

February 1995

Vol. 42, No. 2



Where we're heading



This month:

AIR MOBILITY COMMAND

How Air Force weather is helping toward "Global Reach"



### Air Force Vision

Air Force people building the world's most respected 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

### Air Force Weather

### Where we're headed

It was General Hap Arnold who said, "Weather is the essence of successful air operations," and his quote rings as true today as it did in 1943.

Today, modern technology is helping to alter the future direction of Air Force Weather (AFW). People remain the foundation of AFW; however, the information revolution offers exciting new opportunities to fully integrate weather into military operations.

I'd like to briefly address some of AFW's efforts to take advantage of new opportunities; in particular: exploitation of communications technology, weather data visualization, and development of seamless weather products from surface to space.

Exploitation of Communications Technology. The advent of the "information revolution" allows for new, more reliable, and efficient ways to transmit large volumes of information worldwide. In the past, we relied on dedicated land-line communication systems.

This architecture may work well for units on base, or in garrison, however, it cannot support the deployed unit. Today, deployed AFW units must wait for circuits to be established by the communicators prior to commencing operations. In a few months, we'll run a test in Korea and Germany using satellite communication to improve connectivity to deployed units who will obtain weather products by use of a small satellite dish and receiver.

Weather Data Visualization. Weather information can only add value to the warfighter mission if it's available on time, and in a usable form.

Weather information must be displayed in a meaningful way -- the fighter pilot does not have time to separately consider information from all operational areas. The displays they use should integrate all functional operational elements -- weather data, enemy positions, surface-to-air missile threats, and other vital information must all be available at a glance.

AFW is working on development of software, hardware, and procedural changes to produce integrated graphics products that depict weather conditions for air and ground operations.

We'll also stand up the Combat Weather Facility at Hurlburt Field, Fla., to develop and test new weather display techniques for use in the tactical environment. In addition, we're fielding





the Combat Air Forces Weather Software Program (CAFWSP), and hardware that will allow us to pass detailed weather products to military C3I systems, thereby more fully integrating weather information into the overall military decision process.

Development of Seamless Weather Products from Surface to Space. We're also working to develop the capability to seamlessly support the warfighter across the entire spectrum of the aerospace environment; from the Earth's surface to the vast arena of space.

For instance, the space environment and its weather is as critical to satellite operations as atmospheric weather is to aircraft flight. AFW is actively exploring new ways to improve our capability to analyze and forecast the solar-terrestrial weather parameters that effect space operations. Our goal is to make the same difference to the Air Force space mission that we do for our conventional operations.

I hope you've found this brief look into where AFW is headed to be interesting and exciting. As we usher in a new era of technological capabilities, we also open the door to new challenges, and a future of promising opportunities.



# **Command Line**

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

# Planning for the future



### **Interim Weather Officer Course fills the gaps**

We're proud to announce that one of the many initiatives Air Weather Service is working on to improve the way we train new people kicks off this month -- the Interim Weather Officer Course (IWOC).

For us old timers who have been in for more than a few years, it's not too hard to remember when we entered our first base weather station, meteorology degree in hand and a commission as second lieutenant.

In the "old days" when we had greater manpower numbers, we could afford to invest a lot of time in orienting junior officers to the complexities of base weather station operations. Now, with restructure and drawdowns, we must make new officers productive sooner without increasing the training burden in the base weather station.

As a result of the Chief of Staff of the Air Force's Year of Training initiatives, every Air Force career field is developing an officer initial skills course in association with the Air Education and Training Command for implementation in CY 96. However, we need this training now.

That's why we've created the Interim Weather Officers Course at the Keesler AFB "Schoolhouse."

The 36-day interim course will run until the formal Weather Officer Course begins July 11, 1995.

Developed by Headquarters Air

Weather Service and the Keesler Weather Schoolhouse, the IWOC will cover the following topics:

\* Role of Air Force Weather and its personnel;

\* Structure of AFW and centralized support agencies such as Air Force Global Weather Central and the U.S. Air Force Environmental Technical Applications Center:

- \* Career development and job opportunities;
  - \* Professional military education;
  - \* The assignment process;
  - \* Roles of weather officers;
  - \* Training opportunities;
  - \* Air Force weather support;
  - \* Weather support to the U.S. Army;
- \* Air Force weather support to joint operations; and
  - \* Enlisted career progression.

