



The Magazine for Air Force Weather
OBSERVER

March 1995

Vol. 42, No. 3

**Air
Force
Weather**

**Into the 21st Century
... and beyond**

This month:
AIR FORCE
AFSOC
SPECIAL OPERATIONS COMMAND

*How Air Force weather keeps them
a step ahead in a changing world*



Air Force Vision

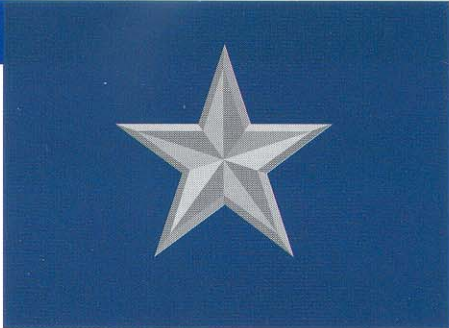
***Air Force people
building the
world's most re-
spected air
and space
force... global
power and reach
for America***



AWS Vision

***Total Force
Professionals
Arming America's
Combat Forces
with the Winning
Edge — The
World's Best
Military Weather
Capability***

Perspectives From The Top



Brig. Gen. Thomas J. Lennon
Air Force Director of Weather



SPACE *How AFW* *is meeting* *the challenge*

The Gulf War gave new focus to using space assets as a recognized force multiplier supporting the warfighter. Exploiting space is key to global situational awareness, part of the revolution in modern warfare.

Adverse space weather can disrupt satellite communications signals reaching ground receivers, wreak havoc with target locations by surveillance platforms, and even prevent calibrating the compass in aircraft inertial navigation systems. The 50th Weather Squadron (at Falcon AFB, Colo.) is the Department of Defense-directed agency for space weather operations and provides input vital to decision-makers to optimize the force enhancement applications of space assets.

Air Force Weather, from the beginning, has been a pioneer since we issued our first solar forecast in 1962. Today, our challenge in space weather is to bring a young science forward as quickly and smartly to enhance the warfighting capabilities of today and in the future, as requirements for space support continue to grow.

We are meeting that challenge head-on

Exploiting space is key to global situational awareness ...

with several initiatives. First, we will train *all* weather personnel to support operations in a seamless aerospace environment -- from the ground to space. For the first time, resident weather skills courses, both officer and enlisted, and Career Development Courses will contain training on space weather effects and the services available to help anticipate and alleviate those effects.

We will strengthen the training of our space weather observers and forecasters, to ensure they enter their jobs with the best possible qualifications. We will ensure system operators and decision-makers also benefit from our training developments to enhance the utility of space weather operations.

Another ongoing initiative is AFW's commitment to the development of numerical predictive models. These will bring us new space weather capabilities -

- a quantum leap in accurate and reliable support to the warfighter. The first models are undergoing transition at the 50th WS right now.

Our space weather observational networks need expanding, and we need to fully exploit opportunities for new data sources. We retained the solar observatories with an eye to future simplification and automation of the systems.

We will receive solar wind data through NASA until we obtain a permanent series of satellites for this critical data.

In a parallel effort, XOW is a prime mover in the new National Space Weather Program, designed to coordinate and focus interagency efforts to leverage existing resources for the biggest payback.

The space weather arena will continue to grow and offer some of the most exciting opportunities in AFW for innovative, forward-looking

weather warriors.

As we "own" space weather, we ensure space control, information dominance, and freedom of action in the theater of operations.

The space weather arena will continue to grow and offer some of the most exciting opportunities in AFW...



Command Line

Col. Frank J. Misciasci Jr.
Air Weather Service
Commander



Thor's Leaders

In early February 1995, the Air Force convened its second Thor's Leaders selection board at Randolph AFB, Texas.

The purpose of this board was to select and provide to the major commands a list of lieutenant colonels, Lt. col.-selects, and senior majors with the right qualifications to be weather squadron commanders or to fill other "key" jobs in Air Force Weather (AFW).

The selection process was difficult, with many outstanding records competing for consideration, and the 57 people whose names appear on the list are to be congratulated.

Now you might ask -- why do we need a Thor's Leaders list?

Well, the answer is pretty straightforward. In the Air Force, as in any other service, certain types of jobs are critical to the process of developing, growing and testing future senior leaders. AFW is no different in this regard.

In the past, Air Weather Service was charged with the responsibility for grooming future senior weather leaders.

With the divestiture of our manpower in large part to our major commands, we also had to change the process of identifying our candidates for key jobs. Our answer was to do it the way the rest of the Air Force does it.

You've no doubt heard of Air Mobility Command's Phoenix Eagle list, Air Force Space Command's Vigilant Eagle list, and Air Combat Command's Ops Support Squadron Board, to name a few.

Thor's Leaders serves the same purpose for AFW. It's provided to all major commands for their consideration

when filling key jobs in the weather career field.

Will everyone on the list get a "key" job? Probably not. There are more names on the list than there are "key" weather jobs.

The selection for any given job is driven by many factors, such as availability, timing, any special job qualifications, and so on. However, we are aiming for the MAJCOMs to include Thor's Leaders for consideration for key non-weather jobs such as operations support squadron commander or director of operations, as well.

So, you're asking yourself now: "How do I get on the list?"

The Thor's Leaders list is dynamic, and will be established after the first of each calendar year by selection board. Consideration criteria is for all lieutenant colonels and selects, and majors within two year in-the-zone-eligibility for lieutenant colonel. You must also be a worldwide volunteer to meet the board. Selection is totally records-driven. The board scores the records and top scoring records make the list.

So what makes up a top scoring record? My observations from the board: first and foremost is duty performance. The record must document superior performance during the officer's career -- period -- in hard-hitting bullets that document achievement and impact.

Do the endorsements clearly call for command and resident professional military education, or does the officer have a string of "continue to challenge" remarks (comments like these don't im-

press the board!)?

Does the record show consistent "top slice" designation? Has the officer won awards -- either military (i.e., officer of the year) or professional (Best, Williams, Moorman)?

Next comes depth and breadth of experience. What levels of responsibility has the officer held? What leadership has the officer exhibited? Has the officer homesteaded at one location, or have they sought and successfully held a series of increasingly challenging jobs.

Has the officer completed the required level of PME? In residence? If so, did they win distinguished graduate honors? Does the officer have a graduate degree? If selected for an Air Force Institute of Technology resident course, did the officer finish the degree? (If not, try to get it done. This is also not a good point for the records review).

The bottom line is that if you want to be selected for Thor's Leaders, you can improve your chances by optimizing those things you can control, like doing your job as well as it can be done; eagerly seek out increased challenge and responsibility; grow technically through advanced education and professionally through PME -- and get the latter done as soon you're eligible.

Get performance feedback from your boss often. Make sure you seek out guidance and counsel about your career so you can make informed choices that meet both the needs of the Air Force and satisfy your personal goals and desires.

Don't let the system manage your career for you. Remember, it's your career!



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FOCUS



This mural hangs in the entryway to the expanded AFSOC headquarters.

Air Force Special Operations Command was created May 22, 1990. It is a major command and the Air Force component of the U.S. Special Operations Command, a unified command. Their mission is to stay a step ahead in a changing world, delivering special operations power anytime, anyplace. To find out how Air Force Weather is helping towards this goal, see Pages 12-15.



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AWS at AMS



They came, they saw, they were impressed! That was the way Headquarters Air Weather Service came across at the 75th Annual Meeting of the American Meteorological Society held at the Loews Anatole Hotel in Dallas, Texas, Jan. 15-20, 1995.

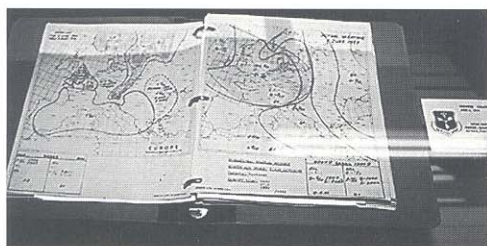
More than 1,500 meteorologists from around the world were in attendance to listen to seminars, participate in workshops and browse through the hundreds of booths set up by weather hardware and software manufacturers.

The AWS booth was manned by five representatives from several AWS units: Air Force Global Weather Central, the U.S. Air Force Environmental Technical Applications Center, the Combat Weather Facility, along with several members of the headquarters staff.

The booth was a big hit with conference attendees and was a magnet for Air Force weather personnel, both active duty and retired.

The first edition of the new OBSERVER magazine was unveiled at the conference and drew rave reviews from all. Thanks to recently-departed AWS public affairs chief TSgt. Bill Rhodes and new AWS PA, SSgt. Steve Elliott, the OBSERVER is setting the standard in military weather publications.

