

The Magazine for Air Force Weather
OBSERVER

February 1996

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**Exploiting The
Weather To
Assure Access
To Space**



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Headquarters
Air Weather Service

OBSERVER Editorial Staff

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

Commander, Air Weather Service
Col. Joseph D. Dushan

Vice Commander, AWS
Headquarters Consultant
Col. Gerald F. Riley, Jr.

Editor/NCOIC, Public Affairs
Staff Sgt. Steve Elliott

Headquarters Consultants
Maj. John Pino
Capt. Vicki Michetti
Capt. Rick Davila
1st Lt. Sarah Terison
1st Lt. Juhna Schadt
Senior Master Sgt. Mike Spaulding

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HQ AWS/PA
102 W. Losey St., Rm. 105
Scott AFB, IL 62225-5206
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"elliotts@hqaws.safb.af.mil"
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New Logo, Motto Stress Weather's Importance

Coelum ad Proelium Elige -- "Choose the Weather for Battle"

When the Air Weather Service first started, this was its official motto. In fact, AWS members wore a badge on their uniform displaying the well-known fleur-de-lis and this motto.

On Dec. 1, 1995, I instructed my staff to reinstitute this as our motto and to incorporate it into our presentations.

Now, I want to tell you why this is important.

First, let's clear up what this means. Basically, we are discussing the where, when, or what of battle. We are not talking about weather modification or ordering up some fog or thunderstorms. What we are talking about is giving the battlefield commander the weather knowledge needed to shape the battle to the best advantage.

For example, in a target-rich environment, an Air Component Commander will want to know where and when an attack will have the greatest chance of success. Once the commander uses this weather knowledge to decide on a final target set, the weather has been chosen for battle.

Another example came on June 6, 1944 — D-Day. Supreme Allied Commander Gen. Dwight D. Eisenhower knew where his battle would be as well as what his battle would be, the variable was when his battle would be. That variable was dependent on the weather.

General (at that time Colonel) Yates and his crew gave the forecast of clearing conditions and the rest is history. Eisenhower

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

chose the weather for his battle.

Weather can also influence what battle can be fought. In the Air Force, apportionment of tomorrow's air power may be based on weather. The type of weapon system used can also be weather-dependent (example: optical vice IR), thus influencing the battle which may be fought. In the Army's "Own the Weather" vision, we also see the weather being used to determine the battle.

Here, the commander uses the weather to his advantage or to the



"Choose The Weather For Battle"

enemy's disadvantage. A field commander can take advantage of superior sensors on his weapon systems to press a battle in times of decreased visibility.

Overcast clouds can also provide the cover needed from airborne or satellite recon for a flanking movement such as Gen. Norman Schwartzkopf's "Hail Mary" in Operation DESERT STORM.

This motto also fits with our efforts to move from giving commanders a "Cope and Avoid" capability to providing them the ability to "Anticipate and Exploit" the

weather. In fact, it is the essence of what we are doing.

To make it successful we also need to take another step. If the warfighter is to choose the weather for battle, we need to re-establish our role as the warfighter's choice for weather. To regain that position, we have to be more accurate than the competition (NWS, Weather Channel, WSI, etc.) and we have to employ user-friendly products.

Our Back to Basics efforts combine with efforts at Air Force Global Weather Central and Air Force Combat Climatology Center to improve our science in the weather station plus provide a visualized graphic product used by both weather staffs and operators. These programs and the new motto are all part of a bigger move towards that goal of anticipating and exploiting the weather.

"If the warfighter is to choose the weather for battle, we need to re-establish our role as the warfighter's choice for weather."



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

We want to incorporate these ideas into everything we do because being a force multiplier, not a force divider, is why we exist. Each of our efforts is aimed at giving you the tools needed to effect improvement so you can give your warfighter the ability to Choose the Weather for Battle.

Have a question for General Lennon? Write to: HQ USAF/XOW, 1490 Air Force Pentagon, Washington, D.C. 20330-1490.

Building A Winning Team

Stress The Fundamentals For Success

Free advice for military folks is as old as history. Everyone seems to have ideas on how to build a winning team.

Cornelius Tacitus, Roman soldier and historian (56-120 A.D.), told his contemporaries: "Pay the troops and fear no evil." Very sound advice, but it is a bit more complicated today.

Northwestern University put together a Cinderella football team and went to the Rose Bowl for the first time since 1949. They emphasized the fundamentals of the game. Their program included solid blocking, hard tackling, ball control, and a strong running game. Prior to the Rose Bowl, sportswriters listed ingredients for the Wildcats success:

- 1) Recruit quality players
- 2) Develop a winning attitude
- 3) Play within your capabilities
- 4) Stress fundamentals
- 5) Leadership on the field is key to winning ballgames.

All five of these ingredients apply to us as well.

The first item is a given for Air Force Weather (AFW). Our people are tops in the Air Force.

