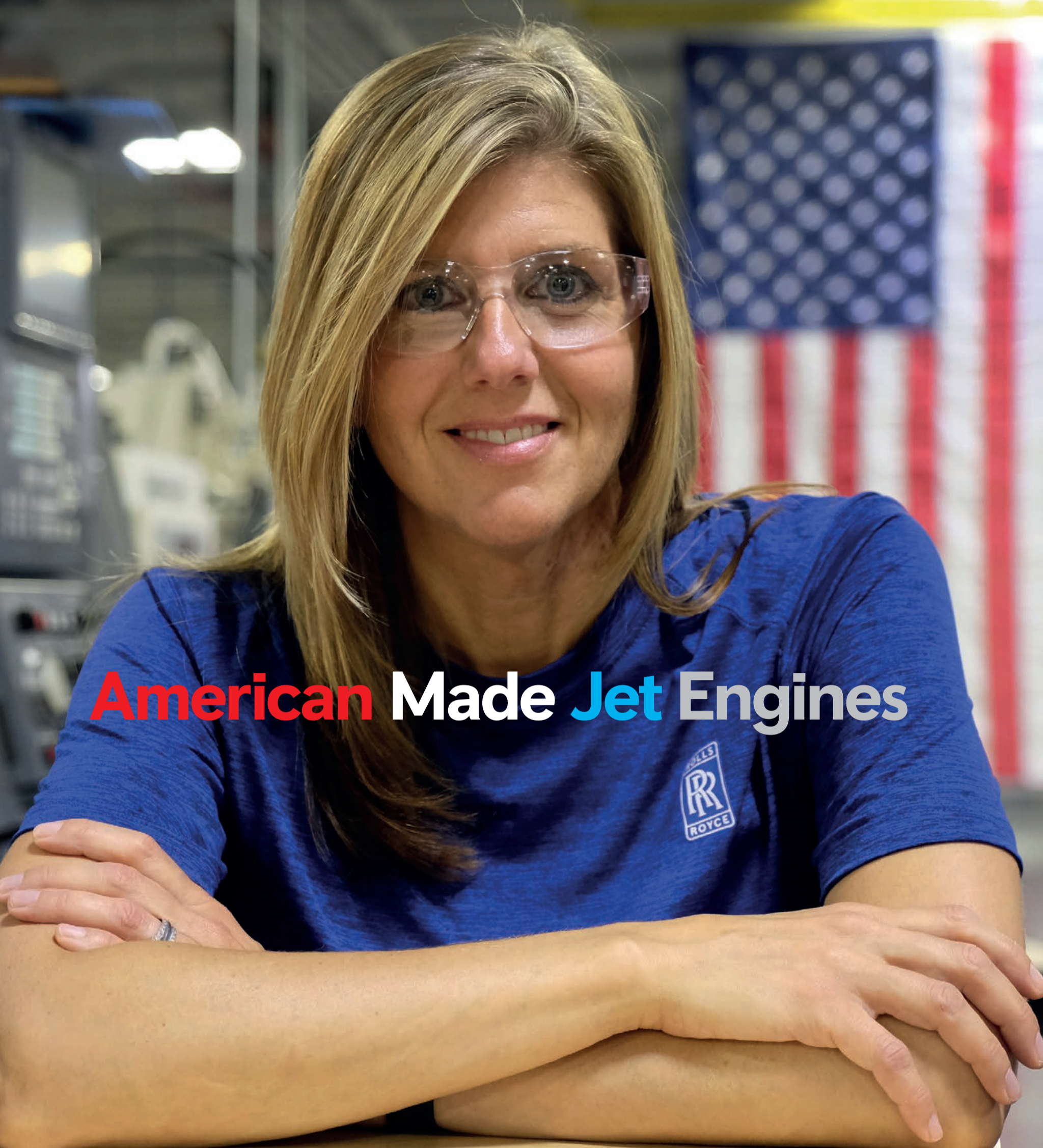
Video by SSgt. Rachel Maxwell.

AFA Almanac

By Chequita Wood

A compendium of facts and figures about the Air Force Association.

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USAF's heightened focus on speed is making long-duration hypersonic flight a reality. This artist's rendering shows Darpa's HTV-2, a prototype reusable, rapid-strike weapon system, re-entering the atmosphere.



THE AIR FORCE FEELS THE NEED FOR SPEED

USAF WANTS FAST WEAPONS, FAST AIRCRAFT, AND FAST ACQUISITION. FAST.

The Air Force could have its first hypersonic weapon within two years, demonstrating a faster acquisition and development process the Air Force hopes will accelerate its modernization push on many levels.

Speed—both hypersonics and faster technology and program development—were core to the messages Air Force leaders took to the force during AFA's Air, Space & Cyber Conference in September.

The development strategy for Next Generation Air Dominance (NGAD) will emphasize prototyping and experimentation rather than rapidly becoming a large-scale program of record, they reported.

To accelerate innovation, Air Force Acquisition chief William Roper said, the Air Force is also focusing on finding better ways to maintain and sustain its platforms, forming a Rapid Sustainment Office modeled on the service's Rapid Capabilities Office, which aims to rush new technologies into use. The new organization will apply predictive analytics and other advanced technologies to the nuts and bolts work of keeping systems operational. Sustainment has long taken a back seat to new combat technologies in the competition for headlines, but sustainment is "where 70 percent of our budget is," Roper said.

The potential for savings is significant. Roper said the new office will "pay for itself" and will be disbanded after two years if it doesn't; an unlikely scenario, he said.

Deputy Defense Secretary Patrick M. Shanahan, in a keynote ad-

By John A. Tirpak,
Editorial Director



William Roper, assistant secretary of the Air Force for acquisition, technology, and logistics, said USAF is out front on developing hypersonics and all the services are working together to bring the capability to fruition.

dress at the conference, said the commercial aircraft industry is far ahead of the US military in understanding aircraft sustainment and wringing savings out of it. The military should be “humble” and learn from “those who do it well.” Shanahan said the military should “rip off and deploy the tools and systems” aircraft maintainers need to get the job done faster and at less cost.

According to Roper, the Hypersonic Conventional Strike Weapon (HCSW, pronounced “Hacksaw”) could be operational as soon as December 2020. It’s “a fact that we can compress the development into two years,” he said, although admitting that dates could slip because of the need to “test aggressively.”

The HCSW will then follow a “spiral development” plan, Roper said.

“You’ll go into some low rate of production, then keep spiraling the technology until you get enough bells and whistles on the weapon and you say, ‘That’s the one I want to buy,’” he explained. Too many programs

have faltered in the past because the service attempted to reach the objective capability in the initial version. That resulting “concurrent risk” slowed development and jacked up cost.

“We’re trying not to do this” with hypersonics, Roper said.

The HCSW is only one of at least four hypersonic projects USAF is pursuing, including boost-glide munitions and air-breathing missiles with longer range and maneuverability.

Among the US Armed Forces, the Air Force is “out of the starting gates the fastest” on hypersonics and will likely be the first to have an operational weapon, Roper said. The services are working together, though. Air Force Secretary Heather Wilson said cooperation with the Army and Navy has already “saved 10 years” of development effort. The services are sharing effort on overlapping technologies,

TSgt. Jordon Jones (left), SSgt. Charles White, and SrA. Jaceb Brammer (right) inspect an F-16 at Misawa AB, Japan. USAF is seeking better ways to maintain and sustain its platforms.



while leaving each free to concentrate on their unique launch requirements.

They have agreed “to use the best technology, no matter where it comes from; go fast, share results, and build harmony,” Wilson said.

Roper said the HCSW and test models from the other services would likely be test-launched from B-52s.

Roper came to his USAF acquisition post from the Pentagon’s Strategic Capabilities Office (SCO), where he was the founding director, and the Air Force’s HCSW flows from work done there. Making use of that body of work has allowed the hypersonics effort to be accelerated, he told reporters, saying he’s handed the program off to himself in his new job.

Roper also said the USAF management team has set a goal to take “a hundred years” out of acquisition programs—and has already cut 56 years from program schedules. “I think we’ll make it,” he said of the 100-year objective. It’s happening “much faster than I was expecting.”

By focusing only on “the things that really matter” and on the 90 percent solution, rather than perfection, programs can move forward much more quickly.

But Roper is still aiming to cut the time to issue contracts. “Two months is not fast enough” for deals, he said. He’d like to complete simple negotiations and agreements in “a single day.” Doing so is especially important with startup companies working on innovative new concepts; they don’t have the cash to wait months for the government to issue a contract. Procedures that would require only short, one- or two-page proposals, a video pitch, and then a live pitch could ultimately result in on-the-spot contract offers.

Even if those startups don’t survive, or are bought up by bigger companies, the people there will have been exposed to the Air Force and its needs, and that will likely pay dividends later, he said.

To keep things on track, Roper said all programs will be given a

An F-35 test aircraft releases a missile during a live-fire test over the Gulf of Mexico. USAF is pursuing a goal to speed up acquisition.

time limit, and if program managers want even “an extra day, week, or month” they’ll have to “fight for it.” Industry embraces this approach and already has the mindset that “we have to make this quarter count; we have to make this year count.”

The bottom line, Roper said, is: The US military will win the technology battle with its peer competitors, “as long as [we] don’t get in our own way.”

Nonetheless, Roper said he’s encouraging program managers to take risks. The Air Force must be “willing to fail” as it experiments with new ideas—however it must not accept failure on major projects like the Ground Based Strategic Deterrent nuclear missile, which will require decades of sustainment and will benefit from taking extra time “at the front end” to reduce risk and cost later.

The Air Force has acknowledged that it needs to up its game in air superiority if it is to remain dominant in the 2030 time frame, which means investing in new capabilities now. Roper said the NGAD can “learn from the SCO approach, which is, you should start with what you have.”

Lt. Gen. Arnold W. Bunch Jr., the Air Force’s top uniformed acquisition leader, told reporters “we need to invest in multiple areas of technology” to map out the NGAD strategy.

“It was not set aside that it was going to be a specific answer,” he noted, but likely a combination of platforms, technologies, and networking. Areas of experiment will include “how we [do] data decision, how we do defeating agile, intelligent targets,” and the results will help determine “what we may be able to invest in” with regard to new products as well as the upgrade of older systems.

“We are looking at advancing key technologies that I won’t go into,” Bunch said. “We’ve got money laid in” for experiments and prototyping. The results of those will drive investments, he said.

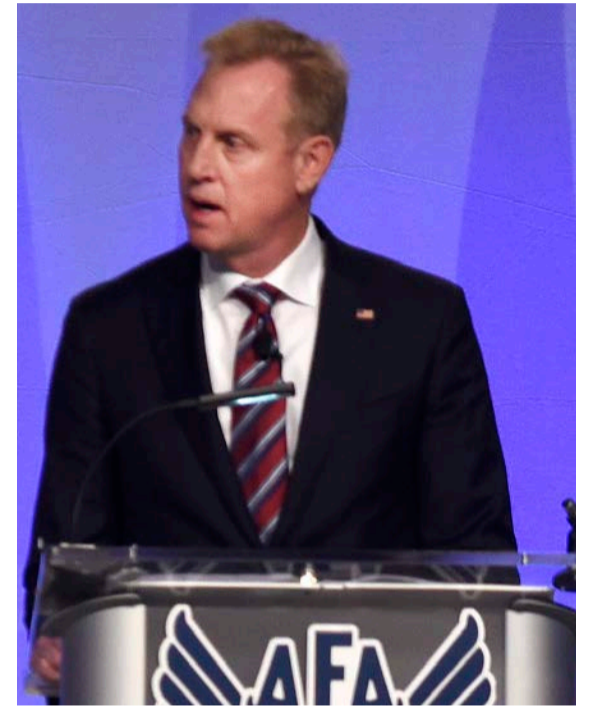
Roper noted the Air Force wants a “balance between these polar extremes ... which is exquisite capability on platforms versus a system of systems. ... The answer isn’t one or the other, we want the best of both.”

This portfolio approach will not be a “traditional, top-down acquisition process,” he said, which “has not worked well for highly tech-driven programs.” The aim will be to continue to limit time lines and press ahead with the technologies that mature within that time line. Roper said USAF will be “very mindful that when you’re trying to target multiple technologies, probably not all of them are going to succeed.”

Air Force officials say the main NGAD technologies are likely to include: extremely low observability aircraft; directed-energy weapons; small, long-range multi-sensor munitions; new variable-cycle longer-range/higher-thrust engines; and augmented and artificial intelligence systems.

Bunch and Roper said they will have a role in moving the Air Force toward a capacity of 386 wings—if that level is approved by Congress and funded—but will chiefly take the job of seeing how existing and future production lines can be adjusted efficiently.

“It’ll be our job to present the best acquisition approach, and that will mean us going through production lines, and [asking], ‘can we go up or down? How can we change within current contracts that we have?’” Roper explained. “We will really have to do the rubber hitting the road ... when we understand what budget to target.”



Patrick Shanahan, deputy secretary of defense, in his keynote address said the commercial aircraft industry is far ahead of USAF in understanding how to wring costs from aircraft sustainment.



Lt. Gen. Arnold Bunch Jr., USAF’s top uniformed acquisition official, said USAF is taking a “portfolio approach” to future air dominance.



A "vicious harmony" of activity across domains multiplies the dilemmas faced by adversaries.

ONE IF BY LAND, TWO IF BY SEA, THREE IF BY AIR, FOUR IF BY SPACE, FIVE IF BY CYBER

MULTI-DOMAIN WARFARE TURNS UP THE HEAT ON THE ENEMY.

The Air Force is looking to blend advanced technology with a new operational construct to provide more options to combatant commanders and speed up the decision-making process. The goal is to ensure the service can take advantage of each of the domains to create a "vicious harmony" and "produce multiple dilemmas for our adversaries," said Air Force Chief of Staff Gen. David L. Goldfein.

Throughout his keynote address at AFA's Air, Space & Cyber Conference in September, Goldfein repeatedly referenced Henry Wadsworth Longfellow's famous poem about Paul Revere's midnight ride to warn colonist of the British plan to seize weapons at Concord in 1775. The redcoats, he noted, "could either march across the land bridge" from Boston to Concord, "or row across the Charles River."

Knowing this, the colonists developed a "crude but effective" command and control architecture, hanging one lantern in the Old North Church tower if the British were advancing by land and "two, if by sea," said Goldfein.

By Amy McCullough,
News Editor



But what if the British had been able to split their forces and advance from both land and sea? Goldfein asked. Adapting the poem for modern-day warfare, he spelled out how that might work in the future:

“One if by land, two if by sea, three if by air, four if by space, five if by cyber—more when we converge effects from multiple domains to achieve military objectives,” he said. Adding dimensions adds complexities and stretches the enemy thinner with each potential option. “We want our adversaries in the lantern-buying business,” he said.

The Air Force has operated in mostly uncontested environments for the past three decades. Now the US is entering a new era of great power competition, the National Defense Strategy argues, requiring a more robust set of capabilities.

In fact, Deputy Defense Secretary Patrick M. Shanahan said at the conference that while the US was fighting insurgents in the Middle East and the Air Force was operating at will overhead, adversaries studied American operations and “built systems and doctrine to thwart” US capabilities.

“The character of war is changing rapidly, dangerously blurring the line between competition and combat,” Shanahan said. “Adversaries increasingly leverage media and hackers instead of fighter jets to achieve their ends.”

USAF has long enjoyed air superiority, but space and cyberspace are more contested domains.

“We’re now seeing that we’ll have to fight in all three of those domains and converge those capabilities on an adversary in order to win a campaign,” said Brig. Gen. B. Chance Saltzman, director of current operations on the Air Staff and the head of Goldfein’s multi-domain command and control initiative. “These have been largely benign campaigns, and as soon as that’s not the case we have to do something different to preserve” USAF superiority.

That’s what Multi-Domain Command and Control (MDC2) is all about. The Air Force will be called on to project combat power in air, space, and cyber, or a combination of the three, Goldfein said. That

USAFE-based F-15Cs rapidly deployed when the call came to strike targets in Syria, and the Eagles worked across domains to make the operation a success.



Chief of Staff David Goldfein said the Air Force must project combat power in air, space, and cyber—or a combination of the three.



