

What's Inside

FORGING A NEW PATH 6

Air Force Weather training initiatives

THOSE REENGINEERING MYTHS 8

PACAF Director of Weather dispells field misconceptions

WEATHER SCHOOL HOUSE STORY 10

Weather training facility still churning out forecasters after more than 60 years

LEARNING THE ABCs OF THE WEATHER BUSINESS 12

Superintendent explains the many "nuts and bolts" needed to grow a qualified, mission-ready weather professional

WEATHER RESERVISTS: ENGAGED IN REENGINEERING 14

Call goes out to Citizen-Airmen to supplement AF's staffing

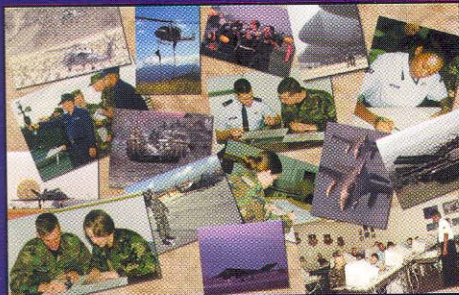
IF YOU'VE ALWAYS WANTED TO TEACH! 16

Consider applying for AETC's Technical Instructor Duty

WEATHER WARRIOR 19

SALUTES 23

ON THE COVER



Cover by Ms. Jodie Grigsby

The Air Force Weather team is an essential element in maintaining the world's supreme airpower: the United States Air Force. This issue is dedicated to all the men and women who work tirelessly to maintain meteorology excellence.

CORRECTION:

We neglected to include the editorial credit for the *Avalanche* article written in the Feb/Mar issue of the *Observer*, please accept our sincerest apology. The author of that article was 2nd Lt. Erik G. Clark, Commander Det 3, 10th Combat Weather Squadron.



OBSERVER

AIR FORCE DIRECTOR OF WEATHER
Brig. Gen. David L. Johnson

AIR FORCE WEATHER AGENCY,
COMMANDER
Col. Charles W. French

PUBLIC AFFAIRS, DIRECTOR
and Editor
Ms. Paige D. Rowland

PUBLIC AFFAIRS SPECIALIST
Ms. Jodie A. Grigsby

This funded Air Force Weather magazine is an authorized publication for members of the U.S. military services. Contents of the *OBSERVER* are not necessarily the official view of, or endorsed by, the United States Government, the Department of Defense or the Department of the Air Force. Editorial content edited, prepared and provided by the public affairs office of the Headquarters, Air Force Weather Agency, Offutt AFB, Neb. All photographs are Air Force photographs unless otherwise indicated. All written material and photos to be considered for publication must arrive at HQ AFWA/PA by the first week of the month prior to the month being published. Photos must be mailed to:

HQ AFWA/PA
106 Peacekeeper Dr., Ste. 2N3
Offutt AFB, NE 68113-4039

Please call (402) 294-3115, or DSN: 271-3115, for more information about this publication. Electronic mail should be addressed to:

"Observer@afwa.af.mil"

Brig. Gen. David L. Johnson
Air Force Director of Weather



Focused on Weather Ops, Committed to Weather Operators

As your newly assigned Director of Weather, I have some initial observations to share. I come to the position without extensive weather expertise but, do have good Ops depth: Ops Group/CC, ACC/ADO; JTF Deputy CC, Wing/CC, and MAJCOM/CV.

I've always been impressed with the science involved in good meteorology. After being here a few short weeks I can tell you I'm dazzled, initially by the acronyms and specific detailed data sets, but even more so by our weather people.

The most lasting first impression is from the industrial strength people we are blessed to have in the weather business. People who work seemingly impossible challenges and come up with the most remarkable forecasts and ways to present/understand complex issues, processes, and events. Space Solar flux units, absolute vorticity, dry adiabatic lapse rates, MM5s, "slime charts", Bonin highs - these are now all meaningful to me.

I really appreciate those who built those acronym decoder cheat sheets to help me get up to speed. I'm not there yet, but, I am rapidly ascending the steepest part of the learning curve - I'll soon earn the badge I now wear with pride.

REENGINEERING - MAIN ISSUE IN MY CROSSCHECK

We are truly blessed to have exceptionally dedicated professionals on board during this critical time of transition. I know the reengineering effort is on going; we are about half way through a six-year effort to leverage the capability new technology brings to our business.

This is a great time to revalidate our plan. From what I've seen, we already have "Operators" and "the mission" in the middle of our crosscheck. We absolutely must keep the needs of our users front and foremost to

be the focus of our efforts. The plan of pooling resources at the Operational Weather Squadron hubs enables many good things to happen in terms of training opportunities and mentorship.

We'll be able to leverage technology to focus on customer needs we already have in our crosscheck. Remember that we'll also have new needs that our

After being here a few short weeks I can tell you I'm dazzled, initially by the acronyms and specific detailed data sets, but even more so by our weather people.

combat weather teams identify. The Air Force Weather Agency and the Operational Weather Squadrons - (the hubs) will do the preponderance of the model running and number crunching and provide forecasts down to the local level thereby freeing the CWTs to be that prime interface with the customer.

Now, I know that this is a different way of doing business - especially for weather professionals who believe that the person on the scene is in the best position to develop the local forecast. There was a time when that was true - but as a function of technology - place doesn't matter as much as it once did.

Those who went before us in Air Force Weather had to work without the benefits of today's technology - and were forced to rely on local tools and observations to build an accurate forecast. We just demonstrated in Allied Force that the server doesn't care where the wire ends. As long as we get good data into the system,

smart folks at the hubs preparing great output products, and professional CWT members taking those products the last mile — dealing directly with the users, we will be the Operational Weather Team the Air Force needs.

We absolutely must keep the needs of our users front and foremost, to be the focus of our efforts.

AF Weather was ahead of the rest of the AF - leveraging reachback, using ever improving sophisticated models, and going light and lean forward.

CONTINUE DOWN THE REENGINEERING PATH

There Is no other prudent way. But, we must do this right. It is far too important. When I was hired into the Director job one of the first questions I asked was if we needed to change the course of events in AF weather - the AF leadership response was immediate and sure - Absolutely not!

Stay the course - reengineering is on track and is the right answer - make it happen. This is high praise for the professionals we have working this complex series of transitions.

My challenge to you is to find creative and innovative ways to make it happen - and make it happen intelligently. Since we're using folks from the base weather teams to stand up the hubs there will be a time wherein our people will be in surge operations. All recognize that fact. I don't see additional manpower on the books beyond what we've already factored in.

Once we reach the steady, reengineered state, we'll be better sized for sustainment operations. Between now and then - in selected venues - we'll face challenges.

HERE'S WHERE YOU CAN HELP

Find ways to make good things happen. Attitude has a great deal to do with how others perceive us and how we perceive ourselves. Don't be full of good reasons why not — or reasons why we can't.

Even though there will be plenty of opportunities to lean backwards in the foxhole, don't do it. Lean forward, get through the surge ops and into the reengineered state as soon as possible and identify the tweaks we need to improve the process.

Hard as we try - I haven't seen anybody issuing us a perfect crystal ball to enable us to have a perfect answer. Having said that, I hasten to say that we are looking for challenges and solutions - not just reasons why not, or reasons we shouldn't.

We all know that there comes a time when the decision is made, and it is time to execute. We are at that time.

TAKE CARE OF OUR PEOPLE

We've made great strides recently to take good care of our hard working folks. We now have Special

Lean forward, get through the surge ops and into the reengineering state as soon as possible and identify the tweaks we need to make to improve the process.

Duty Assignment Pay for weather paratroopers filling jump positions; a \$7,000 initial enlistment bonus for 6

year sign up (vice \$1,000 for 4 years); a higher promotion rate; civilian over hires and extended active duty from the AFRC/ANG to help manpower shortages, and most importantly the chance to work with absolutely great people who demonstrate integrity, service, and excellence in every day efforts. This is different from many places in the civil sector.

