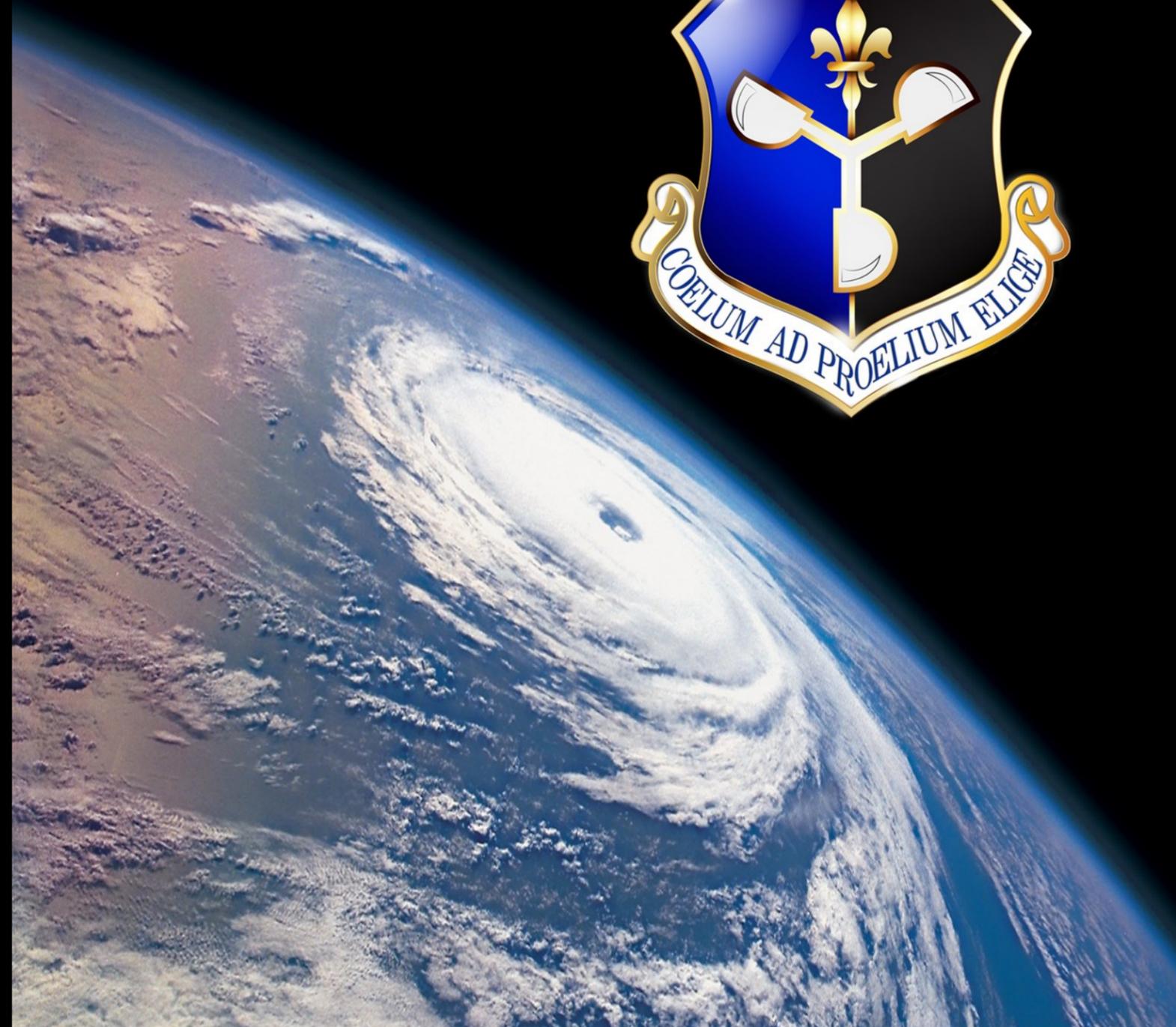


557TH WEATHER WING

FLIGHT PLAN 2016

CHOOSE THE WEATHER FOR BATTLE





FOREWORD

The 557th Weather Wing embraces a proud heritage of maximizing America's military power through the exploitation of timely, accurate and relevant weather information anytime and everywhere on the globe. From the D-Day invasion to Operations ENDURING FREEDOM, IRAQI FREEDOM, and INHERENT RESOLVE, our weather professionals have delivered the decisive advantage for our forces to succeed. As world-class Airmen of the proud 557th, we are operationally focused on supporting today's fight while transforming for tomorrow by leading in innovation, taking care of Airmen and their families, and telling our story through effective strategic communication.

The men and women of the 557th Weather Wing provide environmental information superiority to joint commanders to make the right decisions at the right time across the full spectrum of operations to achieve Air Force, Army, and joint battlespace success. Through the 1st and 2d Weather Groups of the 557th, we integrate leading-edge threat-based weather forecasts and warnings, as well as climatological and solar monitoring expertise, into all operational phases. Whether managing risk or shaping, planning, and executing kinetic and non-kinetic engagements, the 557th empowers decision makers to "Choose the weather for battle!"

Headquartered at Offutt Air Force Base, Nebraska, the 557th is comprised of nearly 1,450 personnel, 11 squadrons, 5 detachments, and 5 operating locations. Eighteen of our units/offices are geographically separated and strategically placed to optimize our long-standing joint, combatant command, coalition, allied and interagency partnerships to achieve our nation's objectives. We will meet the warfighter's operational requirements through unity of effort and teamwork.

Transformation and innovation are inseparable tenets of the wing's approach to ensure battlespace dominance. The transformation from a Field Operating Agency to a specialized mission wing has allowed us to be more operationally focused. Furthermore, we have operationalized the Air Force's new Global Air-Land Weather Exploitation Model, postured to fully exploit global space and terrestrial weather through the assimilation of meteorological satellite data, meeting the dynamic and demanding needs of Air Force, Army, DoD, Special Operations Forces, C2, and ISR activities. The 557th capitalizes on leading-edge science and technology for today and tomorrow.

The 557th Weather Wing's story is centered on its Airmen. The men and women of the 557th support and defend the interests of the greatest nation on earth by serving in the greatest Air Force. This wing and its Airmen face each day as another opportunity to advance its proud history and leave a lasting legacy. We take pride in a culture of social, physical, mental and spiritual resilience, and embrace our Airmen and their families.