Pictured here are just a few of the sights from the 75th Diamond Anniversary of the AMS. Next year's conference will be held in Atlanta, Ga.



(Clockwise from top left) Capt. Phil Reding from the Combat Weather Facility talks to Joshua Wurman from the University of Oklahoma about the global positioning system (GPS) used in the Manual Observing System (MOS). Air Force Director of Weather, Brig. Gen. Thomas J. Lennon, discusses a new system with Darryl Barney, a systems analyst with Sterling Software. SSgt. Russ Louk, CWF, explains a temperature-dew point sensor to AMS guests Dave Gulati and Don Kuhns. Capt. Phil Stone, from the U.S. Air Force Environmental Technical Applications Center, was one of the many presenters representing Air Weather Service. The original D-Day forecast which gave Allied troops the go-ahead for invasion Dec. 6, 1944, was a popular item in the AWS historical display. The display was part of the AMS' 75th Anniversary celebration.



All photos by SSgt. Steve Elliott

Officer Opportunities

An AFIT degree can advance your career

Capt Tim Hutchison
Air Weather Service
Chief of Personnel

In last month's column, I focused on the many job opportunities available to you as a weather officer after your initial assignment.



These included assignments to base weather stations, supporting either Air Force or Army, and the various weather centers. At this point of your career, you are at the four- to six-year point, have had two assignments and that nagging question once again arises—Now what?

One of the first crossroads you will or have already come to in your career is that of obtaining advanced, post graduate education. Promotion board feedback routinely indicates that while your job performance, breadth of experience, and leadership skills are most indicative of an officer's future

potential, advanced education is a valuable asset and can be the "tiebreaker" in the records review and scoring process.

The crossroads?? Whether to obtain an advanced degree, and, if so, will it be an advanced academic degree (AAD) in atmospheric sciences through the Air Force Institute of Technology (AFIT) or a non-weather AAD, such as in Business Administration or Information Technology. Which one you choose, depends initially on the past, i.e. your GPA in your undergraduate work, and your GRE scores. Beyond that, the choice really depends on the types of jobs you want "access" to during your mid to late captain years.

For this month's article we'll focus on the former option, that of obtaining an AAD through AFIT and briefly touch on some of the job opportunities available once you've completed your degree.

Once you've obtained AFIT eligibility and notified Air Force Military Personnel Center that you want to attend AFIT via an AF Form 90, AFMPC will notify you if you were selected to attend AFIT the following year.

Typically, this notification occurs in the October-December timeframe. Based on what specialties you're qualified for (e.g., Dynamic Meteorology, Physical Meteorology, Solar and Space Sciences, etc.), you will either be notified you will be attending AFIT in residence at Wright-Patterson AFB, Ohio, or at civilian university (Florida State University, Texas A&M, Penn State, Utah State, Colorado State, etc.). Normally, this will occur between January and March.

Today, the in-residence AFIT

program is limited to the Solar and Space Sciences specialty, however an expansion of their curriculum to include other specialties may occur as soon as this coming school year.

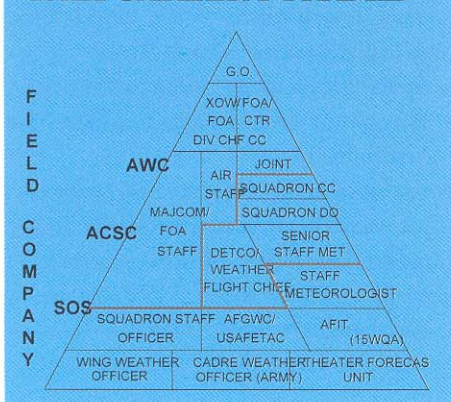
What should be your focus? To put it simply—FINISH! The Air Force invested both time and money in your AFIT assignment, and your primary goal is to complete the advanced degree. Due to the often rigorous course and research work, some officers are unable to complete their thesis work prior to the end of their AFIT assignment. While beginning your next assignment obviously is a high priority, it's essential you keep plugging towards your MS completion. The farther you get from the school and the more involved you get in your job, the easier it is for a mere two months of work to "finalize" becomes 18 months of procrastination that culminates in an uncompleted degree.

Next month's article will focus on the types of jobs you can go to following your AFIT assignment. Remember—You're not alone out there when it comes to career guidance. Your supervisors, senior leaders and the AFMPC assignments officer can provide tremendous insight to guide you in your Air Force career.

This column is written specifically to meet your needs and concerns. If you have specific career questions, or issues which you need addressed, contact me and I'll either answer them in future columns or call you back. Write to me at: HQ Air Weather Service, Chief of Personnel (AWS/RMP), 102 West Losey St, Room 105, Scott AFB IL 62225-5206 or DSN 576-4895, ext 344.

You can also contact me through email at "Hutch@hqaws.safb.af.mil".

15XX CAREER PYRAMID



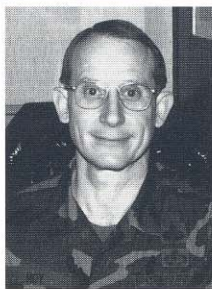
It takes everyone



A vast spectrum of people help put out the weather product

CMSgt. Jim Hoy
Air Force Weather
Senior Enlisted Advisor

“The briefing begins with a weather report ...”



Some things never change. How many weather men and women have been in the same position -- the first briefer?

In the Sept. 24, 1994, edition of the *Washington Post* was an article entitled “Nerve Center at Sea for Land Operations.” The author, Bradley Graham, who was aboard the U.S.S. Mount Whitney, described the joint operations center for U.S. military operations in Haiti.

While the operation is largely an Army operation, according to Graham, the joint operations center is aboard ship. He describes how the commander receives a briefing every afternoon which begins with the weather.

But this article isn't about weather operations -- it's about Air Force Weather people. A quick review of several manpower documents around Air Force Weather gives a glimpse of the many skills that it takes to present that first weather briefing.

While there are about 3,400

people within the weather specialty, it takes another 500 people in various specialties to get our product out the door.

Along with computer operators and programmers, take a look at some of the other skills assigned to AFW: inventory, material storage, supply management, force management, security police, personnel, education and training, manpower, visual information, financial management, special investigations, first sergeants, engineers, information management, navigators, and pilots -- a civilian and blue-suit force, complemented by dedicated contractors.

For instance, at Air Force Global Weather Central, Offutt AFB, Neb., the manpower mix is approximately 50 percent weather specialties, 35 percent other specialties (primarily communications and computers), and 15 percent contractors. They are all focused on one product -- that weather briefing.

As the Air Weather Service mission statement reads: “Total force professionals arming America's combat forces with the winning edge -- the world's best military weather capability.” So, stay tuned over the next few months as we explore the contributions which the various specialties make to our production of weather information for the warfighters.

Do you have questions, concerns, or something you would like to see addressed in this column? Contact me at: HQ USAF/XOW, 1490 Pentagon, Washington, D.C. 30330-1490, or call DSN 224-7410.



AWS Quality

On the right track

John J. Bartrum

HQ AWS Quality Advisor

Over the past year, Air Weather Service as a Field Operating Agency (FOA) has pressed on in the quality arena. The senior leaders began the strategic planning process in Feb 1994.

A strategic plan is a game plan for the future that sets a direction and focus for the organization. The strategic planning team has developed a set of values, principles, vision, and mission statement supported by a five-bullet mission statement description.

The team also identified key customer groups and developed a list of needs and expectations or requirements they believe these customers require from the FOA.

The team is now surveying key customers to validate these requirements and provide them with an opportunity to comment on the products and services provided by the FOA.

The survey results will help us properly allocate our resources to align them with our customer's needs. The compiled information will be invaluable to the team in helping them focus and refine our efforts to maximize the return on our resources.

Customer requirements are the driver in the strategic planning process. The validated customer requirements will be used to create the FOA's Key Result Areas (KRAs).

KRAs are major categories of customer requirements that are critical

to the success of the organization. These KRAs will then become the focus for the strategic planning effort. The team will do a gap analysis to assess the difference between the present capability and the future state for each KRA.

This information will then be used to develop the supporting goals and objectives for moving us to our desired state for each KRA.

Once the plan has been developed it will be deployed throughout the FOA to allow units to develop action plans aligned to these goals and objectives.

If you would like any additional information concerning the FOA's strategic planning process, contact John Bartrum at the HQ AWS Quality Improvement Division (HQ AWS/RMX), DSN 576-5654, ext. 493.

AIR WEATHER SERVICE CORE VALUES

INTEGRITY

Is the commitment to truth and high personal values — keeping our word and performing our duties to the best of our abilities. It is an essential element of every job in AWS.