Number 3 is also in good shape. Recent years have seen much hard work and creative thought devoted to bringing new tools, faster equipment, streamlined procedures, better training, and more efficient organizational structures to bear on the business of adding significant weather value to warfighter tasks.

All this has contributed to the capabilities we have today in our centers, base weather stations, and tactical teams. The AFW team is now poised to exploit these tremendous new capabilities. We're able to deliver quality products and services with a speed, accuracy, and operational validity undreamed of just a few short years ago.

by Col. Joseph D. Dushan
Commander
Air Weather Service

The technical basics, ingredient 4, are well known. Observing, forecasting, careful analysis, and applying physical laws of the atmosphere are the building blocks of AFW.

In a major initiative, Air Weather Service has produced and distributed a Windows hypertext help file called MetTIPS. This outstanding guide encompasses the entire forecast process and every element of the Terminal Aerodrome Forecast (TAF). It includes quick references, definitions, checklists, metwatch procedures, analysis techniques, and specific items on radar. It will serve as a memory jogger for expe-

"Quality people, mission focus, technical fundamentals, leadership, and a winning attitude are AFW core values for the new year."



Col. Joseph D. Dushan
Commander, Air Weather Service

rienced technicians and a self-paced on-shift training guide for people still perfecting our craft. I'm tremendously excited about it and anxious for your feedback.

I consider number 5 on the Northwestern list to be the most important. We can look at leadership in a variety of ways. At Det. 10, 7th Weather Squadron years ago, Maj. Gen. R. Dean Tice, 3rd Infantry Division Commanding General, told me: "Taking care of your troops is a top priority, but don't misunderstand what it means. You can best care for your troops by ensuring they are sufficiently equipped, trained, and disciplined to accomplish the mission."

Mission, training, equipment, and



discipline are certainly fundamentals in our business. An Air Force focus is supplied in remarks Air Force Chief of Staff Gen. Ronald Fogleman delivered to an Air Force Materiel Command conference last September.

"The senior leadership of the Air Force is going to support people who have the vision and courage to step up to initiatives. We will nurture and promote the innovators, the people who can think outside the box. We are going to reward people who can get things done, who are not afraid to give their opinions. We need to train the old school of thought right out of our work force."

Air Force Director of Weather Brig. Gen. Thomas J. Lennon outlined a number of key initiatives during an AFW Functional Review at Keesler AFB, Miss., in December. They include officer meteorologists, enlisted and officer skill training, AFGWC regionalization, Standardization and Evaluation, weather visualization, a greater appreciation for space weather effects on military operations, and "Owning the Weather" as an overarching concept.

The last item is a winning attitude. We depend on you to supply it. No one else can. The first step is the courage to commit to real competence. The second is the confidence you can achieve it. Combined with the initiatives listed above, we seek an AFW-wide commitment to improve the accuracy of our products 10 to 15 percent across the board. This will enable users to "anticipate and exploit" the earth and space environment. It's time to step up to that commitment and execute the initiatives before us.

Quality people, mission focus, technical fundamentals, leadership, and a winning attitude are AFW core values for the new year. By stressing these fundamentals, we build a solid winner every time!

Have a question for Colonel Dushan? Write to: HQ AWS/CC, 102W Losey St., Rm. 105, Scott AFB, Ill. 62225-5206.

'Stay In Your Lane'

We All Have Our Specific Roles To Play

(Note from Chief Master Sgt. Jim Hoy, Air Force Superintendent of Weather: "This article appeared in the Spring 1995 NCO Journal. The Journal is published quarterly by the U.S. Army Sergeants Major Academy as a forum for NCO professional development. The author, Command Sgt. Maj. J.D. Pelfry, espouses some views that are relevant for NCOs in the US Air Force. I offer it to you for your thoughts and welcome any comments you may have. If you have the opportunity, send me an E-mail or give me a call.")

Army 1st Sgt. Pedro Olivari was an influential role model for me. He spoke with a heavy accent, but like others, I always listened intently.

He received a battlefield commission during the Korean War, achieved the rank of captain and had a company command. A reduction in force gave him the option of leaving the Army or becoming a sergeant again. To the Army's good fortune he elected the latter.

He was proud of the time he spent as an officer, but was quick to let you know how serious he was about being a sergeant. He had trained, cared for and led soldiers in peace and combat both as an officer and a sergeant.

His perspective on soldiering was unique and valuable. His advice was tested and sound. He knew his lane.

The most vivid memories I have of Olivari mentoring soldiers and officers was usually while standing around an old diesel space heater in the quonset hut that served as the Headquarters and Headquarters Company, 1 Corps, orderly room.

Usually, some section sergeants and sometimes a lieutenant or two stopped off there after morning formation.

by Command Sgt. Maj.
J.D. Pelfry

"Top" (as most first sergeants are known) never kept his own office, he just had a desk out front beside the company clerk's. There was a room he could have used, but for whatever reason, he never did.

One morning, after listening for a while to some sergeants complain about an officer who they didn't think was doing his job very well, Top got into one of his counseling sessions.