Acknowledgment:

Flight Plan cover designed by SrA Ryan Harris (2 SYOS)



1997



2015



TIROS-1 Satellite

1950s - 1960s

1952: AFGWC redesignated Det 1, 1st Weather Group

1954: The first radar specifically designed for meteorological use, the AN/CPS-9, is unveiled by the Air Weather Service, USAF

1956: AFGWC redesignated Det 1, 3rd Weather Wing

1960: The world's first weather satellite, the polar-orbiting TIROS I, successfully launched from the Air Force Missile Test Center at Cape Canaveral, FL, on April 1, followed by TIROS II on November 11

1965: Capt Keith Grimes organized the First Air Weather Service Unconventional Warfare Detachment



Maj Grimes (C) in Vietnam

1970s - 1990s

1978: Air Force Weather began supporting the NASA Space Shuttle program, which continued 30+ years through the shuttle's final mission, STS-135, in 2011

1990: Operation DESERT STORM: weather personnel deployed from around the globe to meet the challenges of the war in Iraq, laying the groundwork for present-day expeditionary force support

1991: AWS redesignated as a Field Operating Agency under Headquarters Air Force

1997: Air Force Weather Agency (AFWA) activated at Offutt AFB, NE, combining AWS and AFGWC

Pictured: Lt Gen Thomas S. Moorman and the building named in his honor at Offutt AFB, NE, opened in 2008



(L) The auditorium is named after CMSgt Peter Morris; considered one of the finest enlisted leaders and weather warriors over his 30-year career



26th OWS

2000 - Present

2001: The September 11th attacks initiated AFWA's support to combat operations which continue today

2007: 1 WXG and 2 WXG activated and assigned to AFWA

2012: Air Force Weather celebrates its 75th anniversary

2014: Launch of DMSP Flight 19, the 50th anniversary of the Defense Meteorological Satellite Program

2015: AFWA redesignated as the 557th Weather Wing and moved under Air Combat Command; all Operational Weather Squadrons realigned under 1 WXG





1937



1943



MISSION:

Maximizing America's Power through the Exploitation of Timely, Accurate, and Relevant Weather Information; Anytime, Everywhere



AIR FORCE WEATHER HERITAGE

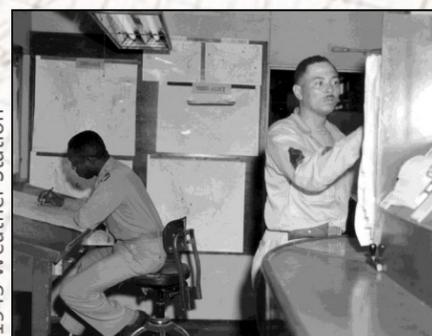
Vilhelm Bjerknes, Father of Modern Meteorology



Col Randolph "Pinkie" Williams, Founder of Army Air Corps Weather Service



1909 Weather Bureau



1945 Weather Station

1900s - 1930s

Early 1900s: Vilhelm Bjerknes developed equations to approximate atmospheric motion and developed the Norwegian model used today

1909: Weather Bureau begins weather balloon observations

1914: The weather emblem's fleur de lis represents military weather volunteers who served in WW1

1937: Army Air Corps Weather Service is founded by Colonel Randolph "Pinkie" Williams; considered the beginning of Air Force Weather

1940s

1943: Air Weather Service (AWS) activated as the Weather Wing

1944: Superior upstream weather intelligence enabled UK, US, and allied meteorologists to out-forecast the Germans resulting in the successful June 6 D-Day invasion (*background map image*)

1947: US Air Force born; Air Force Weather (AFW) assumes weather support for AF and Army

1948: USAF Air Weather Service meteorologists issue first tornado warnings from Tinker AFB, OK

1949: AF Global Weather Central (AFGWC) activated at Offutt AFB, NE

STRATEGIC VISION:

World-Class Airmen ... the DoD's Provider of Choice for Innovative, Actionable, and Authoritative Terrestrial and Space Weather Information to Win the Fight ... Today and Tomorrow.



PEOPLE

1,442 Airmen
Active: 1,141
Civilian: 301

PLACES

19 Locations
Globally-Dispersed
1 Wing
2 Groups, 11 Squadrons
5 Detachments and Operating Locations

CAPABILITIES

Support to every CCMD through unmatched 24/7 in place and reach back weather
The Air Force's sole Strategic Weather High Performance Computing Center
DoD's only space weather provider
DoD's preeminent climate capability
DoD's premier 24/7 weather provider for the Intelligence Community

Current as of 19 Feb 2016





557 WW VECTORS

Support Today's Fight: *Provide 24/7 World-Class Environmental Intelligence for Global Operations*

- ◇ Capitalize on the human ability to forecast and optimize model characterizations of air and space domains
- ◇ Supply authoritative weather/climate data, info, and knowledge for integration into all C2, ISR and operations
- ◇ Provide terrestrial/space weather and climate intel to optimize Global Vigilance, Reach and Power
- ◇ Deliver dynamic, on-demand weather intelligence products and services across all security enclaves
- ◇ Advance Continuity of Operations to guarantee our ability to provide 24/7 worldwide operations support
- ◇ Deliver tailored threat-based weather forecasts and warnings to protect DoD missions and resources
- ◇ Integrate weather support of manned/RPA missions into every phase of Air Force and joint operations

Transform for Tomorrow's Fight: *Meet the Future demands across Air, Ground, Space & Cyberspace*

- ◆ Institutionalize organizational & operational capabilities to execute, refine & optimize Air Force core missions
- ◆ Innovate and Implement a first-ever, on-demand climate characterization capability on all security enclaves
- ◆ Build a culture that empowers Airmen to drive process improvements & communicate future requirements
- ◆ Synergize activities to deliver weather impacts, allowing CCDRs to balance capabilities across multi-domain operations
- ◆ Define and modernize infrastructure through deliberate and disciplined institutional investments and processes

Lead in Innovation: *Advance Air Force Weather Ops through Leading-edge Science and Technology*

- ◇ Posture weather services for multi-domain mobile environment: on-line, on-demand, and platform-independent
- ◇ Implement the Air Force's Live, Virtual, and Constructive weather modeling and simulation program capability
- ◇ Employ common geospatial standards to enhance weather visualizations/optimize C2 capabilities (ops agility)
- ◇ Transform and expand worldwide numerical weather modeling by leveraging UK/partner nations for GALWEM
- ◇ Leverage DoD, Federal, international and academic partnerships to exploit relevant scientific advances

Take Care of Our Airmen and Families: *Build Strong and Resilient Wingmen*

- ◆ Promote a culture of social, physical, mental and spiritual resilience...embracing Airmen and their families
- ◆ Value diversity and cultivate a positive environment that embodies and promotes the Air Force core values
- ◆ Recognize Airmen's exceptional individual and team performance, achievements, and support to mission success
- ◆ Enhance force development and leadership through education, training, certification, and mentoring
- ◆ Attract, develop, and retain a high performing and highly skilled military and civilian workforce
- ◆ Elevate force protection capabilities to maximize situational awareness and safeguard Airmen and their families

Tell Our Story: *Communicate Strategically and Effectively*

- ◇ Build spokesmen out of every 557 WW Airman...honor our history and traditions while embracing the future
- ◇ Assert our role as *Wingmen in achieving Global Vigilance, Global Reach, and Global Power* for America
- ◇ Affirm our ability to empower Air Force and Army leaders to "Choose the weather for battle!" globally, 24/7/365
- ◇ Deliberately engage with commanders at all levels, establishing innovative approaches to communication

THE WARFIGHTER'S CHOICE

OUR PARTNERS

The 557th Weather Wing values its many local and strategic partnerships across the DoD, interagency, international, and research communities. Some of them are:

BASE AND INSTALLATIONS:

The 55th Wing provides vital mission support and services for the men and women of the 557 WW operating from the Lt Gen Thomas S. Moorman building at Offutt Air Force Base. Furthermore, tremendous synergy exists with the three co-located operating locations from the Air Force Life Cycle Management Center, Air Combat Command/A5W, and HQ Air Force/A3W to deliver world-class weather capabilities. Finally, our 18 geographically separated units and offices are integral mission partners with their respective host installations.