PATRIOTISM

Is the love of country. It is putting the greater good of the country above the good of the individual. It is why we serve.

COMPETENCE

Is the skill and knowledge required of our people to successfully perform our jobs. Continuing personal and organizational commitment to growth in skills and expertise is essential to best accomplish our mission.

SERVICE

Is the commitment to anticipate and the tenacity to meet our customers' requirements. It is in our name because that is what we are about. Our focus is to produce quality products — technology, equipment, centralized weather service — for our country's war fighters.

TEAMWORK

Is all of us pulling together — each contributing special skills to accomplish our mission.

COURAGE

Is standing up for what we believe is right. It is the essential element in trusting our people to make the decisions needed to execute our mission.

Demystifying promotions

Master's degrees and promotability

(Editor's note: The following story was provided by Air Force personnel officials. It is the first of a series of regular articles designed to help take the mystery out of the promotion process.)

WASHINGTON, D.C. (AFNS) — You don't need a master's degree to be promoted to major, but it might be a "tiebreaker."

That's the conclusion of a recent review of the impact of advanced degrees on officer promotions.

An AFMPC study of promotion board results from the last four major boards and the last three lieutenant colonel and colonel boards was prompted by two perceptions within the officer force: First, a perception that a captain must have an advanced degree in order to be promoted to major; and second, that a captain without an advanced degree is guaranteed to be a "non-select" if he or she receives a "promote" recommendation on their Promotion Recommendation Form, or PRF, from his or her senior rater.

The study results revealed the following facts:

-- A majority of the officers meeting the majors board over the past four years had an advanced degree.

-- Officers with an advanced degree were selected at a higher rate than officers without an advanced degree.

-- Officers with "promote" PRF

recommendations were promoted with and without an advanced degree.

-- As an officer progresses up the grade ladder, the percentage of eligibles with an advanced degree increases significantly, but the promotion opportunity decreases for both those with and those without an advanced degree.

Overall results for officers competing for promotion to the grades of major, lieutenant colonel and colonel were:

For promotion to major:

— 68 percent of the officers meeting the boards in-the-primary zone, or IPZ, had an advanced degree; 74 percent of all IPZ officers were selected for promotion.

— 45 percent of the officers meeting the boards IPZ had a "promote" PRF recommendation; 43 percent of all IPZ

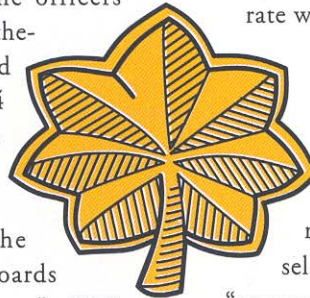
"promotes" were selected for promotion.

— 40 percent of the pilots had an advanced degree; the pilot promotion rate was 81 percent.

— 36 percent of the pilots meeting the boards with a "promote" PRF had advanced degrees; their selection rate was 67 percent. The selection rate for those with a "promote" and without an advanced degree was 32 percent.

— 64 percent of the navigators had an advanced degree; the navigator select rate was 77 percent.

— 60 percent of the navigators meeting the boards with a "promote" PRF had advanced degrees; their selection rate was 65 percent. The selection rate for those with a "promote" and without an advanced degree was 32 percent.



Do you need a master's degree to be promoted?

According to Maj. Gen. Burt Davitte, Air Force Military Personnel Center commander, "It depends on how strong the rest of an officer's whole-person record is. It's up to each officer to evaluate his or her record and determine whether it needs a 'plus up' with an advanced degree."

— 79 percent of the non-rated officers meeting the boards had completed their advanced degrees; the non-rated selection rate was 71 percent.

— 73 percent of the non-rated officers meeting the boards with a “promote” PRF had advanced degrees; their selection rate was 51 percent. The selection rate for those with a “promote” and without an advanced degree was 13 percent.

For promotion to lieutenant colonel:

— 87 percent of the IPZ officers meeting the boards had an advanced degree; the overall IPZ select rate was 63 percent.

— 60 percent of the officers meeting the boards IPZ had a “promote” PRF recommendation; 39 percent of all IPZ “promotes” were selected for promotion.

— 79 percent of the pilots had an advanced degree; the pilot promotion rate was 74 percent.

— 77 percent of the pilots meeting the boards with a “promote” PRF had advanced degrees; their selection rate was 56 percent. The selection rate for those with a “promote” and without an advanced degree was 8 percent.

— 84 percent of the navigators had an advanced degree; the navigator select rate was 59 percent.

— 83 percent of the navigators meeting the boards with a “promote” PRF had advanced degrees; their selection rate was 44 percent. The selection rate for those with a “promote” and without an advanced degree was 4 percent.

— 90 percent of the non-rated officers meeting the boards had completed their advanced degrees; the non-rated selection rate was 61 percent.

— 87 percent of the non-rated officers meeting the boards with a

“promote” PRF had advanced degrees; their selection rate was 43 percent. The selection rate for those with a “promote” and without an advanced degree was 8 percent.

For promotion to colonel:

— 94 percent of the IPZ officers had an advanced degree; the overall IPZ select rate was 42 percent.

— 77 percent of the officers meeting the boards IPZ had a “promote” PRF recommendation; 26 percent of all IPZ “promotes” were selected for promotion.

— 92 percent of the pilots had an advanced degree; the pilot promotion rate was 45 percent.

— 92 percent of the pilots meeting the boards with a “promote” PRF had advanced degrees; their selection rate was 26 percent. The selection rate for those with a “promote” and without an advanced degree was 11 percent.

— 95 percent of the navigators had an advanced degree; the navigator select rate was 29 percent.

— 94 percent of the navigators meeting the boards with a “promote” PRF had advanced degrees; their selection rate was 18 percent. The selection rate for those with a “promote” and without an advanced degree was 5 percent.

— 96 percent of the non-rated officers meeting the boards had completed their advanced degrees; the non-rated selection rate was 46 percent.

— 96 percent of the non-rated officers meeting the boards with a “promote” PRF had advanced degrees; their selection rate

was 32 percent. The selection rate for those with a “promote” and without an advanced degree was 13 percent.

Having an advanced degree is just one factor considered in the promotion process. Promotion boards evaluate records using the “whole-person” concept and are briefed that performance of primary duties and demonstrated leadership abilities are more important than other considerations.

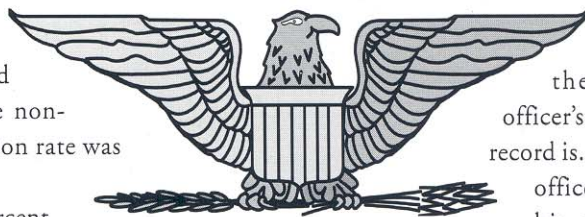
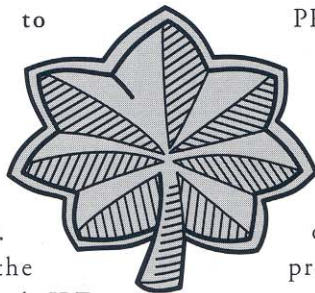
Factors included in the “whole person” assessment include job performance; leadership; professional competence; breadth and depth of experience; job responsibility; academic and professional military education; and specific achievements.

According to interviews of promotion board members from the last three boards held at AFMPC, job performance, as documented in performance reports throughout an officer’s career and in the PRF rendered prior to a promotion board, is the most important factor in promotion success.

The board members said they placed the greatest weight on job performance when they evaluated an officer’s potential for promotion. Board members rated advanced education as the least important of the eight whole-person factors.

However, board members also indicated that an advanced degree could be a “tiebreaker” between two otherwise equal records.

Do you need a master’s degree to be promoted? According to Maj. Gen. Burt Davitte, AFMPC commander, “It depends on how strong the rest of an officer’s whole-person record is. It’s up to each officer to evaluate his or her record and determine whether it needs a ‘plus up’ with an advanced degree.”





Air Force Special Operations Command

MISSION

**America's specialized
air power ... a step
ahead in a changing
world, delivering
special operations
combat power anytime,
anyplace.**

Article compiled by
AFSOC Operations Weather Staff

The size, scope and fortunes of Air Force special operations forces have ebbed and flowed since they were established to support the allies in both the China-Burma-India and European theaters during World War II.

Air Force Special Operations Command was born in 1983 as the 23rd Air Force and elevated to major command status in 1990. AFSOC consists of the 16th Special Operations Wing (SOW) and the 720th Special Tactics Group at Hurlburt Field FL, the 352nd Special Operations Group (SOG) at RAF Mildenhall UK, and the 353rd SOG at Kadena Air Base, Japan.