Deputy Defense Secretary Patrick Shanahan said adversaries have studied US capabilities and built systems to thwart them.



A B-1B Lancer refuels during an attack on Syrian targets in response to Syria's use of chemical weapons.

could mean sending a single Air Force Reserve WC-130 into the eye of a hurricane or “the rapid buildup of new bases across Eastern Europe to execute expeditionary combat operations to halt enemy activity in support of—and in combination with—our NATO allies.”

Most often, he added, it will mean “offering a combination of tailored forces that go forward, with forces that fight from the homeland or provide reachback capabilities that support the fight.”

Multi-Domain in Action

The April attack on chemical weapons facilities in Syria was one of the first opportunities to deploy multi-domain operations since Goldfein tasked Saltzman with studying the concept.

In the early morning hours of April 14 (local time), the United States, United Kingdom, and French forces launched an attack inside Syria,

Infrastructure Key to Successful Multi-Domain Operations

—Amy McCullough

The inaugural Doolittle Wargame series launching in November will test various command and control architectures to see which ones best leverage information and support that result in the fastest, most effective decisions for multi-domain operations.

Infrastructure is critical to successful multi-domain ops, and getting the C2 architecture right is a “stellar” undertaking, said Brig. Gen. B. Chance Saltzman, director of current operations and head of the Air Force’s multi-domain command and control initiative.

Speaking before a Sept. 26 Mitchell Institute for Aerospace Studies event in Washington, D.C., Saltzman compared the Motorola DynaTAC 8000X—the world’s first cell phone, which weighed 1.75 pounds and was 13 inches tall—with a modern iPhone. Even if he’d had an iPhone in 1985, “it would be just as effective as the phone on the left: You could make phone calls with it,” Saltzman said. That’s because without the Internet—the necessary infrastructure—iPhone apps, text messaging, and data features are useless.



Without the KC-135s from RAF Mildenhall, UK, the April operation in Syria would have been scrubbed, Air Force Secretary Heather Wilson said.

“Once we get the infrastructure right, I’m convinced that the applications will be much faster in development and integration,” Saltzman said, acknowledging that will require a significant culture shift inside the Air Force. Everything from how the service works with Congress, industry, and academia, to the way it conducts operations will have to change, he said, and all of those things must happen in parallel.

The Air Force needs to give industry and academia the “basic principles and basic vision” for how it wants to conduct multi-domain operations—and then let them work independently to define the best way to make that happen.

“There’s a struggle here. This is that cultural shift,” he said. “If we’re sitting around waiting for that master conops, the master list of requirements that define MDC2, I’m telling you it’s not coming. It’s not coming because I don’t think that’s the best way to structure all the disparate efforts that have to happen.

“I would much rather focus on standards for the basic foundational work so everybody who is working on the different disparate aspects knows how their project will fit in,” Saltzman continued. “Then we have to figure out what the right contracting mechanisms are, what the right lab work is, how you go from experiments and technology demonstrations to operationalizing this. What does ‘program of record’ mean in this environment?”

Rather than control everything, he argued, the Air Force will get further, faster if it seeds the creative forces around it, rather than defines parameters too concretely. “The short answer is we don’t want to control too much,” he said. “We want to have the grand vision so everybody can contribute the way they see works best.”

striking Syrian chemical weapons research and storage facilities with 105 varying missiles. It was a response to Syrian leader Bashar Assad’s decision to use chemical weapons on his own people.

Just over 24 hours after President Donald J. Trump authorized the strike and forces were notified, F-15Cs assigned to US Air Forces in Europe had deployed to an unnamed staging location in Europe. The Eagles were getting ready to deploy to Morocco for an African Lion exercise. When the majority of the aircraft were redirected to support the Syria operation, they provided defensive and offensive counterair out-

side of Syrian airspace, supporting other assets in theater, according to a USAF officer who participated in the mission.

“It was a very rapid deployment,” he said. “We have a rapid Eagle concept. We trained to that once before. If we get notification to something we can configure our aircraft with live munitions and get out the door quickly.” But it didn’t hurt that the unit was fixing to deploy anyway—that helped speed up the operation.

One of the challenges, however, was that the African Lion mission was still a go. “There were a few days we had members of the squadron in five different countries,” said the officer, whom the Air Force declined to name for operational security reasons. Some members of the squadron went on to Africa, others were at the staging location, some were still at home, and some airmen were operating as liaisons inside the combined air operations center in Germany, he said.

“The stressor part was more starting the airplane without any updated intelligence of what actually happened,” said the pilot, who was slotted to “be the end of the coverage.” It wasn’t until he met up with the first wave of fighters over the Adriatic Sea that he was able to get an updated intelligence report over the radio.

The USAFE-based F-15s and F-16s did not launch strikes, but they did provide airborne surveillance around the Mediterranean Sea. Meanwhile, two USAF B-1B Lancers from the 34th Expeditionary Bomb Squadron at Al Udeid AB, Qatar, escorted by a US Marine Corps E/A-6B Prowler, dropped 19 Joint Air-to-Surface Missiles over Syria, hitting the Barzeh Research and Development Center near Damascus. The US Navy struck with 59 Tomahawk cruise missiles.

F-22 Raptors also “played an integral role” in the strikes, Air Force Central command spokesman Capt. Mark Graff told *Air Force Magazine* at the time. The fast and stealthy F-22s, he said, were “the only airframe suited to operate inside the Syrian integrated air defense systems, offering an option with which to neutralize threats to our forces and installations in the region and provide protective air support for US, coalition, and partners on the ground in Syria.”

The night of the attack, Chairman of the Joint Chiefs Gen. Joseph F. Dunford Jr. had said there was “some initial surface-to-air-missile activity from the Syrian regime,” even though the US had “specifically identified these targets to mitigate the risk of Russian forces being involved.” The pilots involved still weren’t sure what kind of response they would face.

Throughout the course of the mission, the Eagles worked closely with USAF F-16s and other coalition aircraft, providing 12 hours of consistent over watch. The fighters took turns refueling from KC-135s assigned to the 100th Air Refueling Wing from RAF Mildenhall, England, which were in the first wave of aircraft to launch.

Despite weather conditions that were “significantly below minimums” that night, the wing’s tankers took off. Visibility was so poor, in fact, they “needed a follow-me truck to find the runway’s centerline,” said Air Force Secretary Heather Wilson during her keynote address at the conference. But, “If they didn’t go, the mission would have to be scrubbed,” she added. “They relied on their training [and] confidence in the maintenance and equipment to push the throttles forward.”

The risk of conflict with Russia that night was high. Pentagon spokeswoman Dana White said Russian propagandists stepped up activity that night by “2,000 percent” in the wake of the strikes. To mitigate the risk of conflict, the US and its allies deployed assets to several locations to create multiple dilemmas for potential attackers—exactly what the evolving MDC2 strategy calls for.

“I am excited and optimistic about our future,” Goldfein said. “I am confident that the American people will hear the alarm as articulated in the National Defense Strategy. That ... we will once again choose to defend our great nation, just as we have throughout our history, since that fateful night in 1775.”

He paused and added: “They are coming, and we have from this moment forward to get ready. Fight’s on.”

SETTING SIGHTS ON A BIGGER AIR FORCE



Future conflicts might require many small USAF units to deploy to austere airfields, taking only support equipment and people required to conduct operations. A C-130 from the 746th Expeditionary Airlift Squadron unloads equipment at an undisclosed location in Syria.

“THE FORCE WE NEED:” 386 OPERATIONAL SQUADRONS.

Today’s Air Force may still be the best in the world, but it’s no match for a National Military Strategy that demands more than the current force can deliver.

After years of cutbacks, today’s force is undermanned and under-equipped, Air Force leaders say, and the fight is on to build a bigger, more capable and ready force aligned with the requirements of the National Defense Strategy released in January.

The future force should include 386 squadrons, 74 more than today’s 312, Air Force Secretary Heather Wilson said in defining “the force we need.” That represents a 24 percent increase and would also require tens of thousands more airmen, Wilson said.

Details about the plan remain scant. The Air Force did not define the size or makeup of the squadrons and steered clear of detailing the number of aircraft or people in each. Instead, the baseline number comes from a half-year review of the service’s force structure and will be a jumping-off point for a more detailed debate with the Pentagon, the White House, and Congress over the coming year.

Wilson set a target of 2025-2030 to complete the expansion, which would bring the service to a size not seen since the early 1990s.

“We aren’t naïve about how long it will take us to build the support and the budget required for the force we need. It is a choice,” Wilson said. “But we have an obligation to our countrymen: To tell them, as those before us have done in their time, what should be done, what must be done.”

The proposed increase was based on data derived from analysis, war games, modeling, and simulation. Top officials from the Air Staff and also major commands participated, using modern intelligence about potential adversaries and the most recent concepts of operations to determine the optimum size of the force. The nation will rely on the Air Force to lead future fights, Wilson argued, and at its current size, USAF can’t meet the demands of the nation’s combatant commanders.

By Brian Everstine,
Pentagon Editor



USAF needs 22 more command and control and ISR squadrons, Air Force Secretary Heather Wilson argues. Here, mission crew commander Lt. Col. Vida Roeder of the 461st Air Control Wing monitors operations supporting a multinational exercise near Denmark.

“We know now from analysis what everyone in this room knows from experience,” Wilson said. “The Air Force is too small for what the nation expects of us; 312 Operational Squadrons is not enough.”

Wilson said the additional squadrons will include:

- 22 more command and control and intelligence, surveillance, and reconnaissance squadrons
- 14 more aerial refueling squadrons
- 9 more combat search and rescue squadrons
- 7 more fighter squadrons
- 7 more special operations squadrons
- 7 more space squadrons
- 5 more bomber squadrons
- 2 more remotely piloted aircraft squadrons
- 1 more airlift squadron

While the Air Force will modernize its nuclear deterrent and cyber capabilities, Wilson said the service doesn’t need to increase the number of missile or cyber operations squadrons.

Lt. Gen. Brian T. Kelly, deputy chief of staff for personnel, said the service will need some 45,000 more airmen to fill out 74 additional squadrons. Spread out over 12 years, the service would have to grow by 2 percent a year, something the service hasn’t had to do in decades. Indeed, even during the Reagan buildup of the 1980s, the Air Force only grew by about 3 percent—and then soon after began a long decline.

‘NOT A BIRTHRIGHT’

New rivals are rising up to challenge the United States, Wilson said, and the Air Force and the nation cannot claim air dominance as a “birthright” for the US. Rather, she added, it is a choice the country needs to make. The nation cannot be “naïve about the existence of evil, and new threats are emerging to which our generation must respond,” she said.

The Air Force did not immediately explain how the larger force would be divided among Active Duty, Guard, and Reserve, nor did it address how the creation of a new space service would affect the plan. Wilson is developing a plan for creating a new Space Force to be included in the 2020 budget request that goes to Congress in February.

The new benchmark is only “the beginning of the discussion” about what it will take to meet the National Defense Strategy requirements,



“The Air Force is too small for what the nation expects of us,” SECAF Wilson says. “New threats are emerging to which our generation must respond.”



and there will be “five or six more studies due in the next six months” that will flesh out the details, according to Wilson.

Wilson and Chief of Staff Gen. David L. Goldfein also addressed readiness and argued for a higher standard. In addition to growing the size of the Air Force itself, Goldfein said it was time to take a fresh look at the Air & Space Expeditionary Force deployment model, which has been in place since the mid-1990s. “Over time, we have migrated away from expeditionary forces,” Goldfein said in his keynote address.

“We know how to ... fight the base and operate under attack,” he said, but the next fight will be against a near-peer competitor and will require airmen to operate with smaller units spread out over a wider area.

“There will be few established bases,” and few of the amenities USAF units have become accustomed to having when they deploy, Goldfein said. Squadrons will have to operate independently and have reachback capability for command and control and other support.

Today’s AEF sources airmen from throughout the Air Force and spins up units before each deployment.

But the homeland is no longer a sanctuary and the Air Force now needs to be ready to deploy with little to no warning, said Lt. Gen. Mark D. Kelly, the deputy chief of staff for operations. Kelly said units must be ready and cohesive enough to operate immediately.

“It’s time to return to our expeditionary roots,” Goldfein declared. New units will have “flexibility and scalability” to address whatever demands the regional commander makes, he said.

The Air Force is already taking some heat because the studies and plans that produced the 386 number are not transparent. The supporting information is either secret or otherwise closely held, making it hard to justify to defense appropriators, Brookings Institution expert Michael E. O’Hanlon said.

“I don’t know what scenarios drove the calculations—they’re classified,” said O’Hanlon, director of foreign policy research at the Center for 21st Century Security and Intelligence at the think tank. Speaking at an AFA Mitchell Institute panel on the service’s new force-structure plan, O’Hanlon said, “If I did know, I could not talk about it here, and some of you do know, and you can’t talk about it here with me, which means we can’t talk about it with the broader nation, which means we can’t easily relate it to broader questions of US foreign policy and budget priorities.”

Air Force leaders said the new baseline figures will inform the Fiscal Year 2020 budget deliberations, which were headed into their final stages at the time of the conference.

USAF needs seven more fighter squadrons, according to leaders’ analyses. F-22s from the 1st Fighter Wing, JB Langley-Eustis, Va., taxi down the runway at RAF Lakenheath, UK.

WRIGHT'S RALLYING CRY FOR RESILIENCE

CMSAF Kaleth O. Wright's voice boomed out through a packed ballroom, where the crowd overflowed into the hallway. "Out of the night that covers me," he began, reciting the Victorian-era poem, "Invictus," from memory. "Black as the pit from pole to pole/ I thank whatever gods may be/ For my unconquerable soul."

Wright's recitation at the 2018 AFA Air, Space and Cyber Conference was all about resilience and the need to persevere.

"I think this poem serves to remind us that our fate is up to us, to ensure we remain undefeated, that we have to make the choices essential to our soul the ones we won't regret," Wright said in the talk that followed the poem.

Resilience is a skill that must be cultivated by actively taking responsibility for those things one can control and by intentionally pursuing self-care. This is [Wright's vision](#) for building better airmen.

William Ernest Henley, who lost a leg to illness in his youth, wrote the poem while recovering from medical interventions that saved the surviving one.

"Invictus" is Latin for "unconquered," and the poem has long inspired others, including survivors of the North Vietnamese Hoa Lo Prison, better known as the "Hanoi Hilton."

The late Navy Vice Adm. James Bond Stockdale recounted in a 1993 essay how a fellow POW secretly passed part of the poem to him after he returned from a period of solitary confinement. The poem's last verse had been inscribed "with a rat dropping."

Nelson Mandela also used it as inspiration during his time as a political prisoner in South Africa during the apartheid era.

But one need not be on the edge of life and death to find strength in "Invictus."

"I found poetry when I was a young man," Wright told *Air Force Magazine*. Writing poetry is a "great" avenue for self-expression, is "refreshing mentally," and remains a key part of his own mental resilience, he said.

By Jennifer-Leigh Oprihory,
Digital Platforms Editor

What's your resilience story?
Tweet us @AirForceMag,
using the hashtag
#ResilienceReadingList.

SPACE PLANNING

WILSON MAPS THE WAY AHEAD FOR A 6TH SERVICE

The way forward to developing a new Space Force and splitting out a sixth military service gained clarity at AFA's Air, Space & Cyber Conference, where Air Force Secretary Heather Wilson said the USAF has defined what she believes should be the "responsibilities and structure" of a new Space Force.

The Sept. 14 proposal, a copy of which was obtained by *Air Force Magazine*, estimates the Space Force will comprise some 13,000 personnel, including a headquarters staff and secretariat, with close to 8,000 in the Space Force element. In her cover letter to the proposal, Wilson suggests the administration ask Congress for authority and resources to establish the Space Force headquarters in Fiscal 2020, with programs and personnel to follow a year later.

The Air Force plan "avoids detours that do not support the president's policy position to establish a new military department," such as creating a Space Corps inside the Air Force, or new Defense Department positions. "There is no need to establish an assistant secretary of defense for space, nor is there any benefit to either establishing an additive agency or moving programs to a temporary holding organization," it says.

That position was described in Vice President Mike Pence's August announcement of the plan for a new Space Force.

Creating a new Space Force will "maintain the close connection between acquisition and the warfighter, and it must deepen the already close connection between military space and the space elements of the Intelligence Community," Wilson said in her conference keynote address.