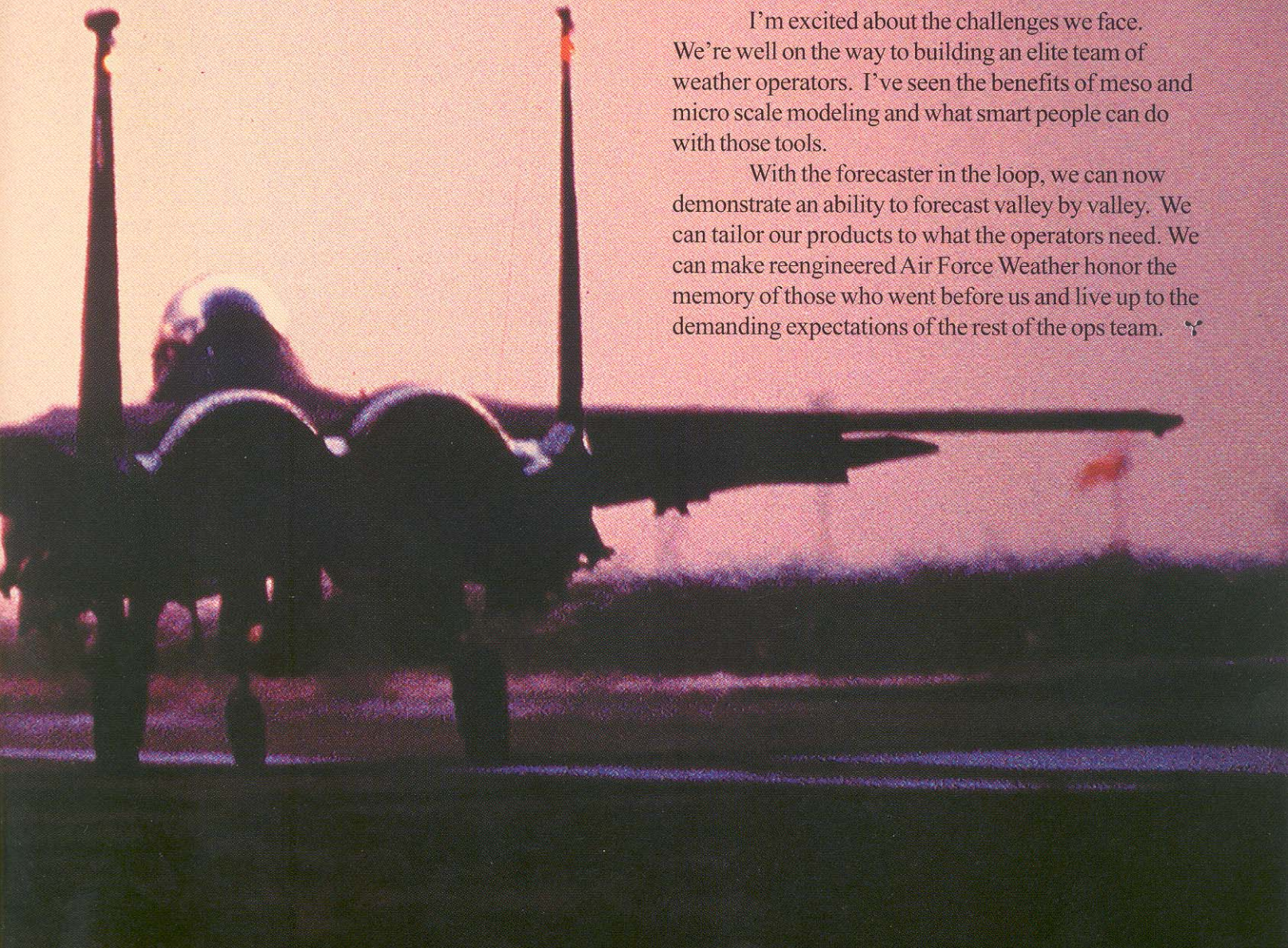
Enjoy the AF workplace, take pride in what we can do for our country. We won't see 100% manning for a while. In the interim, we will hire civilians to help - and "total force" is not just a hollow phrase because of the efforts of the AFRC and ANG.

There will be some times where we'll have to just make due with what we have. But those times should be few in number and relatively short in duration. Smart folks are working hard on implementing this plan - it is now time to execute.

IN SUMMARY

I'm excited about the challenges we face. We're well on the way to building an elite team of weather operators. I've seen the benefits of meso and micro scale modeling and what smart people can do with those tools.

With the forecaster in the loop, we can now demonstrate an ability to forecast valley by valley. We can tailor our products to what the operators need. We can make reengineered Air Force Weather honor the memory of those who went before us and live up to the demanding expectations of the rest of the ops team. ♪



Forging a new path

AFW training initiatives

By Chief Master Sgt. Gordon Fesenger
Enlisted Career Field Manager

Reengineering has brought about numerous changes in Air Force Weather training. The first graduates of the Weather Forecaster Apprentice Course are now working their way through upgrade training in Operational Weather Squadrons. Their upgrade training uses newly revised Career Development Courses and, in a first for AFW, standardized Qualification Training Packages. The changes are the direct result of a well defined process and the hard work of three groups of people, the AFW Council made up of the MAJCOM weather functionals, the AFW Chiefs, and subject matter experts. These groups met in forums such as Functional Reviews, Working Groups, and the Utilization and Training Workshops to plot the future of AFW.

The process started when senior leadership realized AFW had to change if we were to continue to provide relevant weather support. These AFW leaders worked to understand the effects military drawdown, divestiture, and chronic manning shortages on our career field. As they studied the problem, they realized that these circumstances had combined to cause declining experience levels and training capability and a loss of technical oversight. The size of our local units had declined to the point where they no longer had sufficient manpower to provide the in-depth training needed to master forecasting while supporting local operations. Manning shortages and increased workloads com-

pounded this problem. When Air Weather Service divested in 1991, the loss of the technical oversight provided by weather squadrons and wings removed a valuable "safety net" units could turn to for expert advice.

Once they understood the situation, USAF/XOW and the AFW Council worked together with the Chiefs and SMEs to find a way to overcome these negative trends. These groups took the idea of using regionally-focused OWSs to produce forecasts for their areas of responsibility and Combat Weather Teams to support the field units, and turned it into a plan making fundamental changes to the career field. The end result was the AFW Strategic Plan that the AF Vice Chief of Staff signed in August 1997.

The strategic plan provides a basic framework for a revolutionary shift in our career field, and therefore, our training process. The OWSs bring together a "critical mass" of experienced forecasters who help train and mentor young airmen. These young airmen learn forecasting first and are given time to grow into the job at an OWS. There, they function as a member of a team rather than being forced into an accelerated qualification program to fill a one-deep duty position. Airmen receive extensive supervised training during their upgrade to the 5-skill level. Once upgraded, airmen will return to Keesler to attend the Weather Flight Operations Course where they will learn observing skills and, more importantly, how to provide weather support tailored to the customer's specific mission. After completing this course, airmen are ready for assignment to the "sharp end of the spear" at field units around the world.

The U&TW process was the key to making the details happen and AFW convened both enlisted and officer U&TWs consisting of the Career Field Manager and MAJCOM Functional Managers assisted by SMEs from the schoolhouse and the field. At times, officer and enlisted worked separately to define their unique training requirements; at other times they came together to discuss issues affecting both officer and enlisted. The U&TWs took the broad concepts spelled out in the plan and defined specific training requirements to support the new structure.

The first order of business was to define the new ISC, the Weather Forecaster Apprentice Course. This was accomplished in a series of three meetings held in 1998. The U&TW members prepared for these meetings by reviewing a great deal of data. Perhaps the most labor intensive was studying a list of over 1,400 tasks performed by weather personnel to determine if

they were an OWS task, weather flight task, or both, and who (what skill level) would be performing that task. Since no one had actual experience with the new structure, the years of experience the group possessed proved invaluable.

The primary goal of the early U&TW meetings was development of a draft specialty training standard. The STS is a very important document because it serves as a contract between the career field and AETC in addition to a job qualification standard for training documentation. Group members had to take their evaluation of the tasks and decide whether or not they applied to enough of the career field to document on the STS as a line item. Once included as a line item, the group had to decide whether or not the item required formal training or was included for JQS documentation only. If the group decided an item required formal training, it had to determine how to deliver the training, either through the schoolhouse, a CDC, or QTP, and what proficiency level to train to.

Once the draft STS was completed, SMEs at the schoolhouse reviewed it to develop a preliminary course resource estimate. Using this resource estimate, the U&TW determined that AFW could not afford the extra cost in training time and instructors the proposed course would require and that some trade-offs were required. The group took a look at a number of options to make the course affordable while at the same time ensuring it produced graduates capable of working in an OWS. Every line item was reviewed along with its desired proficiency level. The group made some adjustments that brought the course closer to what AFW could afford. Then they reviewed the current Able Forecaster Course to see if there were some possible savings there that could be applied to the ISC. After a great deal of discussion and negotiation, the group had defined an ISC that met the requirements of all of AFW. However, the process was not yet complete.

Because AFW conducts a significant portion of its weather training jointly, any changes affecting consolidated training must pass through a review process. AFW, Navy, and Marine representatives met in September 1999 at a Curriculum Review Board to evaluate the new ISC's affect on consolidated training. Once this process was complete, the schoolhouse was free to develop the new course and bring it on line.

All that work defined the majority of the training required to support the new career path. However, one piece was still missing, the Weather Flight Operations Course. Once again, AFW convened a U&TW to

define this final piece of training. Prior to the meeting, the Career Field Manager and AWFA/DNT took advantage of the AFW Expo to discuss possible training requirements with representatives from the field. Also, during the 1997 U&TWs, the group did its best to define a notional Weather Flight Operations Course based on their best guess of the requirements. Armed with this data, and two years of experience moving down the reengineering path, the group met in November 1999, representatives gathered to begin the process again. The end result was a revised STS outlining a course tentatively scheduled to begin in October of 2001. As with the ISC, the Navy and Marines must

The OWSs bring together a critical mass of experienced forecasters who help train and mentor young airmen.

review and approve this new course at a CRB since it also affects their training.