The 16th SOW is primarily responsible to the Central, Atlantic and Southern Commands. The 352nd SOG serves as the Air Force component to Special Operations Command Europe while the 353rd SOG serves as the Air Force component to Special Operations Command Pacific. Finally, there are two air reserve component groups: the Air National Guard's 193rd SOG located at Harrisburg PA, and the Air Force Reserve's 919th SOW, Duke Field, Fla.

AFSOC has a proud history of service to the nation and the world. Elements of the command participated in WWII between 1943 and 1945, the Korean War from 1951 to 1953, Southeast Asia conflict from 1961 to 1975, Operation Desert One (the Iranian hostage rescue attempt) in 1980, Operation Urgent Fury in Grenada in 1983, Operation Just Cause in Panama in 1989 and 1990, Operations Desert Shield and Desert Storm in 1990/91 and numerous nation-building and humanitarian assistance missions during the same periods.

AFSOC's official missions include unconventional warfare, direct action, special reconnaissance, Foreign Internal Defense, humanitarian assistance, psychological operations, counterterrorism, personnel recovery and counter-narcotics. As the Air Force component of the United States Special Operations Command (USSOCOM), AFSOC routinely operates within the joint environment.

Similarly, AFSOC DOOW is responsible for functional management of all Air Force Special Operations Weather Teams (SOWTs) as well as the SOWTs subordinate to the USSOCOM ground component, the United States Army Special Operations Command.

This responsibility entails the training and equipping of all weather SOF personnel keeping "jointness" at the forefront. Accordingly, AFSOC DOOW also interacts with its Navy counterpart, especially with the goal of optimizing tactical weather support to the Navy SEALs.

Air Force weather people, who are military parachutists, wear the distinctive "grey beret" which was first worn by SOWT members in the Viet Nam War.

The following list gives you some idea of how active these weather professionals have been recently:



1989 - JUST CAUSE, Panama.
1990 - DESERT STORM, Kuwait.
1991 - PROVIDE COMFORT,
Iraq.
1992 - RESTORE HOPE,
Somalia.
1993 - PROVIDE
PROMISE, Bosnia.
1993 - CONTINUE
HOPE, Somalia.
1994 - SUPPORT DE-
MOCRACY, Haiti.
1994 - SUPPORT
HOPE, Rwanda.
1994 - UPHOLD DE-
MOCRACY, Haiti.

SOWT MISSION

The SOWT mission is to provide specialized meteorological, environmental, and oceanographic services for worldwide employment of joint special operations forces. The mission is simply stated; but, performing the mission requires rigorous training beyond that necessary to accurately observe and forecast the weather and involves complex and often innovative methods of providing support.

In addition to normal in-garrison

duties, SOWTs deploy to virtually all corners of the world. They are continuously in the highest state of readiness and often deploy with very little notice as a part of the advance command and control element. Consequently, every team member must be highly trained and well equipped to meet the challenges demanded by ambitious, but realistic, joint exercise schedules as well as wartime deployments, real-world contingencies, and military operations other than war.

Air Force Special Operations Command

Support to USSOCOM's unique missions requires a commensurate uniqueness in how the SOF weather personnel deliver their support. For example, nearly 60% of SOF METOC personnel are jump qualified.

These forces are carefully blended with nonjumpers to shape the SOF weather experts into a force-multiplying team. This ensures the necessary technical knowledge to provide the best meteorological and oceanographic support possible, often in the worst conditions possible.

With the global SOF mission, our SOWTs must be capable of observing and forecasting from virtually any platform in any theater of operations. They are often subjected to austere conditions, high physical risk, and situations requiring maximum use of survival techniques.

Special operations weather people go wherever their customer goes. How do our weather forces feel about the demands and challenges offered by

special operations? We asked them, and in a few words ... they feel "involved and professional." In some of their own words:

"It's where the action is." (1st Lt. Derek West)

"It's where the action is." (1st Lt. Derek West)

"To be able to serve anytime, anyplace in the world." (SSgt. Mark Gustilo)

anytime, anyplace in the world." (SSgt. Mark Gustilo)

"I like deploying with the operators, seeing how my job affects their mission and getting immediate feedback." (SSgt. Carol Spradlin)

"I like deploying with the operators, seeing how my job affects their mission and getting immediate feedback." (SSgt. Carol Spradlin)

"It's a tough job that sees little or no public rewards due to its classified nature...[but we're]...the best trained and equipped weather professionals in the

United States Air Force." (TSgt. Ron Kellerman)

In recognition of the importance of providing these dedicated and talented people with the best technical support possible, USSOCOM is in the process of procuring state of the art data processing and tactical meteorological equipment.

Most notable is the new SOCRATES/METOC man-transportable weather station.

Interoperability problems among the service components have existed for a

considerable time. In an attempt to resolve these problems, a USSOCOM METOC Interoperability Plan was completed in October 1993 and continues to serve as our roadmap. One of the problems

which became evident in the plan was the SOF METOC need for a small man-transportable METOC computer system.

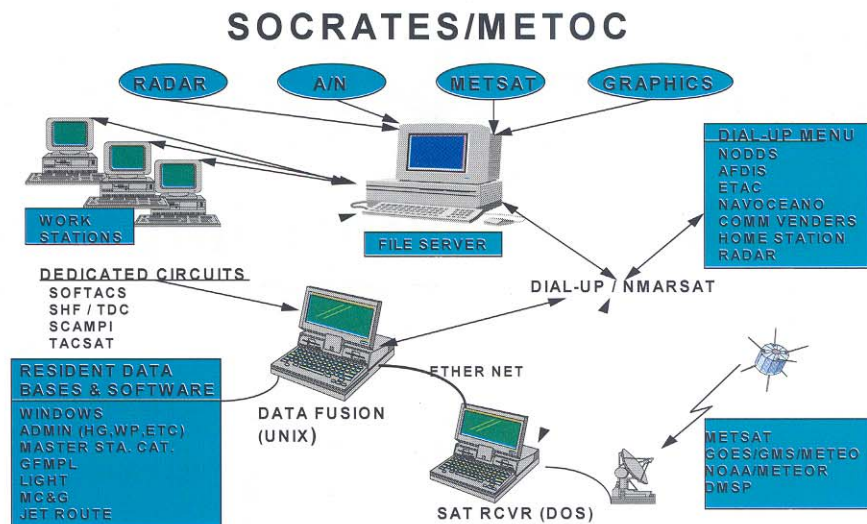
The solution was to obtain approval in the USSOCOM FY96 POM for a METOC variant of an existing USSOCOM system called the Special Operations Command, Research, Analysis, and Threat Evaluation System, or SOCRATES (see accompanying diagram on page 15).

USSOCOM successfully obtained the POM funds for the out years and to keep pace with technology, developed an acquisition strategy based on a modular procurement approach.



Special Operations Weather Team Locations

Special Operations Command, Research, Analysis, and Threat Evaluation System



Module I provides APT/WEFAX and dial-in capability in additions to keeping all the PC-DOS applications already available; Module II adds data fusion software in a UNIX operating environment; Module III adds high resolution geostationary imagery, and Module IV will add DMSP/HRPT satellite imagery.

U S S O C O M designated AFSOC/DOOW as executive agent to integrate/manage the procurement with the primary intent to purchase off-the-shelf as funds become available.

Due to the cost savings of this acquisition strategy, USSOCOM and the SOF METOC teams are able to have the flexibility and current technology they need now!

The fielding plan calls for 62 man-transportable

SOCRATES METOC computers with the ultimate goal of ensuring each SOWT receives at least one complete system.

With full deployment of SOCRATES/METOC, Special Operations Weather Teams worldwide will

have instant laptop access to the Air Force Global Weather Central, the Environmental Technical Application Center, the Defense Meteorological Satellite System, and other global METOC databases—in short, the most sophisticated meteorological technology in the world.

Since WW II, Special Operations Forces

“To be able to serve anytime, anyplace in the world.” (SSgt. Mark Gustilo)

“It’s a tough job that sees little or no public rewards due to its classified nature... [but we’re]...the best trained and equipped weather professionals in the United States Air Force .” (TSgt. Ron Kellerman)

have been fulfilling their responsibilities in our nation’s defense, and every step of the way Special Operation weather warriors have been integral members of the team.

The challenge and reward of responding to world crises, when weather support frequently means the difference between success and failure continues to attract some of the most outstanding weather professionals in the Air Force.

They have played a vital role and will continue to do so as long as needed “Any Time - Any Place.”



Better & faster

Global's product improvements

Col. Joseph Dushan
Commander

Air Force Global Weather Central is poised to rocket into the 21st century with more, better, and faster weather products than you've ever seen before.