The Air Force proposal urges DOD to assign the proposed Space Development Agency—which would be aimed at supporting new product development—to the existing Air Force Space Rapid Capabilities Office, allowing the Air Force to maintain at least a portion of the overall space portfolio.

By Steve Hirsch,
Senior Editor





In her cover letter, Wilson said the USAF Space Rapid Capabilities Office “was already given special authorities and exemptions by Congress to rapidly develop space capabilities.”

She added, “This office exists now and has the personnel and expertise to develop and field the warfighting capabilities needed by US Space Command.” Re-establishing a unified SPACECOM was another component of the August Space Force announcement.

The Air Force proposal called its own plan the “most cost-effective approach to fix critical issues immediately and achieve the expeditious and comprehensive implementation of a separate and equal Department of the Space Force.”

DEADLINES AND MORE DEADLINES

The Space Force must start small, Deputy Defense Secretary Patrick M. Shanahan told the conference. It should have a limited headquarters, limited red tape, and a principal aim to accomplish its mission by “doing no harm” to the work the Air Force has already achieved.

That means ensuring current mission effectiveness remains intact and avoiding opening “seams” between the services. Pentagon leadership must be “laser-focused” on what the warfighters need to dominate in space, he said.

In a Sept. 10 internal Pentagon memo from Shanahan, also obtained by *Air Force Magazine*, he laid out a series of important deadlines for senior military leaders related to the Space Force proposal.

Shanahan’s memo directed the military service Secretaries, the Chairman of the Joint Chiefs of Staff, and the Office of the Secretary of Defense and DOD component heads to take specific actions to establish the Space Force.

The chief management officer was to come up with a plan to establish a new assistant secretary of defense for space and the White House was to start identifying potential candidates for the post, with an interim progress review due to a new Space Governance Committee being set up to oversee establishment of the Space Force by Oct. 1.

The Chairman of the Joint Chiefs of Staff, Gen. Joseph F. Dunford Jr., was put in charge of the push to re-establish a unified combatant command for space, which the memo said should stand up by the end of this year. The Joint Staff, which was tasked with developing

Members of the 30th Operations Support Squadron weather flight team participate in the launch of the InSight mission to Mars. The Air Force would split such operations out into a new Space Force now being developed in the Pentagon.



During a training exercise, the 4th Space Operations Squadron loads a Low Profile Antenna into a C-17 at Peterson AFB, Colo. Even if “space” became a separate service, the Air Force would still be responsible for transporting space gear in times of conflict.

a plan to move authorities and capabilities to US Space Command, was to provide an interim progress review to the Space Governance Committee by Sept. 30.

The memo directed Dunford to work with the service Secretaries and the undersecretary of defense for personnel and readiness to produce an inventory of space operations-related forces and functions, while the undersecretary was to come up with an approach for managing DOD space personnel. The Joint Staff was to produce an interim progress review by Oct. 1, to include a recommended target date for initial operational capability in 2019.

The legislative proposal to set up the Space Force, including its roles and missions, structural options, responsibilities, relationship with the USSPACECOM, and a “lean headquarters model to avoid growing unnecessary bureaucracy,” is to be submitted to the Office of Management and Budget by Dec. 1—although an interim progress review was due to the Space Governance Committee by Oct. 15.

Meanwhile, an interim progress review on preparing the Space Force budget for the administration’s Fiscal Year 2020 budget request and the five-year Future Years Defense Program were due Oct. 15.

Wilson and the Undersecretary of Defense for Research and Engineering, Michael D. Griffin, were directed to develop concepts for the Space Development Agency, and draft concepts were due Sept. 14, according to the memo.

QUESTIONS, QUESTIONS, QUESTIONS

The Air Force push was not without critics.

The budget estimate in Wilson’s proposal came under questioning from Todd Harrison, Center for Strategic and International Studies director of defense budget analysis, who said Sept. 20 that the roughly \$13 billion is “not a conservative estimate,” adding that, “this is the highest estimate I think you could possibly come up with.”

He also raised questions about a number of aspects of the memo, including its personnel estimates and costs for a new building.

“I don’t think that there’s a lot to this cost estimate,” he said.

Nevertheless, the machinations around the shape of the new department came at a time that acceptance of space as a military domain is becoming more widespread.



SpaceX President Gwynne Shotwell is concerned about national security space threats from both Russia and China.

Gen. John Raymond, AFSPC commander, wants a defensible space architecture.



Air Force Space Command chief Gen. John “Jay” Raymond, during an ASC18 presentation, laid out four lines of effort his command is pursuing at the “strategic inflection point” when space is becoming a contested domain.

Raymond said AFSPC is concentrating on partnerships within the Air Force, with the Intelligence Community, and with allies, as well as relations with industry.

“There’s an explosion of things happening in the commercial industry, and we want to capitalize on that,” he said.

He also said AFSPC is working to develop joint warfighters—including space operators who understand joint operations and conventional operators who understand space—and moving toward defensible space architectures.

“The constellations that we have on orbit today aren’t all that defensible,” he said, suggesting they have been compared to the “slow kids in gym class that can’t run very fast.”

The command, he said is going “to make them run a little faster.”

Finally, in an effort mostly involving the Space and Missile Systems Center, he said AFSPC is working to improve its acquisition agility to ensure it can develop new capabilities quickly.

SpaceX President Gwynne Shotwell told attendees she had concerns about Russian military space efforts, and more so about threats from China.

These foreign space companies, she said, are backed heavily by their governments. She noted that Chinese media has reported that country’s goal of flying 40 times this year.

“It’s not for commercial customers, they have very few commercial customers,” noted Shotwell. “We should be quite worried about that.”

She also raised concerns about the rapid pace and heavy underwriting of the Chinese space program and its innovations.

When asked whether SpaceX would consider launching offensive military systems, she replied, “If it’s for the defense of this country, yes.”

The answer earned applause.

FAST FACTS IN NUMBERS FROM ASC



More than 2,239

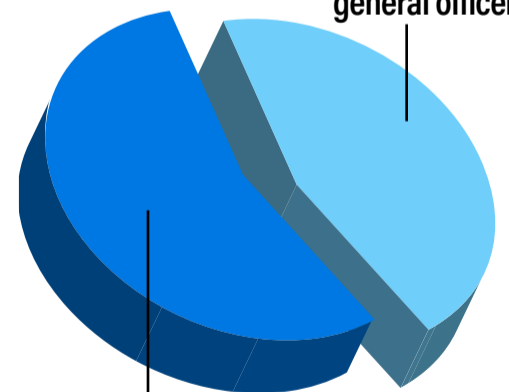
Text-in questions from attendees



67 speakers

240

Total Air Force general officers



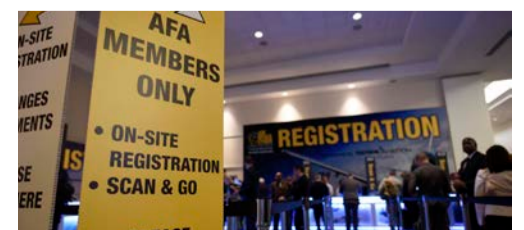
298

Total Air Force Active Duty generals



More than 6,600

Total Air Force members (Active Duty, Guard, Reserve, SES, DOD Civilian)



More than 5,300

Total Air Force uniformed registrants

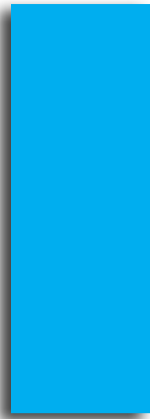
131

Foreign Military

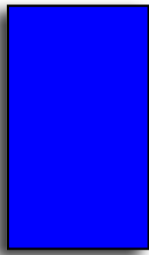


Flags from all 50 states are presented during the National Anthem at the start of the Outstanding Airmen of the Year Dinner.

915



620



OAY Dinner attendees

USAF Dinner attendees



USAF Band string section performed at the Air Force Birthday Dinner.

222

Members of the media registered



10

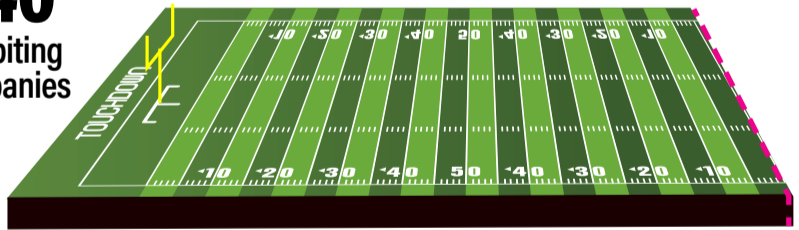
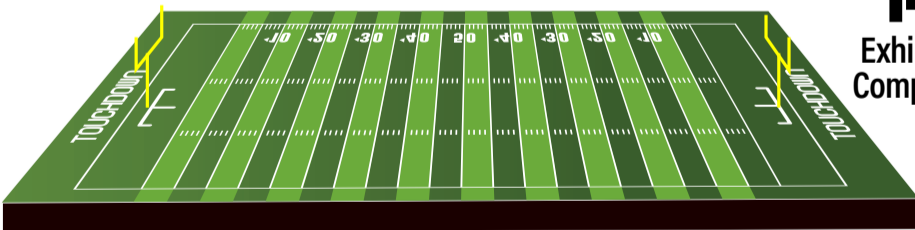
Press Briefings/Conferences



This year's exhibit floor was jam-packed with attendees. Exhibit space for next year's ASC is already sold out.

140

Exhibiting Companies



106,291 sq. ft.

of Exhibit Space



Numbers were up at this year's Tech Expo.



A display of aircraft at the Lockheed Martin booth.

2018 AFA AWARDS



AFA Chairman of the Board F. Whitten Peters, left, and Gen. John Raymond, Commander, Air Force Space Command, far right, present the award for Best Space Operations Crew to the X-37B Operations Crew from Schriever AFB, Colo., at the Air Force Association's Air, Space & Cyber Conference at the Gaylord National Convention Center, National Harbor, Md.



Air Force Association President Larry Spencer, center, is awarded the Dwight D. Eisenhower Award.



Cyberpatriot National Commissioner Bernard Skoch, center, is awarded the AFA President's Citation by AFA President Larry Spencer, left, and AFA Chairman of the Board F. Whitten Peters.



Air Force Magazine Editorial Director John Tirpak, center, is awarded the Gill Robb Wilson Award by Air Force Chief of Staff Gen. David Goldfein, second from left, Secretary of the Air Force Heather Wilson, second from right, CMSAF Kaleth Wright, far right, and F. Whitten Peters, AFA Chairman of the Board, far left.



Deborah Lee James, right, former Secretary of the Air Force, is awarded the W. Stuart Symington Award by AFA Chairman of the Board F. Whitten Peters.

CHAPTER NEWS



■ CHUCK YEAGER CHAPTER

The **Chuck Yeager Chapter** in West Virginia sponsored awards given at the Mountaineer Cadet Officer Leadership School (MCOLS) at Concord University in Athens, WVa.

The school runs each year in June for a week, and this year 235 cadets from 16 schools and six states participated.

Cadet Sierra Knott from Jefferson High School, WVa., won Best in Fitness (Female), Best in Personal Inspection, and Outstanding Basic Cadet; Cadet Casey Bennett from William Blount H.S., Tenn., won the Academic Achievement award; Cadet Wilton Kitt, Patrick Henry H.S., Va., won Outstanding Advanced Cadet; Cadet Avion Tucker, E.C. Glass H.S., Va., won Best in Individual Drill; Cadets Coralee Swan, Douglas H.S., S.D., and Rylie Hart, Hixon H.S., Tenn., won the Outstanding Flight Cadre awards; Cadet Lou Mustian, Deep Run H.S., Va., won Best in Fitness (Male); and Cadet George Struthers, Jefferson H.S., WVa., won Best in Room Inspection.

MCOLS was founded in 2000. Its mission is to teach Air Force core values, to improve cadet's leadership abilities, marching skills, physical fitness, and to produce the next generation of leaders.

The chapter also announced the winners of the 22nd annual **Chuck Yeager Chapter #209 Drill Competition**, held at Parkersburg South High School, Parkersburg, WVa., on Feb. 10, 2018: 1st place: PA-931; 2nd place: OH-091; 3rd place: OH-881, W. Va.; Grand Trophy: WVa. 781. Top Three Knockout winners are: 1st place: Cadet Campbell, PA-931, 2nd place: Cadet Ward, OH-881, 3rd place: Cadet Smart, OH-881.

■ MONTGOMERY CHAPTER

Silver Wings Cadets participated in the Air University Intern Program from June 18-22, 2018, at Maxwell AFB, Ala. The **Montgomery Chapter** partnered with the Air University Foundation to provide a \$600 donation to fund four Silver Wings students, helping to defray costs during their AU Fellowship.

This year's interns were Ashley MacKinnon, Sheona Lalani, Ignacio Vide-

From left: Central East Region President Peter Jones and Chuck Yeager Chapter President Herman "Herk" Nicely II stand next to Mountaineer Cadet Officer Leadership School awardees/cadets: Sierra Knott, Casey Bennett, Wilton Kitt, Avion Tucker, Coralee Swann, Rylie Hart, Lou Mustian, and George Struthers.

Photo via Herman Nicely II

la, all from George Washington University in Washington, D.C., along with Erin Roush from Ohio State University.

Marianne Williams, Silver Wings senior director, joined and assisted the AU project officer, Maj. Christopher Pugh, in accompanying the students—who are also AFA members—on their visit to two operational wings, the 187th Fighter Wing (ANG) and 908th Airlift Wing (AFRES). They also had the opportunity to learn about the Air Force's Center for Professional Military Education. The interns attended seminars, speeches, and lectures at Air War College, Air Command and Staff College, and Squadron Officer College.

The interns say the fellowship was an eye-opening experience.



Silver Wings students get a firsthand look into the cockpit of a C-130H as they tour the 908th Airlift Wing (Air Force Reserve). L-r; Ignacio Videla, Ashley Mackinnon, Sheona Lalani, and Erin Roush.

Photo via Marianne Williams

■ LT. COL. B.D. "BUZZ" WAGNER CHAPTER

Artist Paul Jacobs donated his painting, "First Ace," depicting World War II hero Lt. Col. "Buzz" Wagner's most notable flight, at his hometown's Showcase for Commerce in Montclair, Va., in June.

He presented the painting to the **Lt. Col. B. D. "Buzz" Wagner Chapter** (Pa.), which also maintains a replica of Wagner's aircraft. The painting shows Wagner, the first American ace from World War II, rolling inverted to keep his target in sight. It gives the viewer a good feel for what that event may have felt like.

The painting will be a welcome addition to the chapter's permanent display honoring the service of Wagner, and will help keep his story alive for generations to come.



Artist Paul Jacobs, left, and Lt. Col. B.D. "Buzz" Wagner Chapter Secretary Bob Rutledge, with the "First Ace" painting.

Photo via Bob Rutledge

■ SPIRIT OF ST. LOUIS AFA

The **Spirit of St. Louis Chapter** held its 45th Annual Awards Ceremony in Maryland Heights, Mo., in March honoring the top four NCOs from the St. Louis area's Active and Guard units.

Pictured are the winners, flanked by the President and Vice President of the **Spirit of St. Louis AFA Chapter**. L-r: CMSgt. Gary Young (Ret.); Lt. Col. Joel Brown, AETC 345th Recruiting, Scott AFB, Ill.; TSgt. Angela Caufield; Lt. Col. Bill Layton, 157th Air Operations Group, Missouri ANG Jefferson Barracks; TSgt. Nicholas Noduft; Lt. Col. Michael J. Willen, USAF Band of Mid America, Scott AFB, Ill.; TSgt. Michael Correa; Col. J. Van Ryn, MOANG Medical Unit, Jefferson City, Mo.; TSgt. Tyler F. Owenby; and MSgt. Bob Schure, USAF (Ret.).



Photo via Bob Schure



Squadron Commander, Lt. William Burns (I), and Randy Whitmire, Michigan state AFA president, present the AFA Outstanding Cadet Award to CAP Amn. Jake Roberson.