His movements were always the same and served as a signal that something was coming. He would get up from his desk, saunter over to the heater and

"In our profession, we're obligated to fulfill our role by providing leadership to, and the proper example for, our junior soldiers to follow."

Command Sgt. Maj. J.D. Pelfrey



stand directly across from the most vocal individual there. He would hold his hands out and rub them together over the stove for a few seconds.

Then he would take the cigar stub out of the corner of his mouth. Holding it between his thumb and forefinger and using his remaining three fingers like a pointer he would always start by saying: "My son," (that was how he addressed everyone).

This particular morning he told the sergeant, "My son, if you want to make it in this Army, you better spend your time worrying about your soldiers and how you do your job. You have to know what you're supposed to do and then do it. Don't waste your time



worrying about how an officer does his job. That's officer's business. If your soldiers fail, it won't be an officer's fault. What he told that sergeant was "...Stay in your lane."

Another time, after listening to a sergeant's complaints about his soldiers being more interested in going to the club in the village than they were in doing their jobs — and going through his choreographed steps -- he said, "My son, soldiers go where their sergeants lead them."

I observed and was the benefactor of many of these counseling sessions. Lately, I've had reason to reflect on just how solid Top Olivari's advice still is.

In every facet of our lives, whether social, professional, before, during or after the Army, we will always have or have had a specific role to play. We always have a lane in which to operate. In team sports we had a position to play — a lane. If we got out of our lane and into another's the team would break down and if we continued to operate out of our lane the team would fail.

In our profession, we're obligated to fulfill our role by providing leadership to, and the proper example for, our junior soldiers to follow. Put simply, in everything we do, we have to clearly define our lane and stay in it. We have to know its boundaries and all the challenges that lie within those boundaries. If we fail to meet the challenges that are in our lane, our team will break down and ultimately fail.

If you know your lane, then staying in it is easy. When NCOs are in the structure of a platoon, squad or team, the lane boundaries and everything in the lane is generally clear to them.

See LANE

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Facing The Challenge

Team Leadership In Weather Operations

Up to this point, we've looked at the "basics" of Back to Basics. However, there's still one area we need to take a closer look at to help put the pieces into place.

One question comes up repeatedly when we brief Back to Basics: What do the instructor meteorologist and station chief do?

The easy answer is scientific leadership and technical leadership, but that's an oversimplification.

Perhaps the best way to answer the question is to describe the work each will do in the weather station. This article focuses on the general areas of scientific and technical leadership that directly impact our ability to exploit technology and enhance our scientific and technical capability.

Officers will provide the scientific leadership. Enlisted will provide the technical. In the formal structure, the bulk of this leadership will fall on the instructor meteorologist and the station chief.

That doesn't mean just the instructor meteorologist and the station chief provide the leadership. The command meteorologist has the ultimate leadership responsibility. In more ways than one, we all have a responsibility to lead.

We must take advantage of the unique leadership skills, training, and abilities of officers and enlisted. Each brings something special to

by Chief Master Sgt. Robert Brooks
Manager, Weather Operations
Air Force Directorate of Weather

daily weather operations to enhance the warfighting, peacekeeping, and humanitarian missions of the U.S. Air Force.

So, what will the instructor meteorologist do? What is scientific leadership?

First and foremost, it's direct involvement in the day-to-day operations of the weather station. Instructor meteorologists will plan and organize the forecasting function to infuse the sci-

"We must take advantage of the unique leadership skills, training, and abilities of officers and enlisted. Each brings something special to daily weather operations to enhance the warfighting, peacekeeping, and humanitarian missions of the U.S. Air Force."



**Chief Master Sgt. Robert Brooks
Chief, Airfield Operations
Air Force Directorate of Weather**

ence of meteorology into weather operations.

They'll plan analyst and forecaster training to advance meteorological knowledge and skills. They'll also take the lead in developing the forecast process, forecast review program, and satellite and radar programs to exploit



"Choose The Weather For Battle"

the meteorological capabilities of our weather systems.

We're also returning science officers to the major command functional staffs. They will help fill the void left when we lost the scientific expertise provided by weather squadrons and wings.

As technical leaders, station chiefs will direct and implement the plans and strategies drawn up by officers. Enlisted leadership highly versed in the orderly and efficient application of plans and strategies is a time-proven method for success in military operations.

The station chief will also be responsible for managing the observing and meteorological watch functions. These functions are linked as data collection, and data collection lays the foundation for everything else we do.

Soon, the Career Field Education and Training Plans for weather officers and enlisted will be available. They'll have more information on specific jobs.

Officers and enlisted will have to work together to put these principles into place at particular locations and for particular missions. It will be a challenge requiring creativity, flexibility, and teamwork. Facing that challenge head-on takes leadership.

Have questions or comments about the new "BackTo Basics" initiatives? Contact Chief Brooks at DSN 426-4390, CMCL (703) 696-4390, or by electronic mail at: "rbrooks@pafosu3.hq.af.mil".