The bottom line is that before arriving at their new unit, the IWOC graduate will have under their belt seven days training each on synoptic system forecasting and satellite interpretation; 10 days on weather station operations including pilot briefings, forecasts, advisories, etc.; two days training on AWDS and seven days on the NEXRAD.

The material covered in the IWOC will be an integral part of the formal course in July -- a foundation of sorts.

With this initial orientation, the new lieutenant's transition into the weather career field should be smoother and faster -- a win for them, a win for the unit, and a win for Air Force Weather.

"With restructure and drawdowns, we must make our new officers productive sooner without increasing the training burden in the base weather station."



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### **Focus**

The dramatic events of the beginning of this decade are reshaping the face of the world. Political upheaval, international economic restructuring and the proliferation of high-tech weaponry among Third World countries are changing the threats to U.S. security interests.

The Air Mobility Command was activated June 1, 1992, with primary mission providing rapid mobility for America's Armed Forces. The Air Force component of the U.S. Transportation Command, AMC is responsible for strategic

airlift, aerial refueling, special air missions, aeromedical evacuation, and operational

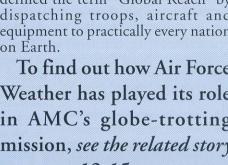
support airlift.



State of the Air Force Secretary of the Air Force Sheila E. Widnall explains her vision of the Air Force ... Page 11.

In the past two years, AMC has defined the term "Global Reach" by dispatching troops, aircraft and equipment to practically every nation on Earth.

To find out how Air Force Weather has played its role in AMC's globe-trotting mission, see the related story on pages 12-15.



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# Weather Heritage

### 40 years ago — 1955

April: One of the most complete weather-support organizations ever assembled for atomic test work is in operation during the present series of nuclear weapons tests at the Nevada Proving Ground, the Atomic Energy Commission has revealed. Weather support will be provided by Air Weather Service.

May: The IBM Model 701, called a "giant brain" at the time, starts turning out daily weather charts at the Joint Numerical Weather Prediction Unit in Suitland, Md.

### 20 years ago -- 1975

April-May -- The last weather squadron in Southeast Asia, the 10 Weather Squadron at Nakhon Phanom AB, Thailand, inactivates. The last Air Weather Service unit, Det. 7, 1st Weather Wing, deactivates at U-Tapao, RTNAS.

July -- Air Force Global Weather Central reassigned from 6th Weather Wing to Headquarters Air Weather Service.

August -- ETAC moves from Washington, D.C., to Scott AFB, Ill.

### 30 years ago — 1965

- A global cloud mosaic was assembled, using Tiros 9 pictures. This first global view of Earth's cloud cover as seen by weather satellites was shown to the Aeronautical and Space Sciences Committee of the U.S. Senate during hearings March 12.
- AWS provided vital weather support to the first manned Gemini space mission.
- The last WB-50 weather reconnaissance aircraft is retired in September.

### 10 years ago -- 1985

March -- AWAPS, using the Cray X-MP "super" computer, formally dedicated during ribbon-cutting ceremony at AFGWC.

August -- Initial operational capability declared for Satellite Data Handling System at AFGWC. Final operating capability declared April 1986.

**September** -- The last of the 15 backbone circuits of the Military Dedicated Service "A" network disconnected, terminating Service "A" support in AWS.

### In Memorial

Brig. Gen. William Henry Best, Jr., Commander of the Air Weather Service from July 27, 1970-July 29, 1973, died Jan. 21, 1995, in Durham, N.C.

As the thirteenth AWS commander, he was also our first nonrated commander. Under General Best's leadership, AWS saw the transfer of the Military Airlift Command computer flight function from



Suitland, Md., to Air Force Global Weather Central Aug. 1, 1970; operation of the Automatic Response to Query

system with the ADWS at Carswell AFB, Texas, Nov. 3, 1970; launching of the centralized terminal forecast program which led to AFGWC issuing terminal forecasts for all U.S. units; and inactivation of the last AWS unit in South Vietnam March 3, 1973.