Not only will our major computer systems be replaced with more powerful processors over the next few years, but our suite of numerical weather prediction (NWP) databases will rival those at other centers.

Combining these high-tech improvements with high-quality people will make AFGWC not only the largest military meteorological computer facility, but ensure it remains the best.

AFGWC's short-term improvements include Navy -Air Force Cooperation (NAVAF) efforts, Theater Forecast System (TFS) and Severe Weather Visualizations.

NAVAF: Exciting new NWP -- The days of AFGWC's forecasting dependence upon the Global Spectral Model are numbered. The GSM's 1980's-vintage science will be replaced with the latest version of the Fleet Numerical Meteorology and Oceanography Center's global forecast model, the Navy Operational Global Atmospheric Prediction System (NOGAPS).



MISSION

Builds the world's most comprehensive weather database and applies it in real-time to satisfy the worldwide operational requirements of Air Force combat forces, Army and joint combat forces, the National Command Authorities, Department of Defense, and multibillion-dollar sensitive National Programs controlled by the Secretary of the Air Force.

Preliminary NOGAPS-GSM comparison results show significant NOGAPS improvements through the first 24-hour forecasts and even better improvements over the GSM in the extended forecast periods.

AFGWC will receive NOGAPS operationally this Fall and provide real-time shipments to Automated Weather Dissemination System (AWDS) in Uniform Gridded Data Fields (UGDFs). Initially, NOGAPS UGDFs will have the same spatial resolution as the GSM.

Planned improvements will double the resolution and extend UGDF forecasts to 96 hours. All AWDS command sequences currently being used with the GSM will work with the NOGAPS data. Once NOGAPS UGDFs start to flow, forecasters should see a tremendous jump in accuracy -- so heads up! There'll be no more convenient excuses for avoiding AFGWC products!

AFGWC: Center of Excellence for METSAT -- The spirit of NAVAf interservice cooperation continues with meteorological satellite (METSAT) operations. As our counterparts in the Navy assume the Department of Defense role of global NWP, the AFGWC becomes the primary DOD METSAT center. Starting with the current 5D2-DMSP satellites,

AFGWC will be the DOD focal point for reception and processing of METSAT data for Air Force, Army, and Navy applications. Soon after receipt, AFGWC, will ship data to FNMOC for their use. The objective is to eliminate duplicate ingest and processing functions.

Theater Forecast System: Improved NWP Resolution -- Since Air Force Weather's global scale modeling needs will be met with the importation of NOGAPS data, the next logical step in our total NWP upgrade is to improve theater-scale forecasting.

AFGWC's Relocatable Window Model (RWM) has reached full maturity with last year's completion of five major science upgrades. Accurate forecast fields at 25nm resolution from several theaters are currently available via the AFGWC Dial-In Subsystem (AFDIS).

Further improvements are also underway. AFGWC is work

See AFGWC, continued on Page 22



Let's talk details

Our vision for the future

Lt. Col. Jud Stailey
Commander

Last month I wrote about how we're changing ETAC to prepare for the future—changing our computer systems, organization, and operations.

This month I'm going to expand on that vision to discuss what it will mean to you. I'll provide some interesting examples of how you will acquire and use climate information.



Weather Data—Come And Get it! Suppose you're working a project which requires weather data directly from our database—new facility or weapon system design, after-the-fact analysis, whatever.

Today we require a formal request for the data, then we pull the data, format it the way you want it, and send it to you. We usually turn these requests around quickly, but it takes a lot of work, and you have to wait while we do it.

In the future, when you need weather data you'll just come and get it. You'll dial into our systems, request the specific data, specify the format, and standby. Tape robots will pull and load the right tape and our computer will pull off the data and send it to you. If the amount of data isn't too large, you'll have it in a few minutes. No paperwork, no waiting.

Out The Door To War—We'll Help! The balloon goes up and you're off to the AOR. Unfortunately, it's not to the area you were expecting, and you need weather tools right away.

Today you'd grab whatever books and computer disks you have and hope that nothing important happens in theater before you get the rest of the information you need. In the future you'll grab the CD-ROM (or the latest technology equivalent) for the theater (there'll be one for each region).

That one device will contain the regional climatology,

hypertexted with animated loops of weather front patterns, typical satellite pictures, etc; electro-optical climatology for the area; cloud ceiling atlas for the region; upper air climatology for the world; and other useful data sets and utilities.

But that's not all.

If you're going to forecast, you'll want point specific information for an airfield you may never have heard of. So you'll dial into our computer, check to make sure there's some data available for the location, and run the program which models forecast ceiling and visibility based on current ceiling, visibility and wind conditions. Get diverted to a different place in theater? No problem—just dial in from there and repeat the process.

Want To Just Pretend? We'll Do Modeling and Simulation, Too! Almost everything we do in the Air Force—combat ops, logistics, intel—is impacted by weather in some way. The Air Force is going to model operations so we can try situations out and learn the best way to handle them before we have to do it for real. Weather will be part of those simulations. We'll open our data bases so you can pull weather data as you need it for your simulation.

Will There Still Be People At ETAC? You Bet! I'm not suggesting that ETAC will be running on autopilot. We'll still provide tailored climatologies when that's what the customer needs. But we'll have greater flexibility in formats—for example when appropriate we'll provide visualized products through direct communication channels.

If it sounds like we're excited about our future—we are! Come on along with us!

MISSION

Collect, save, and apply worldwide weather data to generate environmental products in support of worldwide operations of the Air Force, Army, and other DoD and US Government agencies.

Centralized support

What we're doing for you



MISSION

Plan, program and identify the best technology available to put into Air Force Weather equipment acquisition programs. Ensure AFW people have the right mix of initial and recurring training to meet customers' current and future deployed and in-garrison weather product needs.

Air Force Space Forecast Center (AFSFC) System Replacement.

Upgrades AFSFC's four Digital VAX computer systems and current database environment with a system of new computers. The upgrade is required to process the new Solar Prediction model and the Follow-on Global Ionospheric, Magnetospheric, Neutral Atmospheric, and ISEM models.

STATUS: Contract Award scheduled for FY99. AWS MANAGER: Capt. Chip Parker.

Global Theater Weather Analysis and Predictions System.

Provides for the replacement of Air Force Global Weather Central's Advanced Weather Analysis and Prediction System with competitively-acquired hardware to host a theater-scale numerical weather prediction model and associated applications software to compute aviation and maneuver impact variables such as clouds, present weather and surface visibility, turbulence and icing, and thunderstorms all supporting Theater

Battlefield Management needs.

STATUS: Contract Award scheduled for FY96. AWS MANAGER: Capt. John Pino.

Satellite Data Handling System (SDHS) II. Upgrades SDHS hardware and adds the capability to access and retrieve satellite data and meteorological fields from a centralized database via a user-friendly, graphical workstation.

STATUS: Contract Award scheduled for FY99. AWS MANAGER: Capt. Lou Zuccarello.

U S A F Environmental Tactical Applications Center (USAFETAC) Replacement.

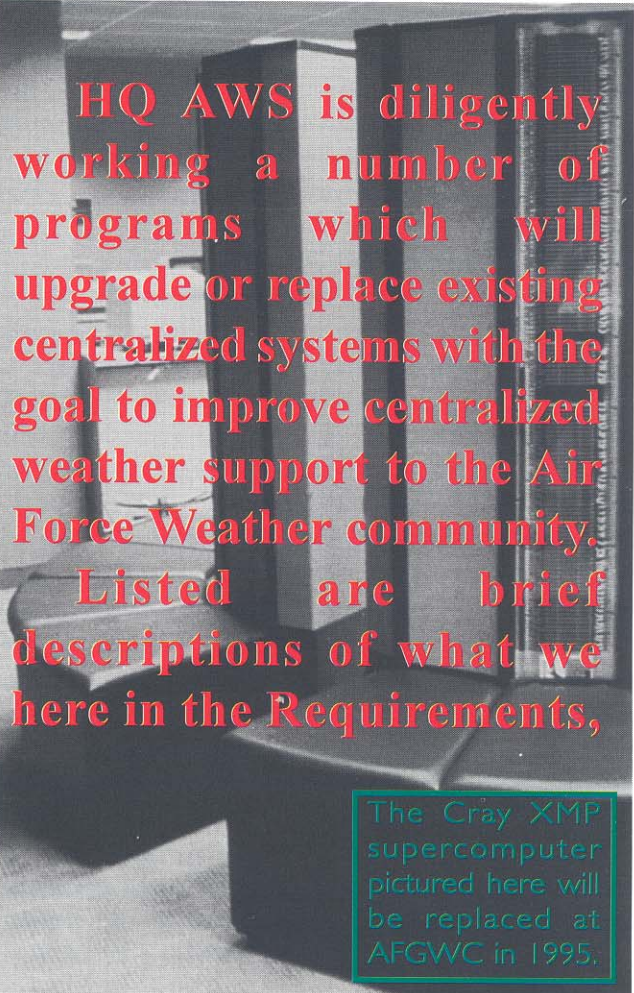
This program replaces the mainframe computer systems at USAFETAC, Scott AFB, Ill., and OL-A, Asheville N.C., with a cluster of workstations and state-of-the-art data storage devices. This enhancement is needed to improve climatological support to Department of Defense customers worldwide.