How A Board Works

Downsizing Has Increased The Competition



by Maj. John D. Murphy
Air Weather Service
Chief of Personnel

With the next majors' board coming soon (March 4, 1996), the time is right to explain how a promotion board works. Each board's goal is to pick those officers who are best qualified for promotion regardless of their Air Force Specialty Code.

This isn't easy to do, since the military downsizing over the last few years has actually increased the level of competition within the Air Force — "enriching the pool of eligible officers", so to speak.

With that understood, let's look at how promotion boards work:

The size of each board depends on the number of officers eligible for promotion — more candidates, the bigger the board. Boards are held for officers above the rank of first lieutenant and below the rank of lieutenant general (and for senior and chief master sergeants).

Each board is overseen by a nonvoting general officer (board president), who is the highest-ranking officer on the board.

The remaining board members are divided into five-person panels who are a grade higher than those being considered for promotion. The panel chief would be a grade higher than the other panel members (i.e., for lieutenant colonel promotions, brigadier generals serve as panel chiefs with colonels as panel members; for captain and major promotions, all panel members are colonels).

All promotion boards meet at the Air Force Personnel Center, Randolph AFB, Texas, and open with briefings about how the board works, followed by a reading of an official message from the Secretary of the Air Force.

The Secretary's instructions often include: "Act in the interest of the Air Force, not a particular command, specialty or group; joint-duty officers must be promoted at a rate not less than that of all Air Force officers in the same grade and field specialty; give fair and equitable consideration to minority and female officers, being sensitive to the possibility that they have been at a career disadvantage due to past discrimination."

After receiving their instructions, board members are sworn in and go through a dry run with some sample

"Regardless of whether you like the selection process or not, it's the system we live with. The Air Force goes to great lengths to ensure no single career field or specialty has an advantage. It's difficult to imagine a more fair method of selecting future leaders."
Maj. John D. Murphy
Chief of Personnel, Air Weather Service

promotion folders. During the dry run, members are allowed to take notes on why they scored a certain way (note taking is not permitted during the actual scoring of candidates).

During the board, members are limited to scoring no more than 200 to 220 folders a day to avoid getting "burned out". On the average, it takes five minutes to review each record — new board members tend to be slower since they read every word in the folder (a great folder can be gone through in three minutes, while a middle-of-the-road folder will take longer). Members score on a

scale of six (below average) to 10 (outstanding).

Normally, panel members don't know how other members scored a folder, but the exception is if one member gives a score of 8.5 and another scores the same record a 6.5. If this happens, there is a problem, because 6.5 is considered well below average and 8.5 a strong record — panelists must discuss the folder and rescore it. This prevents any member from overlooking something in a candidate's record.

Once the board scores the records of in- or above-the-zone (I/APZ) officers, it starts on the below-the-zone (BPZ) candidates. If three of the five panel members agree an individual is well-qualified for a promotion, then all five score the record using the 6-to-10 point scale. The entire board then compares BPZ candidates with I/APZ candidates.

If the majority finds a BPZ record is better, then the "fast burner" officer replaces an I/APZ officer. Those officers who are "bumped" will have another chance later as above-the-zone (APZ) candidates. Those already above the zone may be separated from the service in keeping with public law.

The final act is to certify that the officers recommended for promotion are, in the opinion of the majority of the board, fully qualified and the best-qualified for promotion. It is interesting to note that board members don't actually know which officers have been promoted, only that the best were selected.

Regardless of whether you like the selection process or not, it's the system we live with. The Air Force goes to great

See BOARD
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Did You Know?

More About Our Weather History

Did You Know?

It was determined that with the onset of World War II, Army Air Force weather forecasters required more information than ever to assist bomber and fighter aircraft in England. Therefore, Headquarters VIII Support Command established a weather reconnaissance flight, "Mercury," in November 1943.

This flight's assets included 12 pilots and 10 P-51s. These pilots were provided training in various areas of weather, including cloud orientation, preparation of charts and how to take observations. After training, they were sent up in B-26s to familiarize themselves with the medium bomber, its tactics and limitations.

Those "weather" pilots then would take off in their P-51 Mustangs on weather missions. The aircraft had no special equipment and observations were visual only. The

pilots sat on alert awaiting requests by bombardment units of the Ninth Air Force.

These scouts would then fly to the primary and secondary target areas to gather the necessary weather data and radio it back to the strike force. They were truly the "unsung heroes" of the air war.

The Commander of U.S. Strategic Forces in Europe, Gen. Carl Spaatz, realized the value of weather reconnaissance and commended the weather units, stating that missions flown by a handful of carefully selected pilots had resulted in savings of \$30 million in gasoline alone during a three-month period!

Did You Know?

Most people consider weather per-

by Ms. Lil Wilbur
Air Weather Service
Chief of History

sonnel to be noncombatant and yet often weather folks have found themselves right in the middle of things. When Pearl Harbor was bombed, five weather personnel on their way to duty were killed by a Japanese bomb.