JOINT AND COMBATANT COMMANDS:

In addition to supporting the Air Force and Army, the 557 WW is uniquely postured to provide a full spectrum of support and services to the joint warfighter and Combatant Commands. Furthermore, the 557 WW works closely with its U.S. Navy meteorological and oceanographic counterparts to deliver unsurpassed air-land-sea characterizations.

DOD AGENCIES:

The 557 WW supports multiple DoD organizations, to include the National Geospatial-Intelligence Agency in their primary missions of collecting and analyzing geospatial intelligence. Additionally, the 557 WW enhances the missions of other combat support agencies, such as the Defense Threat Reduction Agency.

ALLIED AND COALITION:

The 557 WW treasures its longstanding relationship with its international meteorological partners, such as the United Kingdom Met Office and Ministry of Defense, the Australian Bureau of Meteorology, and the Republic of Korea Air Force Weather Wing. Delivering unmatched weather support to the U.S. and its international partners are essential to the success of NATO and other alliances.

FEDERAL AGENCIES:

The 557 WW highly respects its relationships with other federal agencies to include the National Oceanic and Atmospheric Administration's National Weather Service and National Environmental Satellite, Data, and Information Service, as well as the U.S. Geological Survey. Our complementary, but distinct, roles and unique capabilities ensure the nation succeeds at home and abroad.

16TH WEATHER SQUADRON



MISSION: Exploit cutting-edge technologies, science, and innovations to provide responsive, accurate, and relevant weather intelligence to the warfighter and other national agencies.

ORGANIZATION: Our team of 80 military, civilian, and contractor technical experts are organized into three flights that develop, demonstrate, and deploy innovative environmental intelligence products into global weather operations. We are DoD experts on terrestrial, atmospheric, and space weather models; environmental modeling and simulation capabilities; and the Air Force Weather Web Services (AFW-WEBS) — specialized airpower that enables accessible, on-demand, decision-quality weather products to joint and national agency partners.

OPERATIONS: Servicing worldwide combatant command operations, the 16 WS tailors, integrates, and validates terrestrial and space weather intelligence products and services for the Air Force Weather Weapon System. We tune and advance the DoD's only worldwide cloud forecast and analysis capability, supporting an array of national agencies and DoD users. Recent accomplishments credited to 16 WS innovators are operationalization of the Global Air-Land Weather Exploitation Model, the Air Force's first global weather modeling system in 20 years; inventing the DoD's first convective scale ensemble forecasting suite, delivering rapid refresh of model data for Remotely Piloted Aircraft support and decision-grade stochastic products to over 5,000 users; and pioneering the Air Force's first mobile weather application for integration with 3,000 Electronic Flight Bag mobile computing platforms

AIRMEN FUELING AIRPOWER

Vision: Innovative Center of Excellence for transitioning terrestrial and space weather science, technology, and services to operations.

Innovate: Advance numerical weather modeling techniques, deliver premiere decision-grade products and services through AFW-WEBS, and generate unsurpassed cloud and aerosol analyses/forecasts.

Optimize: Stand up a specialized science and technology operational exploitation team to advance environmental applications and deliver a new modeling and simulation capability through Weather Services — Live, Virtual, and Constructive program.



APPROACH & EXPECTATIONS

LEADERSHIP APPROACH

MISSION: There is no substitute for mission success. We must be ops-focused to meet the warfighters' needs. We must consider the consequences and impacts to the field before executing any action. We are vital to the success of the Air Force, Army, joint, interagency, coalition, and allied partners.

PEOPLE: We must strengthen our most precious resource by taking care of our Airmen and their families. We must guarantee our Airmen are trained, meet standards, and are prepared to execute our mission. We must ensure the workplace is professional, positive, safe, and respectful. Our Nation demands it and our Airmen and their families deserve it.

DIVERSITY: We must foster acceptance and mutual respect for distinctive experiences, backgrounds, and abilities. By capitalizing on our differences, we maximize innovation and performance.

MENTOR: We must guide, develop, and prepare Airmen of all ranks and grades. We must continuously invest in the future by growing leaders at the first opportunity; the wing and the Air Force depend on it.

COMMUNITY: We must represent the 557th, Team Offutt, 12th Air Force, and the Air Force well. Respect and cultivate positive relationships with our local community partners. We are here to serve!

COMMITMENT: Lead by example. Recognize success. Extoll the Airman's Creed. Wingmen always.

EXPECTATIONS OF ALL AIRMEN

CORE VALUES: The Air Force core values guide every Airman to do the right thing every time, to put our Wingmen and mission before ourselves, and to ensure excellence in all our actions. We will never fail by serving in accordance with these common principles.

LEADERSHIP: Airmen of all ranks and grades are expected to be leaders. Leaders are selfless and focused on maximizing the performance of their subordinates, peers, and their team. Leaders must be actively engaged, create opportunities, provide solutions, and empower their Airmen. Our Air Force is the best in the world, because we expect leadership from everyone.

TEAMWORK: The 557th embraces teamwork. Common purpose and unity of effort within the wing and with our functional and mission partners will ensure mission success. Understand your role on the team. Understand the big picture and your invaluable contribution to our mission success.

READINESS: Our wing delivers weather decision superiority to commanders, decision makers, and warfighters to manage risk and achieve mission success anytime and everywhere on the globe and in space. We must be proactive and always prepared for today's and tomorrow's challenges.



DECISION SUPERIORITY AND RISK MANAGEMENT FOR WARFIGHTER OPS

Decision Superiority & Risk Mgmt for Warfighter Ops



“IN MILITARY OPERATIONS, WEATHER IS THE FIRST STEP IN PLANNING AND THE FINAL DETERMINING FACTOR IN THE EXECUTION OF ANY MISSION.”

- GEN CARL “TOOEY” SPAATZ, FIRST CHIEF OF STAFF OF THE AIR FORCE



14TH WEATHER SQUADRON



MISSION: Collect, protect, and exploit authoritative climate data to optimize military and intelligence operations and planning.

ORGANIZATION: We are the Air Force’s only climate operations unit, co-located with the National Centers for Environmental Information (formerly the National Climatic Data Center) as part of the Federal Climate Complex in Asheville, NC. We consist of two flights, a Climate Operations Flight and a Systems Flight, with 62 authorizations.

OPERATIONS: We are the Air Force’s go-to source for climate services! We ingest nearly two million weather observations and gridded climate datasets every

day, and are stewards of DoD’s only authoritative climate data archive. We collect weather data from numerous worldwide sources and provide quality controls to ensure an authoritative 40-terabyte climate data archive. We provide climatology subject matter expertise and leverage our archive to respond to 800 climatology support requests and 400,000 web hits per year from joint forces, Intelligence Community, and DoD strategic planners. Our data enables decisions regarding weapons system basing, sensor fielding strategies, weather forecast operations, and informs national-level decision makers about current and projected climate impacts. As the sole active duty military unit in western North Carolina, our Special Ceremonies Team fulfills traditional Honor Guard and Color Guard duties.