The general was born in Brooklyn, N.Y., Aug. 24, 1920, and graduated from Princeton University in 1941 with a bachelor of arts degree in mathematics. Enlisting in the Army Air Corps in 1942, he graduated from the aviation cadet course in meteorology from the Massachuetts Institute of Technology in September 1943, earning a commission as a second lieutenant. General Best earned a doctorate in meteorology from the University of Stockholm, Sweden in 1955.

General Best's tours included duty in Washington, D.C., Denver, Japan, New York, Germany, Massachusetts, and Maryland. He is survived by his wife, Evelyn Louise Gonzales, of Yonkers, N.Y., and his four children.

# Officer Opportunities

### Where do I go from here?

# Capt Tim Hutchison Air Weather Service Chief of Personnel

In last month's column, I focused on the opportunities available to the new Air Force weather officer. After spending two to three years in your



initial assignment, you've hopefully become an expert in the mission and the weapon systems you support, and it's time to move on.

Now the real question—where to go from here?

For your second assignment, a whole host of opportunities open up. These include follow-on assignments to other base weather stations which support a

different mission from that of the first assignment. If you've been a Wing Weather Officer supporting a fighter wing, head to an Army unit and support an infantry division. If you've supported special operations, learn the mission sensitivities and gain a global mission perspective by supporting airlift operations.

These are just a few examples. The key is to learn as many different aspects of the overall Department of Defense mission, broadening your experiences...a

significant benefit for your future and the Air Force.

At this early stage of your career, avoid the pitfall of getting too comfortable with either the mission you support or the location you're assigned. Developing a narrow, parochial view of the Air Force and Air Force weather and/or "homesteading" can have significant impacts on your future career opportunities.

If, at this point in your career, you're satisfied with your base weather station experience and knowledge base, you may choose to move to one of the Air Force weather centers, which include: Air Force Global Weather Central at Offutt AFB, Neb.; the U.S. Air Force Environmental Technical Applications Center at Scott AFB, Ill.; and the Space Forecast Center at Falcon AFB, Colo., or other forecast centers located worldwide.

All of these provide unique opportunities to see Air Force weather support in a broader light, as you have the opportunity to support to a vast range of missions, customers and

national priorities.

What should be your focus? Regardless of your follow-on assignments early in your career, your focus is to broaden your knowledge of Air Force and Army operation. Become an expert in your area, pay attention to what is going on around you, whether it's learning more about how your Operations Support Squadron work, or the roles and missions of another division in your unit.

The more you learn about the Air Force and the role Air Force weather plays, the better leader and decision maker you will be in the future.

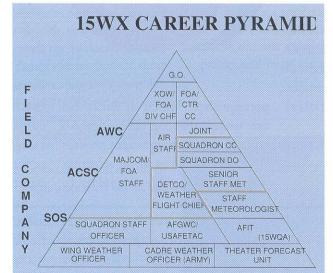
Just a reminder—you're not alone out there when it comes to career guidance. Your supervisors, senior leaders and the Air Force Military Personnel Center assignments officer can provide tremendous insight to guide you in your Air Force career.

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.

My address is: Capt. Tim Hutchison, HQ Air Weather Service, Chief of Personnel (AWS/RMP), 102 W. Losey St., Rm. 105, Scott AFB, IL 62225-5206 or call DSN 576-4895, ext 344.

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



# Enlisted Opportunities

# Job hunting? Check EQUAL, EQUAL-Plus listings

CMSgt. Jim Hoy Superintendent of Weather

The Air Force Weather leadership recently reviewed the assignment process for



key enlisted positions, like station chief, flight superintendent, detachment chief, and senior NCO staff positions.

We wanted to address two areas: assigning qualified individuals to critical positions and ensuring all candidates had equal opportunity to volunteer and be selected.

It quickly became evident that the EQUAL-PLUS assignment process provided several advantages as a tool for the major commands to identify critical vacancies.

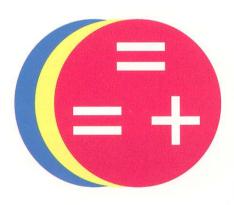
EQUAL-PLUS identifies a specific job vacancy. For instance, EQUAL-PLUS could show a master sergeant vacancy at Minot AFB, N.D., for station chief, where EQUAL would only show a master

sergeant vacancy at Minot.

EQUAL-PLUS provides the major commands a tool to advertise key vacancies; EQUAL does not advertise vacancies for Continental United States-to-CONUS moves.