Fifteen members of the 5th Weather Squadron fought in a final effort on Bataan and Corregidor when the Japanese swept through the Philippines. Bare-base weather stations were set up

"Most people consider weather personnel to be noncombatant and yet often weather folks have found themselves right in the middle of things."



**Ms. Lil Wilbur
AWS Chief of History**

along the front lines in Africa, Sicily, France and Italy.

Did You Know?

What was considered the most crucial forecast in history (to that date), was the forecast preceding the D-Day landing at Normandy. In fact, General Eisenhower said that "one morning a corporal would test the wind, find it right, and the assault would be on." As it turned out, that was pretty much what did happen.

The Chief Meteorological Officers kept the General updated on weather



conditions and forecasts for possible days when the assault could take place. Eventually a date was selected and as we all now know D-Day occurred Tuesday, June 6, 1944.

Following World War II, Air Weather Service manpower was reduced from 19,000 to 9,000 in 1948.

However, as always, when called upon to do a job, weathermen were there without thinking twice. Weather personnel were intimately involved in the Berlin Airlift. In fact, their job proved to be most difficult since weather was the number one problem encountered in this operation. In a U.S. Air Forces in Europe Summary of the Airlift, it was stated that, "low clouds, fog, freezing rain, turbulence and ice were all of great operational significance."

Much was learned during the Berlin Airlift that impacted Air Weather Service future operations.

Did You Know?

Templehof Air Base in Berlin had a unique layout which resulted in observation equipment being located too far from the runway. A pilot could have easily encountered a sudden 20 to 30 degree shift in wind direction while landing, because wind direction and velocity were measured from the top of the high terminal building!

This situation was resolved by having an observer at the end of the runway, which led to Air Weather Service developing the Representative Observation Program. This program located the observation equipment where it could measure actual runway conditions.

DidYou Know is brought to you by your friendly AirWeather Service History Office. If you have any stories, artifacts, old emblems, photos, etc., contact Lil Wilbur by electronic mail at "wilbur@hqaws.safb.af.mil" or call (618) 256-5654, ext. 258 or DSN 576-5654, ext. 258.

MetTIPS: Weather Forecast Tips, Techniques, Rules And More!

Think back to your first forecast assignment. Remember the frustration of going to 5-10 different binders to get your arms around all the tools and information you needed to put out your TAF? Imagine having a library of basic weather forecast tips, techniques, and rules integrated in one spot, and accessible by merely clicking a mouse ... that's MetTIPS.

The HQ AWS Technology Training Division (AWS/XOT) has produced a new operational forecast support product called Meteorological Technical Information Programs (MetTIPs). The officers and NCOs of XOT began the MetTIPs project in-house six months ago based on your desires for a computerized Local Area Forecast Program (LAFP).

In a nutshell, MetTIPs is a software program you load on the forecast counter personal computer to provide forecasters with a single-stop source for general weather analysis and forecasting rules, tips, and techniques. MetTIPs is designed to be easy to use in day-to-day weather operations, and you may find it useful as a part of your forecaster preparation training. We've utilized hypertext linking to develop MetTIPs in a Windows Help format. We think you'll find the "point and click" navigation simple to use.

MetTIPs provides an excellent source for general forecasting information and tech-

by Maj. Michael L. Davenport
Chief, Technology Training
Division

niques—you'll find it similar to AFM 105-56, *Meteorological Techniques*; but in a computerized format. The first version of MetTIPs, which we've already begun fielding, covers the following areas: shift change/METCONs, METWATCH, weather analysis, forecast development, Doppler radar, references and checklists.