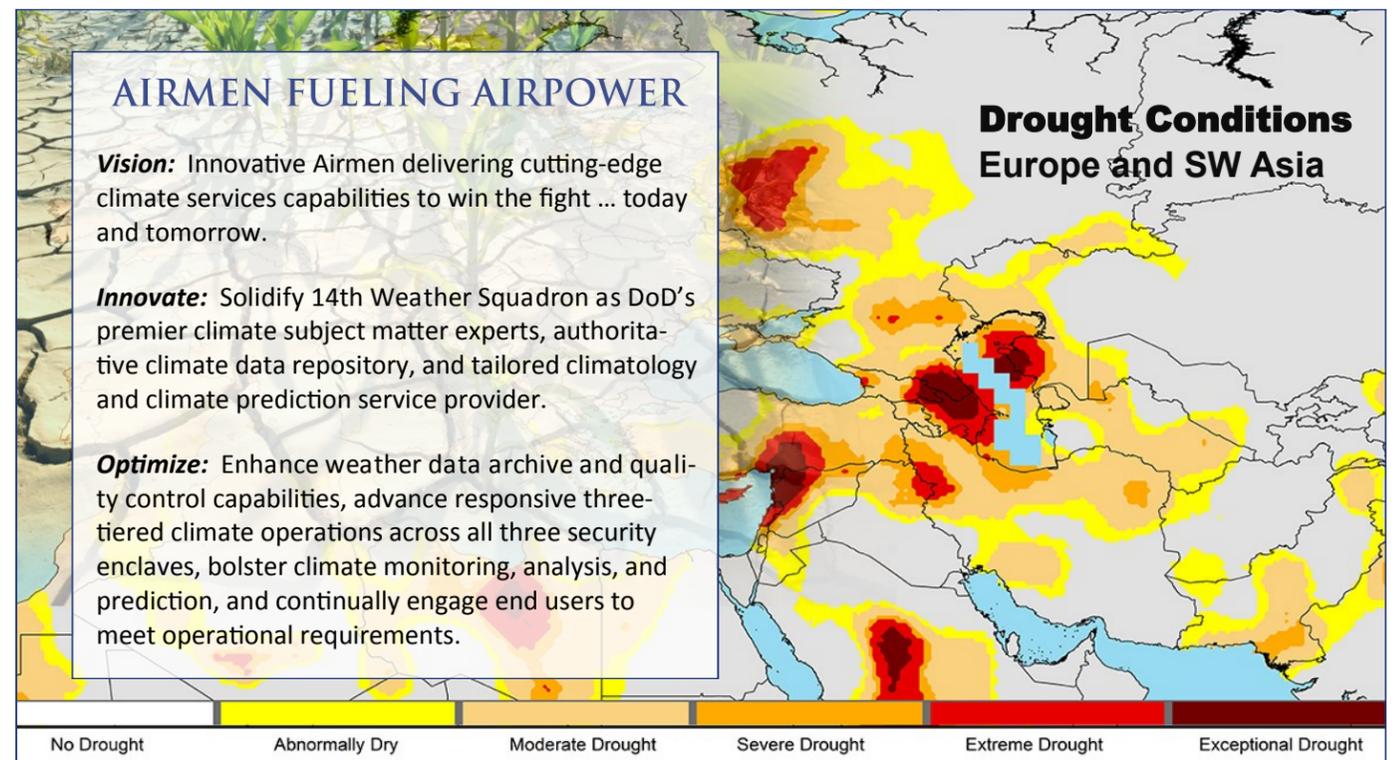
AIRMEN FUELING AIRPOWER

Vision: Innovative Airmen delivering cutting-edge climate services capabilities to win the fight ... today and tomorrow.

Innovate: Solidify 14th Weather Squadron as DoD’s premier climate subject matter experts, authoritative climate data repository, and tailored climatology and climate prediction service provider.

Optimize: Enhance weather data archive and quality control capabilities, advance responsive three-tiered climate operations across all three security enclaves, bolster climate monitoring, analysis, and prediction, and continually engage end users to meet operational requirements.

Drought Conditions Europe and SW Asia



2D WEATHER SQUADRON



MISSION: Deliver DoD-unique environmental capabilities to the joint force and Intelligence Community.

ORGANIZATION: We are a 159-member squadron maintaining global vigilance at seven worldwide sites in support of multiple national security mission sets. Responsible to joint and interagency partners for a wide range of mission-tailored products essential to ongoing contingency operations, the unit primarily provides meteorological conditions to the Intelligence Community. However, the unit also provides space weather situational awareness and environmental monitoring to combatant commanders as the DoD's sole space weather center. The squadron consists of four geographically separated detachments, two operations floors, a broadcast studio and an overseas contract site.

OPERATIONS: We maintain around-the-clock vigilance at nine operations centers covering seven mission areas to include space environment operations, hourly worldwide cloud analysis, real-time response to sensitive environmental requests, global volcanic ash monitoring, global snow and ice coverage, American Forces Network (AFN) broadcast production, and Solar Electro-Optical Network (SEON) operations through both the four-site Radio Solar Terrestrial Network (RSTN) and the three-site Solar Optical Observing Network (SOON). Space environment operations include daily coordination with NOAA's Space Weather Prediction Center (SWPC) on three joint forecasts, facilitated by the squadron liaison officer integrated with SWPC.

AIRMEN FUELING AIRPOWER

Vision: Ever-vigilant operators with worldwide focus executing 24/7 missions to enhance national security.

Innovate: Deliver environmental intelligence that enables decision-making — a specialized form of airpower on-line, on-demand, and discoverable.

Optimize: Optimize national security through the use of environmental intelligence to enable resiliency and decision superiority at the national and strategic levels.



1ST WEATHER GROUP



MISSION: Provide accurate, timely, relevant weather assessments to Air Force, Army, Guard, Reserve, and other forces operating worldwide in support of all combatant commands. Provide qualification and upgrade training to enlisted and officer weather Airmen.

ORGANIZATION: We are a thousand warriors over watching global operations, providing decision-quality weather information with unprecedented accuracy and timeliness, and transforming weather operations and training to meet global demands. 1 WXG is comprised of six Operational Weather Squadrons (15 OWS at Scott AFB, Ill.; 17 OWS at Joint Base Pearl Harbor-Hickam, Hawaii; 21 OWS at Kapaun, Germany; 25 OWS at Davis-Monthan AFB, Ariz.; 26 OWS at Barksdale AFB, La.; and 28 OWS at Shaw AFB, S.C.) and an operating location (OLK at the Radar Operations Center, Norman, Okla.).