EQUAL-PLUS gives the major commands the opportunity to review candidates and recommend the most qualified person for the assignment.

Under EQUAL-PLUS, the major command is able to advertise



prerequisites. When applications are unsuitable or there are no volunteers, the assignment process continues as it does today, selecting the most vulnerable candidate to fill the vacancy.

Two items are key in this assignment process. Assignments become a major command

program as is the case with most of the Air Force. We provide a process for the Air Force member to volunteer for key positions. For instance, the master sergeants determine which requirements are for station chiefs (or key positions) instead of viewing vacancies for master sergeants.

By availing ourselves of the EQUAL -PLUS process, we can achieve the goal of providing the best leadership available for key positions.

PALACE WEATHER at the Air Force Military Personnel Center remains the hub of Air Force weather assignments. However, the major commands are now equipped with a program to advertise their key enlisted needs and give equal opportunity for selection across Air Force weather.

For more information about the EQUAL-PLUS process, contact your local Military Personnel Flight. For more information on your major command's involvement in the assignments process, call the senior NCO at your major command's weather staff.

And finally, if you're looking for a job, start by looking at the EQUAL and EQUAL-PLUS listings.

# What works for businesses can work for the Air Force

### John J. Bartrum

**HQ AWS Quality Advisor** 

The Air Force decided several years ago to adopt the Quality Air Force (QAF) criteria directly from the Malcolm Baldrige National Quality Award (MBNQA), established in 1987 by Congress.

Air Force Policy Directive 90-5 states the criteria used for this award is a template for improving performance and the criteria will be used for unit planning, unit self assessment, and rewarding excellence.

The question asked is why should the Air Force use this criteria for internal assessments, since it was intended to be used for civilian companies striving to win the award?

While the criteria was developed in part to recognize American companies for business excellence, it also promotes quality awareness, understanding of the requirements for performance excellence, and sharing of information on successful performance strategies

along with the benefits derived from these strategies.

More than a million organizations from around the world have requested copies of the MBNQA criteria since 1987.

It is used by organizations as

commitment to customers, to employees, and to long- and short-term planning.

The use of the QAF criteria will assist the Air Force in its improvement efforts by providing a systematic framework that encourages planning, fact-based decision making, leadership involvement, and customer, supplier, and employee participation.

The majority, if not all, of the criteria, which was developed competitive organizations, can easily be applied to the Air Force even though the Air Force is not in a totally competitive organization. As more Air Force members become exposed to the QAF criteria, their awareness of its simplicity will increase

organizational improvement will soon follow thus strengthening the Air Force and moving us into the future.

For more information, call John J. Bartrum, HQ AWS/RMX, DSN 576-5654, ext 493.

a guideline for improvement and

internal assessment that examines the entire organization as a system

The fact that less than 500 companies have applied for the award demonstrates the strength of the criteria as a management theory which recognizes a

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Back from the ashes of Detachment 4

Lt. Col. Gerald D. Swoboda Chief, Air Weather Service Restructure Office In this age of base closures, draw downs, and force reductions in the Department of Defense, it is extremely rare to have a unit deactivate only to have it reactivate more robust than ever -- even before the dust settles.

This is exactly what happened to the Combat Weather Facility at Hurlburt Field,

Fla., and highlights the importance placed on combat weather in support of the Air Force mission.

The Combat Weather Facility was approved by the Vice Chief of Staff of the Air Force Nov. 22,

1994 and immediately activated thanks to the efforts of a small number of people who had not yet departed from Detachment 4, Headquarters Air Weather Service which deactivated Oct. 1, 1994.

The CWF was established as the premier Air Force organization supporting Air Force and Army combat weather training, exercise, equipment, concepts, techniques,

and technology. Other Department of Defense agencies are encouraged to utilize the CWF's expertise upon request.

Air Weather Service personnel will conduct a variety of exercise including the annual Forecast Challenge competition, U.S.-based and overseas Joint Meteorological Forecast Unit exercises, and Senior Air Force Weather Leader Battlefield Management exercises.

Air Weather Service warrior-scientists will evaluate the leading edge of combat weather technology whether it be meteorology, equipment, or communications. After evaluation, the CWF will deliver the "goods" to field weather units either in the form of publications or by on-site visits by Combat Weather Enhancement Teams.