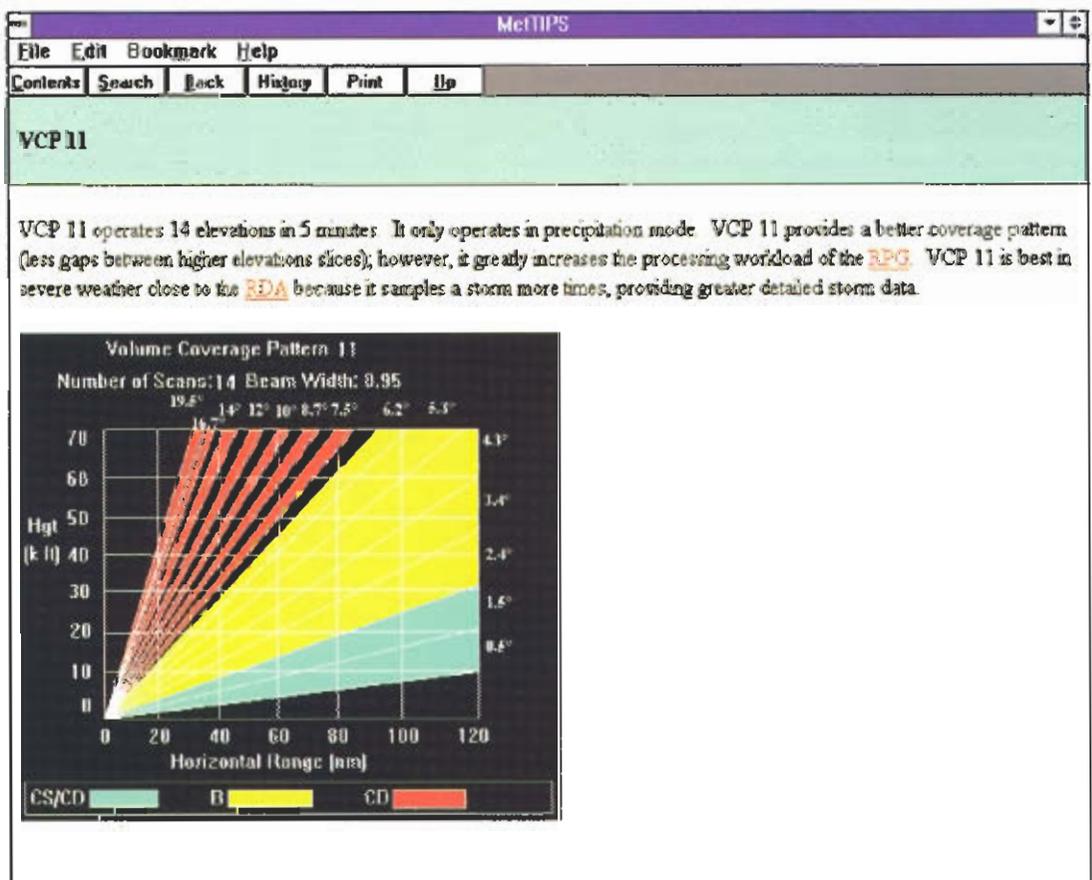
Future versions of MetTIPs will cover all aspects of the weather station forecast process; and we're investigating links to your commonly-used operational software programs (such as Skew-T, toxic corridor, light programs, computer-based TAF worksheets, and MODCV to name

a few), and plan to begin regional tailoring of MetTIPs later this year.

MetTIPs requires at least a 386SX personal computer with Windows 3.1 and Microsoft Word 6.0. Because MetTIPs is rich in graphics files and data tables, the program requires about 20 megabytes storage space on your hard drive. We've included instructions for installation and use of MetTIPs with the software. You need to do nothing to get your copy of MetTIPs — we're distributing it to all AFW units.

We welcome your suggestions for improvement for future versions of MetTIPs. Please contact XOT with your thoughts and ideas.

If you have questions or run into any problems, call your regional manager or Capt. Margo Bjorkman at DSN 576-4721, ext. 445.



An example of a MetTIPS help screen.



AIR FORCE MERITORIOUS SERVICE MEDAL

Master Sgt. Timothy J. Smith, 612th COS/DQOSM, Davis-Monthan AFB, Ariz.
 Capt. Jude Holzer, 19th ASOS/CDW, Fort Campbell, Ky.
 Master Sgt. Jim Lynch, 375th OSS/OSW, Scott AFB, Ill. (1st OLC)
 Lt. Col. Thomas R. MacPhail, 611th OSF/WEX, Alaskan Forecast Unit, Elmendorf AFB, Alaska



AIR FORCE COMMENDATION MEDAL

Capt. Christopher A. Donahoe, 612th COS/DQOSM, Davis-Monthan AFB, Ariz.
 1st Lt. Brian Griffith, 19th ASOS/CDW, Fort Campbell, Ky.
 Tech. Sgt. Sylvia V. Poole, 15th ASOS/ASW, Hunter AAF, Ga.
 1st Lt. Lisa Swartz, 375th OSS/OSW, Scott AFB, Ill. (1st OLC)
 Capt. Gerry W. Vest, Headquarters Air Force Global Weather Central, Offutt AFB, Neb.
 Tech. Sgt. Scott Straw, Det. 2, 607th WS, Camp Humphreys, Korea
 Tech. Sgt. Jerry L. Scholl, Tanker Air/Jt Central Center/WXC, Scott AFB, Ill. (2nd OLC)
 Staff Sgt. Richard D. Jacobsen, Det. 4, 50th WS, Holloman AFB, N.M.

ARMY COMMENDATION MEDAL

Master Sgt. Donald Garske, 19th ASOS/CDW, Fort Campbell, Ky.

JOINT SERVICE ACHIEVEMENT MEDAL

1st Lt. Brian Griffith, 19th ASOS/CDW, Fort Campbell, Ky.
 Staff Sgt. (select) Greg Espinosa, 375th OSS/OSW, Scott AFB, Ill.
 Staff Sgt. James M. Vinson, 24th WS, Howard AB, Panama
 Senior Airman James M. Overstreet, 24th WS, Howard AB, Panama



AIR FORCE ACHIEVEMENT MEDAL

Senior Airman Shannon Mattie, 30th WS, Vandenberg AFB, Calif.
 1st Lt. Joe Benson, 19th ASOS/CDW, Fort Campbell, Ky.
 1st Lt. Jason Hoffman, 49th ASOS/CDW, Fort Campbell, Ky.
 Tech. Sgt. Sylvia V. Poole, 15th ASOS/ASW, Hunter AAF, Ga.
 Senior Airman Sean O. Rafferty, 24th WS, Howard AB, Panama
 Tech. Sgt. John D. Greenwood, TACC/WXC, Scott AFB, Ill. (3rd OLC)

ARMY ACHIEVEMENT MEDAL

Senior Airman Dean Harpster, 45th WS, Patrick AFB, Fla.