Even though the training requirements for all the new courses have been defined, the process is far from complete. AFW developed these courses to support a structure not yet fully in place. It is inevitable that we will have to adjust our training as we learn more about operating in the reengineered environment. In November of this year, AFW will again hold a U&TW. The goal of this meeting is to scrub the requirements for the ISC. The group will evaluate the documented training requirements against the performance of nearly a year's worth of graduates to decide whether the ISC is producing an apprentice with the skills required to continue their upgrade training in an OWS. The result may be changes to the ISC. Likewise, another U&TW will likely convene in the future to scrub the requirements of the Weather Flight Operations Course based on actual experience with course graduates.

As you can see, a great deal of effort has gone into the changes in AFW training. The major pieces of the new training path are now in place or under development. The new courses, CDCs, and QTPs are the end result of the vision of AFW senior leaders and the experience of the Chiefs and SMEs. Together, these three groups have charted the future path of the AFW career field. Although there may be minor adjustments along the way, their work has laid a sound foundation on which to build. ✧

THOSE RE-ENGINEERING MYTHS

PACAF Director of Weather Dispells Field Misconceptions

By Col. Robert H. Allen

PACAF Director of Weather

The Oct/Nov 99 Observer gave a good update on all of the hubs. Korea (607th WS) and Alaska (11th OWS) have declared themselves fully operational and the first Initial Skills Graduates are in Alaska. Because of tours in Korea last one year, we don't send any ISGs there. The Yokota hub (20th OWS) will start ramping up this fall, with an initial capability about a year from now. The Hickam hub, which will fall under the 17th OWS (parent organization also to the Joint Typhoon Warning Center), will be standing up in the next year also. In addition to responsibility to the 13 Air Force Area of Responsibility, the 17th OWS will also provide 7X24 support to the Pacific Operations Support Center and support to the Air Mobility Operations Control Center.

Why don't we combine all those PACAF hubs? The original premise was that hubs were collocated with the warfighter. Not only are the Korea and Japan hubs collocated with the Numbered Air Forces, but also with the subunified Commander in Chiefs, US Forces Japan, and Korea. While we have committed to evaluating mergers in the future, we will not begin any of that evaluation until the hubs are up and fully functioning, and we've got robust communications and systems in place.

So what are those reengineering myths? As I've traveled the hubs the last two years, we hear a lot of feedback I place in the "Reengineering Myths" category. I call them reengineering myths because, despite strong convictions by some to the contrary, they are not caused by reengineering. It's important to know the problems were not caused by reengineering, and won't be solved by a change in reengineering. Rather, they are almost a condition of human nature, and as such are issues we must address every day, everywhere, regardless of how we are organized.

The first myth was **you can't forecast for a location remotely as well as you do on-site—we tried that in the 70s and it failed.**

First of all, remote forecasting is a way of business with us—you do that every time you sign a 175-1 or put out an AR/DZ/LZ forecast. Secondly, technology has

become a real enabler. Right now there is substantially more remote data (including satellite and radar) for making a forecast for base X than we had 20 years ago when we were stationed at base X. Add to that Combat Weather Team eyes forward, real-time radar, satellite and sensor readouts, and you have powerful tools. Our assessment of before-and-after hub support is that base level metrics are on an equal footing and, in some areas, markedly better. Why? **Teamwork.**

I've got eyes on the runway here. The hub can't possibly know what's going on locally! I chuckle over this one. I can remember when we had observers in ROSs and they didn't let the forecaster know the weather was changing. Chief reminded me that the same thing sometimes happened when the observers were in the weather station. My point is that the real issue is, and always has been, that the observer must communicate to the forecaster what's going on—especially if it's unforecast. **Teamwork.**

That's not my forecast and how can you expect me to brief it when I don't agree with it? The implication is that, when the forecast was prepared in station, every forecaster present was in agreement with the final product. Frequently, not. But the weather flight knew that a single forecast was imperative for the customer and for credibility—nothing worse than having two or three different categories of forecasts being briefed. And so it still is. When the final call is made, we've got to go with it. And if we decide it's broken, we've got to re-engage with the duty forecaster and alter course as appropriate. That's what happened pre-reengineering when you had a weather briefer and a forecaster/meteorologist splitting the counter workload. **Teamwork.**

Those folks in the hub are not accountable and they don't understand my local effects or my customer sensitivities. Okay, now we're getting down to some real emotion! First of all, I've checked the hubs and CWTs—same high quality folks with the same basic training. They all want to do a good job—they're professionals with a lot of pride. So what's the real issue here? Weather people

are highly technical and take great pride in providing the best possible support to their customer. When it doesn't pan out there's always some factor that the forecaster didn't take into account to ensure the best possible support. How did we handle these issues in the weather station before? Local checkout, TFRN review, customer familiarization. The need to do that has not changed. **Teamwork.**

You mean I have to tell the crew to pick up a phone for support? Yes, in many cases. But this is not new to us or them. Remote briefing support has been around longer than any of us active duty weather folks have been in the Air Force. But we take that a step further. The remote support will be better, supported by people who are focused on briefing crews and providing products to them that are better than staring across the counter at a radar summary off the Alden Facsimile machine. The OWS will use today's technology to share the information the crew needs to get the mission done. **Teamwork.**

That's not my job to support those guys. Maybe not, but take a real customer service approach as we migrate to new paradigms. DO NOT LEAVE CREWS OR CUSTOMERS HANGING if it's obvious they are struggling with who's responsible for them, especially during reengineering transition. And if you sense they're getting passed around from here to there, hold their hand a little and go the extra mile 'til we get everything in place. Imagine going into a store where you've always gone to a particular sales person and one day you walk in and that person says, "I don't do that right now" and walks away. Imagine how the crew feels. Let's don't be so cold in how we cut up that pie that we make a point of damaging our reputation. Nobody gains by that approach. Everybody wins when you put the mission first. **Teamwork.**

I told you they couldn't do it...they busted the forecast today. I've come to this conclusion: We used to bust forecasts. We bust forecasts today. We will bust forecasts in the future. Show me a forecaster who hasn't busted a forecast and I'll show you a person that hasn't put a forecast out. So let's be a little tolerant. You guessed it. **Teamwork.**

Having forecasters in the flying squadrons adds value. Okay, you caught me. This isn't a myth—it's absolute reality. As I talk to flying squadron commanders, they're absolutely ecstatic about what's happening with weather people in their business. And the weather folks are learning tactics and being more "bombs on target" smart. What they learn will serve us

very well as they become the next leaders of Air Force Weather. They've experienced first-hand the key element of a warfighting unit: **Teamwork.**

The point of highlighting these myths is not "hub-busting". Moreover, I've come to the conclusion that when you look at the things that frustrate forecasters over the long term, you'll always find us trying to do our best, being frustrated when we don't, and typically finding shortfalls in the process. These truths find a different setting in reengineering, but ones we must address every day we come to work—just as we did 20 years ago. I've yet to find an issue in the reengineered operational setting that we didn't have to deal with, in some fashion, 20 years ago. ♪

PACAF/DOW's Recipe for Success:

1. Maintain professional relations with your counterpart. We've always had personality conflicts. Park them at the door when you come to work.
2. Localized training for hub forecasters. TFRNs, local effects, customer familiarization. Travel to the sites you forecast for and have the experts tell you what they see and how it really happens. We've always done that.
3. CWTs must give the hub a heads-up call if unforecast weather is rolling in. (After all, the observer has always had that function—this is nothing new.)
4. The forecasters (hub) must be responsive. Again, this has always been expected of us.
5. The hub and CWTs must travel to see each other frequently, at least quarterly. Lack of face-to-face contact results in well-intentioned processes and procedures not being engrained in day-to-day operations. Accusations and assumptions about why people do things creep in, and THEY ARE NOT, IN MANY CASES, FACT-BASED.
6. Hub and CWTs will track metrics jointly and discuss trends on at least a monthly basis. Leadership must ID problems, work problems, and solve problems.
7. Do not work problems in such a way that demotivates people. This is just good leadership. Do not confuse this with the need to provide solid, specific constructive feedback. But it does speak to the manner in which we do it.
8. Finally, systemic and recurring problems will be elevated to the DOW staff to ensure reengineering stays on track. **Keep 'em flying!**

Weather training facility still churning out forecasters after more than 60 years

By Capt. Mac Harris

Commander, Joint Weather Training Flight

Our weather schoolhouse has formed the careers of literally tens of thousands of Army (back in the old days), Air Force, Navy, Marines, Coast Guard, DoD civilians and international observers, weather apprentices, forecaster apprentices, forecasters, weather craftsmen, and weather officers. We could just call them weather people, but that doesn't give the same flavor. The schoolhouse has proudly produced highly trained weather forecasters and observers supporting

warfighters in efforts ranging from World War, regional conflicts, and simple "flying around the flagpole" at your local base. Hopefully this article will give you some background on where the schoolhouse came from, where we are, and where we're headed.