The core CWF, staffed by 10 Air Education and

### Combat Weather Facility vision:

Provide an institutionalized way for Air Force Weather to examine Air Force, Army and Special Operations Forces weather warfighting ideas and emerging technologies, experiment with them in an operational environment, and apply the most promising enhancements to increase the capability of AFW forces.

Bottom Line: Weather is a combination of science and art first; systems and technology second. We must master those elements of change and hone our world-class qualitative edge.

Training Command instructors and 14 Air Weather Service warriors, will offer a wide variety of services.

The initial AETC training courses will include Combat Lightning, Transportable Automated Weather Distribution System, Mini Marine Rawindsonde System, High Frequency Network Control, and Rapid Deployment Imagery Terminal.

Full operational capability for the core CWF will be July 1, 1995; but, the vision is to bring the myriad of combat weather activities supporting the Air Force and Army under the CWF umbrella.

The bottom line is that the CWF will continue to grow to support customer needs.

The exciting aspect of the CWF is its growth potential. As more manpower and resources are made available, the mission of the CWF will expand. Negotiations are under way for an AETC Combat Initial Skills Course for all new officers and enlisted personnel. Development of doctrinal weather tactics, techniques, and procedures are envisioned for the future. Enhanced combat technology transition functions will evolve with time.

The vision is to make the CWF the "one-stop-shopping" organization for all. If you have a combat weather problem or issue, the CWF is the place to go. Likewise, if you want a challenging job that will take you to the core of weather support, the CWF may be the job for you.

### State of the Air Force

Sheila E. Widnall Secretary of the Air Force

Much has happened in the world and in the Air Force over the past year. As a national resource with unique capabilities, we've been called upon to participate in many areas. At the dawn of the new year, let's consider how far we've come and where we're headed.

The Air Force has always thrived on change. The past few years are no exception. We've cut personnel by a third, fighter forces by half, and the bomber force by 75 percent. Our budget is down 40 percent from its Cold War high. But we've used this opportunity to recreate the Air Force. Today, we're simpler, more flexible, tougher, less expensive to operate, and focused on readiness for the challenges ahead.

Air Force Chief of Staff Gen. Ron Fogleman and I believe we'll face even bigger challenges in the next decade. We've identified four objectives to help guide us through these turbulent times: remain engaged, support our people, preserve combat readiness, and build for the future.

### **ENGAGEMENT**

The Air Force is actively involved in our new national

security strategy of enlarging the community of market democracies. With personnel strength down, our deployment tempos are up five-fold since the Berlin Wall fell

Our global reach forces operated in nearly every country in the world this year. We delivered 75,000 tons of relief supplies to Bosnia; 15,000 tons to Rwanda and Zaire; supported major deployments to Haiti and Kuwait; and conducted hundreds of operations in such far-ranging places as Yemen and Johnston Atoll.

Our combat forces are also busy. Almost 50 percent of our active-duty fighter force is continuously engaged overseas. These forces support alliances promote stability throughout Europe, Asia, and the Middle East. We have flown nearly 10,000 sorties in Bosnia. In the Gulf, we've launched three times the missions of Desert Storm. Within 10 days of Iraq's provocation this fall, 160 combat aircraft joined the 140 already deployed there, and we had flown 1,000 sorties. As Secretary of Defense (William) Perry said:

See STATE, continued on Page 23



# Air Mobility Command

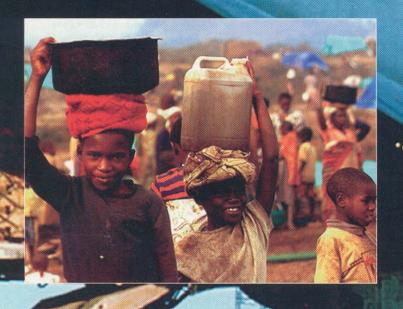
MISSION

"The Air Mobility Team ... Responsive Global Reach for America ... Every Day!"









ever events equipment, such a ted up B o s m such as in Herzogovania, Rwanda or Somolia, or Kenya, done that." Iraq, or when people AMC has defined the "Global were desperately in term need of food and Reach".

saying the goes, AMC troops have "been there,

water a second

And they are still there to make sure those who need the help get it.