JOINT MERITORIOUS UNIT AWARD

1st Lt. Joe Benson, 19th ASOS/CDW, Fort Campbell, Ky.

COMBAT READINESS MEDAL

Staff Sgt. Ben Deluzier, 19th ASOS/CDW, Fort Campbell, Ky.
 Master Sgt. Jeffrey B. Dunn, 47th OSS/OSW, Nellis AFB, Nev.
 Tech. Sgt. Steven R. Grimes, 57th OSS/OSW, Nellis AFB, Nev.

ARMED FORCES EXPEDITIONARY MEDAL

1st Lt. Joe Benson, 19th ASOS/CDW, Fort Campbell, Ky.

HUMANITARIAN SERVICE MEDAL

1st Lt. Joe Benson, 19th ASOS/CDW, Fort Campbell, Ky.
 Lt. Col. Thomas R. MacPhail, 611th OSF/WEX, Alaskan Forecast Unit, Elmendorf AFB, Alaska

PROMOTIONS



Fred R. Johnson, 140th WF, Pittsburgh, Pa. (ANG)



Christine Stevenson, 195th WF, Channel Island, Calif. (ANG)
 Edmund Zinal, 13th ASOS/ASW, Ft. Carson, Colo.
 Randy J. Pearson, HQ ACC/DW/C, Langley AFB, Va.

APPOINTMENT TO REGULAR AF

Capt. Eric L. Dernovich, 612th COS/DQOSM, Davis-Monthan AFB, Ariz.

SELECTED FOR CAPTAIN

1st Lt. Keith Force, AFGWC, Offutt AFB, Neb.
 1st Lt. Charles R. Grisham, AFGWC, Offutt AFB, Neb.
 1st Lt. Jean E. Hazens, AFGWC, Offutt AFB, Neb.
 1st Lt. Kara L. Phillips, AFGWC, Offutt AFB, Neb.
 1st Lt. Joseph P. Richards, Keese AFB, Texas
 1st Lt. Phillip G. Stratton, Air Force Combat Climatology Center, Scott AFB, Ill.



Anne S. Koch, 40th WS, Vandenberg AFB, Calif.
 Steven G. Gruber, 268th WF, Minneapolis, Minn. (ANG)



Michael J. Mills, 30th WS, Vandenberg AFB, Calif.
 Joe Benson, 19th ASOS/CDW, Fort Campbell, Ky.
 Stephen Wilkinson, 140th WF, Pittsburgh, Pa. (ANG)
 Tim E. Dreifke, 13th ASOS/ASW, Ft. Carson, Colo.



Scott D. Weber, 342nd OSS/DGW, Malmstrom AFB, Mont.



Marvin S. Coombs, 15th ASOS/ASW, Hunter AAF, Ga.
 Mark R. Mirkes, 17th ASOS, CFB, Fort Benning, Ga.



Andrea Graves, 45th ASOS/FWX, Keesler AFB, Miss.
 Michael Schierer, 19th ASOS/CDW, Fort Campbell, Ky.
 Michael J. Miller, 24th WS, Howard AB, Panama
 Ronald J. Cake III, 120th WF, Buckley ANGB, Colo. (ANG)



Regina Kennedy, 45th WS, Patrick AFB, Fla.
 Shannon Mattie, 30th WS, Vandenberg AFB, Calif.
 Jason B. Anderson, 15th ASOS/ASW, Hunter AAF, Ga.
 Robin D. Bernstein, 121st WF, Andrews AFB, Md. (ANG)



Thomas J. Frost, 30th WS, Vandenberg AFB, Calif.
 Kathy L. Lucia, 30th WS, Vandenberg AFB, Calif.
 Rodney Menezes, 30th WS, Vandenberg AFB, Calif.
 Musette M. Smith, 30th WS, Vandenberg AFB, Calif.
 Michele Fallabaum, 375th OSS/OSW, Scott AFB, Ill.
 Scott A. Losenicky, 341st OSS/DGW, Malmstrom AFB, Mont.



Math J. Barnes, 30th WS, Vandenberg AFB, Calif.
 Candie R. Fison, 30th WS, Vandenberg AFB, Calif.
 Randy D. Sunga, 30th WS, Vandenberg AFB, Calif.
 Bos Lim, 30th WS, Vandenberg AFB, Calif.
 Dressed Holt, 57th OSS/OSW, Nellis AFB, Nev.