Weather training for observers began in 1870 at Fort Whipple (now Fort Meyer), Virginia, after President Grant directed the Secretary of War to "provide for the taking of meteorological observations." The year 1937 is a significant one for Air Force Weather because it marked the advent of Air Weather Service and the birth of our "schoolhouse." The forecaster school started as the Army Corps for Enlisted Forecasters at Patterson Field, Ohio, while observing school began in 1937 at Scott Field, Ill. In 1940, the two schools were combined at Chanute Field, Ill. In 1947, the National Security Act created the individual Departments of the Army, Navy, and Air Force. While the Navy and Air Force continued to train and maintain their observers and forecasters separately, the Army agreed to have the Air Force provide all of its environmental support, an arrange-

ment that continues today.

Weather training continued separately for the Air Force and Navy up until 1978, when a congressional mandate forced consolidation of any Department of Defense enlisted training that could gain a cost savings by operating jointly. Weather training was identified for consolidation and Navy, Marines, and Air Force weather personnel were brought together to train at Chanute. A special interservice organization, called the Interservice Training and Review Organization, was set up to govern the "new" weather school and the Air Force was designated the lead (host) organization. The Joint Weather Training Flight has been turning out weather warriors to support all aspects of DOD operations ever since. We also train Coast Guard (Department of Transportation) personnel, international (Japan, Hungary, Korea, Thailand, Philippines, and others) enlisted and officer students, and DOD civilians.

In 1988, the Base Realignment and Closure committee identified Chanute as a closure target. In late 1992, Chanute closed down and the schoolhouse moved to Keesler



AFB, Miss., landing in the present facility in March of 1993. Organizationally, our flight falls under the 335th Training Squadron, a unit of the 81st Training Group, one of four groups in the 81st Training Wing. Weather personnel make up approximately 50 percent of the 335th TRS, which also administers manpower and personnel training via the Manpower and Personnel Training Flight. Our squadron's other operational flight, the Military Training Flight, or MTF, houses all of the squadron's non-prior service students in a modern, state-of-the-art dormitory, teaches and maintains military standards, and otherwise takes care of the students during the time when they are not in the academic environment.

In a given year, the trained personnel requirement for the schoolhouse stands at nearly 2,000 personnel. On a given day, we have approximately 450 people, 350 interservice and international students, 100 interservice instructors and staff, working in our \$20 million

dollar facility at Keesler. Our facility is truly the "crown jewel" of Keesler; we recently hosted a dinner for the Secretary of the Air Force in our third deck observatory. Despite some bad luck with weather (heavy thunderstorms, of course!), the event was a huge success.

Due to changes in the structure of Air Force Weather, we no longer train observers in our Air Force three-level initial skills course; instead, we currently train forecaster apprentices. These young people have been steered clear of paper chart analysis and are using computers to accomplish their analysis and re-analysis. Other major changes to come include the discontinuation of the forecaster course, scheduled for 2002, and the development and implementation of the combat weather flight course, now slated for start in fall of 2001.

Both weather officers and enlisted, returning from their first tour at an Operational Weather Squadron, will come to the CWF course and train side-by-side for about 21

weeks while they learn to support operations at the base level. Our other major in-house course is the weather officer initial skills course. This course trains 70 new weather officers in basic military weather support each year. We also administer 14 other courses ranging from tropical meteorology to Doppler radar and electro-optics to the unique forecasting and observing courses for the Navy and Marine Corps personnel.

As you read through this issue, think back to the days when you were at Keesler (or Chanute). Even if it was just recently, even a year ago, things have changed quite a bit here at the schoolhouse and will continue to do so as we continue implementing re-engineering.

We thank all of you for your feedback on our graduates (we do read the surveys!!) and we will continue to produce well trained and professional airmen, sailors, and marines for supporting military operations worldwide. We call them *Weather Warriors!* ♡

LIGHTS...CAMERA...ACTION!

Instructors use television to teach critical forecasting skills

By Capt. Rayna Mercer
Weather Schoolhouse Instructor

There's only one place in the world where you can teach weather live on television. You guessed it—Keesler Air Force Base. Did you know that you can practice to become a broadcast meteorologist by volunteering to teach? Welcome to the Environmental Support for Electro-Optical Systems Course—the only weather course taught via distance learning. Distance learning is simply structured learning that takes place without the physical presence of the instructor.

We think we have the best job in the Air Force. We instruct weather forecasters how to prepare a tactical decision aid using the Target Acquisition Weather

Software. It's an exciting job that requires you to instruct inside a television studio as opposed to a classroom. Instead of unlocking a room before class at the schoolhouse, we put our microphone on, do a voice and sound check, throw on some makeup, and stare inside a camera all day! You learn new ways of communicating with your students—learning who they are by the voices; not their faces.

This new way of instruction is being implemented in most career fields worldwide. It's an obvious sign that the year 2000 is upon us. Distance learning is a challenging way of instructing that has unique and rewarding experiences unlike those found elsewhere in weather. To sign up for the course, contact your local base education office. Then all you need to do is show up for class, turn the T.V. on, and prepare to observe technology at its finest! ♡

LEARNING THE ABCs OF

Superintendent explains the many “nuts and bolts” needed to grow a qualified, mission-ready weather professional

By Senior Master Sgt. Dale Williamson
Superintendent, Weather Forecast Course

As superintendent of the Weather Forecaster Apprentice Course, I have the privilege of overseeing the training of Weather Forecaster Apprentice graduates; the future of AFW. I work day to day with my staff and the students to provide the field with the highest quality graduate.

Working with Air Force and Air Education and Training Course Instructions, I ensure our students meet academic and non-academic standards. I believe our responsibility is fourfold; academic standards; military bearing; physical fitness; and mental preparedness.

ACADEMIC STANDARDS Forecaster apprentice course instructors

attend a 4-week Basic Instructor Course prior to teaching at the schoolhouse. Once at the schoolhouse, new instructors observe qualified instructors who provide them one-on-one training in a particular subject. The new instructor reviews all course material, develops a lesson plan, and takes all of the tests before they are qualified to teach. After initial qualification, an instructor teaches his first class with a qualified instructor who observes performance and provides feedback.

We teach to the standards as outlined in the Career Field Education and Training Plan. Career field functional managers determine

requirements based upon needs. We take those requirements and develop all of the course materials, working closely with the flight Training Development Element.

MILITARY BEARING We continue the “bluing” process that began in Basic Military Training. Working closely with the Military Training Flight; we monitor all students for compliance with AFI 36-2903, Dress and Personal Appearance of Air Force Personnel. Our students are expected to look sharp and violations are identified and corrected. We use this as an opportunity for students to learn. We expect and demand airmen to conduct themselves in a military manner at all times. This means students walk single file through the halls and rise to the position of parade rest whenever instructors enter the classroom.

This is an effort remind the students that this is a military school first, not college or high school. Our



Two Air Force Weather Forecaster Apprentice students work on theater area forecast worksheet preparation.

TRAINING



Technical Sgt. Gene King (far right) and his Air Force "Unique" Forecaster Apprentice students listen to a student briefing on the current forecast model output.

career field demands military bearing and so does the Air Force. Those students not conducting themselves accordingly face the usual disciplinary actions—verbal counseling, written counseling and reprimands or possible Article 15's. And yes, they do get sent to the "Principal's Office." Non-prior service students face the additional consequences of being phased back (losing privileges) or Remedial Military Training. The airmen we send to the field should be well-trained and highly-disciplined. That is our goal!

PHYSICAL FITNESS Although the schoolhouse is not charged with physical fitness of the students (that is the MTF responsibility), we do

believe that we have a responsibility to identify any physical/medical problems that require attention and get them resolved before students graduate and move on to their assignments. We can refer the student to sick call for appointments, ensure they meet those appointments, and monitor their condition as it relates to classroom learning and meeting the course objectives.

MENTAL PREPAREDNESS We do our best to identify personal problems and assist the individual in resolving them so as not to impact training. We want to get the ball rolling on a solution before they report to their Operational Weather Squadron. We do extensive counseling after each failure or when we perceive a problem (academic, personal, or discipline). If a problem continues we can refer that individual to the Training Squadron Chaplain,

hospital, Life Skills Enhancement Center (formerly mental health), Personal Financial Management Program reps, and other base agencies that may be required. Do we have success stories—you bet!

All of the staff members at the schoolhouse share the sense of accomplishment and pride with each graduating student. It's a tremendous feeling sending a well trained student into the field because we know that we've given each student the tools they need to excel in the weather career field, the rest is up to them and the receiving OWS. Being an instructor is truly a rewarding experience. Keeping our focus on academic standards; military bearing; physical fitness; and mental preparedness, we feel we can provide the field with the best possible graduates. ♣

Weather Reservists: Engaged in reengineering

Call goes out to Citizen-Airmen to supplement AF's staffing

By Col. Rich Fisher

Individual Mobilization Assistant to XOW

Reservists, one-part of today's Total Force triad, has been integral to Air Force Weather for more than 50 years. In 1948, during the dramatic military post-war active duty downsizing, the new Air Weather Service Commander, Brig. Gen. Don Yates hired 2,800 reservists. His intent was to supplement and to rapidly rejuvenate an under-performing post-world war AWS. Those reservists were critical in the successful transition to a cold war weather service charged to support both the Air Force and the Army. Today, 95 weather-ready reservists scattered throughout 12 major and unified commands in the Air Force bring extensive active duty experience to weather units around the world. In addition, the 53rd Weather Reconnaissance Squadron is a flying reserve unit and a national asset that helps save lives by providing critical storm data to the National Hurricane Center.