### Air Mobility Command

Helping make sure AMC troops and aircraft knew what they were flying into, Air Force weather people were called on to make observations and forecasts in almost every corner of the globe. Since none of these places had weather stations on the ground, the task fell to those AMC bases to have their people pack their bags for mobility taskings.

The taskings have come fast, furious and in mass quantities. All told, AMC had people deployed for more than 4,065 man-days in 1994. That's the equivalent of having 11 people deployed for an entire year.

Since the reorganization of Air Weather Service in April 1991, the major comand's weather directorates have made great progress in setting their own tempo and guidelines. To get a feel of what progress has been made, the following is from an interview with Col. Thomas P. Walters, AMC/DOW.

As a command, how do you feel the AMC WX structure has evolved since 1991?

I believe we experienced fewer growing pains as we responded to the restructuring of the Air Force. At all levels, weather is totally integrated into the command. Operational Support Squadron (OSS) commanders eagerly accepted their new roles to lead weather operations. More important is that they are doing a great job taking care of their weather forces — ensuring the weather flights have the resources they need to do their job and recognizing the outstanding performers.

AMC wings moved quickly to take advantage of the exceptional talents of our weather people. Majors Ray Clark and Mark Welshinger, former flight commanders at McGuire and Grand Forks respectively, were singled out for their outstanding performance and are now serving as their OSS directors of operations. At Travis AFB, the most recent commander of the 60 OSS was Lt. Col. Dave Urbanski. He excelled in weather and moved up through the OSS to lead the squadron. Dave is now the Deputy Support Group Commander at Plattsburgh AFB.

Where has AMC weather gone since 1991?

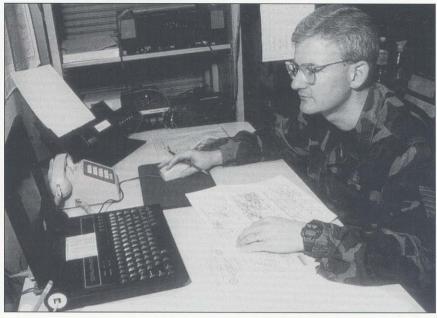


Photo by SSgt. Angela Stafford

MSgt. Donald D. Gunning, weather forecaster from the 319th OSS/OSW, Grand Forks AFB, N.D., receives weather forecasts and satellite images from the Air Force Dial-In System. He was deployed to Pisa, Italy, in support of Operation DENY FLIGHT.

The AMC mission is "The Air Mobility Team...Responsive Global Reach for America...Every Day." AMC weather is an integral part of that team. Our weather forces have evolved with the rest of the command to have a truly worldwide perspective.

The end of the Cold War meant an increase in humanitarian and peacekeeping missions and an increased demand for AMC's GLOBAL REACH capability. If you pick up a newspaper and read about U.S. involvement in a humanitarian or peacekeeping mission, AMC is involved and so are AMC weather teams.

We've helped establish air bridges in support of such notable operations as RESTORE HOPE in Somalia, SUPPORT HOPE in Rwanda, UPHOLD DEMOCRACY in Haiti, and VIGILANT WARRIOR in Southwest Asia.

For many operations other than war, airlift forces are the first in and the last to leave. Consequently, we've seen an increased demand for highly trained weather teams, ready to deploy at a moment's notice. In every contingency or humanitarian mission, AMC weather personnel have excelled, frequently under some very trying conditions.

Take SUPPORT HOPE as an example. Working with USTRANSCOM, we deployed a five-person AMC weather team into Entebbe, Uganda, the hub of relief airlift support. We also arranged for an ACC weather team to support intra-theater airlift out of Mombassa. We deployed another team to establish a weather station at Moron AB, Spain. Their job was to provide weather services to air refueling operations essential to completing the long air bridge. Other teams were alerted and ready.

Capt. Ann Lee, the weather flight commander at Scott AFB, directed weather services in the theater of operations. She established her weather station in the Entebbe International Airport and immediately began 24-hour operations. When CONUS weather teams were unable to reach Kigali, Lee arranged for an observer to fly into the city on the first flight of the day and out with the last.

It made for long days, but the observer was able to provide observations in support of critical airlift missions. Everyone worked hard on that deployment. The Director of Mobility Forces in Entebbe moved Lee for three weeks to fill a void in his air operations cell. After working 12-hour shifts in the strategic airlift section, she almost always pulled a shift at the weather station.