Photo via Randy Whitmire

■ AFA PRESENTS OUTSTANDING CADET AWARD

Civil Air Patrol Cadet, Amn. Jake Roberson, a 13-year-old student from Grand Haven Middle School in Michigan and also a member of the Lakeshore 119 Composite Squadron, received an Outstanding Cadet Award from the Air Force Association in June.

Cadet Roberson approached the senior members of his squadron shortly after joining CAP to suggest introducing more aerospace education routinely within the squadron. He volunteered his time and efforts to research subject matter for current event topics and to give monthly presentations, complete with sources of information as well as question and answer sessions.

His fellow cadets describe his passion for aerospace as “contagious.”

“I really enjoy learning about the topics and sharing that knowledge with others. I love CAP,” said Roberson, who credits his parents, Mark and Carrie Roberson, for encouraging his interests in aerospace and CAP. Cadet Roberson plans to become an aerospace engineer.



Members of the Fairbanks Midnight Sun Chapter gather near the flight line on an icy runway at Eielson AFB, Alaska.

■ FAIRBANKS MIDNIGHT SUN CHAPTER

The Fairbanks Midnight Sun Chapter (Alaska) experienced a VIP tour of Eielson AFB, Alaska, in March, witnessing F-35 icy-runway testing throughout the day. The first stop was to the base’s water treatment plant, which hosts a state-of-the-art filtration and distribution system. The system allows Eielson to have no outside lines, making the base’s water supply 100 percent self-sustainable.

They visited the “Panther Pens,” which house the 18th Aggressor Squadron and its fleet of F-16 fighters. Members were able to climb aboard and get a firsthand look. The base typically conducts Red Flag exercises from April through October.

The five-hour tour ended with stops at the 168th Wing, where KC-135s are maintained. Chapter members traveled along the flight line and got out on the ramp to observe F-35 “touch-and-gos.”

Before members departed, they were hosted at a luncheon at the Yukon Club and enjoyed a final presentation by Col. Jacob Trigler, commander of the 354th Operations Group. He gave the group a mission brief emphasizing Eielson’s strategic importance—being able to reach anywhere in the Pacific area of responsibility within eight hours.



Warming up in the “Panther Pens” next to an F-16.

Photos via Nicole Stewart



Photo via Ziggy Wozniak

■ N.J. AFA

Sal Capriglione Chapter (N.J.) president, Joseph Capriglione, left, presented an AFA pin and cap to Col. Neil Richardson, commander of JB McGuire-Dix Lakehurst, N.J., and the 87th Air Base Wing.

Richardson was the guest speaker for the Ocean County Community Business Association meeting held in Tom’s River, N.J., in January. He discussed the new upcoming construction at McGuire and its impact on the Ocean County community.



Lt. Col. Dave Garner (left), representing the Gen. Bruce K. Holloway Chapter and the Tennessee Wing CAP, and Lt. Col. Gary Lynn, also of the Tennessee Wing CAP, present the Tennessee State Teacher of the Year awards to Sherilyn Dawson.

Photo via David Garner

■ GEN. BRUCE K. HOLLOWAY CHAPTER

Sherilyn Dawson, a K-5 teacher at Concord Christian School in Knoxville, Tenn., and also a 9-12 afterschool STEM teacher at Oak Ridge Associated Universities, was selected as the **Gen. Bruce K. Holloway Chapter** (Tenn.) and Tennessee State Teacher of the Year, as well as the Tennessee Wing Civil Air Patrol Aerospace Teacher of the Year.

Dawson won the awards because of her aerospace education instruction to both elementary and high school students. She used STEM kits provided by CAP to enhance her instruction with hands-on lessons in aerospace science, robotics, and space science, including a high-altitude balloon launch and recovery.

The joint presentation of the Teacher of the Year awards took place at the school in an awards assembly of high school students and staff, highlighting the close AFA-CAP relationship in East Tennessee.

■ G.V. SONNY MONTGOMERY CHAPTER

This year's Mississippi Teacher of the Year who has excelled in Science, Technology, Engineering, and Math (STEM), chosen by the **G. V. Sonny Montgomery Chapter** (Miss.), is Enterprise Elementary-Middle School teacher Megan Shumate.

Shumate was recognized for her teaching her students creativity and critical thinking skills.

Working with 2nd through 6th graders, she taught the students to explore coding and programming Spero robots to maneuver "hands-free" through increasingly difficult obstacle courses. Using physics applications, the students studied the shape of snowflakes and learned how air density affected the aerodynamics and fall rates of the snowflakes. Her students finished the year by designing their own video game, using Bloxels, and by building a programmable robot with Lego kits.



G.V. Sonny Montgomery Chapter President Langford Knight (left) presented the Mississippi State Teacher of the Year Award to Megan Shumate.

Photo via Langford Knight

■ CENTRAL OKLAHOMA CHAPTER

The **Central Oklahoma (Gerrity) Chapter** was one of 65 educational and corporate aerospace entities participating on April 24 in the "AERO Oklahoma" Aviation & Aerospace Advocacy Day at the Oklahoma State Capitol. The event is sponsored annually by the Oklahoma Aeronautics Commission.

Two industry groups, including three members of the **Gerrity Chapter**, visited with more than 30 legislators and the state speaker of the house, advocating not only for aerospace company interests, but also for the preservation and development of the state airport system. Additional **Gerrity Chapter** members manned a booth, sharing information about Oklahoma aerospace, chapter activities, and Air Force Association efforts such as the CyberPatriot program.

As Oklahoma's second largest industry, aviation has a significant impact on the lives of its citizens. The event was a unique opportunity for Oklahoma military, aerospace companies, private and commercial pilots, airport managers, municipal officials, drone pilots, educators, flying clubs, and many users of the Oklahoma airport system to meet one-on-one with state legislators and other elected officials.

The official address was given by Governor Mary Fallin, who welcomed the large crowd with remarks about the aviation and aerospace industry spurring some \$44 billion in annual economic activity, while supporting 206,000 jobs, and totaling a \$11.7 billion payroll. Lt. Gen. Lee K. Levy II, then-commander of the Air Force Sustainment Center headquartered at Tinker Air Force Base in Oklahoma City, also spoke regarding the impact of military aviation.



Jeff James, AFA Gerrity Chapter VP for Education and Marc Stewart (right), past Gerrity Chapter President and National AFA Emerging Leader, man the AFA booth at the Oklahoma State Capitol.

Right: (L-r) AFA National At-Large Board Member Mark Tarpley, AFA State VP, Oklahoma Aeronautics Commissioner Jim Putnam, and Chase Beasley from American Airlines Governmental Affairs participated in discussions on aerospace education with key members of the Oklahoma Senate.



Left: Lt. Gen. Lee K. Levy II spoke in front of the Oklahoma City Air Logistics Complex booth. Tinker Air Force Base is the largest single-site employer in Oklahoma.

Photos via Janelle Stafford



Georgia ANG C-130 from the 165th Airlift Wing, Savannah, Ga.



Marietta High School cadets, all smiles and ready to go.

■ DOBBINS CHAPTER

On April 6, 2018, a Georgia ANG C-130 Hercules from the 165th AW based at Savannah ANGB, Ga., departed from the Clay National Guard Center, Dobbins ARB, Ga., for an AFJROTC orientation flight over north Georgia coordinated by the Georgia National Guard recruiting and retention office.

A host of passengers included: Junior and Senior AFJROTC cadet and detachment leadership from Marietta High School, Wheeler H.S., Collins H.S., Dutchtown H.S., Towers H.S., and East Paulding H.S., as well as **Dobbins Chapter** President Michael Wilkins and special guests.

Also in attendance were representatives from Cobb Industrial Inc.— Bryan Pickens, Detera Pickens, and Sydney Pickens—which sponsor's AFA's **Dobbins Chapter** (Ga.) STEM scholarship in conjunction with the AFJROTC AFA National Award Certificate, Medal, and Ribbon presented to the top cadet in each detachment.

Following the flight, guests received a presentation from the Georgia ANG leadership who reviewed the military career and service opportunities offered by the Georgia ANG and fielded questions from the cadets.

MSgt. Jose Padilla, state recruiting and retention supervisor, spoke about the Guard's "citizen airmen"—civilians with full-time jobs. He reviewed educational opportunities, including scholarships and financial assistance. The cadets were very interested in learning more about opportunities available to them after high school.

■ BRIG. GEN. BILL SPRUANCE CHAPTER

An Aerospace Education Activity Day was organized by Derald Wentzien, President of the **Brig. Gen. Bill Spruance Chapter** (Del.).

In May, Delaware Civil Air Patrol cadets, University of Delaware AFROTC cadets, and members of the Delaware State Air Force Association attended the activity day/workshop at Dover Air Force Base's Air Mobility Command Museum in Dover, Del.

The Delaware CAP cadets participated in a Jeopardy-type contest, learned about the history of the Delaware CAP, participated in a team-building exercise conducted by the UD AFROTC cadets, held a STEM egg-drop challenge, and learned about drones used by CAP.

Delaware AFA State President Bill Oldham was in attendance and spoke to the cadets.



Lt. Col. Elmer Boyer, Delaware CAP, moderated Jeopardy. Categories included The Wright Brothers, Billy Mitchell, Neil Armstrong, and Amelia Earhart.



L-r: Col. George Xiques, USAF (Ret.), Senior Aerospace Science instructor from Wheeler High School, and Michael Wilkins, President AFA Dobbins Chapter, before takeoff.

Photos via Michael Wilkins



University of Delaware AFROTC cadets conducted a human knot team-building exercise and led the Delaware CAP in drill exercises.

Photos via David Wentzien



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By McKinnon Pearse



TEACHER OF THE YEAR

Beth Leavitt is AFA's National Teacher of the Year.

Top: Beth Leavitt helps students with a STEM project. Left: Leavitt (top row, left) is the director of FIRST Robotics Team 283 (pictured).

Share.
Teach.
Empower.
Motivate.

All of these words describe the tools used by Beth Leavitt of Wade Hampton High School, Greenville, S.C., who has been named the 2018 AFA National Teacher of the Year (TOY) by the Air Force Association (AFA) and Rolls-Royce.

As part of AFA's mission to encourage aerospace education in science, technology, engineering, and math (STEM) fields, the TOY program ensures America's aerospace excellence by supporting teachers who carry out that mission in the classroom.

SHARE

Beth Leavitt has been a physical science, chemistry, astronomy, engineering, and physics teacher at Wade Hampton High School in Greenville, S.C., since 1999. She holds a degree in the sciences and has previously worked as an environmental chemist for 12 years. Leavitt is currently lead of the Professional Learning Community in Physics and is a workshop presenter in her school district, state, and across the nation for the High Schools That Work program and also the National Science Teachers Association (NSTA).

TEACH

Leavitt collaborated with Buzz Aldrin's Share Space Foundation to bring Giant Mars Maps to her school district and beyond, and she has helped develop the curriculum to accompany these interactive maps. Additionally, she co-wrote physical science standards and presented a videotaped lesson on the solar eclipse for her school district. She is the director of FIRST Robotics Team 283, coordinating community engagement and developing and implementing summer engineering camps at Greenville Tech and Sevier Middle School.

EMPOWER

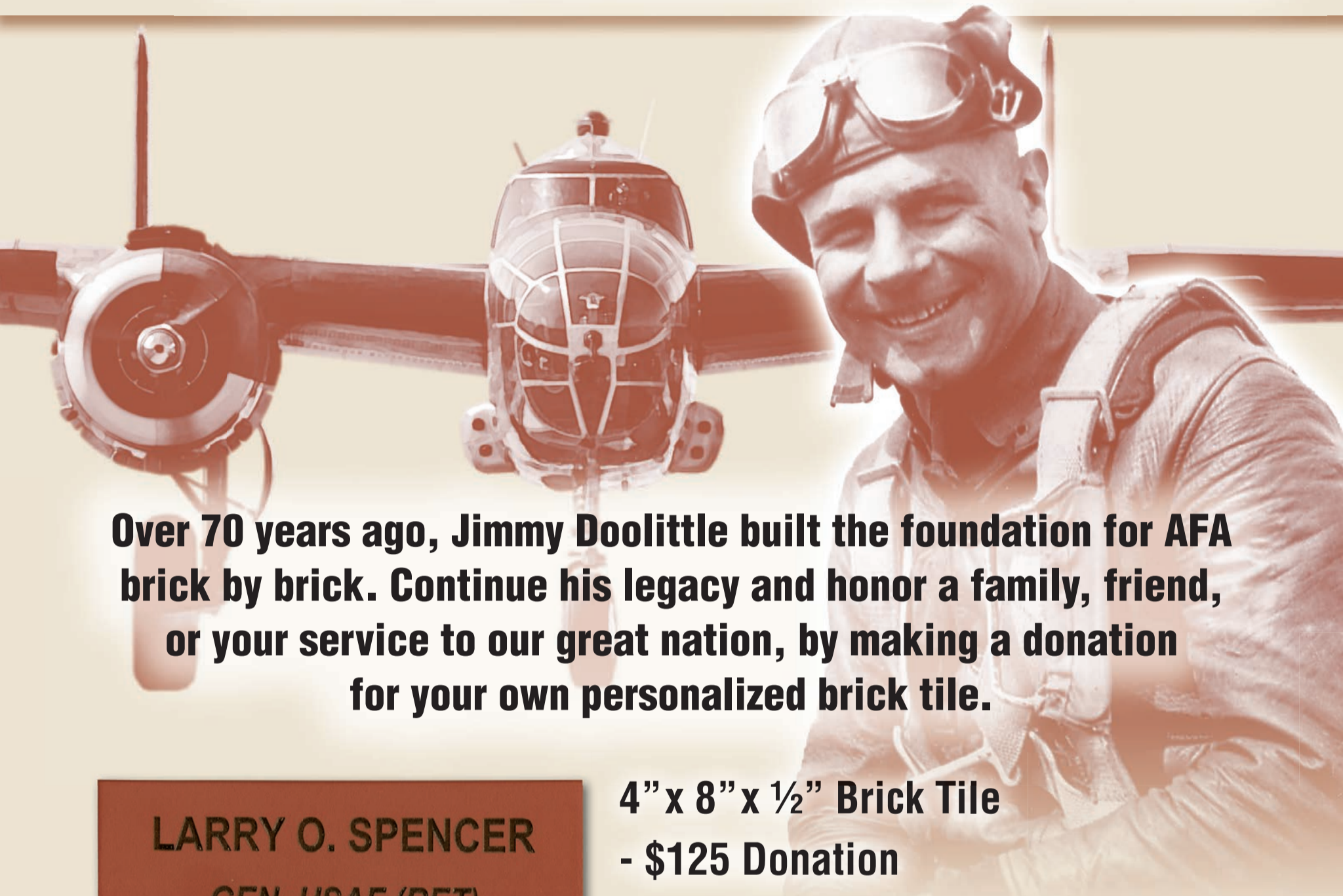
"The reason I engage in many after-school robotics programs is that these 'extended learning' environments are where students define a problem and then set about locating, selecting, organizing, presenting, and finally solving a problem," said Leavitt. "For a lifelong learner, it is an essential strategy. Being able to set parameters for the scope of a project, as well as setting and sticking to a time line for the completion of a project, is an imperative skill to ensure learning continues throughout a lifetime."

MOTIVATE

Leavitt has garnered grants totaling \$32,000 to conduct enrichment STEM programs and is a member and/or awardee of numerous national organizations, including American Modeling Teachers Association, iMAGINE Upstate STEMfest Board, NASA Networks of Educator Astronaut Teachers, American Vacuum Symposium Teacher Fellows, the Fulbright Memorial Teacher Award to Japan, and National Space Club's 2017 Educator of the Year, among others.