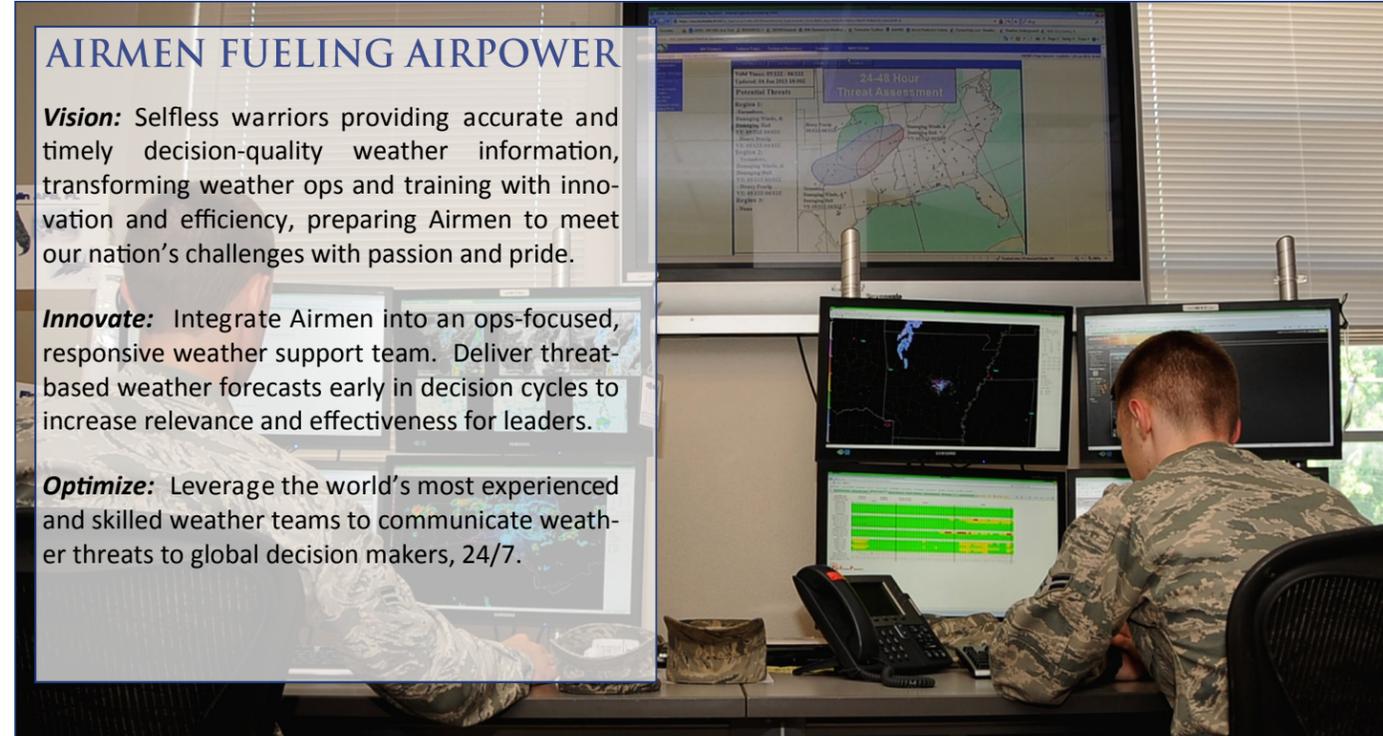
OPERATIONS: We protect over a million Airmen, Soldiers, and family members and almost a trillion dollars in Department of Defense assets around the world by delivering over 500,000 accurate, timely, and relevant weather forecasts and warnings each year. Additionally, the Air Force weather team at the interagency Radar Operations Center in Oklahoma supports global radar sites in the Next Generation Radar Program. Finally, we continue a decade-long tradition of expertise in virtual, collaborative training environments and provide state-of-the-art network security with the best trainers and communicators in the Air Force.

AIRMEN FUELING AIRPOWER

Vision: Selfless warriors providing accurate and timely decision-quality weather information, transforming weather ops and training with innovation and efficiency, preparing Airmen to meet our nation's challenges with passion and pride.

Innovate: Integrate Airmen into an ops-focused, responsive weather support team. Deliver threat-based weather forecasts early in decision cycles to increase relevance and effectiveness for leaders.

Optimize: Leverage the world's most experienced and skilled weather teams to communicate weather threats to global decision makers, 24/7.





GLOBAL SYNERGY



2D SYSTEMS OPERATIONS SQUADRON



MISSION: Operate and sustain the Air Force's \$303M strategic weather high performance computing center to deliver authoritative environmental intelligence to decision makers across the spectrum of global operations.

ORGANIZATION: We are a 128-member squadron of military and civilian professionals that provide strategic to operational level specialized airpower by uniquely supporting the communication, computing, and programming needs of the highly technical, data intensive Air Force Weather global enterprise. The squadron is comprised of three flights: Operations, Software Sustainment, and Change Management. Collectively, they form the core of the weather enterprise "engine."

OPERATIONS: We operate the Air Force's largest Special Purpose Processing Node — the linchpin force enabler for the Air Force weather enterprise, generating thousands of critical global environmental products and services to weather forecasters and operational end users every day. We maintain DoD's tactical weather location identifier program, which ensures transmission of and access to vital weather information at deployed and oftentimes austere operating locations across the globe. Our professionals operate 2 WXG's Change Management program that oversees 200 software projects annually and maintains 139 software baselines to deliver cutting-edge capabilities across the spectrum of military operations. We apply over 7,000 system patches annually to mitigate security vulnerabilities across the enterprise. We ensure data integrity across 90 databases, and we enable DoD's sole space weather warning capability to secure our country's \$104B strategic satellite fleet.



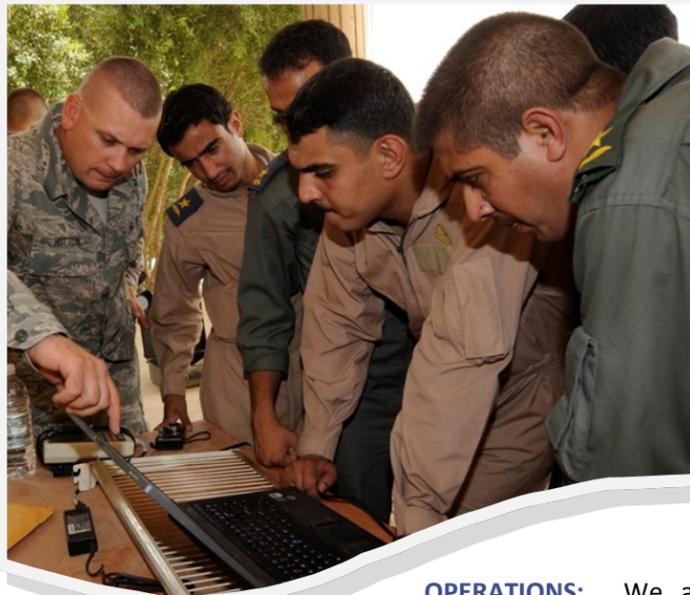
AIRMEN FUELING AIRPOWER

Vision: Digitally dominate ... craft world-class environmental intelligence products and services; physical and virtual — on time, all the time.

Innovate: Leading-edge technical agility driving improvements to specialized weather applications; cultivate an asymmetric computing advantage to answer the most difficult weather challenges.

Optimize: Seek unsurpassed model run-time performance gains, data flow efficiencies, and internal network security to guarantee superior access to timely, accurate, and relevant weather intelligence.

2D COMBAT WEATHER SYSTEMS SQUADRON



MISSION: Perform operational test and evaluation of Air Force fixed-based and tactical weather systems, train weather and communications Airmen for deployed operations, and provide combat weather system maintainers to enable worldwide military operations.