Modern day weather individual reservists, also called Individual Mobilization Augmentees or IMAs, are active duty assets, managed by the major commands to which they are assigned. Altogether, there are more than 12,000 IMAs in virtually every career field across the Air Force who provide primarily a wartime supplement to active duty forces. But IMAs can also be hired to bring aboard special expertise not otherwise available among the active duty. For example, in Air Force Weather, advanced degree IMA meteorologists at the Air Force Weather Agency at Offutt AFB add a significant capability to meteorological model development and applications.

Since IMAs are primarily intended to be wartime assets, the bulk of the current AFW IMAs are assigned to major commands that carry the largest war-fighting profiles; Air Combat Command and Air Mobility Command. The remainder are spread among 10 other major and unified commands. Approximately 85 percent of AFW IMAs are officers. Most weather IMAs have advanced degrees and more than 10 years

of Air Force weather experience. Many are meteorologists in their civilian occupations, but all bring a wealth and breadth of experience to their Air Force jobs.

The strategy for use of most reservists in reengineered Air Force Weather emphasizes direct support to all Air Force Reserve flying units (Air Guard Weather Flights will support primarily Guard flying units). Consequently, when a reserve flying unit deploys, the weather reservist assigned to the unit will deploy simultaneously. This assignment concept will be phased-in over a period of

several years so as not to inadvertently lose incumbent members who cannot adapt to training at a new location or within a new schedule.

Special projects are especially well-suited for IMAs. A stellar recent example is the electro-optics tactical decision aide upgrade that Lt. Col. Mary Lockhart has spearheaded over the last couple of years. Along with an F-16 pilot, she has engineered a markedly improved tool that will allow forecasters to directly assist operators anticipate target acquisition conditions.

Weather IMAs recently have deployed around the world performing their duties seamlessly with their active duty and Guard counterparts. Reservists have served in many of the hotspots including Bosnia and Southwest Asia as well as other parts of Europe. During Operation Allied Force 11 IMAs were mobilized for a period of several months. Active duty commanders and fellow forecasters at these forward locations have told me that these citizen airmen - men and women - came to the fight prepared and committed.

Without fail, commanders and supervisors say, "give me more reservists." So, we are recruiting from the ranks of separated weather members of any service to acquire more IMA weather forecasters. To place these new IMAs, we have requested, and are optimistic about being assigned, several new positions.

Joining the IMA program makes sense for separating weather men and women. It's a great part-time job that allows you to earn good money while applying skills you already know. Moreover, you can build a handsome supplemental retirement plan. The IMA program is especially attractive to busy professionals because duty time is negotiated with his/her active duty supervisor. Unit reservists, on the other hand, must adhere to a



strict pre-established monthly and annual training schedule. IMAs by necessity must be self-starters willing and capable of solving problems on their own, whether technical weather tasks or personnel, travel or other administrative issues. The most important reason to become an IMA is that the Air Force urgently needs your expertise.

Another way we have found to better use the skills and knowledge in the IMA corps, is to bring volunteer reservists back on active duty for a limited period. Five IMAs have answered this call and returned to extended active duty. Another application is being processed now. Those on active duty requested and received their respective assignment preferences at Pope, Davis-Monthan, Scott and Shaw AFBs and Sembach AB, Germany. This has been a very successful program since instituted more than two years ago. IMAs are still welcome to apply. The longest initial assignment period for noncommissioned officers is three years and for officers, two years.

Brig. Gen. Lewis, recently retired Director of Weather, said "...reservists are an absolutely critical component in Air Force Weather... true Total Force partners." He was especially proud of the fact that so many IMAs were on active duty volunteered for long active duty tours during Operation Allied Force and that several more IMAs have returned to extended active duty to help out during the difficult transition period in reengineering. He concluded his active duty career by saying of the Guard and Reserve, ... "we trust you to

fight a war with, and that's the highest form of trust in our business. You are special, dedicated, outstanding weather warriors, who I was proud to serve with."

Any discussion about weather reservists certainly cannot be complete without recognizing the yeoman service of the 53rd WRS – the Hurricane Hunters – located at Keesler AFB, Miss.

These men and women form the only Air Force Reserve Squadron solely devoted to weather; the only reserve flying unit devoted solely to weather; and the only unit program devoted solely to weather. Twenty crews comprised of approximately one half full-timers and one half part-timers fly 10 specially-equipped WC-130H aircraft. Theirs is a colorful and distinguished history of heroics and devoted public service.

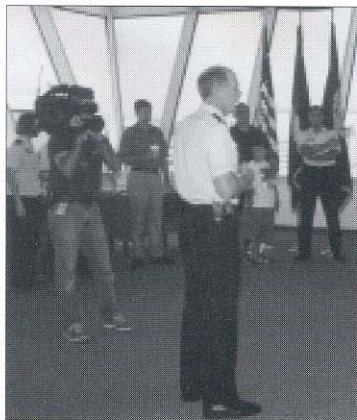
If you or someone you know in the weather career field, whether Air Force, Navy or Marine, is separating from active duty, consider joining the Air Force Reserve. As an IMA, the possibilities are almost endless. To find out about vacant weather IMA positions, check www.amc.af.mil/do/dow/IMA_home.htm or www.arpc.org, or call Mr. Bob Miller at 618-256-5082 or Mr. Stan Tkach at 757-764-8445. To find out about the 53rd WRS, see www.hurricanehunters.com.

Opportunities exist for reservists to return to extended active duty at almost any Air Force weather unit in the world. Especially needed are volunteers for work in operational weather squadrons. To volunteer for extended active duty, contact Lt. Col. Ron Dunic at 703-696-4849. ♪

T.V. METEOROLOGISTS GET A TASTE OF BILOXI

Courtesy of the Weather Schoolhouse

The Weather Training Flight hosted a Weathercaster's Weekend along with the Biloxi Bay Chamber of Commerce March 23-25, 2000. Broadcast meteorologists from the south-east region of the United States came to



Biloxi for the weekend. The Weather Training Flight welcomed the group on Friday morning with

was given by Detachment 1, 334th Training Squadron, from Hurlburt Field, Florida. This group of

a breakfast and tour of the schoolhouse. The tour included a hands-on demo of the WSR-88D Doppler Radar. The group interrogated severe storms that occurred recently in the southeast.

The second part of the tour

weather warriors set up camp outside the schoolhouse. The array of equipment on display included the TMQ-34, GMQ-33, QRCT 3 and a MOS kit.

The broadcast meteorologists were thoroughly impressed and were excited to see the military's weather forecasters in action. This annual event will continue to be hosted by the Biloxi Bay Chamber of Commerce and Keesler Air Force Base to make the public aware of Biloxi's vibrant community and the military's primary weather training facility. ♪

If you've always wanted to teach!

Consider applying for AETC's Technical Instructor Duty

By Chief Master Sgt. Michael Dougherty
Former Superintendent (PCS'd to Korea)

Have you ever considered becoming a better public speaker? Would you enjoy a four year controlled tour and a stable life style? Does living along the Mississippi Gulf Coast sound intriguing? Do you want to increase your chances of promotion? Then the Air Force has a challenging and rewarding job waiting for you, Air Education and Training Command's Technical Training Instructor Duty.

The 335th Training Squadron at Keesler Air Force Base, Miss., is home for Air Force Weather personnel who train and educate young personnel to become key members of our career field. Over the past 4-½ years of my assignment here at Keesler, we have received numerous telephone calls from personnel in the field asking about instructor duty and the application process. The reference for AETC instructor duty is SPECAT 101, AETC Technical Training Instructor (Enlisted). All personnel wishing to apply for instructor duty should review this information prior to applying.

Personnel meeting the above qualifications should work closely with their MPF to apply. Application must contain: copies of individuals last five performance reports, copy of Air Force Form 422 with current physical profile, height and weight with statement "Applicant's medical records have been reviewed and there is no history of alcohol/drug abuse

and individual is able to endure long periods of standing on a daily basis." AF Form 415 or equivalent, copy of Community College of the Air Force progress report or a general education CLEP test results if individual does not hold an Associates degree or higher. Mail the application to: HQ AETC/DPAAT, 1851 1st Street East, Ste. 1, Randolph AFB Texas, 78150-4315.

Some of the benefits associated with instructor duty include no shift work. Duty hours are normally Monday through Friday 0600 – 1600, and because Keesler AFB operates under a compressed work schedule where every other Friday is a down Friday. This enables Keesler personnel to enjoy a three-day weekend. This schedule allows instructors and staff

members' time to complete off duty college education. Additionally, there is no mobility commitment. Promotions within the schoolhouse are normally well above the rest of the career field. During last years promotion cycle the schoolhouse had five members promoted to technical sergeant, and five promoted to master sergeant. Some instructors have even earned two stripes during their tour. Other benefits of instructor duty are the Occupational Instructor Certificate and the highly-coveted Master Instructor status.