DOOLITTLE BUILDING BRICK CAMPAIGN




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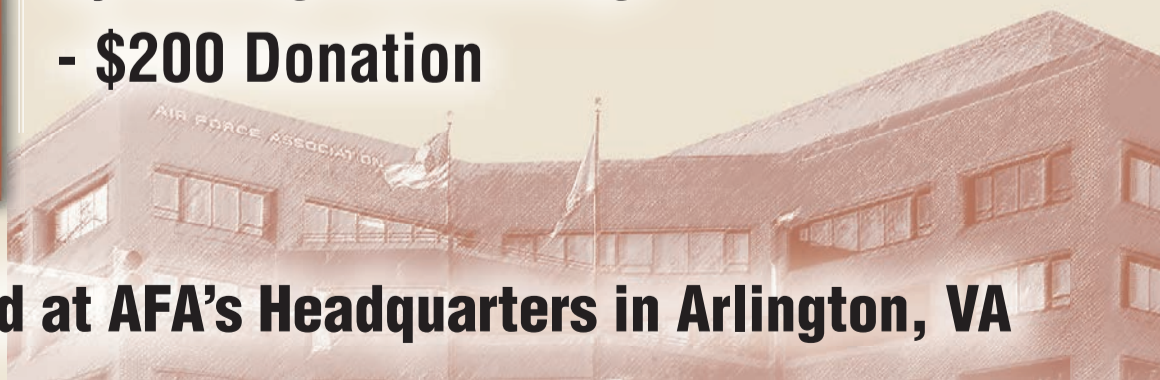
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AFA Almanac

By Chequita Wood, Assistant Managing Editor

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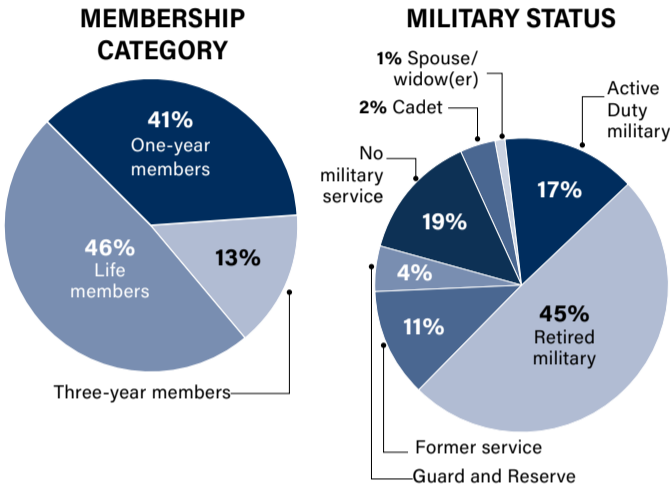
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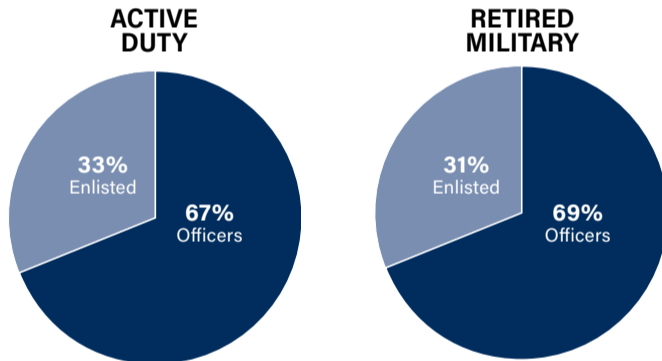
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Profiles of AFA Membership

As of June 2018. Total 96,429. Numbers are rounded.



OF AFA'S SERVICE MEMBERS WHO LIST THEIR RANK:



AFA Membership Statistics

Year	Total	Life Members	Year	Total	Life Members
1946	51,243	32	1982	179,149	7,381
1947	104,750	55	1983	198,563	13,763
1948	56,464	68	1984	218,512	18,012
1949	43,801	70	1985	228,621	23,234
1950	38,948	79	1986	232,722	27,985
1951	34,393	81	1987	237,279	30,099
1952	30,716	356	1988	219,195	32,234
1953	30,392	431	1989	204,309	34,182
1954	34,486	435	1990	199,851	35,952
1955	40,812	442	1991	194,312	37,561
1956	46,250	446	1992	191,588	37,869
1957	51,328	453	1993	181,624	38,604
1958	48,026	456	1994	175,122	39,593
1959	50,538	458	1995	170,881	39,286
1960	54,923	464	1996	161,384	39,896
1961	60,506	466	1997	157,862	41,179
1962	64,336	485	1998	152,330	41,673
1963	78,034	488	1999	148,534	42,237
1964	80,295	504	2000	147,336	42,434
1965	82,464	514	2001	143,407	42,865
1966	85,013	523	2002	141,117	43,389
1967	88,995	548	2003	137,035	42,730
1968	97,959	583	2004	133,812	42,767
1969	104,886	604	2005	131,481	43,094
1970	104,878	636	2006	127,749	43,266
1971	97,639	674	2007	125,076	43,256
1972	109,776	765	2008	123,304	43,557
1973	114,894	804	2009	120,507	43,782
1974	128,995	837	2010	117,480	43,954
1975	139,168	898	2011	111,479	44,182
1976	148,202	975	2012	106,780	43,686
1977	155,850	1,281	2013	102,540	43,851
1978	148,711	1,541	2014	96,017	43,720
1979	147,136	1,869	2015	92,829	43,936
1980	156,394	2,477	2016	93,379	44,074
1981	170,240	3,515	2017	90,970	44,083
			2018	96,429	44,068

DONALD W. STEELE SR. MEMORIAL AWARD

Air Force Association unit of the year

Year	Award Recipient(s)	Year	Award Recipient(s)
1953	San Francisco Chapter	1985	Cape Canaveral Chapter (Fla.)
1954	Santa Monica Area Chapter (Calif.)	1986	Charles A. Lindbergh Chapter (Conn.)
1955	San Fernando Valley Chapter (Calif.)	1987	Carl Vinson Memorial Chapter (Ga.)
1956	Utah State AFA	1988	Gen. David C. Jones Chapter (N.D.)
1957	H. H. Arnold Chapter (N.Y.)	1989	Thomas B. McGuire Jr. Chapter (N.J.)
1958	San Diego Chapter	1990	Gen. E. W. Rawlings Chapter (Minn.)
1959	Cleveland Chapter	1991	Paul Revere Chapter (Mass.)
1960	San Diego Chapter	1992	Central Florida Chapter and Langley Chapter (Va.)
1961	Chico Chapter (Calif.)	1993	Green Valley Chapter (Ariz.)
1962	Fort Worth Chapter (Texas)	1994	Langley Chapter (Va.)
1963	Colin P. Kelly Chapter (N.Y.)	1995	Baton Rouge Chapter (La.)
1964	Utah State AFA	1996	Montgomery Chapter (Ala.)
1965	Idaho State AFA	1997	Central Florida Chapter
1966	New York State AFA	1998	Ark-La-Tex Chapter (La.)
1967	Utah State AFA	1999	Hurlburt Chapter (Fla.)
1968	Utah State AFA	2000	Wright Memorial Chapter (Ohio)
1969	(No presentation)	2001	Lance P. Sijan Chapter (Colo.)
1970	Georgia State AFA	2002	Eglin Chapter (Fla.)
1971	Middle Georgia Chapter	2003	Hurlburt Chapter (Fla.)
1972	Utah State AFA	2004	Carl Vinson Memorial Chapter (Ga.)
1973	Langley Chapter (Va.)	2005	Central Florida Chapter
1974	Texas State AFA	2006	Enid Chapter (Okla.)
1975	Alamo Chapter (Texas) and San Bernardino Area Chapter (Calif.)	2007	Central Oklahoma (Gerrity) Chapter
1976	Scott Memorial Chapter (Ill.)	2008	Lance P. Sijan Chapter (Colo.)
1977	Thomas B. McGuire Jr. Chapter (N.J.)	2009	Paul Revere Chapter (Mass.)
1978	Thomas B. McGuire Jr. Chapter (N.J.)	2010	C. Farinha Gold Rush Chapter (Calif.)
1979	Brig. Gen. Robert F. Travis Chapter (Calif.)	2011	Lance P. Sijan Chapter (Colo.)
1980	Central Oklahoma (Gerrity) Chapter	2012	Hurlburt Chapter (Fla.)
1981	Alamo Chapter (Texas)	2013	Paul Revere Chapter (Mass.)
1982	Chicagoland-O'Hare Chapter (Ill.)	2014	D. W. Steele Sr. Memorial Chapter (Va.)
1983	Charles A. Lindbergh Chapter (Conn.)	2015	Lance P. Sijan Chapter (Colo.)
1984	Scott Memorial Chapter (Ill.) and Colorado Springs/Lance Sijan Chapter (Colo.)	2016	Paul Revere Chapter (Mass.)
		2017	Enid Chapter (Okla.)
		2018	Langley Chapter (Va.)

JOHN R. ALISON AWARD

AFA's highest honor for industrial leadership.

Year	Award Recipient(s)	Year	Award Recipient(s)
1992	Norman R. Augustine, Chairman, Martin Marietta	2004	Thomas J. Cassidy Jr., Pres. and CEO, GeneralAtomicsAeronauticalSystems
1993	Daniel M. Tellep, Chm. and CEO, Lockheed	2005	Richard Branson, Chm., Virgin Atlantic Airways and Virgin Galactic
1994	Kent Kresa, CEO, Northrop Grumman	2006	Ronald D. Sugar, Chm. and CEO, Northrop Grumman
1995	C. Michael Armstrong, Chm. and CEO, Hughes Aircraft	2007	Boeing and Lockheed Martin
1996	Harry Stonecipher, Pres. and CEO, McDonnell Douglas	2008	Bell Boeing CV-22 Team, Bell Helicopter Textron, and Boeing
1997	Dennis J. Picard, Chm. and CEO, Raytheon	2009	GeneralAtomicsAeronauticalSystems Inc.
1998	Philip M. Condit, Chm. and CEO, Boeing	2010	Raytheon
1999	Sam B. Williams, Chm. and CEO, Williams International	2011	United Launch Alliance
2000	Simon Ramo and Dean E. Wooldridge, missile pioneers	2012	Boeing
2001	George David, Chm. and CEO, United Technologies	2013	X-51A WaveRider Program, Boeing, Aerojet Rocketdyne, and Air Force Research Laboratory
2002	Sydney Gillibrand, Chm., AMEC; and Jerry Morgensen, Pres. and CEO, Hensel Phelps Construction	2014	C-17 Globemaster III, Boeing
2003	Joint Direct Attack Munition Industry Team, Boeing	2015	F-22 Raptor, Lockheed Martin
		2016	SpaceX
		2017	Northrop Grumman
		2018	Skunk Works, Lockheed Martin

AFA MEMBER OF THE YEAR AWARD

Year	Award Recipient(s)	Year	Award Recipient(s)
1953	Julian B. Rosenthal (N.Y.)	1985	George H. Chabbot (Del.) and Hugh L. Enyart (Ill.)
1954	George A. Anderl (Ill.)	1986	John P. E. Kruse (N.J.)
1955	Arthur C. Storz (Neb.)	1987	Jack K. Westbrook (Tenn.)
1956	Thos. F. Stack (Calif.)	1988	Charles G. Durazo (Va.)
1957	George D. Hardy (Md.)	1989	Oliver R. Crawford (Texas)
1958	Jack B. Gross (Pa.)	1990	Cecil H. Hopper (Ohio)
1959	Carl J. Long (Pa.)	1991	George M. Douglas (Colo.)
1960	O. Donald Olson (Colo.)	1992	Jack C. Price (Utah)
1961	Robert P. Stewart (Utah)	1993	Lt. Col. James G. Clark (D.C.)
1962	(No presentation)	1994	William A. Lafferty (Ariz.)
1963	N. W. DeBerardinis (La.) and Joe L. Shosid (Texas)	1995	William N. Webb (Okla.)
1964	Maxwell A. Kriendler (N.Y.)	1996	Tommy G. Harrison (Fla.)
1965	Milton Caniff (N.Y.)	1997	James M. McCoy (Neb.)
1966	William W. Spruance (Del.)	1998	Ivan L. McKinney (La.)
1967	Sam E. Keith Jr. (Texas)	1999	Jack H. Steed (Ga.)
1968	Marjorie O. Hunt (Mich.)	2000	Mary Anne Thompson (Va.)
1969	(No presentation)	2001	Charles H. Church Jr. (Kan.)
1970	Lester C. Curl (Fla.)	2002	Thomas J. Kemp (Texas)
1971	Paul W. Gaillard (Neb.)	2003	W. Ron Goerges (Ohio)
1972	J. Raymond Bell (N.Y.) and Martin H. Harris (Fla.)	2004	Doyle E. Larson (Minn.)
1973	Joe Higgins (Calif.)	2005	Charles A. Nelson (S.D.)
1974	Howard T. Markey (D.C.)	2006	Craig E. Allen (Utah)
1975	Martin M. Ostrow (Calif.)	2007	William D. Croom Jr. (Texas)
1976	Victor R. Kregel (Texas)	2008	John J. Politi (Texas)
1977	Edward A. Stearn (Calif.)	2009	David R. Cummock (Fla.)
1978	William J. Demas (N.J.)	2010	L. Boyd Anderson (Utah)
1979	Alexander C. Field Jr. (Ill.)	2011	Steven R. Lundgren (Alaska)
1980	David C. Noerr (Calif.)	2012	S. Sanford Schlitt (Fla.)
1981	Daniel F. Callahan (Fla.)	2013	Tim Brock (Fla.)
1982	Thomas W. Anthony (Md.)	2014	James W. Simons (N.D.)
1983	Richard H. Becker (Ill.)	2015	James R. Lauducci (Va.)
1984	Earl D. Clark Jr. (Kan.)	2016	David T. Buckwalter (Texas)
		2017	James T. Hannam (Va.)
		2018	Russell V. Lewey (Ala.)

State names refer to recipient's home state at the time of the award.

AFA CHAIRMAN'S AEROSPACE EDUCATION ACHIEVEMENT AWARD

For long-term commitment to aerospace education, making a significant impact nationwide.

Year	Award Recipient(s)	Year	Award Recipient(s)
2009	ExxonMobil Foundation	2014	Department of Defense STARBASE Program
2010	<i>USA Today</i>	2015	Northrop Grumman Foundation
2011	The National Science Foundation	2016	Harry Talbot
2012	The Military Channel	2017	Analytical Graphics, Inc.
2013	The Civil Air Patrol Aerospace Education Program	2018	Project Lead the Way

GOLD LIFE MEMBER CARD

Awarded to members whose AFA record, production, and accomplishment on a national level have been outstanding over a period of years.

Name	Year	Card No.	Name	Year	Card No.
Gill Robb Wilson	1957	1	Sam E. Keith Jr.	1990	12
Jimmy Doolittle	1959	2	Edward A. Stearn	1992	13
Arthur C. Storz Sr.	1961	3	Dorothy L. Flanagan	1994	14
Julian B. Rosenthal	1962	4	John O. Gray	1996	15
Jack B. Gross	1964	5	Jack C. Price	1997	16
George D. Hardy	1965	6	Nathan H. Mazer	2002	17
Jess Larson	1967	7	John R. Alison	2004	18
Robert W. Smart	1968	8	Donald J. Harlin	2009	19
Martin M. Ostrow	1973	9	James M. McCoy	2013	20
James H. Straubel	1980	10	George M. Douglas	2014	21
Martin H. Harris	1988	11	John A. Shaud	2016	22
			Mary Anne Thompson	2018	23

H. H. ARNOLD AWARD

Named for the World War II leader of the Army Air Forces, the H. H. Arnold Award has been presented annually in recognition of the most outstanding contributions in the field of aerospace activity. Since 1986, it has been AFA's highest honor to a member of the armed forces in the field of national defense.