ORGANIZATION: We are 49 military and civilian professionals, aligned under the 2 WXG. We consist of three flights functionally aligned with our three distinct mission sets; Weather System Test and Evaluation, Weather System Training, and deployed Weather System Support. Each capability of the 2 CWSS is unique to the global Air Force mission and impacts every facet of terrestrial-based Air Force weather support for the Department of Defense. The squadron is a tenant unit located at Hurlburt Field, Fla.

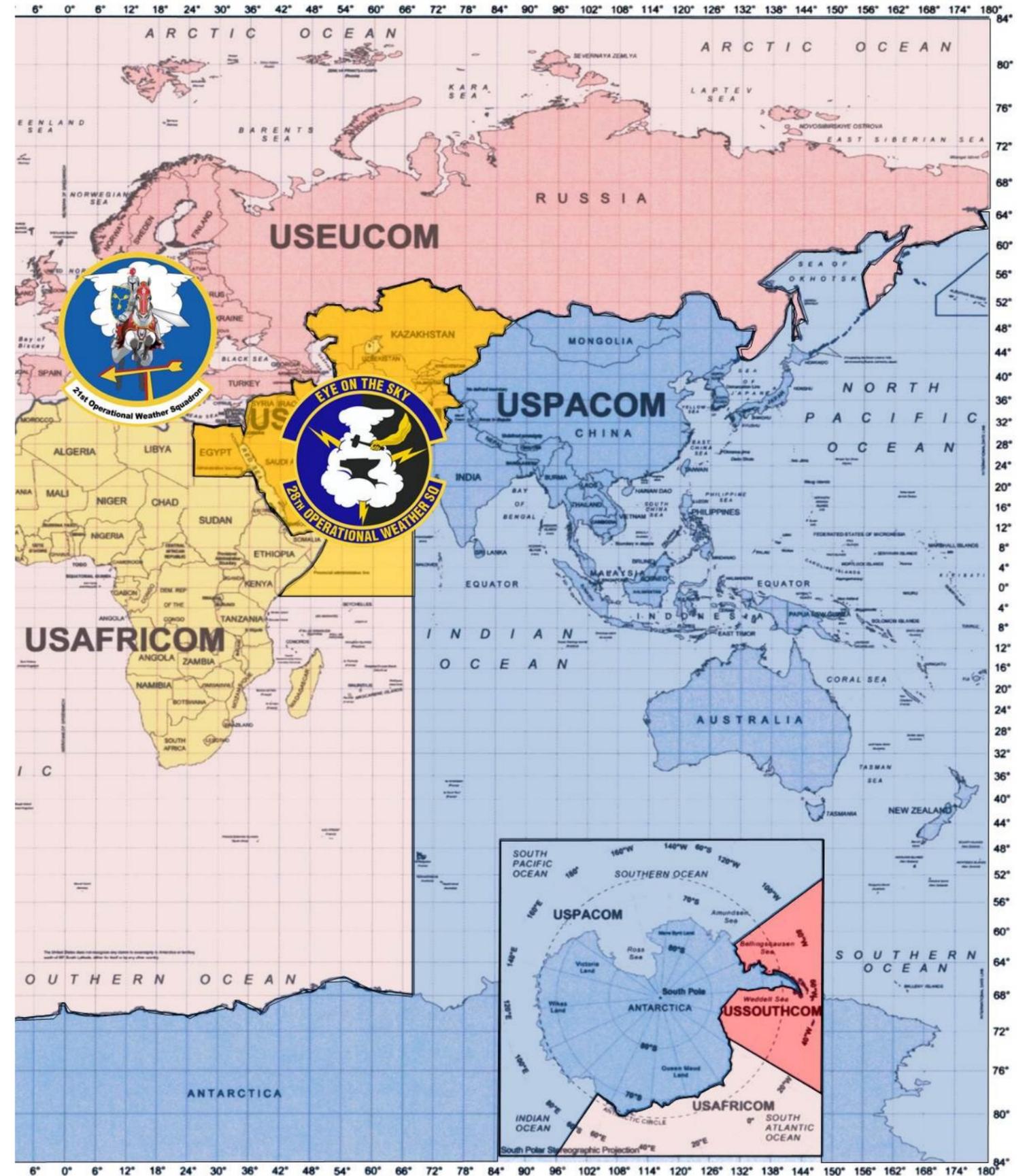
OPERATIONS: We are the sole force provider of the Weather System Support Cadre, which deploys mobile maintenance teams to rapidly restore the geographic combatant commanders theater weather sensing strategy during contingency operations. We test and evaluate both emerging and established weather technologies to inform global, regional, and tactical sensing strategies and enable strategic fielding decisions. We develop tactics, techniques, and procedures to properly employ and maintain the entire Air Force inventory of fixed-base and tactical weather systems. We develop and conduct the Deployed Weather Systems Training Course where we teach weather Airmen how to use and maintain deployed weather systems to maximize joint warfighter capabilities. We are responsible for maintaining and rapidly deploying Portable Doppler Radars and tactical weather systems in support of global operations and contingencies.

AIRMEN FUELING AIRPOWER

Vision: Empower Airmen to innovatively execute our test, train, and maintain missions while preparing combat-ready warfighters; enhance deployed weather system "operator/maintainer" concept.

Innovate: Exploit new garrison/tactical-level weather and communication concepts and solutions; spearhead Air Force Weather techniques and procedures development.

Optimize: Facilitate weather system upgrades, maintenance, and logistics support; participate in limited interagency experimentation; streamline AF Weather's tactical equipment storage mission.



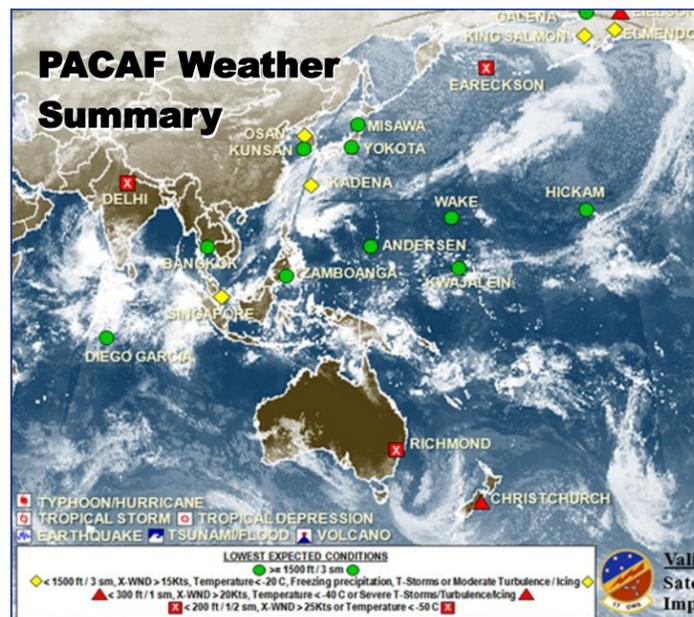
1 WXG THE PACIFIC



MISSION: Provide timely and accurate decision-grade weather intelligence to successfully plan and execute PACOM military operations. Develop skilled weather Airmen necessary to support global DoD operations.