### Air Mobility Command

Where does AMC WX see its role in future AF operations? What is AMCWX's plan for providing weather support for the next DESERT STORM?

Air mobility is the cornerstone of national military strategy. Throughout the 1990s, the operating tempo of the nation's air mobility fleet has been extremely high. With less forward basing, the nation calls on air mobility first and most often to respond to events around the globe because of its inherent flexibility and responsiveness.

This increased demand means that AMC weather is practicing its wartime role every day. Each deployment presents many of the challenges we will face in a major regional contingency. Only the threat, scale, and involvement of other forces differ.

Whether supporting air mobility for U.N. peacekeeping operations or for a multi-lateral contingency, AMC weather will deploy with command and control elements to ensure airlift and air refueling forces have accurate and timely weather services.

We do hope to do our jobs smarter in the future. For the past 18 months, we've been actively pursuing Joint Staff funding of an initiative to provide our weather teams with deployable laptop computers capable of reaching back to Air Force Global Weather Central for data.

For a number of years we've been able to send alphanumeric products from the Tanker Airlift Control Center (TACC) at Scott to deployed teams via SATCOM. AFGWC's dial-in system provides almost all the information our first-in weather teams need.

We see the deployable computers, which were recently funded, as an interim solution to our data needs until a form of the Tactical Forecast System is fielded.

With all the deployments AMC WX has gone on, what lessons have been learned?

While each deployment is unique, most continue to drive home lessons about training, communications, and equipment.

It's absolutely necessary to have a highly trained force — and the training must include more than the functional responsibilities of providing weather services. The very nature of deployments requires our weather people to know about things such as communications, maintenance, and supply, as well as wartime skills. The better trained our people are, the better prepared they will be to cope with the challenges deployments present.

Communications is always a problem—there never seems to be enough. AMC has tackled this problem by supplementing satellite communications capabilities with commercial INMARSAT satellite receivers. Still, however, there always seems to be a struggle to get air time. Extraordinary ingenuity has helped our deployed teams overcome comm shortfalls.

During many deployments, we've found our tactical meteorological equipment to be deficient—either we didn't have enough or what we deployed failed. We're very excited about Air Weather Service efforts to field a new Manual Observing System. We're encouraged by the results of recent operational tests of commercial off-the-shelf components, and we're looking forward to seeing the new equipment in the field.

Has the restructuring of AMC WX accomplished what it was set out to do?

The restructuring of AMC weather has been a real success story. The weather

flights belong to and are totally integrated into wing missions. Deployments and day-to-day support haven't really changed. The real difference is that weather is now considered a real member of the wing team.

The bottom line is that AMC weather is ready, and it's showing in the outstanding weather services our people are providing worldwide.

In the future, where does AMC WX need to grow and evolve?

AMC weather must keep pace with operational changes to provide the timely and relevant information necessary for conducting strategic and specialized air mobility operations.

In the future we'll see fewer interactions between the weather technician and the aircrew. Weather data will speed to the operator via C2 and planning systems or directly into the cockpit.

The technological and organizational changes to support such concepts, within the framework of a smaller overall force, will present challenges to all of Air Force weather.

As we evolve, we must keep in mind the impact changes will have on our most important resource—our people.

I'm continually amazed by the quality of weather people. They're smart, dedicated, and totally professional.

As we keep pace with the changing requirements of our customers, we must provide our people with the equipment and training that will enable them to excel.

If we do, I'm convinced they will meet the challenges of GLOBAL REACH.



### Officer to enlisted conversions:



## A silver lining around the cloud

By Col. Joseph Dushan Commander

"Oh, the times they are a-changin'."

Truer words have never been spoken! Whether it is downsizing or right-sizing (whichever phrase is politically correct at the time), it seems like the only constant at Air Force Global Weather Central is change.



Just when it seems like we are

getting a handle on all the changes, the Air Force announces officer to enlisted conversions. What does this all mean for the Air Weather Service? More to the point, what does it mean for AFGWC customers and the services they need from us to accomplish their missions?

Downsizing/right-sizing and conversions are two separate issues with very distinct impacts. The recent cuts we've all been through caused AFGWC to re-evaluate its priorities.