STATUS: Contract Award

scheduled for FY96. AWS MANAGER: Capt. Lou Zuccarello.

Weather Information Processing System (WIPS) Replacement. A hardware/software replacement for the current WIPS at AFGWC and associated Central Database Management System to maintain and expand current capabilities.

STATUS: Contract Award scheduled for FY98. AWS MANAGER: Capt. John Pino.



HQ AWS is diligently working a number of programs which will upgrade or replace existing centralized systems with the goal to improve centralized weather support to the Air Force Weather community.

Listed are brief descriptions of what we here in the Requirements,

The Cray XMP supercomputer pictured here will be replaced at AFGWC in 1995.



What's in the works Upgrades & improvements

Hyperchannel Replacement: Replaces congested, outdated local area network providing data communications between computer systems at Air Force Global Weather Central (AFGWC). These systems produce centralized atmospheric environmental products for U.S. combat forces, unified and specified commands, Air Force MAJCOMs, Army MACOMs, national programs, and other agencies as directed by the Secretary of the Air Force.

STATUS: Contract Award scheduled

for FY97. **AWS MANAGER:** Mr. Bradley Marler.

AFGWC Software Improvement Program (ASIP) 5.2: Long-range AFGWC software modernization effort mandated by GSA as a result of 1982 GAO audit. ASIP 5.2 will correct the Julian hour flag problem and complete software improvement on WIPS.

STATUS: RFP released Sep 94; anticipate modernization effort to commence 1FY96. **AWS MANAGER:** Mr. Glenn Shelley.

Weather Information Processing

System Expansion

(WIPS-E): Provides an expanded processing capability as the first upgrade to AFGWC's WIPS. This expansion meets increased requirements resulting from Navy-Air Force cooperative agreements, the AFGWC Software Improvement Program, Theater Battle Management efforts, and the Cloud Depiction and Forecast System.

STATUS: Equipment delivery completed Jan. 95. **AWS MANAGER:** Mr. Glenn Shelley.

Satellite Data Handling System Upgrade (SDHSU): Replaces outdated SDHS computers to extend service life, and adds ingest and processing of GOES-NEXT and foreign geostationary

MISSION

Provide standard systems management for USAF meteorological equipment, weather center computer hardware and software, and long-haul communications.

satellite data. SDHS processes satellite and surface-based weather data to generate mission-tailored weather products for National Programs and Air Force and Army operations.

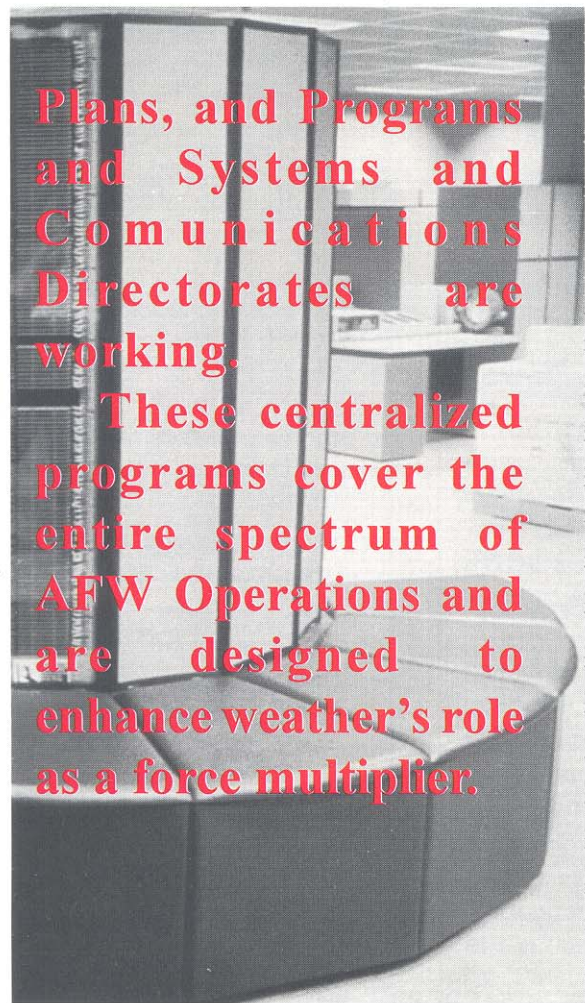
STATUS: Site III upgrade in progress; expect replacement beginning 3FY97. **AWS MANAGER:** Capt. Mark Seifert.

Advanced Computer Flight Plan (ACFP): Replaces leased Optimized MAC Computer Flight Plan system and AF-owned Flight Simulation Model. ACFP provides mission planners best route computer flight plans, analyzing digitized aircraft performance data, navigational data, and latest weather data.

STATUS: Last six enhancements completed Sept. 94. **AWS MANAGER:** Capt Daniel Purdy

Space Environmental Technology Transition (SETT): Implements new space environmental models and applications software at 50th Weather Squadron (formerly Air Force Space Forecast Center) to improve warnings, forecasts, and analyses provided to space system operators for strategic/tactical warning and attack assessment.

STATUS: First three of nine models in system integration phase; expect



Plans, and Programs and Systems and Communications Directorates are working.

These centralized programs cover the entire spectrum of AFW Operations and are designed to enhance weather's role as a force multiplier.

See SY, continued on Page 22

USAFETAC distributes GHF CD-ROMs

The U.S. Air Force Environmental Technical Applications Center at Scott AFB, Ill., will soon distribute copies of the Global Historical Fields (GHF) CD-ROM (Version 1.0, Aug. 1994), which is produced jointly by the Navy and NCDC.

Containing sea level pressure analyses dating from 1899 and upper air temperature and pressure analyses dating from as early as 1946, this CD is an excellent reference/training tool for staffmets, analysts, and forecasters.

For more information call the USAFETAC Operations Support Branch at DSN 576-4024.

NOAA launches satellite

At 2:02 a.m. Dec. 30, 1994 at the Vandenberg AFB, Calif., launch facility, the NOAA-14 polar-orbiting environmental satellite was launched for the National Oceanic and Atmospheric Administration.

The 32-year-old Altus-E launch vehicle performed perfectly, placing the new spacecraft into the predetermined orbit.

Want to print your AFTOX?

As weather stations upgrade to the Windows environment and with laser printers, many people have experienced problems printing graphics from their Disk Operating System (DOS) utility programs, such as the Air Force Toxic Corridor Program (AFTOX).

Here is a "work-around" to print AFTOX from your laser printer:

1. You must be using DOS Version 5.0 or higher and your printer must not be on a Local Area Network.

2. Use the "Graphics" command to load the printer you are using. (Type "HELP" from the DOS directory for a description of this command.)

3. For example, to print to a Laserjet II printer: go to the DOS directory and type "graphics lasejetii"; start the AFTOX program; when the program asks you if you want to print, say "YES"; press the "shift" and "print screen" keys simultaneously.

DOS HELP contains a list of other printer drivers under the "graphics" command. If your computer has sufficient memory, the command can be loaded from the "AUTOEXEC.BAT" file, or create a separate batch file to run the "graphics" command prior to starting the AFTOX program. These procedures should work for other non-Windows programs (STABLE, Skew-T Pro).

For more information, contact TSgt. Mike Nelson, HQ AWS/XOT, DSN 576-4721, ext. 426. Nelson's Internet electronic mail address is: "nelson@hqaws.safb.af.mil"

AFDIS - Now And The Future

The Air Force Dial-In System (AFDIS) has come a long way since its inception in 1992.

You, the customer, identified the improvements you wanted. We listened. The software (version 3.1) currently in the field is a reflection of your inputs.

World-wide coverage with thousands of charts, Relocatable Window Maps, observations, TAFs, bulletins, vector graphics, SGDB satellite shots, and gridded data are now available.

In early 1996, expect AFDIS to "step into" the 21st century with the ability to access data via satellite, providing 99 percent reliability in communications.

Other improvements are highly dependent on current fiscal constraints. We will strive to continue AFDIS improvements at every opportunity.

Our vision of AFDIS' future still

depends on the customer. We need your input in order to continue to improve.