Instructor duty is a challenging and rewarding career option for those in any career field. In addition to being an instructor, you'd also be a mentor to our young airmen. This mentorship pro-

vides the opportunity to make a lasting impression upon them as they graduate and go into the operational field.

Personnel interested in instructor duty may contact myself or Senior Master Sgt. Paul Leidig at DSN 597-0362. ♪

Qualifications for instructor duty are:

- **Grade E-4 or higher, skill level commensurate with grade**
- **If CONUS, minimum two years on station at time of application, if currently on a controlled tour, individual must be within 12 months of date of availability**
- **Physical profile of 1211212**
- **Meet current weight standards**
- **Overall EPR ratings of 3 or higher on last five performance reports**
- **Ability to obtain 48 months retainability as of the requirement month**
- **Associates degree or within one year of completion of an Associates degree**

Who decides what to teach?

The evolutionary process of an approved weather course

By Ms. Vickie Simants

Chief, Training Development Element

How does a new course evolve? It all begins with a Utilization and Training Workshop, usually held at the Weather Schoolhouse. These are conducted about every two years and each MAJCOM sends an officer and an enlisted representative. The enlisted representatives are normally chief master sergeants. Each group (officer and enlisted) reviews their applicable specialty training standard or course training standard to identify any changes. Then they review the supplemental course CTSs.

All of the formal weather courses taught at the school are reviewed. If a proposed change is not unanimous, a vote is taken.

Each MAJCOM has one vote. Neither the schoolhouse nor the Career Field Manager are voting members, but the CFM will vote in case of a tie. U&TWs are where STS/CTS line items and their proficiency levels are determined, so always let your MAJCOMs know about your training requirements, so they can be

introduced at the U&TWs. If the changes are in Air Force-only courses, the new STS/CTS is given to the schoolhouse to begin curriculum development. However, not all of our courses are Air Force only.

Many of the weather courses taught at Keesler are Interservice Regulatory Organization courses. In other words, we teach consolidated courses with the Navy and Marine Corps, with the Air Force acting as the host service. Both the Navy and the Marine Corps have meetings similar to our U&TWs where they can also identify changes they want made to the courses. Any changes identified in the consolidated portion

of an ITRO course must also be approved by all three services before it can be implemented. When these situations arise, a Curriculum Review Board or Joint Service Review is called and the three services send representatives.

The Air Force representatives are usually the officer and enlisted Career Field Managers, with the officer having the

Air Force vote. Another review is conducted and sometimes compromises by one or more services, must be made before a final agreement can be reached. The final STSs and CTSs are then given to the schoolhouse for development to begin.

The Forecaster course has been an ITRO course since 1978, but because of reengineering the Air Force no longer needs this course. The Air Force is withdrawing from the current Forecaster course in FY02 and it will become a Navy and Marine Corps only course. The Air Force has already identified requirements for new enlisted and officer Weather Flight Operations courses, which is scheduled to begin in October 2001. These requirements were finalized at the November 1999 U&TW and will be published in the next Career Field and Education Plan later this year.

The Navy and Marines are currently reviewing our new requirements to determine if they want to join in on our Weather Flight Operations course. If they decide to combine with us, another review of our requirements will probably result.

For the officer and enlisted weather flight courses, the schoolhouse is working on a tentative course layout, determining course lengths and identifying requirements for classroom space, equipment and manpower.

In a project of this magnitude, specific slots are authorized just for

All of the formal weather courses taught at the school are reviewed. If a proposed change is not unanimous, a vote is taken. Each MAJCOM has one vote.

See EVOLUTION p.22

Weather Officer Course Revised

Courtesy of the Weather Schoolhouse

The Weather Officer Course is the introductory course for all Air Force and Air National Guard weather officers. The Weather Officer Course also teaches foreign officers. The WOC is 13 weeks long and annually trains about 70 new Air Force and Air National Guard students. Most students have a degree in meteorology before attending the WOC. Those who do not have a degree in a technical field, such as mathematics, computer science and physics, then attend a civilian institution for a year to study meteorology through the Basic Meteorology Program. Civilian undergraduate meteorology classes concentrate on theory. The Weather Officer Course takes that knowledge of theory and tailors it to military operational meteorology.

The first block of the course concentrates on the Air Force Weather structure, a weather officer's career, customer support, and weather impacts to operations. The second block is Skew-T and weather chart analysis. Most students have already learned how to plot Skew-Ts and weather charts during their undergraduate work. The Weather Officer Course teaches students how to analyze these charts, then apply that knowledge to supporting the customer. They typically learn to analyze for things such as convective and non-convective severe weather.

The satellite is one of the most important tools of our profession and is covered extensively in block three. Students learn the capabilities and limitations of satellite systems, how to interpret visible, infrared and microwave satellite imagery, and streamline analysis using

satellite imagery. Block four is the special topics portion of the course. Students get an introduction to several meteorology topics, including space weather, observing, tropical, oceanography, aircraft hazards, and numerical weather prediction.

Block five covers the fixed weather equipment that students will operate in the field. Each student spends six days learning about Doppler radar and AMIS. They also learn about radar theory, interpretation, and operating the radar. An additional five days is used to introduce students to hands-on operation of the equipment. Students learn the background information for AMIS and again spend five days with actual hands-on experience. The last three weeks of the course is dedicated to applying what has been learned to an operational environment. They are assigned a lab and each lab is designated as a Weather Hub. They are then responsible for pilot briefings, forecasts for many locations, and staff weather briefings.

The Weather Officer Course has recently been revised to incorporate Air Force Weather Reengineering efforts. Block one now covers the structure and mission of the new Operation Weather Squadrons, AEF and weather impacts on weapons systems. Block two was expanded to cover convective and non-convective severe weather more thoroughly. The satellite portion of the course was also expanded to include using satellites to determine wind flow and streamlines. Block five was revised to include AMIS, which is replacing AWDS. Finally, the lab section has been revised to mirror operational weather squadron operations. Most new lieutenants will now go to operational weather squadrons as their first assignment. ♪

REVISED COURSE SYLLABUS

Block 1: Weather Support

- Unit 1: Orientation
- Unit 2: Career Development
- Unit 3: Weather Support System
- Unit 4: Wartime Weather Support
- Unit 5: Unit Support

Block 2: Analysis Techniques

- Unit 1: Climatology/Mid-Latitude Weather
- Unit 2: Skew-T
- Unit 3: Weather Chart Analysis

Block 3: Satellite

- Unit 1: Concepts and Satellite Interpretation

Block 4: Special Topics

- Unit 1: Space Weather
- Unit 2: Observations and Equipment
- Unit 3: Tropical Weather and Oceanography
- Unit 4: Aviation Hazards
- Unit 5: Numerical Weather Products

Block 5: Fixed Computer Equipment

- Unit 1: WSR 88-D Weather Radar
- Unit 2: Advanced Meteorological Information System(AMIS)

Block 6: Weather Station Operations

- Unit 1: Forecasting Laboratory

WEATHER WARRIOR

PACAF

NAME: A1C Marjorie Kirby

UNIT: 51 OSS/OSW

JOB TITLE: Weather Observer

YEARS IN SERVICE: Three years

HOMETOWN: San Diego, CA

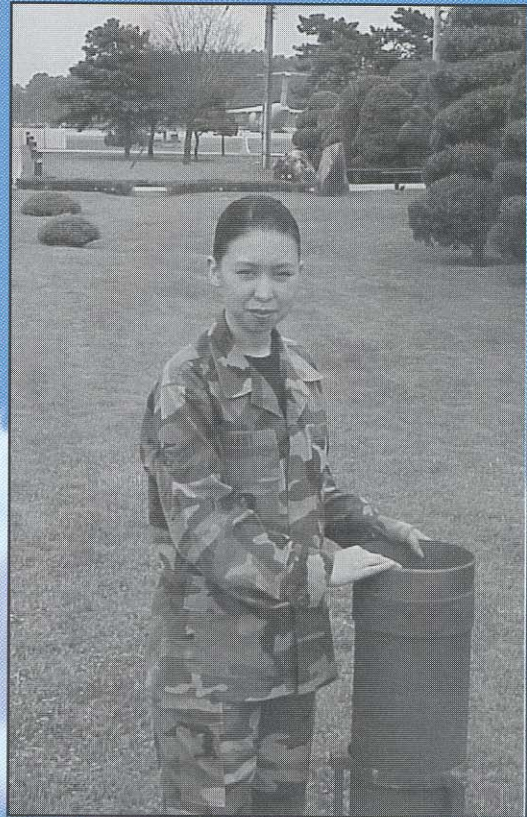
FAMILY STATUS: Single

HOBBIES: Secretary of Osan Filipino-American Association, Secretary of Dorm Council, Booster Club Representative, and karaoke

REASON JOINED THE AIR FORCE: travel, education

PERSONAL MOTTO: "Do your job to the best of your ability...and people will see and appreciate your efforts."