Year	Award Recipient(s)	Year	Award Recipient(s)
1948	W. Stuart Symington, Secretary of the Air Force	1967	460th TRWs
1949	Maj. Gen. William H. Tunner and the men of the Berlin Airlift	1968	Gen. William W. Momyer, Cmdr., 7th Air Force, PACAF
1950	Airmen of the United Nations in the Far East	1968	Col. Frank Borman, USAF; Capt. James Lovell, USN; and Lt. Col. William Anders, USAF, Apollo 8 crew
1951	Gen. Curtis E. LeMay and the personnel of Strategic Air Command	1969	(No presentation)
1952	Sen. Lyndon B. Johnson and Sen. Joseph C. O'Mahoney	1970	Apollo 11 team (J. L. Atwood; Lt. Gen. S. C. Phillips, USAF; and astronauts Neil Armstrong and USAF Cols. Buzz Aldrin and Michael Collins)
1953	Gen. Hoyt S. Vandenberg, USAF (Ret.), former Chief of Staff	1971	John S. Foster Jr., Dir. of Defense Research and Engineering
1954	John Foster Dulles, Secretary of State	1972	Air units of the allied forces in Southeast Asia (Air Force, Navy, Army, Marine Corps, and the Vietnamese Air Force)
1955	Gen. Nathan F. Twining, Chief of Staff, USAF	1973	Gen. John D. Ryan, USAF (Ret.), former Chief of Staff
1956	Sen. W. Stuart Symington	1974	Gen. George S. Brown, USAF, Chm., Joint Chiefs of Staff
1957	Edward P. Curtis, special assistant to the President	1975	James R. Schlesinger, Secretary of Defense
1958	Maj. Gen. Bernard A. Schriever, Cmdr., Ballistic Missile Div., ARDC	1976	Sen. Barry M. Goldwater
1959	Gen. Thomas S. Power, CINC, SAC	1977	Sen. Howard W. Cannon
1960	Gen. Thomas D. White, Chief of Staff, USAF	1978	Gen. Alexander M. Haig Jr., USA, Supreme Allied Commander, Europe
1961	Lyle S. Garlock, Assistant SECAF	1979	Sen. John C. Stennis
1962	A. C. Dickieson and John R. Pierce, Bell Telephone Laboratories	1980	Gen. Richard H. Ellis, USAF, CINC, SAC
1963	The 363rd Tactical Recon. Wing and the 4080th Strategic Wing	1981	Gen. David C. Jones, USAF, Chm., Joint Chiefs of Staff
1964	Gen. Curtis E. LeMay, Chief of Staff, USAF		
1965	The 2nd Air Division, PACAF		
1966	The 8th, 12th, 355th, 366th, and 388th Tactical Fighter Wings and the 432nd and		

Year	Award Recipient(s)	Year	Award Recipient(s)
1982	Gen. Lew Allen Jr., USAF (Ret.), former Chief of Staff	2000	Gen. Michael E. Ryan, Chief of Staff, USAF
1983	Ronald W. Reagan, President of the United States	2001	Gen. Joseph W. Ralston, CINC, EUCOM
1984	The President's Commission on Strategic Forces (Scowcroft Commission)	2002	Gen. Richard B. Myers, USAF, Chm., Joint Chiefs of Staff
1985	Gen. Bernard W. Rogers, USA, SACEUR	2003	Lt. Gen. T. Michael Moseley, Cmdr., air component, CENTCOM, and 9th Air Force
1986	Gen. Charles A. Gabriel, USAF (Ret.), former Chief of Staff	2004	Gen. John P. Jumper, Chief of Staff, USAF
1987	Adm. William J. Crowe Jr., USN, Chm., Joint Chiefs of Staff	2005	Gen. Gregory S. Martin, USAF (Ret.), former Cmdr., AFMC
1988	Men and women of the Ground-Launched Cruise Missile team	2006	Gen. Lance W. Lord, USAF (Ret.), former Cmdr., AFSPC
1989	Gen. Larry D. Welch, Chief of Staff, USAF	2007	Gen. Ronald E. Keys, Cmdr., ACC
1990	Gen. John T. Chain, CINC, SAC	2008	Gen. Bruce Carlson, Cmdr., AFMC
1991	Lt. Gen. Charles A. Horner, Cmdr., CENTCOM Air Forces and 9th Air Force	2009	Gen. John D. W. Corley, Cmdr., ACC
1992	Gen. Colin L. Powell, USA, Chm., Joint Chiefs of Staff	2010	Lt. Gen. David A. Deptula, USAF Deputy Chief of Staff, ISR
1993	Gen. Merrill A. McPeak, Chief of Staff, USAF	2011	Gen. Duncan J. McNabb, Cmdr., TRANSCOM
1994	Gen. John Michael Loh, Cmdr., Air Combat Command	2012	Gen. Norton A. Schwartz, USAF (Ret.), former Chief of Staff
1995	World War II Army Air Forces veterans	2013	Gen. Douglas M. Fraser, USAF (Ret.), former Cmdr., SOUTHCOM
1996	Gen. Ronald R. Fogleman, Chief of Staff, USAF	2014	Gen. C. Robert Kehler, USAF (Ret.), former Cmdr., STRATCOM
1997	Men and women of the United States Air Force	2015	Gen. Janet C. Wolfenbarger, USAF (Ret.), former Cmdr., AFMC
1998	Gen. Richard E. Hawley, Cmdr., ACC	2016	Gen. Mark A. Welsh III, USAF (Ret.), former Chief of Staff
1999	Lt. Gen. Michael C. Short, Cmdr., Allied Air Forces Southern Europe	2017	Lt. Gen. Christopher C. Bogdan, USAF (Ret.), former PEO, F-35 Prgm
		2018	Gen. Herbert J. Carlisle, USAF (Ret.), former Cmdr., ACC

W. STUART SYMINGTON AWARD

AFA's highest honor to a civilian in the field of national security, the award is named for the first Secretary of the Air Force.

Year	Award Recipient(s)	Year	Award Recipient(s)
1986	Caspar W. Weinberger, Secretary of Defense	2002	Rep. James V. Hansen (R-Utah)
1987	Edward C. Aldridge Jr., Secretary of the Air Force	2003	James G. Roche, SECAF
1988	George P. Schultz, Secretary of State	2004	Peter B. Teets, Undersecretary of the Air Force
1989	Ronald W. Reagan, former President of the United States	2005	Rep. Duncan Hunter (R-Calif.)
1990	John J. Welch, Asst. SECAF (Acquisition)	2007	Michael W. Wynne, SECAF
1991	George Bush, President of the United States	2008	Gen. Barry R. McCaffrey, USA (Ret.)
1992	Donald B. Rice, SECAF	2009	Sen. Orrin G. Hatch (R-Utah)
1993	Sen. John McCain (R-Ariz.)	2010	John J. Hamre, Center for Strategic & International Studies
1994	Rep. Ike Skelton (D-Mo.)	2011	Rep. C. W. "Bill" Young (R-Fla.)
1995	Sheila E. Widnall, SECAF	2012	Gen. James L. Jones, USMC (Ret.)
1996	Sen. Ted Stevens (R-Alaska)	2013	Michael B. Donley, SECAF
1997	William Perry, former SECDEF	2014	Ashton B. Carter, former Deputy SECDEF
1998	Rep. Saxby Chambliss (R-Ga.) and Rep. Norman D. Dicks (D-Wash.)	2015	William A. LaPlante, Asst. SECAF (Acquisition)
1999	F. Whitten Peters, SECAF	2016	Jamie M. Morin, Director, Cost Assessment & Prgm Evaluation
2000	Rep. Floyd Spence (R-S.C.)	2017	Lisa S. Disbrow, Undersecretary of the Air Force
2001	Sen. Michael Enzi (R-Wyo.) and Rep. Cliff Stearns (R-Fla.)	2018	Deborah Lee James, former SECAF

AFA LIFETIME ACHIEVEMENT AWARD

The award recognizes a lifetime of work in the advancement of aerospace.

Year	Award Recipient(s)
2003	Maj. Gen. John R. Alison, USAF (Ret.); Sen. John H. Glenn Jr.; Maj. Gen. Jeanne M. Holm, USAF (Ret.); Col. Charles E. McGee, USAF (Ret.); Gen. Bernard A. Schriever, USAF (Ret.)
2004	Gen. Russell E. Dougherty, USAF (Ret.); Florene Miller Watson
2005	Sen. Daniel K. Inouye; William J. Perry; Patty Wagstaff
2007	CMSAF Paul W. Airey, USAF (Ret.)
2008	Col. George E. Day, USAF (Ret.); Gen. David C. Jones, USAF (Ret.); Harold Brown
2009	Doolittle Raiders; Tuskegee Airmen; James R. Schlesinger
2010	Col. Walter J. Boyne, USAF (Ret.); Andrew W. Marshall; Gen. Lawrence A. Skantze, USAF (Ret.); Women Airforce Service Pilots
2011	Natalie W. Crawford; Lt. Gen. Thomas P. Stafford, USAF (Ret.); Gen. Larry D. Welch, USAF (Ret.); Heavy Bombardment Crews of WWII; Commando Sabre Operation-Call Sign Misty
2012	Gen. James P. McCarthy, USAF (Ret.); Vietnam War POWs; Berlin Airlift Aircrews; Korean War Airmen; Fighter Pilots of World War II
2013	Maj. Gen. Joe H. Engle, USAF (Ret.); US Rep. Sam Johnson; The Arlington Committee of the Air Force Officers' Wives' Club—"The Arlington Ladies"
2014	Brig. Gen. James A. McDivitt, USAF (Ret.); Civil Air Patrol—World War II veterans; American Fighter Aces
2015	R. A. "Bob" Hoover; Eugene F. "Gene" Kranz; Gen. Michael V. Hayden, USAF (Ret.)
2016	Maj. Gen. Claude M. Bolton Jr., USAF (Ret.); Lt. Col. John T. Correll, USAF (Ret.); Gen. Charles A. Horner, USAF (Ret.); Lt. Gen. James M. Keck, USAF (Ret.); Gen. Richard B. Myers, USAF (Ret.)
2017	Gen. Ronald R. Fogleman, USAF (Ret.); Col. Clarence E. "Bud" Anderson, USAF (Ret.); Elinor Otto; Lafayette Escadrille Memorial Foundation
2018	Maj. Gen. Alfred K. Flowers, USAF (Ret.); Dan Friedkin; Air Force Scientific Advisory Board; Air Force Enlisted Village; Air Force Aid Society

DOTTIE FLANAGAN STAFF AWARD OF THE YEAR

A donation from the late Jack B. Gross, national director emeritus, enables quarterly and staff member of the year awards.

Year	Award Recipient(s)	Year	Award Recipient(s)	Year	Award Recipient(s)
1992	Doreatha Major	2001	Katie Doyle	2010	Bridget Wagner
1993	Jancy Bell	2002	Jeneathia Wright	2011	Merri Shaffer
1994	Gilbert Burgess	2003	Jim Brown	2012	Caitie Craumer
1995	David Huynh	2004	Pearlie Draughn	2013	Pamela Braithwaite
1996	Sherry Coombs	2005	Ursula Smith	2014	Bridget Dongu
1997	Katherine DuGarm	2006	Susan Rubel	2015	Nathaniel Davis
1998	Suzann Chapman	2007	Ed Cook	2016	Amanda L. Grandel
1999	Frances McKenney	2008	Michael Davis	2017	Alexandria Browning
2000	Ed Cook	2009	Chris Saik		

Aerospace Awards

AWARDS AND RECIPIENTS

David C. Schilling Award

Most outstanding contribution in the field of flight
13th Bomb Squadron, Whiteman AFB, Mo.

Theodore von Karman Award

Most outstanding contribution in the field of science and engineering
Dr. Mark Lewis

Gill Robb Wilson Award

Most outstanding contribution in the field of arts and letters
John A. Tirpak

Hoyt S. Vandenberg Award

Most outstanding contribution in the field of aerospace education
Organization of Black Aerospace Professionals

Thomas P. Gerrity Award

Most outstanding contribution in the field of systems and logistics
Maj. Shaun Parker, Southwest Asia

Lieutenant General Claire Lee Chennault Award

For outstanding aerial warfare tactician(s) from ACC, PACAF, USAFE, ANG and AFRC
Maj. Dustin Merritt, Hill AFB, Utah

General Larry D. Welch Award-Officer

Most significant impact by an individual on the overall operations, safety, security, and effectiveness of the Air Force nuclear mission
Lt. Col. Craig Bailey, Kleine Brogel AB, Belgium

General Larry D. Welch Award-Enlisted

Most significant impact by an individual on the overall operations, safety, security, and effectiveness of the Air Force nuclear mission
MSgt. Cleveland Coley, Kleine Brogel AB, Belgium

General Larry D. Welch Award-Civilian

Most significant impact by an individual on the overall operations, safety, security, and effectiveness of the Air Force nuclear mission
Barbara Johnston, Kirtland AFB, N.M.

General George C. Kenney Award

Most significant contribution by an individual or team in the area of lessons learned
USAFCENT Lessons Learned Team, Al Udeid AB, Qatar

Joan Orr Spouse of the Year Award

For civilian spouses of military members for their significant contributions to the United States Air Force
Morgan Noller, Travis AFB, Calif.

Chief Master Sergeant of the Air Force Thomas N. Barnes Award

Most outstanding aircraft crew chief in the United States Air Force
SrA. Tanner Apple, Luke AFB, Ariz.

Citations of Honor

RECIPIENTS AND ACHIEVEMENTS

Electronic Analysis Squadron, Wright-Patterson AFB, Ohio
The Electronic Analysis Squadron delivered 2,000 intelligence products directly supporting more than \$150 billion in joint acquisition programs and Department of Defense assets. As the national center of excellence for predictive scientific and technical intelligence on worldwide electronic systems, the squadron provided crucial intelligence-steering acquisition upgrades, national policy, and combatant command tactical and operational strategies.

White House Communications Agency, J-3 Travel Operations, Washington, D.C.

The J-3 Travel Operations Section has demonstrated excellence while providing command and control capabilities to the President, Vice President, First Lady, and White House staff. The team directly planned, resourced, and provided communications for the 45th Presidential Inauguration, nine natural disaster responses, the Group of 20 Summit, United Nations General Assembly, North Atlantic Treaty Organization Summit, Asia-Pacific Economic Cooperation Summit, and over 199 official travel missions supported across 14 countries.

SMSgt. Destiny Hager, Ramstein AFB, Germany
SMSgt. Destiny Hager of USAFE was critical to the standardization of air traffic operations, procedures, and training for 104 nations, 10 main operating bases, and 10 forward operating locations. Additionally, she worked directly with four combatant commands to implement the first-ever deployment of air traffic controllers as landing zone safety officers, mitigating the Air Force's combat controller shortage and allowing for safe aerodrome operations at eight classified locations.

Air Force Awards

AWARDS AND RECIPIENTS

General Larry O. Spencer Innovation Award - Individual

Capt. Michael J. Kanaan, The Pentagon, Va.

General Larry O. Spencer Innovation Award - Team

The 6th & 927th Maintenance Squadron Top Coat Team, MacDill AFB, Fla.

International Affairs Excellence Award

Officer - Lt. Col. Kathleen D. Buss; Enlisted - MSgt. Anthony B. Dunn;
Senior Civilian - Patrick T. Luna; Junior Civilian - Bradley W. Schmidt

Professional, Civilian, Education, Management, and Environmental Awards

AWARDS AND RECIPIENTS

AFMC Management Award - Executive Division

Edward Stanhouse, Wright-Patterson AFB, Ohio

AFMC Management Award - Middle Division*

Lt. Col. Luis Otero, Wright-Patterson AFB, Ohio

AFMC Management Award- Junior Division*

Richard Smith, JBSA-Lackland, Texas

USAFA Cadet of the Year

Cadet Kyle Haak, Cadet Squadron 31, Colorado Springs, Colo.

AFROTC Cadet of the Year

Cadet Austin Fischer, Detachment 028, Embry-Riddle Aeronautical University

CAP Aerospace Education Cadet of the Year

Cadet Marcos Samuel Feijoo-Martinez, Vegas Valley Composite Squadron, Nev.

Chaplain Corps Award

SMSgt. Tommy Tipton, JB Langley-Eustis, Va.

Paul W. Myers Award for Physicians

Maj. Bryant Webber, Wright-Patterson AFB, Ohio

Juanita Redmond Award for Nursing

Capt. Dana Volesky, Columbus AFB, Miss.

Stuart R. Reichart Award for Lawyers

Col. Vance Spath, JB Andrews, Md.

Verne Orr Award for Effective Utilization of Human Resources

88th Security Forces Squadron, Travis AFB, Calif.

Civilian Senior Manager of the Year

Frederick Fallman, MacDill AFB, Fla.

Civilian Program Manager of the Year*

James Samartino, Travis AFB, Calif.

Civilian Program Specialist of the Year*

Michelle Capik, Eglin AFB, Fla.