What changes can be made? What do you like or dislike about the current version? What are your requirements for any future versions?

If you have any questions or comments about AFDIS, call 1st Lt. Bryan Adams at DSN 576-4110, ext. 207.

USAFETAC joins the World Wide Web

USAFETAC, the Air Force climate center, has opened a home page on the WWW for web users who want to quickly learn more about ETAC.

The service is currently available to users on UNIX platforms, but upcoming technology should provide access to PC users by the end of the year.

Available information includes the text of the ETAC tech note describing the center's capabilities, products, and services, as well as a variety of other information about the organization.

To access ETAC's home page, open a URL to <http://thunder.safb.af.mil/html/ETAC.html>.

What's new on the AFW BBS

Do you know all there is to know about the NGM Output Data? Maybe not.

For instance, do you know the height of the temperature (T1, T3, T5) layers in the output data?

There's a way to compute the heights of these layers to a foot value.

Information about this and many other operations-related issues can be

See, OH BY THE WAY, continued on Page 22



Meritorious Service Medal

SMSGt. Andrew J. Miller, 56th OSS/OSW, Luke AFB, Ariz.
 MSGt. William R. Mitchell, Jr., 56th OSS/OSW, Luke AFB, Ariz.
 Maj. Roger D. Coats, Headquarters Air Force Global Weather Central, Offutt AFB, Neb.
 MSGt. Edward S. Alexander, HQ AFGWC, Offutt AFB, Neb.
 MSgt. Laura S. Angel, OL-A, 18th Weather Squadron, Fort Belvoir, Va.



Air Force Commendation Medal

SSgt. Kevin O. Johnson, 437th OSS/OSW, Charleston AFB, S.C.
 TSgt. Richard P. Hofer, HQ AFGWC, Offutt AFB, Neb.
 TSgt. Raymond L. Pierce, HQ AFGWC, Offutt AFB, Neb.
 SSgt. Larry C. Ferrell, HQ AFGWC, Offutt AFB, Neb.
 SSgt. Kevin J. Truitt, HQ AFGWC, Offutt AFB, Neb.
 Sgt. Scott H. Pfender, HQ AFGWC, Offutt AFB, Neb.
 SrA. Stephanie D. Hammonds, HQ AFGWC, Offutt AFB, Neb.
 A1C William A. Ward, HQ AFGWC, Offutt AFB, Neb.
 TSgt. William J. Murtagh, OL-A, 18th WS, Ft. Belvoir, Va.
 TSgt. Andrew J. Hopwood, 18th WS, Fort Devens, Mass.
 SrA. Larry M. Overmyer, 18th WS, Ft. Devens, Mass.



Air Force Achievement Medal

SrA. Jacob P. Ballard, Det. 5, 50th Weather Squadron, Palehua, Hawaii (1st OLC)
 SSgt. Timothy R. Johnson, Det. 5, 50th WS, Palehua, Hawaii
 Capt. Katherine A. Motilak, HQ AFGWC, Offutt AFB, Neb.
 MSGt. Michael A. Zimer, HQ AFGWC, Offutt AFB, Neb.
 Sgt. Rodney L. Hamonds, HQ AFGWC, Offutt AFB, Neb.
 SrA. David A. Penne, HQ AFGWC, Offutt AFB, Neb.
 SrA. George J. Spratley, HQ AFGWC, Offutt AFB, Neb.
 A1C James D. Northamer, HQ AFGWC, Offutt AFB, Neb.
 Amn. Vincent A. Heath, HQ AFGWC, Offutt AFB, Neb.
 SrA. Bryan R. Pontius, OL-A, 18th WS, Ft. Belvoir, Va.

Army Achievement Medal

TSgt. David L. Tucker II, 146th WF, ANG
 SSgt. Robert W. Beveridge, 146th WF, ANG
 SSgt. Wayne R. Lacosse, HQ AFGWC, Offutt AFB, Neb.
 TSgt. Andrew J. Hopwood, 18th WS, Ft. Devens, Mass.



Air Force Good Conduct Medal

TSgt. Brian Siciliano, Det. 5, 50th Weather Squadron, Palehua, Hawaii (4th OLC)
 CMSgt. Jean M. Hugunin, HQ AFGWC, Offutt AFB, Neb.
 MSGt. Michael A. Zimmer, HQ AFGWC, Offutt AFB, Neb.
 MSgt. Angelita F. Lewis, HQ AFGWC, Offutt AFB, Neb.
 MSgt. Steven E. Gifford, HQ AFGWC, Offutt AFB, Neb.
 TSgt. David R. McConnell, HQ AFGWC, Offutt AFB, Neb.
 TSgt. Ronald L. Durbin, HQ AFGWC, Offutt AFB, Neb.
 SSgt. Mickael Archuletta, HQ AFGWC, Offutt AFB, Neb.
 SSgt. Michael D. Buchanan, HQ AFGWC, Offutt AFB, Neb.
 SSgt. Carol A. Mlynarek, HQ AFGWC, Offutt AFB, Neb.
 SSgt. Roxanne D. Gelb, HQ AFGWC, Offutt AFB, Neb.
 SSgt. David M. Blond, HQ AFGWC, Offutt AFB, Neb.
 SrA. Anthony S. Morence, HQ AFGWC, Offutt AFB, Neb.
 SrA. Steven D. Counis, HQ AFGWC, Offutt AFB, Neb.
 SrA. Gema M. Kepler, HQ AFGWC, Offutt AFB, Neb.
 SrA. Anthony B. Laurent, HQ AFGWC, Offutt AFB, Neb.
 SrA. James A. Pidge, HQ AFGWC, Offutt AFB, Neb.
 SrA. Sekvan G. Snow, Jr., HQ AFGWC, Offutt AFB, Neb.
 SrA. Christopher T. Trulove, HQ AFGWC, Offutt AFB, Neb.
 SrA. Michael I. Witte, HQ AFGWC, Offutt AFB, Neb.

Promotions



To First Lieutenant

Stephen Barish, Headquarters Air Weather Service, Scott AFB, Ill.
 Dale Brande, HQ AWS, Scott AFB, Ill.



To Master Sergeant

William R. Mitchell, Jr., 56th OSS/OSW, Luke AFB, Ariz.
 Bradley D. Shank, HQ AFGWC, Offutt AFB, Neb.
 Michael Sheldrake, HQ AFGWC, Offutt AFB, Neb.
 Paul D. Reynolds, HQ AFGWC, Offutt AFB, Neb.
 Garland K. Head, HQ AFGWC, Offutt AFB, Neb.
 Michael R. Daniels, HQ AFGWC, Offutt AFB, Neb.



To Technical Sergeant

Javier E. Anguiano, HQ AFGWC, Offutt AFB, Neb.
 Joseph D. Lett, Jr., HQ AFGWC, Offutt AFB, Neb.



To Staff Sergeant

Leonard F. Lewis, Jr., 164th Weather Flight, Air National Guard
 Shawn E. Pier, 122nd WF, ANG
 Karen J. Shelton, 11th WF, ANG



To Senior Airman

Curtis Beckhusen, 355th OSS/OSW, Davis-Monthan AFB, Ariz.
 Jason G. Bettis, HQ AFGWC, Offutt AFB, Neb.
 Seth T. Farnsley, Det. 7, HQ AFGWC, Tinker AFB, Okla.
 Jamie P. Holcomb, OL-A, 18th WS, Ft. Belvoir, Va.
 Thomas R. Bryant, 18th WS, Ft. Devens, Mass.



To Airman First Class

Todd V. Preimesberger, OL-A, 18th WS, Ft. Belvoir, Va.
 Karyn E. Shonk, HQ Air Weather Service, Scott AFB, Ill.

Education

CCAF Associates Degree in Weather Technology
 SrA. John E. Rhoden, 437th OSS/OSW, Charleston AFB, S.C.
 SrA. Larry M. Overmyer, 18th WS, Ft. Devens, Mass.
 NCO Academy Distinguished Graduate
 TSgt. Scott T. Klaiber, 56th OSS/OSW, Luke AFB, Ariz.
 WSR-88D Operation/Manager Course
 SrA. Mario B. Viray, 56th OSS/OSW, Luke AFB, Ariz.
 2nd Lt. Steven M. Callis, 437th OSS/OSW, Charleston AFB, S.C.
 TSgt. Jerry L. Scholl, 437th OSS/OSW, Charleston AFB, S.C.
 Weather Technician Course
 SrA. Jeffrey W. Renfrow, 437th OSS/OSW, Charleston AFB, S.C.
 Weather Satellite and Photo Interpretation Course
 SrA. Jeffrey W. Renfrow, 437th OSS/OSW, Charleston AFB, S.C.
 Masters Degree in Management
 Capt. Charles A. Rogers, HQ AFGWC, Offutt AFB, Neb.