It has forced us to make tough decisions about how we use our diminishing resources, such as people, time, skills, etc. As a result of these cuts in resources, we have stopped performing functions which were found to be adding the least value in service to our customers. Conversions, however, do not focus on eliminating tasks or functions. Rather, they focus on the very way we do business.

The end result of officer-to-enlisted conversions will see NCOs performing jobs previously handled by officers. At AFGWC, this means workcenters on the production floor which were previously run by an OIC are now headed by an NCOIC. It also means some jobs previously done by officers with advanced academic degrees will now be done by NCOs.

How will this impact our customers? Customer support requirements have not diminished, therefore our customers expect the same high-quality service they have come to depend on in the past. Continuing to provide that high-level service will be a challenge, but one AFGWC will step up to and master.

These conversions will offer NCOs new opportunities to lead people and manage programs. In our forecast workcenters, for example, the first level of leadership

responsible for the quality of our weather support products is now an NCO with 10 or more years of forecasting experience.

That's the good news. However, officer to enlisted conversions at AFGWC will also have drawbacks. The loss of officers within our software development workcenters erodes our ability to maintain the level of service users in the field deserve. Our NCOs will step up to take a more active role in evaluating model results, tuning applications programs, and developing new model techniques to make sure the quality of our forecasts remains unmatched anywhere.

Officer to enlisted conversions ... they're happening now. An entire layer of middle management disappeared with sleek structure cuts and reorganizations in 1991. New challenges and adjustments lie ahead as NCOs step up to take on new responsibilities.

It certainly won't be easy. There will be some growing pains as we learn how to effectively use those resources available to us. There may even be some structural changes required to ensure we can continue to meet our customers' needs. Implementing the conversions while minimizing the impact will be another challenge.

We're absolutely confident these challenges will be mastered and AFGWC will remain the solid heart of the Air Force weather team.

You could say "the more things change, the more they stay the same."

### 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.



### Preparing for the future:

### New architecture, new concepts

By Lt. Col. Jud Stailey

Commander

Like nearly every other function in the Air Force, ETAC will continue to "downsize" over the next several years. By late in the decade the number of people working in the center will be about half what it is today.

While we're not going to try to do more with less, we're planning some significant changes in the way we do business to minimize



the impact of manpower cuts on the support we provide you. We're working the problem from three angles—

"One thing will not change: the commitment to quality and responsiveness in climatological support."

architecture, organization, and operations.

### ARCHITECTURE

We were already planning to replace two of our three big computers in the next few years, so we're designing our new systems to reduce overhead and provide quicker response.

We'll be doing most of our work on workstations, and we'll significantly increase the size of our on-line database and use robotic tape systems to speed access to the data which is not on line. Workstations will also provide an additional technology boost by allowing us to visualize our huge data fields to improve quality control and simplify assimilation of the data.

We're also working on providing visualized data fields to customers when that approach streamlines their use of the data.

#### **ORGANIZATION**

We have a lot of reengineering to do yet to design an organization which gets the most from a limited number of people. However, we've made a few decisions to get the

process started. The role of Operating Location A in Asheville, N.C., will be reduced to just what they do best—building the climatological database. All external customer support will be shifted to ETAC at Scott AFB, Ill. We're also beginning to explore how we can work closer with our civilian counterparts at the National Climatic Data Center (NCDC) at Asheville. We may be able to stretch our resources by consolidating databases and sharing computer equipment.

#### **OPERATIONS**

Finally, we're aggressively pursuing the continuing process of improving the way we operate on a daily basis.

For example, we're scaling down our computer operations from 24 hours-a-day to about half time, and turning in nearly half our computer operators by next summer.

To hold customer impacts to a bare minimum, we've adopted some new technology which allows us to schedule jobs to run when the lights are out. We're looking to expand our dial-in service to allow greater access to ETAC technology directly from the field, including the capability to extract data directly from our database in standard formats.

Finally, we're continuing the push to position climatology forward through the use of small computer software. We'll still be here to provide tailored climatological projects when the need arises, but more and more standard data will be as near as a floppy disk or CD-ROM. Our new Ceiling Atlas on CD-ROM is a good example.

We expect to see a lot of changes in ETAC in the next few years, but one thing will not change: the commitment to quality and responsiveness in climatological support.

### 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.