MOST MEMORABLE AIR FORCE WEATHER EXPERIENCE: While stationed at Fairchild AFB, standing literally at the end of the runway with a turbometer, a compass, and a radio, relaying winds to the forecaster for a KC-135 takeoff during a winter 35-knot wind storm.



ANG



NAME: Therese M. Gibson (Terry), Master Sgt.

UNIT: 116th Weather Flight, WA ANG, Camp Murray, Wash.

JOB TITLE: Meteorological Technician

YEARS IN SERVICE: 15

HOMETOWN: Orting, Wash.

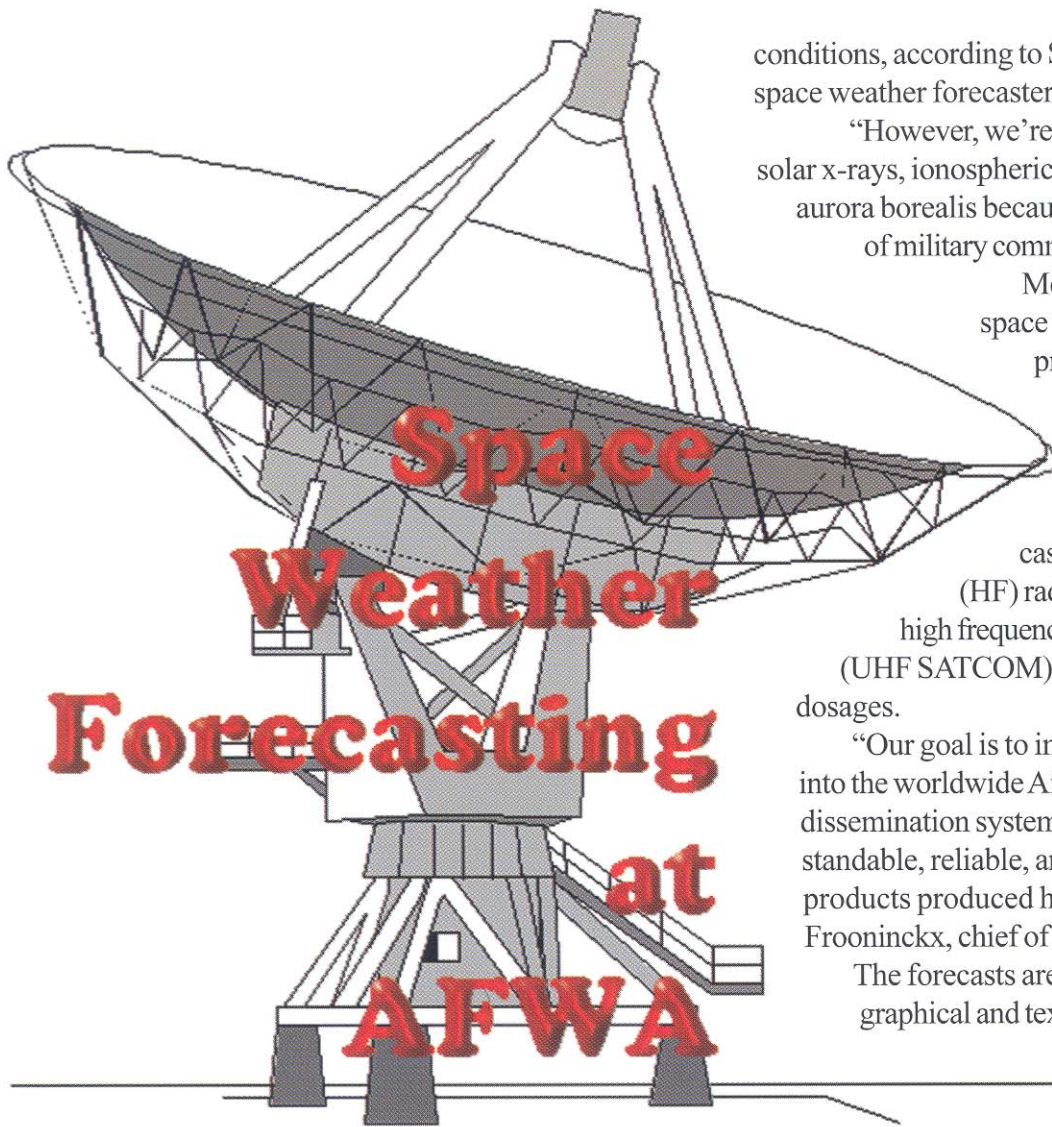
FAMILY STATUS: Married to Ken, 3 daughters, Chrissy, Heather and Laura

HOBBIES: Camping/Hiking, Quiltmaking, Gardening, and Ceramics

REASON JOINED THE AIR FORCE: Enjoyed weather observing while active duty Army and wanted to serve again.

PERSONAL MOTTO: Everyone wants to do well, but needs to be given the proper inspiration.

MOST MEMORABLE AIR FORCE WEATHER EXPERIENCE: Participating in Operations Joint Forge in Slavonski Brod, Croatia and Noble Anvil in Trapani, Italy. In addition to contingency operation's knowledge gained, I learned how truly fortunate we are to live in the United States.



conditions, according to Staff Sgt. Ernest Samuel, the space weather forecaster who released the first product.

“However, we’re monitoring the intensity of solar x-rays, ionospheric disturbances, and even the aurora borealis because they can affect certain types of military communications,” he added.

Members of the newly formed space weather section here will produce approximately 140 space weather products every day during this first phase, including space weather analyses and forecasts in support of high frequency (HF) radio wave communications, ultra high frequency satellite communications (UHF SATCOM), and high altitude radiation dosages.

“Our goal is to integrate space weather products into the worldwide Air Force Weather information dissemination system, and to make them as understandable, reliable, and relevant as the other weather products produced here at AFWA,” said Maj. Tom Froominckx, chief of AFWA space integration.

The forecasts are provided in a variety of graphical and textual formats with an emphasis on producing visualized products to meet customer requirements.

Since AFWA

See SPACE p. 22

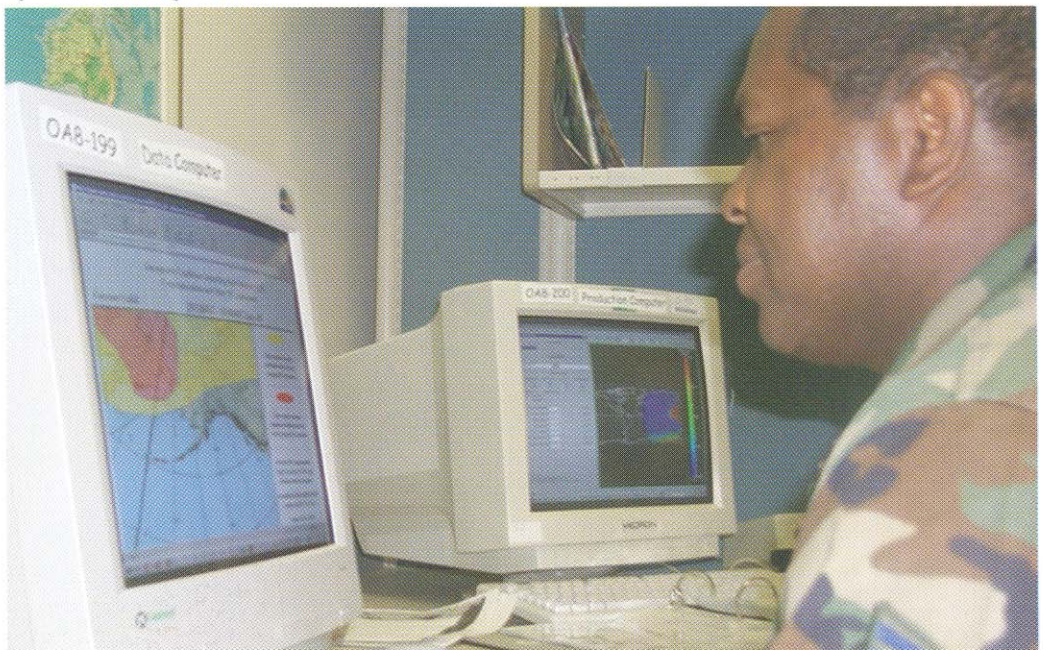
By Ms. Paige Rowland
AFWA Public Affairs

The space weather mission crossed a milestone June 29 with the release of the first space weather product from the Headquarters, Air Force Weather Agency.

The release brings an end to phase one of the space weather mission transfer to HQ AFWA from one of its subordinate units, the 55th Space Weather Squadron at Schriever Air Force Base, Colorado.

The initial forecast generated here showed relatively calm space weather

Space weather forecaster Staff Sgt. Ernest Samuel prepares one of the first Headquarter AFWA space weather products.



**AIR FORCE
Core
Values:**

**Integrity
First**

**Service
Before
Self**

**Excellence
In All
We Do**

FORECAST: Improved conditions for weather career field



By Senior Master Sgt. Paul F. Leidig
Superintendent, Weather Training Flight

The weather forecast school is a rigorous 22.5-week course designed to train airmen to perform duties as Weather Journeymen. Graduates are assigned duties at Air Force and Army installations throughout the world.