Civilian Wage Employee of the Year*

Larry Moore, Dyess AFB, Texas

Gen. Edwin W. Rawlings Award - Management*

Patricia Hudson, Dyess AFB, Texas

Gen. Edwin W. Rawlings Award - Technician*

Patrick Albritton, Kadena AB, Japan

* presented at recipient's location

Air Reserve Component Awards

AIR NATIONAL GUARD AWARDS AND RECIPIENTS

Earl T. Ricks Award

Outstanding ANG airmanship
Lt. Col. Kristian Thiele, Texas ANG

CMSgt. Dick Red Award

Best ANG maintainer
TSgt. Edward Moyer, Montana ANG

Outstanding ANG Unit

Best ANG unit airmanship
158th Operations Group, Vermont ANG

George W. Bush Award - Enlisted

MSgt. Laduska Miller, Oregon ANG

George W. Bush Award - Officer

Maj. Jamie Favro, Vermont ANG

Crew and Team Awards

AWARDS AND RECIPIENTS

Lt. Gen. Howard W. Leaf Award

Best test team
416th Flight Test Squadron F-15SA Combined Test Team, Edwards AFB, Calif.

Lt. Gen. William H. Tunner Award

Best airlift crew
Crew of REACH 865, JB Lewis-McChord, Wash.

Brig. Gen. Ross G. Hoyt Award

Best air refueling crew
Crew of PETRO 91, Travis AFB, Calif.

Gen. John P. Jumper Award

Best remotely piloted aircraft crew in USAF
Pilot: Maj. Nicholas Myers; Sensor Operator: TSgt. Phillip Brattan;
Mission Intelligence Coordinator: Lt. Ryan McDermott

Gen. Curtis E. LeMay Award

Best bomber aircrew
Crew of CHILL 33, Minot AFB, N.D.

Gen. Thomas S. Power Award

Best missile combat crew
Lt. Alyssa Ford and Lt. Collin Crane, Minot AFB, N.D.

Gen. Jerome F. O'Malley

Best reconnaissance crew
Crew of Python 73, 55th Wing, Offutt AFB, Neb.

Gen. Mark A. Welsh III One Air Force Award

For the team that best demonstrates improved effectiveness through integrated solutions
USAF Airfield Pavement Evaluation Team, JBSA-Lackland, Texas

Airborne Battle Management Crew Award

961st Airborne Air Control Squadron, Combat Crew One, Kadena AB, Japan

Best Space Operations Crew

X-37B Operations Crew, Schriever AFB, Colo.

BAVA Humanitarian Mission of the Year Award

Most outstanding humanitarian mission
621st AMAG Hurricane Relief Team, JB McGuire-Dix-Lakehurst, N.J.

AIR FORCE RESERVE COMMAND AWARDS AND RECIPIENTS

President's Award for AFRC

Best AFRC flying unit or individual of the year
916th Air Refueling Wing, Seymour-Johnson AFB, N.C.

AFRC Unit Award

Best AFRC wing of the year
920th Rescue Wing, Patrick AFB, Fla.

Citizen Airman and Employer of the Year Award for AFRC

Maj. Bryan Card, Kratos Defense and Security Systems, Langley AFB, Va.

Outstanding State Organization

Oklahoma

President Dan Ohnesorge

Outstanding Chapters by Size

Small Chapter

Brig. Gen. Bill Spruance Chapter, Del.
President Derald Wentzien

Medium Chapter

Lincoln Chapter, Neb.
President Richard Holdcroft

Large Chapter

Tennessee Valley Chapter, Ala.
President Rick Driesbach

Extra Large Chapter

Eglin Chapter, Fla.
President Candace Lovell

Aerospace Education Excellence Award

Presented for excellence in aerospace education programming.
To qualify, a chapter must have received the Aerospace Education Achievement Award this year.

Large Chapter

Tennessee Valley Chapter, Ala.
President Rick Driesbach

Extra Large Chapter

Lance P. Sijan Chapter, Colo.
President Kristen Christy

Aerospace Education Achievement Award

Presented to chapters for outstanding achievement in aerospace education programming.

Langley Chapter, Va.

President Mark "Buster" Douglas

Chicagoland Chapter, Ill.

President Gerald Ashley

Gen. Charles A. Gabriel Chapter, Va.

President Joe Burke

Scott Memorial Chapter, Ill.

President Mark Morgan

Richmond Chapter, Va.

President Harper S. Alford

Paul Revere Chapter, Mass.

President Donald Vazquez

Martin H. Harris Chapter, Fla.

President Todd Freece

Lance P. Sijan Chapter, Colo.

President Kristen Christy

Eglin Chapter, Fla.

President Candace Lovell

Mel Harmon Chapter, Colo.

President Ray Brown

Wright Memorial Chapter, Ohio

President Kent Shin

Montgomery Chapter, Ala.

President Patrick Albrecht

Lincoln Chapter, Neb.

President Richard T. Holdcroft

Tennessee Valley Chapter, Ala.

President Rick Driesbach

Ak-Sar-Ben Chapter, Neb.

President Chris Canada

Gen. Bruce K. Holloway Chapter, Tenn.

President Paula Penson

Unit Exceptional Service Awards

Airmen and Family Programs

Thunderbird Chapter, Nev.

President Bobi Oates

Community Partners

Fairbanks Midnight Sun Chapter, Alaska

President Nicole Stewart

Best Single Program

Langley Chapter, Va.

President Mark "Buster" Douglas

Community Relations

Lance P. Sijan Chapter, Colo.

President Kristen Christy

Communiations

Gen. Charles A. Gabriel Chapter, Va.

President Joe Burke

Overall Programming

Gen. Charles A. Gabriel Chapter, Va.

President Joe Burke

AAS/SW Integration

Nation's Capital Chapter, D.C.

President John Bird

Veterans Affairs

Eglin Chapter, Fla.

President Candace Lovell

Jack Gross Award

Presented to the chapter in each size category with the highest number of new members as a percentage of chapter size at the beginning of the membership year. A minimum of 10 is required.

Small Chapter

Mel Harmon Chapter, Colo.

President Ray Brown

Extra Large Chapter

Seidel Chapter, Texas

President Paul Hendricks

Medium Chapter

Golden Triangle Chapter, Miss.

President Richard Johnson

Chapter Size Larger Than 1,100

Lance P. Sijan Chapter, Colo.

President Kristen Christy

Large Chapter

David D. Terry Jr. Chapter, Ark.

President Jerry Reichenbach

Arthur C. Storz Sr. Membership Award

Presented to the AFA chapter producing the highest number of new members during the 12-month period ending June 30, 2018, as a percentage of total chapter membership as of July 1, 2017. This award is based on both the quantity of new members as well as sustained new member recruitment. A chapter must be chartered for at least three years to qualify.

Seidel Chapter, Texas

President Paul Hendricks

Distinguished Sustained Aerospace Education Award

Bill Croom

Community Partner Membership Awards

GOLD AWARD

Presented to chapters whose Community Partners represent at least six percent of overall chapter membership, with a minimum number of Community Partners. The minimum number is determined by chapter size.

Tennessee Valley Chapter, Ala.	Gen. David C. Jones Chapter, N.D.
Swamp Fox Chapter, S.C.	Northeast Texas Chapter, Texas
Mel Harmon Chapter, Colo.	Meridian Chapter, Miss.
Cheyenne Cowboy Chapter, Wyo.	Fairbanks Midnight Sun Chapter, Alaska
Golden Triangle Chapter, Miss.	Alaska
Fort Wayne Chapter, Ind.	Enid Chapter, Okla.

Special Recognition Awards

STATE GROWTH

These states have realized a growth in total membership from June 2017 to June 2018.

Arkansas	Maryland
Colorado	Michigan
District of Columbia	Missouri
Kansas	South Dakota
Kentucky	Tennessee

REGION GROWTH

These regions have realized a growth in total membership from June 2017 to June 2018.

Rocky Mountain
Far West

Chairman's Citation

NICHOLAS ABATE	GINA GILES	JOHN TOOHEY
GERALDHOVATTER	KEN KELLY	BOB GEHBAUER
	CHRIS CANADA	

ACHIEVEMENT AWARD

Presented in the field to chapters whose Community Partners represent at least three percent of overall chapter membership, with a minimum number of Community Partners. The minimum number is determined by chapter size.

Montgomery Chapter, Ala.	Thunderbird Chapter, Nev.
Green Mountain Chapter, Vt.	Hurlburt Chapter, Fla.
David D. Terry Jr. Chapter, Ark.	

CHAPTER GROWTH

These chapters have realized a growth in total membership from June 2017 to June 2018.

Altoona Chapter, Pa.	Harry S. Truman Chapter, Mo.
Baltimore Chapter, Md.	Hawaii Chapter, Hawaii
Brig. Gen. Bill Spruance Chapter, Del.	Inland Empire Chapter, Wash.
Central Maryland Chapter, Md.	Lance P. Sijan Chapter, Colo.
Charleston Chapter, S.C.	Lewis E. Lyle Chapter, Ark.
Chuck Yeager Chapter, W.Va.	Lexington Chapter, Ky.
Cochise Chapter, Ariz.	Maj. Gen. Edward R. Fry, Kan.
Col. H. M. Bud West Chapter, Fla.	Mile High Chapter, Colo.
Columbia Gorge Chapter, Ore.	Mount Clemens Chapter, Mich.
David D. Terry Jr. Chapter, Ark.	Nation's Capital Chapter, D.C.
Del Rio Chapter, Texas	Pope Chapter, N.C.
Fairbanks Midnight Sun Chapter, Alaska	Prescott/Goldwater Chapter, Ariz.
Florida West Coast Chapter, Fla.	Pride of the Adirondacks Chapter, N.Y.
Gen. Bruce K. Holloway Chapter, Tenn.	Richmond Chapter, Va.
Gen. H. H. Arnold Memorial Chapter, Tenn.	Roanoke Chapter, Va.
Gen. Joseph W. Ralston Chapter, Ohio	Salt Lake City Chapter, Utah
Gen. Robert E. Huyser Chapter, Colo.	San Diego Chapter, Calif.
Gen. Russell E. Dougherty Chapter, Ky.	Seidel Chapter, Texas
Greater Seattle Chapter, Wash.	Spirit of St. Louis Chapter, N.Y.
	Stan Hryn Monterey Bay Chapter, Calif.
	Strom Thurmond Chapter, S.C.
	Tennessee Valley Chapter, Ala.
	Tidewater Chapter, Va.

Individual Awards by Region

Central East

Medal of Merit

James Nichol
Mike Winters
Jack Diamond
Lloyd Swede
Tanisha Crosby
John Lucarelli

Exceptional Service Award

Joe Burke
James Lavin
John Kennedy

Europe

Medal of Merit

Dustin Lawrence

Far West

Exceptional Service Award

Tyler Worley

Florida

Medal of Merit

Dave Price
James DeRose

Exceptional Service Award

Dennis Krebs
Bob Ceruti
Thomas Guthrie
Bob Hicks
Nelson Arroyo
Bill Yucuis
Tim Brock

Great Lakes

Medal of Merit

Ted Pifer
Bobbie Smith
Rhonda Roberts

Exceptional Service Award

Gerald Reblin

Midwest

Medal of Merit

Kathleen O'Shea
William Harding
Todd Hunter
Steven Miller
David Skilton

Exceptional Service Award

Richard Holdcroft
Thomas O'Shea
Harley Thornton

New England

Medal of Merit

David DeNofrio
Matt Mleziva
Dick Strifert
Vincent Pamparo
Nicole Citro
Jonathan Belveal

North Central

Medal of Merit

Lloyd Ward
Mary Ward
Bryan Graddy
Thomas Brummer
Erin Lee Vergara

Northeast

Medal of Merit

Robert Ward

Rocky Mountain

Medal of Merit

Margaret Eichman

Exceptional Service Award

Jim Aadland

South Central

Medal of Merit

Joe Bryant
Zygmund Jastrebski
William Jervis
Stacey Sells
Daryl Carpenter
Eric Silkowski
Larry Nix

Exceptional Service Award

Pauline Morisey
Derick Seaton
Teresa Anderson

Southeast

Medal of Merit

Mike Wilkins
Ginger Langley

Exceptional Service Award

Larry Wells

Southwest

Medal of Merit

Jimmy Clark
Marie Lankford
Angelo Rossetti
Dave Swock

Exceptional Service Award

Robert Hale
Mark Koechle
Judith Logan
Walter Saeger

Texoma

Medal of Merit

Robert Epstein
Jeff James
Darin Defendorf
Joyce Sean Habina
Marc Stewart
Mechille Braden
Rick Pena
Scott Northcutt
Bill Shewey
John Traugott

Exceptional Service Award

Paul Hendricks
Joseph Summers
George Pankonin
Ulrik Peterson
Richard Buschelman
Lori Earl

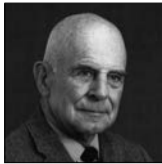
CyberPatriot Mentor of the Year

James R. Johnson
Cheyenne Central High School
Cheyenne, Wyo.

CyberPatriot Coach of the Year

Bill Blatchley
Colorado Springs Cadet Squadron
Colorado Springs, Colo.

AFA Chairmen of the Board and National Presidents



Jimmy Doolittle
President, 1946-47
Chairman, 1947-49



Edward P. Curtis
Chairman, 1946-47



Thomas G. Lanphier Jr.
President, 1947-48
Chairman, 1951-52



C. R. Smith
President, 1948-49
Chairman, 1949-50



Robert S. Johnson
President, 1949-51



Carl A. Spaatz
Chairman, 1950-51



Harold C. Stuart
President, 1951-52
Chairman, 1952-53



Arthur F. Kelly
President, 1953-54
Chairman, 1953-54



George C. Kenney
President, 1953-54
Chairman, 1954-55



John R. Alison
President, 1954-55
Chairman, 1955-56



Gill Robb Wilson
President, 1955-56
Chairman, 1956-57



John P. Henebry
President, 1956-57
Chairman, 1957-58



Peter J. Schenk
President, 1957-59



James M. Trail
Chairman, 1958-59



Howard T. Markey
President, 1959-60
Chairman, 1960-61



Julian B. Rosenthal
Chairman, 1959-60



Thos. F. Stack
President, 1960-61
Chairman, 1961-62



Joe Foss
President, 1961-62
Chairman, 1962-63



John B. Montgomery
President, 1962-63



W. Randolph Lovelace II
President, 1963-64
Chairman, 1964-65



Jack B. Gross
Chairman, 1963-64



Jess Larson
President, 1964-67
Chairman, 1967-71



Robert W. Smart
President, 1967-69



George D. Hardy
President, 1969-71
Chairman, 1966-67
Chairman, 1971-72



Martin M. Ostrow
President, 1971-73
Chairman, 1973-75



Joe L. Shosid
President, 1973-75
Chairman, 1972-73
Chairman, 1975-76



George M. Douglas
President, 1975-77
Chairman, 1977-79



Gerald V. Hasler
President, 1977-79
Chairman, 1976-77



Victor R. Kregel
President, 1979-81
Chairman, 1981-82



Daniel F. Callahan
Chairman, 1979-81



John G. Brosky
President, 1981-82
Chairman, 1982-84



David L. Blankenship
President, 1982-84
Chairman, 1984-85



Edward A. Stearn
Chairman, 1985-86



Martin H. Harris
President, 1984-86
Chairman, 1986-88



Sam E. Keith Jr.
President, 1986-88
Chairman, 1988-90



Jack C. Price
President, 1988-90
Chairman, 1990-92



Oliver R. Crawford
President, 1990-92
Chairman, 1992-94



James M. McCoy
President, 1992-94
Chairman, 1994-96



Gene Smith
President, 1994-96
Chairman, 1996-98



Doyle E. Larson
President, 1996-98
Chairman, 1998-2000



Thomas J. McKee
President, 1998-2000
Chairman, 2000-02



John J. Politi
President, 2000-02
Chairman, 2002-04



Stephen P. Condon
President, 2002-04
Chairman, 2004-06



Robert E. Largent
President, 2004-06^a
Chairman, 2006-08^b



Joseph E. Sutter
Chairman, 2008-10



S. Sanford Schlitt
Chairman, 2010-12



George K. Muellner
Chairman, 2012-14



Scott P. Van Cleef
Chairman, 2014-16



F. Whitten Peters
Chairman, 2016-

^a The office of National President, an elected position, was disestablished in 2006.