ORGANIZATION: We embrace the President's rebalance to the Asia-Pacific region, where the 17 OWS traces its lineage to World War II and the battlefields of the Pacific Theater. The Fightin' Geckos, which includes a US Navy meteorology and oceanography detachment, monitor and predict the weather for half of the globe and 60% of the world's population, providing environmental intelligence to the PACOM commander, his Army and Air Force elements, and US government agencies throughout the PACOM AOR. We deliver vital theater-scale weather forecasts, supporting U.S. military operations essential to building regional partnerships, maintaining theater presence, and enhancing power projection for regional security and stability.

OPERATIONS: We provide 24/7 weather support for 98 sites across a 113 million square mile AOR, protecting assets worth over \$90 billion. We work with the U.S. Navy to support naval aviation in the Pacific, and we partner with them at the Joint Typhoon Warning Center to provide tropical cyclone reconnaissance, forecast, and warning support for the Pacific and Indian Oceans, covering over two-thirds of the world's tropical cyclones. We support the full range of military operations -- OPLANs, contingencies, exercises, and humanitarian assistance. We provide flight weather briefings for over a thousand Global Reach sorties a year and participate in exercises like ULCHI FREEDOM GUARDIAN, the largest exercise on the Korean Peninsula; COBRA GOLD in Thailand, enhancing multinational interoperability; BALIKATAN in the Philippines, a Marine Corps bilateral exercise; and RIMPAC, 2014's largest international maritime warfare exercise. In 2011, we helped airlift relief supplies to Japan after a devastating earthquake and tsunami, and in 2013, we helped deliver aid and evacuate 7,000 people after one of history's strongest tropical cyclones hit the Philippines.



AIRMEN FUELING AIRPOWER

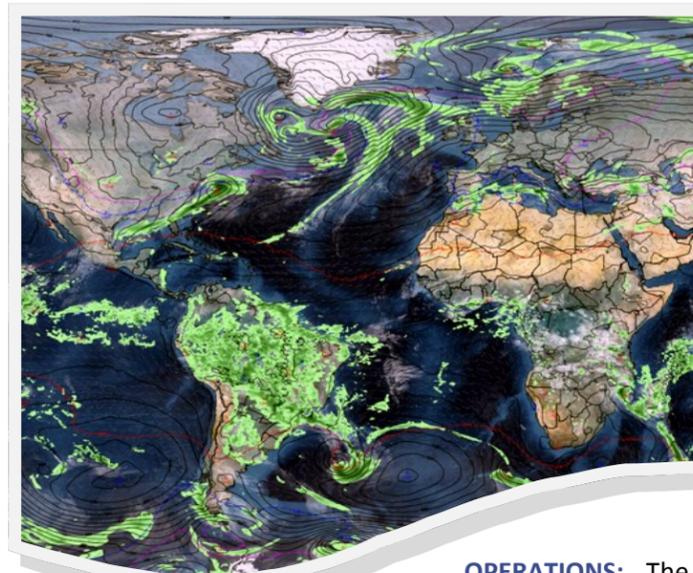
Vision: PACOM's provider of unparalleled meteorological intelligence for theater aviation missions and resource protection, enabling CCMD authorities and subordinate military units to successfully plan and operate throughout the 113M square mile AOR.

Innovate: Deliver regional expertise and world-wide experience to the global OWS network. Assist in joint, combined, and interagency efforts to overcome the "tyranny of distance" in the Pacific theater.

Optimize: Advance joint and partner efforts to characterize data-sparse regions using earth- and space-based sensors. Expand joint capabilities to provide typhoon warnings for the US and partner nations.



2D WEATHER GROUP



MISSION: Five unique squadrons optimizing joint military and intelligence readiness and operations.

ORGANIZATION: We are headquartered at Offutt Air Force Base, Neb. and are comprised of over 500 active duty military members, civilians, and contractors, operating at nine operating locations across three continents. The 2d Systems Operations Squadron (2 SYOS), 16th Weather Squadron (16 WS), and 2d Weather Squadron (2 WS) are each located at Offutt Air Force Base, NE. The 14th Weather Squadron (14 WS) is headquartered in Asheville, N.C. and is collocated with the Federal Climate Complex. The 2d Combat Weather Systems Squadron (2 CWSS) is located at Hurlburt Field, Fla.

OPERATIONS: The 2d Weather Group (2 WXG) is the 557 WW's production center, providing specialized airpower — global, terrestrial, space and climatological environmental intelligence — to the Joint force, defense agencies, Defense Department senior leaders, select members of the Intelligence Community, interagency partners, and allied nations. The 2 WXG operates, sustains, and maintains the AF's \$288M strategic weather high performance computing capability, making us a critical 24/7 reach back node for collection, processing, and dissemination of terrestrial and space weather data. We have the Air Force's only unit that evaluates, integrates, trains, deploys, and maintains the tactical components of the Air Force Weather Weapon System. Whether it's a volcano erupting with an ash cloud extending thousands of miles, a solar storm impacting the space environment, or the global impacts of climate change, 2 WXG stands ready to inform decision makers at the tactical, operational, and strategic levels with the best and latest environmental information — from the mud to the sun!

AIRMEN FUELING AIRPOWER

Vision: Enterprising Airmen, developing, operating, maintaining DoD's preeminent weather exploitation capabilities.

Innovate: Enable the world's brightest Airmen to leverage state-of-the-art technology to arm decision makers with on-time, on-demand, and accessible weather intelligence.

Optimize: Advance the Air Force's strategic weather enterprise to deliver authoritative environmental intelligence to decision makers, creating asymmetric advantages across the full spectrum of global operations.



1 WXG

S.W. ASIA & THE MIDDLE EAST



MISSION: Provide accurate and timely weather information for CENTCOM combat operations and reach back support to the Combined Air Operations Center. Lead forecast development and create a single coordinated weather picture for multiple Joint Operating Areas for air tasking order development, execution, and command and control. Provide weather forecasts for aviation operations, Army maneuver, ISR, and resource protection for coalition personnel and billions of dollars in DoD assets.

ORGANIZATION: We have been “all in” from the first days of Operation ENDURING FREEDOM, as the men and women of 28 OWS have spent over 13 years maintaining combat weather over-watch for millions of troops conducting

hundreds of thousands of sorties and tens of thousands of joint, combined, and coalition operations. From the Afghanistan weather forecasts, which synchronized SOCOM support to the Northern Alliance and the regional weather studies that help reconstruction teams mitigate seasonal flooding, to the mission planning forecasts for the invasion of Iraq and the specialized support to forces advising Iraqis combating ISIS, 28 OWS was and remains the focal point for Southwest Asia weather expertise. We have interdependencies with 21 OWS, 17 OWS, 23 WS (the Special Forces weather squadron), and 2 WXG for the integration of upstream weather information, launch-base weather intelligence, future innovation, and infrastructure support requirements.

OPERATIONS: We helped senior leaders “choose the weather for battle” in a vast number of major combat operations that have spanned first contact with the enemy in Operation ANACONDA, covering the troop surge/withdrawals on multiple fronts, and most recently with on-the-spot support to Operation INHERENT RESOLVE. We deliver over a quarter-million accurate, timely, and relevant weather assessments each year to support over 100,000 CAS, ISR, airlift, and air refueling sorties.