Hails and Farewells

Retirements -- Capt. Raymond J. Tenpenny, 355th OSS/OSW, Davis-Monthan AFB, Ariz.
 MSgt. Laura S. Angel, OL-A, 18th WS, Ft. Belvoir, Va.
 Separations -- SrA. Larry M. Overmyer, 18th WS, Ft. Devens, Mass.

Awards

Charleston AFB, S.C., 437th Operations Group NCO of the Quarter - TSgt. Thomas C. Balsoma
 Charleston AFB, S.C., 437th Operations Support Sq. NCO of the Quarter - TSgt. Jerry L. Scholl
 Charleston AFB, S.C., Airman Leadership School Levittow Award - SrA. Carrie D. Roberts
 District of Columbia ANG "Tuskegee Airman" Award -- SrA. Jason C. Gregory, 121st WF, ANG

Badges

Senior Parachutist Badge - SSgt. James N. Ozdunde, 18th WS, Ft. Devens, Mass.
 Slovakian Parachutist Badge - SrA. Brandon G. Kindle, 18th WS, Ft. Devens, Mass.



working to replace the Cray supercomputer with a cluster of high-speed IBM workstations (SP-2s). Since the SP-2 can run several RWM windows simultaneously, more timely RWM output will be available to warfighters using AFDIS. RWM will also be the initial model of choice for all Theater Battlefield Management (TBM) weather fields.

The programed replacement for RWM, and the final solution to higher-resolution TBM output is our Global Theater Analysis and Prediction System (GTWAPS). An advanced technology demonstration of GTWAPS will be in place at Global this summer.

The demonstration is based upon computational research results from the Argonne National Laboratory. During the past two years, the lab has successfully produced high-resolution forecasts with new parallel, scalable computing technology.

Their initial efforts use the Penn State/National Center for Atmospheric Research mesoscale model, version 5 (MM5). Other state-of-the-art models

are also being investigated.

When GTWAPS reaches full maturity, a real-time mesoscale theater model will be available for all Theater Battlefield Management weather needs. These will include not only conventional NWP gridded output as we know them today, but also forecasts of surface visibility, specific weather phenomena, bases and tops of clouds, icing, turbulence, and thunderstorms.

Severe Thunderstorm Forecasting: New Visualizations -- In conjunction with RWM advances, advanced workstation techniques are being developed to improve severe thunderstorm resolution and accuracy on the Military Weather Advisory.

New visualization methods will help forecasters quickly recognize key thunderstorm variables. We'll test these this Spring and plan to put them in the hands of field forecasters this Fall.

AFGWC's Future -- Without a doubt, the upcoming years will be one of the most exciting periods in our history. State-of-the art atmospheric modelling with upgraded computer systems will be the heart of our weather analysis and forecasting mission.

SY, continued from Page 19



completion of remaining models Sept. 95. **AWS MANAGER:** Maj. Philip Nostrand.

Cloud Depiction and Forecast System (CDFS

II): Replaces CDFS mainframes, software operating systems, and systems analyst support. CDFS provides cloud analyses and forecasts and other specialized products/databases for National Programs and Air Force and Army operations.

STATUS: Contract Award anticipated 2FY95. **AWS MANAGER:** Maj. John Murphy.

Advanced Weather Analysis System (AWAPS): Replaces outdated, high-cost system of supercomputer and two mainframes with 5-6 workstations: complies with AF-directed open architecture standards; improves throughput and reliability; and cuts maintenance costs. AWAPS analyzes weather data, produces model predictions, and provides specialized weather products to worldwide military and civilian customers.

STATUS: Working to obtain approval to replace the supercomputer; anticipate replacement end of March 95. **AWS MANAGER:** Capt. Dave Musick.

Oh, By The Way, continued from page 20

found in the "general" library under the filename of "opsdiges.txt" on the Air Force Weather Bulletin Board System. For more information, call DSN 576-5768 or e-mail: "bbs.safb.af.mil."

AWDS Skew-T Tip

Does your station miss some useful indices from the sounding because your elevation makes them useless? Read on, here's a "work-around" for Skew-T indices for stations above 850MB.

1. For horizontal 850MB charts:

- "Show/Edit Raw Data" for each of the stations in the area (KGJT, KDEN, KLND, etc.).
- Change the 850MB temperature/wind data to read as same as the surface data.
- Select "Save Changes".
- Generate the chart using "Override Data" (plots and isopleths).

2. For generating a Skew-T:

AWDS

- "Show/Edit Raw Data" as before for desired station.
- Change the 850MB temperature/wind data to read as same as the surface data.
- Select "Save Changes".
- Generate the skew-t using "Override Data".
- Generate "Severe" using "Override Data" for all the new indices.

STABLE/SHARP/SKEW-T PRO

- Copy TTAA surface temperature/wind data (99xxx) to the 850MB level (85xxx).
- Also change TTBB lowest significant level (00xxx) to 850 MB (00850).

Note: You must exercise care in relating these indices to stability predictions. There must be studies done at each location to determine the key numbers to watch for. It is very unlikely that the standard numbers will be of much use since they are based on the notion that the 850MB level is nearly 5,000 feet above the actual surface. Another possible simulation would be to use the 700MB in place of the 850 level and the 450MB in place of the 500. Thanks to the F.E. Warren AFB weather station for their help in relaying this data.

For more information, contact TSgt. Mike McAleenan at DSN 576-4721, ext. 227 or via electronic mail address: "mcaleen@hqaws,safb.af.mil".

Don't miss out -- Air Weather Association grows, new leadership takes over

The Air Weather Association continues to grow. Membership is open to all who serve in weather units, either active duty, Reserve, Air National Guard, retired, prior service, or surviving spouse.

Membership currently stands at 3,800 members. Former 4th Weather Wing commander J. Kevin Lavin is the new chairman and editor; MSgt. (retired) Donald G. Farrington is the reunion organizer; and Cliff D. Kern is the secretary-treasurer. Other members

of the Board of Directors include: MSgt. David W. Hannum, the active-duty associate.

The 1995 newsletter will be mailed to every Air Force and Army weather support unit. If you're not a member of the unique organization, an application appears below.

Membership is lifetime and costs \$9; there are no annual dues. This \$9 entitles you to a membership roster and newsletter. The membership roster is sent to all members and keeps you in

touch with your former associates. The newsletter announces details about reunions and other news of military weather support, past and future.

If you are currently a member and have moved since receiving the 1994 newsletter (or didn't get it), send a change of address to: **AWA Locator, 4751 Knapp Way, Carmichael, Calif. 95608-5423.**

The AWA sends its mail by Third Class Bulk Rate, which cannot be forwarded if addresses are wrong.

AIR WEATHER ASSOCIATION MEMBERSHIP APPLICATION

Membership is open to civilians and military members who serve, or formerly served, in a USAF/USAAF weather support unit (including reconnaissance), or a weather training unit, regardless of AFSC/MOS, and to the surviving spouse. Membership is lifetime, with no annual dues.

MEMBER NO. _____ (Assn. Use) Release _____ (Assn. Use.)

*NAME _____ NICKNAME _____

If applicable, enter current spouse's name/nickname _____

Home phone number (____) _____

Full Mailing Address _____

Service dates _____ Current/last weather unit _____

Current/highest military rank _____ If current, where _____

(Check One) Active Duty _____ ANG _____ Reserve _____ Retired _____ Prior Service _____

If applicable, check military service as: Civilian _____ Grade _____ Retired _____

War Veteran (On active duty during World War II, Korea, Vietnam, Panama, Desert Storm) Yes _____ No _____

Widows of weather alumni: please enter the deceased weather spouse's name, rank and year in which deceased: _____

Enclose \$9 and indicate choice (check only one): Lapel pin _____ Ladies pendant _____

Mail to: AIR WEATHER ASSOCIATION, 1879 COLE ROAD, AROMAS, CA 95004-9617

To order additional pins/pendants, up to a maximum of five each, send \$3 for each to: Forest View Enterprises, P.O. Box 550, Yucaipa, CA 92399.

*NOTICE TO THE ASSOCIATION: Release the above information ONLY to the members to the AWA upon their request. You may also include the names, address***, and telephone number*** in a membership roster distributed ONLY to association members.* YES _____ NO _____

Date: _____ Signature _____

* If you checked yes, but do not wish your address or telephone number to appear in the roster, circle the appropriate "***". If you do not wish the names to appear in the roster or for your address or telephone number to be released to another AWA member upon request, check NO. (Note: The AWA does not sell its mailing list to commercial interests).