^b AFA's Chairman of the Board also serves as Chairman of the AFA Veteran Benefits Association and prior to 2018 also as Chairman of the Air Force Memorial Foundation.



AIR FORCE ASSOCIATION

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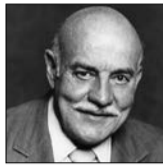
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AFA Executive Directors/Presidents/CEOs



Willis S. Fitch
Executive Director
1946-47



James H. Straubel
Executive Director
1948-80



Russell E. Dougherty
Executive Director
1980-86



David L. Gray
Executive Director
1986-87



John O. Gray
Executive Director
1987-88, 1989-90



Charles L. Donnelly Jr.
Executive Director
1988-89



Monroe W. Hatch Jr.
Executive Director
1990-95



John A. Shaud
Executive Director
1995-2002



Donald L. Peterson
Executive Director
2002-06*
President-CEO
2006-07



Michael M. Dunn
President-CEO
2007-12



Craig R. McKinley
President
2012-15



Mark A. Barrett
Acting President
2015



Larry O. Spencer
President
2015-

* The position of Executive Director was replaced in 2006 by President-CEO. In 2012, the position was redesignated President.

VICE CHAIRMEN FOR FIELD OPERATIONS

Joseph E. Sutter	2006-08
James R. Lauducci	2008-10
Justin M. Faiferlick	2010-12
Scott P. Van Cleef	2012-14
David A. Dietsch	2014-16
F. Gavin MacAloon	2016-

VICE CHAIRMEN FOR AEROSPACE EDUCATION

L. Boyd Anderson	2006-07
S. Sanford Schlitt	2007-10
George K. Muellner	2010-12
Jerry E. White	2012-15
Richard B. Bundy	2015-18
James T. Hannam	2018-

NATIONAL SECRETARIES

Sol A. Rosenblatt	1946-47
Julian B. Rosenthal	1947-59
George D. Hardy	1959-66
Joseph L. Hodges	1966-68
Glenn D. Mishler	1968-70
Nathan H. Mazer	1970-72
Martin H. Harris	1972-76
Jack C. Price	1976-79
Earl D. Clark Jr.	1979-82
Sherman W. Wilkins	1982-85
A. A. "Bud" West	1985-87
Thomas J. McKee	1987-90
Thomas W. Henderson	1990-91
Mary Ann Seibel	1991-94
Mary Anne Thompson	1994-97
William D. Croom Jr.	1997-2000
Daniel C. Hendrickson	2000-03
Thomas J. Kemp	2003-06
Judy K. Church	2006-09
Joan Sell	2009-11
Edward W. Garland	2011-14
Marvin L. Tooman	2014-15
John T. Brock	2015-17
Richard W. Hartle	2017-

NATIONAL TREASURERS

W. Deering Howe	1946-47
G. Warfield Hobbs	1947-49
Benjamin Brinton	1949-52
George H. Haddock	1952-53
Samuel M. Hecht	1953-57
Jack B. Gross	1957-62
Paul S. Zuckerman	1962-66
Jack B. Gross	1966-81
George H. Chabbott	1981-87
William N. Webb	1987-95
Charles H. Church Jr.	1995-2000
Charles A. Nelson	2000-05
Steven R. Lundgren	2005-10
Leonard R. Vernamonti	2010-14
Nora Ruebrook	2014-16
Charles L. Martin Jr.	2016
Steven R. Lundgren	2016-

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Jimmy, Air Force Wounded Warrior



Deloitte.



Photos by MSgt David Long

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AFA's Regions, States, and Chapters

These figures indicate the number of affiliated members as of June 2018. Listed below the name of each region is the region president.

CENTRAL EAST REGION	10,520
Peter Jones	
Delaware	366
Brig. Gen. Bill Spruance	108
Delaware Galaxy	258
District of Columbia	1,030
Nation's Capital	1,030
Maryland	1,977
Baltimore*	728
Central Maryland	430
Thomas W. Anthony	819
Virginia	6,946
Donald W. Steele Sr. Memorial	3,195
Gen. Charles A. Gabriel	1,143
Langley	162
Northern Shenandoah Valley	249
Richmond	561
Roanoke	335
Tidewater	301
West Virginia	201
Chuck Yeager	201
FAR WEST REGION	8,020
Wayne R. Kauffman	
California	7,263
Bob Hope	484
Brig. Gen. Robert F. Travis	465
C. Farinha Gold Rush	917
David J. Price/Beale	261
Fresno*	422
Gen. B. A. Schriever Los Angeles	670
General Doolittle Los Angeles Area*	840
Golden Gate*	442
High Desert	128
Orange County/Gen. Curtis E. LeMay	503
Palm Springs	305
Robert H. Goddard	323
San Diego	658
Stan Hryn Monterey Bay	153
Tennessee Ernie Ford	422
William J. "Pete" Knight	270
Hawaii	757
Hawaii*	757
FLORIDA REGION	7,378
Sharon Branch	
Florida	7,378
Brig. Gen. James R. McCarthy	259
Cape Canaveral	783
Col. H. M. "Bud" West	203
Eglin	928
Falcon	431
Florida Highlands	246
Florida West Coast	269
Gold Coast	512
Hurlburt	666
Martin H. Harris	1,012
Miami-Homestead	321
Red Tail Memorial	434
Tyndall	280
Waterman-Twining	1,034
GREAT LAKES REGION	5,977
Tom Koogler	
Indiana	1,055
Central Indiana	326
Fort Wayne	151
Grissom Memorial	162
Lawrence D. Bell Museum	174
P-47 Memorial Chapter	113
Southern Indiana	129
Kentucky	634
Gen. Russell E. Dougherty	384
Lexington	250

Michigan	1,313
Battle Creek	66
Lake Superior Northland	110
Lloyd R. Leavitt Jr.	259
Mount Clemens	878
Ohio	2,975
Capt. Eddie Rickenbacker Memorial*	460
Frank P. Lahm	340
Gen. Joseph W. Ralston	287
North Coast*	178
Steel Valley	103
Wright Memorial*	1,607
MIDWEST REGION	5,497
Chris Canada	
Illinois	2,055
Chicagoland-O'Hare	968
Scott Memorial	1,087
Iowa	428
Fort Dodge	26
Gen. Charles A. Horner	171
Northeast Iowa	173
Richard D. Kisling	58
Kansas	513
Lt. Erwin R. Bleckley	334
Maj. Gen. Edward R. Fry	179
Missouri	1,388
Harry S. Truman	495
Spirit of St. Louis	504
Whiteman	389
Nebraska	1,113
Ak-Sar-Ben	912
Lincoln	201
NEW ENGLAND REGION	2,630
Kevin M. Grady	
Connecticut	520
Flying Yankees/Gen. George C. Kenney	296
Lindbergh/Sikorsky	224
Massachusetts	1,193
Minuteman	218
Otis	192
Paul Revere	559
Pioneer Valley	224
New Hampshire	580
Brig. Gen. Harrison R. Thyng	580
Rhode Island	172
Metro Rhode Island	134
Newport Blue & Gold	38
Vermont	165
Green Mountain	165
NORTH CENTRAL REGION	2,521
Larry Saggstetter	
Minnesota	833
Gen. E. W. Rawlings	689
Richard I. Bong	144
Montana	283
Big Sky	209
Bozeman	74
North Dakota	311
Gen. David C. Jones	163
Happy Hooligan	87
Red River Valley	61
South Dakota	367
Dacotah	197
Rushmore	170
Wisconsin	727
Billy Mitchell	727
NORTHEAST REGION	5,151
Bill Fosina	
New Jersey	1,167
Brig. Gen. Frederick W. Castle	230

Hangar One	148
Highpoint	58
Mercer County	100
Sal Capriglione	212
Shooting Star	159
Thomas B. McGuire Jr.	260
New York	1,951
Albany-Hudson Valley*	323
Finger Lakes	252
Gen. Carl A. Spaatz	132
Genesee Valley	163
Iron Gate	224
L. D. Bell-Niagara Frontier	266
Long Island	487
Pride of the Adirondacks	104
Pennsylvania	2,033
Altoona	122
Joe Walker-Mon Valley	208
Lehigh Valley	150
Liberty Bell	467
Lt. Col. B. D. "Buzz" Wagner	99
Mifflin County*	84
Olmsted	244
Pocono Northeast	170
Total Force	274
York-Lancaster	215
NORTHWEST REGION	4,023
William Striegel	
Alaska	524
Edward J. Monaghan	383
Fairbanks Midnight Sun	141
Idaho	408
Snake River Valley	408
Oregon	730
Bill Harris	185
Columbia Gorge*	545
Washington	2,361
Greater Seattle	758
Inland Empire	653
McChord Field	950
ROCKY MOUNTAIN REGION	4,945
Don Kidd	
Colorado	3,650
Gen. Robert E. Huyser	118
Lance P. Sijan	2,046
Mel Harmon	140
Mile High	1,346
Utah	1,007
Northern Utah	350
Salt Lake City	384
Ute-Rocky Mountain	273
Wyoming	288
Cheyenne Cowboy	288
SOUTH CENTRAL REGION	5,898
Russell V. Lewey	
Alabama	1,930
Birmingham	304
Montgomery	900
South Alabama	160
Tennessee Valley	566
Arkansas	818
David D. Terry Jr.	475
Lewis E. Lyle	343
Louisiana	855
Ark-La-Tex	462
Maj. Gen. Oris B. Johnson	393
Mississippi	779
Golden Triangle	252
John C. Stennis	359
Meridian	168
Tennessee	1,516
Everett R. Cook	342

Gen. Bruce K. Holloway	660
H. H. Arnold Memorial	119
Maj. Gen. Dan F. Callahan	395
SOUTHEAST REGION	6,337
Rodgers K. Greenawalt	
Georgia	2,630
Carl Vinson Memorial	821
Dobbins	1,296
Savannah	345
South Georgia	168
North Carolina	2,118
Blue Ridge	412
Cape Fear	229
Kitty Hawk	56
Pope	533
Scott Berkeley	275
Tarheel	613
South Carolina	1,589
Charleston	509
Columbia Palmetto	348
Strom Thurmond	361
Swamp Fox	371
SOUTHWEST REGION	5,658
John A. Toohey	
Arizona	3,046
Cochise	125
Frank Luke	1,626
Prescott/Goldwater	339
Tucson	956
Nevada	1,428
Thunderbird	1,428
New Mexico	1,184
Albuquerque	831
Fran Parker	246
Llano Estacado	107
TEXOMA REGION	10,699
Kelly Jones	
Oklahoma	1,616
Altus	147
Central Oklahoma (Gerrity)	995
Enid	169
Tulsa	305
Texas	9,083
Abilene	306
Aggieland	161
Alamo	3,300
Austin	1,025
Concho	183
Del Rio	132
Denton	460
Fort Worth	1,195
Gen. Charles L. Donnelly Jr.	182
Northeast Texas	383
San Jacinto	830
Seidel	926
OVERSEAS CHAPTERS	
US Air Forces in Europe	
Charlemagne: Geilenkirchen, Germany	
Dolomiti: Aviano AB, Italy	
Ramstein: Ramstein AB, Germany	
Spangdahlem: Spangdahlem AB, Germany	
United Kingdom: RAF Lakenheath, UK	
Pacific Air Forces	
Keystone: Kadena AB, Japan	
MIIG Alley: Osan AB, South Korea	
Tokyo: Tokyo, Japan	

*These chapters were chartered before Dec. 31, 1948, and are considered original charter chapters. Ohio's North Coast Chapter was formerly the Cleveland Chapter; Oregon's Columbia Gorge Chapter was formerly the Portland Chapter.



VINCENT

Casey and the Pirates

It existed for only three years, far back in the 1950s, but many still remember Vincent Air Force Base, outside Yuma, Ariz. One reason: the name stirs memories of one of the more colorful and daring officers ever to enter the Air Force.

Clinton D. "Casey" Vincent was Gen. Claire L. Chennault's top fighter commander in China, a P-40 ace, and a general officer at age 29. Milton Caniff, the famed syndicated cartoonist, drew his character in two popular comic strips. He was the stuff of Air Force legend.

Vincent was born in 1914 in Gail, Texas, a tiny windswept town on the High Plains. Casey—no one called him Clinton—was the youngest of 10 children. The Vincents moved on to Natchez, Miss., where Casey grew up and excelled in school.

The star student entered West Point on July 1, 1932. That class produced 48 generals—among them Benjamin O. Davis Jr. and Creighton W. Abrams Jr. Upon graduating in June 1936, second lieutenant Vincent instantly transferred into the Air Corps.

Vincent completed primary flight training and advanced attack training in Texas. By December 1941, he was a major and commanded the 35th Pursuit Group in California.

Then came Pearl Harbor and the Pacific War.

Vincent spent a year in India, but he itched for combat. In late 1942, he joined the China Air Task Force, formerly the "Flying Tigers," run by Chennault. By August 1943, Vincent was a P-40 ace with six victories and was a member of "the Zero Club"—composed of five US pilots who had flown captured Japanese Zero fighters.

His China exploits got Caniff to drawing Vincent as the fictionalized "Col. Vince Casey" in his *Terry and the Pirates* strip. It ran throughout World War II. (Later, Vincent appeared as "Brig. Gen. P. G. 'Shanty' Town" in Caniff's postwar strip *Steve Canyon*.)

In December 1943, the Army Air Forces formed the 68th Composite Wing in China. Chennault put Vincent in charge. He devised bold offensive tactics that stunned Japanese forces. In June 1944, at 29, Vincent reached temporary rank of brigadier general—the second youngest airman to receive a star. He was eight years out of West Point.

Vincent's tour ended in late 1944. He returned to the US, reverted in 1946 to his permanent grade of major, and began another rise in the ranks. He regained the grade of brigadier general in 1951.

July 5, 1955, was Vincent's first full day as deputy chief of staff for operations at Continental Air Defense Command. He went home that night, fell asleep, and suffered a fatal heart attack. He was 40.

On Sept. 1, 1956, USAF bestowed Vincent's name upon Yuma AFB, Ariz. Vincent Air Force Base was the main flying training base for Air Defense Command's F-86 and F-89 interceptor crews and some B-26 drone carriers. USAF closed Vincent in 1959, transferring ownership to the Navy. It soon became Marine Corps Air Station Yuma, which today is USMC's busiest aviation site.

The airfield itself, however, is still "Vincent Field."

1/ Clinton "Casey" Vincent with an F-89 in the early 1950s. 2/ Marine Corps Air Station Yuma, which was formerly Vincent AFB, Ariz. 3/ Brig. Gen. Vincent receives an Oak Leaf Cluster for his Air Medal from Maj. Gen. Claire Chennault.

CLINTON DERMOTT VINCENT

Nickname: Casey
Born: Nov. 29, 1914, Gail, Texas
Died: July 5, 1955, Colorado Springs, Colo.
College: US Military Academy
Occupation: US military officer
Services: Army Air Corps (1936-41); Army Air Forces (1941-47); US Air Force (1947-55)
Main Era: World War II
Years Active: 1936-1955
Combat: China-Burma-India Theater
Final Grade: Brigadier General
Honors: Distinguished Service Medal, Purple Heart, Legion of Merit, Distinguished Flying Cross (3) Air Medal (4)
Famous Friends: Claire Chennault, Milton Caniff, John Alison, Tex Hill
Buried: Fort Sam Houston National Cemetery, Texas

VINCENT AIR FORCE BASE

State: Arizona
Nearest City: Yuma
Area of Main Base: 4.7 Sq mi./approx 3,000 acres
Status: Closed
Opened (by Army as Fly Field): 1928
Renamed Yuma Army Airfield: Dec. 15, 1942
Inactivated: Nov. 1, 1945
Renamed Yuma AFB: Aug 24, 1954
Renamed Vincent AFB: Sept. 1, 1956
Closed (by USAF): June 15, 1959
Reopened by Navy/USMC: June 15, 1959
Renamed MCAS Yuma: July 20, 1962
Current Owner: USMC
Former Owners: US Army (Eighth Corps, 1928-32, Third Army, 1932-42, Flying Training Command, 1942-45, US Air Force—Air Defense Command, 1951-59)



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Of course, the world and the Air Force have changed a lot since 1946. However, one fact remains unchanged: We are all Airmen who believe deeply in a dominant Air Force for our nation.

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