The curriculum includes instruction in atmospheric physics, dynamics, satellite interpretation, analysis, propping techniques, Doppler radar, severe weather, weather effects on electro-optical weapon systems, tropical weather, mesoscale forecasting, journeyman duties, the Automated Weather Distribution System and weather station operations.

Twenty-seven faculty members from the Air Force, Navy and the Marine Corps are assigned to the course. The student-teacher ratio is 12:1, allowing effective interaction between faculty and students. Instructors routinely provide after-duty, one-on-one assistance to students.

Preparation is the key to success in forecasting school. Students should initiate a study program 4 to 6 months prior to their class start date. This is a two-part process; utilizing self-study and supervised training.

Self-study material is available in Career Development Course Number 1W051, Part B, Volumes 2 and 3 and is available to all personnel as promotion study material. A second source of information is the college text *Meteorology Today*, by C. Donald Ahrens. The text can be purchased on-line at www.amazon.com. The cost is \$63.95 plus shipping and handling. Supervised training is conducted in the weather station by a qualified forecaster, and should concentrate on chart analysis and forecasting techniques, emphasizing the dynamic reasoning that goes into these processes.

In Fiscal Year 2000 the forecast course will train 150 active duty and 50 Air National Guard and Air Force Reserve airmen. The student population will increase to 200 active duty and 75 Air National Guard in FY 2001.

Graduates are awarded 36 credits towards an associate's degree in weather technology from the Community College of the Air Force.

Visit our Web Site at www.keesler.af.mil/335trs. ♣

It's An Ethical Thing

By Lt. Col. Robert C. Thorp

Air Force Weather Agency Inspector General

From time to time, everyone will face an ethical dilemma. How we handle it will either build our character or destroy it.

As government civil servants we are constrained to a series of ethical rules, regulations, and guidelines that define our actions. Sometimes the sheer volume of guidelines seem insurmountable, that every step we take is designed to "trip us up."

However, we still need to know what things we can do and what things we can't do. There are even times that the rules are unclear or "gray" and require a legal evaluation.

As leaders in today's Air Force, it's incumbent upon you to make the right choices and to do the right things, regardless of your personal involvement or commitment.

Before you make that big or small decision, consult with professionals that have knowledge and experience to guide you to the correct decision. For example, before you commit government funds to purchase invitations for a retirement dinner, consult with your servicing JAG as to the legality of it. You may be surprised with the answer.

Before, you send out an e-mail soliciting support for non-federal entities to everyone in your chain of command including contractors, have a supervisor, commander, or even the IG review it for accuracy and compliance.

It's about making informed decision at the right time which will enviably build confidence in your team and keep you on the path to success. ♪

SPACE cont. from p. 20

assumed command of the space weather mission from Air Force Space Command last October, wheels have been in motion to stand up a space weather element here in the special support operations branch under AFWA's director of operations. The team currently consists of meteorologists specially trained in space weather.

"Reengineering Air Force Weather has allowed us to reexamine how we do business, and now we can do the space weather mission in one facility rather than two," said Col. Charles French, AFWA commander.

Space weather products support six Department of Defense mission areas.

Those areas are satellite operations, communications (HF and UHF SATCOM), intelligence collection, single-frequency GPS navigation, space tracking, and U-2 and Space Shuttle high-altitude human flight.

The job of the space weather section is to analyze and forecast space weather conditions that can adversely affect those mission areas.

"As an example, military forces using UHF SATCOM need to be aware of possible outages that may occur as a result of space weather disturbances," said Capt Ariel Acebal, operations team chief.

Phase two of the transfer is scheduled to be completed 27 July and will add an additional 50 space weather products produced here.

The completion of the space weather mission transfer, consisting of five phases, is set for the summer of 2001. ♪

EVOLUTION cont. from p. 17

curriculum development. The curriculum development team is currently being selected from the existing instructor corp here at the school, so their teaching and development expertise can be utilized. Their slots will be back-filled from the career field.

Once changes are made to a course, it goes through a validation process. Here, the hours, the objectives, the curriculum, tests, audiovisual aids - just about everything - is scrutinized for their ability to meet the STS or CTS line item. Validation is normally conducted for the first three

classes. Further changes may result from the validation data gathered. From there, it is continuous maintenance for the courses, with the instructors and staff always keeping an eye out for changes or upgrades occurring in the field.

Those who have had the opportunity to experience instructor duty at the school, you understand how this process works and have seen firsthand how rewarding it can be to instruct and to help train the young airmen and officers who will soon be the new generation forecasters of the Air Force. ♪



MEDALS

MERITORIOUS SERVICE MEDAL

Master Sgt. Jeffrey A. Goldman, 111th WF, Houston, Texas
(1 OLC)

Master Sgt. Dale R. Light, Air Force Combat Weather
Center, Hurlburt Field, Fla.

AIR FORCE COMMENDATION MEDAL

Technical Sgt. Mike Mortenson, 9th OSS/OSW, Beale AFB,
Calif.

Technical Sgt. Joseph G. Pestana, 57th OSS/OSW, Nellis AFB NV
(2nd OLC)

Staff Sgt. Stephen R. Dunwoodie, Air Force Combat
Weather Center, Hurlburt Field, Fla.

AIR FORCE ACHIEVEMENT MEDAL

Staff Sergeant Rafael A. Kaup, 305th OSS/OSW
McGuire AFB, New Jersey

TEXAS LONE STAR DISTINGUISHED SERVICE MEDAL

Master Sgt. Jeffrey A. Goldman, 111th WF, Houston, Texas

ANG PROMOTIONS

TO MAJOR

Loretta J. Lombard, 116th WF, Camp Murray, Wash.

TO CAPTAIN

James A. Wingenroth, 125th WF, Tulsa, Okla.

TO 1ST LIEUTENANT

Julie F. Chambers, 181st WF, Fort Worth, Texas

TO MASTER SERGEANT

Carlos A. Delanuez, 159th WF, Camp Blanding, Fla.

TO TECHNICAL SERGEANT

Jeffrey A. Sarver, 165th WF, Louisville, Ky.

TO STAFF SERGEANT

Marjorie L. Norton, 127th WF, Forbes Field, Kan.

Lara D. Owczarski, 116th WF, Camp Murray, Wash.

Myron T. Whitmore, 104th WF, Baltimore, Md.

EDUCATION

JOHN L. LEVITOW AWARD

Technical Sgt. Robin Clark, Air Force Weather Agency, Offutt
AFB, Neb.

AIRMAN LEADERSHIP SCHOOL

Senior Airman Adam B. Weiner, 57th OSS/OSW, Nellis AFB, Nev.

COMBAT AIR PLATFORM EMPLOYMENT SEMINAR

Staff Sgt. Wayne R. Hardesty, 57th OSS/OSW, Nellis AFB, Nev.

WEATHER SATELLITE SYSTEMS COURSE

Senior Airman Huan C. Duong, 57th OSS/OSW, Nellis AFB, Nev.

NEXRAD COURSE

Mr. Tommy B. Timmons, 57th OSS/OSW, Nellis AFB, Nev.

EOTDA DISTANCE LEARNING COURSE

Technical Sgt. Joseph G. Pestana, 57th OSS/OSW, Nellis AFB,
Nev.

Staff Sgt. Wayne R. Hardesty, 57th OSS/OSW, Nellis AFB, Nev.

Mr. Al Caudel, 57th OSS/OSW, Nellis AFB, Nev.

NIGHT VISION GOGGLE INSTRUCTOR COURSE

2nd Lt. Jerome H. Hernandez, 57th OSS/OSW, Nellis AFB, Nev.

RETIREMENTS

Master Sergeant Clayborn C. Barnett, III, Master Sergeant Sean
P. Julich, Technical Sergeant Gordon K. Chapman, Technical
Sergeant Kevin N. Shindollar, Technical Sergeant Curtis G. Crow,
Technical Sergeant Mark R. Rice, Technical Sergeant Michael G.
Chilcott, Technical Sergeant Wayne R. Lacosse, Staff Sergeant
Bradley J. Doucette, Air Force Weather Agency, Offutt AFB,
Neb.

Technical Sergeant Brian L. Miller, 305th OSS/OSW, McGuire
AFB, New Jersey

PLEASE USE THE FOLLOWING GUIDELINES WHEN SUBMITTING ITEMS FOR SALUTES

1. All submissions should be formatted: Rank, First name, Middle initial, Last name and Unit.
2. All major medal sections should be formatted using Universal Bold Type, 12 points
3. Individual information should be in Times New Roman Normal Type at 12 point.
4. All listings should be ranked: medals, promotions, education, re-enlistment and retirements. Refer to the PFE for proper order of medals if unsure.
5. All regular AF promotions are run once from promotion announcement listing. ANG promotions are run as received because of their promotion procedures.
6. Email submissions to "observer@afwa.af.mil"
We appreciate your support!