AIRMEN FUELING AIRPOWER

Vision: Improve timely and accurate weather depiction for warfighters, aid deployed weather warriors, and respond to requirements by adapting and exploiting emerging technologies, innovating operations, and cultivating an environment where we improve our capabilities and reach our fullest potential.

Innovate: Integrate capabilities learned in contingency support into the OWS network. Posture for global response while remaining the leader in CENTCOM AOR meteorology.

Optimize: Normalize manning to ensure a combatant-responsive weather force. Transfer what we’ve learned about injecting weather into operations to training and exercises in CONUS and overseas.



1 WXG

THE AMERICAS



MISSION: Provide accurate, timely, and relevant weather support to Air Force, Army, Guard, Reserve, and combatant command forces training and operating to secure the United States and the western hemisphere. Integrate decision-cycle weather forecasts to aid North American aerospace, maritime, and nuclear warning and surety operations. Help fight transnational organized crime and terrorism, help build partner nation capacities, and help conduct defense support to civil authorities for disaster relief and crisis response operations.

ORGANIZATION: Our nation’s defense begins at home, and primarily leverages three CONUS-based Operational Weather Squadrons (OWSs) to support western hemisphere as well as

global operations. Department of Defense Operations Plans geographically link the 15 OWS, 25 OWS, and 26 OWS to NORTHCOM upon execution, building on close relationships developed through western hemisphere joint training exercises, Customs and Border Protection operations, and the execution of North American Aerospace Defense Command (NORAD) responsibilities. The 1 WXG HQ element is collocated with STRATCOM at Offutt AFB, Neb., and we leverage our proximity to provide responsive command and control support. Similarly, we leverage the 15 OWS, collocated with TRANSCOM at Scott AFB, Ill, to provide weather support for their nonstop Global Reach missions. Our Delta Flight, part of the 25 OWS at Davis-Monthan AFB, Ariz., supports SOUTHCOM’s planning and operations in Central and South America. The 26 OWS, collocated with Global Strike Command at Barksdale AFB, La., not only provides customized support for Global Power missions, but also augments the air and space operations center during periods when capabilities need to surge.

OPERATIONS: We are uniquely postured and trained to protect the homeland, as well as our nation’s interests throughout the western hemisphere. Every year, the 15 OWS supports NORTHCOM’s largest catastrophic event response exercise, fusing active, reserve, and civilian components. Also at the 15th, we backup the National Weather Service’s Storm Prediction Center and Aviation Weather Center, official government sites for civilian resource protection and civil aviation weather hazards. The 25 and 26 OWSs team up to support Exercise RED FLAG pilot training as well as joint force training via GREEN FLAG exercises at Fort Irwin, Calif., and Fort Polk, La. CONUS-based OWSs also help Customs and Border Protection agents conduct over 500 border surveillance flights and 800 drug interdiction missions annually. Our support to the nation’s counterdrug initiative assisted in the capture of 600 criminals and the seizure of \$5 billion in illegal narcotics in 2014 alone. Finally, the men and women at OL-K in Norman, Okla., meet the Air Force’s commitment to the trillion-dollar NEXRAD Doppler weather radar network. They improve and maintain 168 radar sites at locations worldwide.

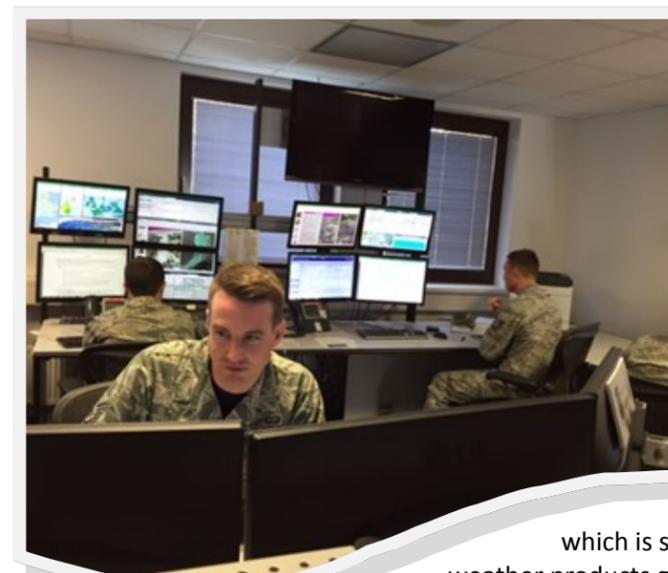




1 WXG EUROPE & AFRICA



Pictured above and right: While deployed to Afghanistan in 2011, 25 OWS member Capt Nathan Nylander was killed in action during a “green on blue” attack while engaging a renegade Afghan officer. Capt Nylander was awarded the Silver Star for his life-saving actions. The 25 OWS facility at Davis-Monthan AFB, Ariz., bears his name.



MISSION: Support EUCOM and AFRICOM with accurate, timely and relevant weather intelligence to enable theater operations. Participate in NATO exercises and operations and fulfill U.S. responsibilities as lead nation for METOC for Baltic Air Policing and the NATO Reaction Force. Serve as the standing Joint METOC Coordination Organization for EUCOM.

ORGANIZATION: We are committed to helping the United States build relationships in Europe and Africa while protecting DoD and partner resources. The men and women of the 21st OWS, located at Kapaun Air Station, Germany, monitor the weather over landmasses that make up a third of the globe. We are joined by a U.S. Navy meteorology and oceanography detachment,

which is seamlessly integrated into daily ops, and we leverage upstream weather products generated and enabled by other units in 557 WW. The 21 OWS operates and maintains the only OWS-controlled weather satellite downlink site to better provide support to worldwide operations.

OPERATIONS: We provide airfield forecasts for 20 locations in Europe and Africa and resource protection to an additional 34 sites. We build joint operations area forecasts in support of ongoing operations in northern and western Africa. We leverage longstanding relationships with Western Europe’s weather and climatology agencies, advancing both the science and exploitation of weather as operational force multipliers. Additionally, we support OPEN SKIES treaty verification missions and Presidential travel in the EUCOM and AFRICOM AORs.

AIRMEN FUELING AIRPOWER

Vision: Weather warriors providing ops-focused weather support, training the force’s future, and caring for Airmen to meet the nation’s challenges.

Innovate: Expand regional applications of threat-based meteorological techniques to the global OWS network. Advance our mission ownership mindset to drive ever-increasing responsiveness to decision makers at all levels.

Optimize: Shape combatant command ops with regionally-focused, experienced weather forecasting teams who give leaders the ability to choose and exploit the weather for battle.



AIRMEN FUELING AIRPOWER

Vision: The premier, forward-based provider of decision-quality weather intelligence — the authority on European and African weather characterization and exploitation — a team of professionals fully engaged with joint and combined partners.

Innovate: Transition state-of-the-science weather depiction methods to the global OWS network. Expand regional weather expertise to bring even better forecasting support to joint, combined, and coalition combat, civil support, and humanitarian actions.

Optimize: Leverage advanced meteorological techniques to shine new light on the data-sparse regions in Africa. Earn recognition, beyond the Air Force and Army, as the authority on weather support to EUCOM and AFRICOM theater operations.