RE-ENLISTMENTS

Staff Sgt. Craig J. Lacey, 52nd OSS/OSF, Spangdahlem AB, Germany
 Tech. Sgt. Steven B. Pooler, 611th OSF/WEX, Alaskan Forecast Unit, Elmendorf AFB, Alaska
 Staff Sgt. Joseph E. Haux III, 611th OSF/WEX, Alaskan Forecast Unit, Elmendorf AFB, Alaska
 Staff Sgt. Ronald B. Sharp, 611th OSF/WEX, Alaskan Forecast Unit, Elmendorf AFB, Alaska

HAILS AND FAREWELLS

Staff Sgt. Raymond L. Pelletier -- to HQ AFGWC, Offutt AFB, Neb., from 45th ASOSP4X, Keesler AFB, Miss.
 Airman Mark D. Burgado -- to 45th ASOSP4X, Keesler AFB, Miss.
 Senior Airman Ashleigh Brown -- to 45th WS, Patrick AFB, Fla., from Keesler AFB, Miss.
 Airman 1st Class Melissa Hadley -- to 45th WS, Patrick AFB, Fla., from Keesler AFB, Miss.
 Staff Sgt. Sandra Keane -- to 45th WS, Patrick AFB, Fla., from March AFB, Calif.
 Airman 1st Class Rosswald Gutierrez -- to 45th WS, Patrick AFB, Fla., from Keesler AFB, Miss.
 Airman 1st Class Angelita Carlier -- to 45th WS, Patrick AFB, Fla., from Keesler AFB, Miss.
 Capt. Maria Reymann -- to HQ Air Weather Service, Scott AFB, Ill., from 45th WS, Patrick AFB, Fla.
 Senior Airman Julie Williams -- to Mountain Home AFB, Idaho, from 45th WS, Patrick AFB, Fla.
 Capt. Sue Blessner -- to 30th WS, Vandenberg AFB, Calif., from 50th WS, Falcon AFB, Colo.
 Airman Malik Barnes -- to 30th WS, Vandenberg AFB, Calif., from Keesler AFB, Miss.
 Airman Candie Fison -- to 30th WS, Vandenberg AFB, Calif., from Keesler AFB, Miss.
 Airman Randy Sunga -- to 30th WS, Vandenberg AFB, Calif., from Keesler AFB, Miss.
 Senior Airman Laura Sealy -- to 30th WS, Vandenberg AFB, Calif., from RAF Mildenhall, U.K.

Senior Airman Shannon Mattie -- to Yongsan AIN, Korea, in 30th WS, Vandenberg AFB, Calif.
 Senior Airman Kyle Gayan -- to 19th ASOS/CDW, Fort Campbell, Ky., from Keesler AFB, Miss.
 Senior Airman Letitia V. Peterson -- to 15th ASOS/ASW, Hunter AAF, Ga.
 Airman 1st Class Christian M. Gidstrup -- to 15th ASOS/ASW, Hunter AAF, Ga.
 Airman Eric J. McGee -- to 15th ASOS/ASW, Hunter AAF, Ga.
 Staff Sgt. Kurt A. Garmendia -- to Ramey AFB, Puerto Rico, from 47th OSS/OSW, Laughlin AFB, Texas
 Airman 1st Class Lakisha A. Burton -- to Howard AFB, Panama, from 47th OSS/OSW, Laughlin AFB, Texas
 Staff Sgt. Dan Ketola -- to 375th OSS/OSW, Scott AFB, Ill., from Keesler AFB, Miss.
 Senior Airman Bob Albertson -- to 375th OSS/OSW, Scott AFB, Ill., from Hanae, Germany
 Airman Shobdon Pupovich -- to 375th OSS/OSW, Scott AFB, Ill., from Keesler AFB, Miss.
 1st Lt. Steven J. Storck -- to 52nd OSS/OSF, Spangdahlem AB, Germany, from Howard AFB, Panama
 1st Lt. Raymond S. McLeod -- to 52nd OSS/OSF, Spangdahlem AB, Germany, from Keesler AFB, Miss.
 Staff Sgt. AnnMarie N. Benson -- to 52nd OSS/OSF, Spangdahlem AB, Germany, from Fort Lewis, Wash.
 Senior Airman Brian P. Hailey -- to 52nd OSS/OSF, Spangdahlem AB, Germany, from Keesler AFB, Miss.
 Airman Norman B. Snook -- to 52nd OSS/OSF, Spangdahlem AB, Germany, from Keesler AFB, Miss.
 Airman Terrance S. Smiley -- to 52nd OSS/OSF, Spangdahlem AB, Germany, from Keesler AFB, Miss.
 Maj. David M. Muehl -- to AFGWC, Offutt AFB, Neb., from 341st OSS/DOW, Malmstrom AFB, Mont.
 Capt. Walter Otto -- to 341st OSS/DOW, Malmstrom AFB, Mont., from Shaw AFB, S.C.
 2nd Lt. Robert Russ -- to 341st OSS/DOW, Malmstrom AFB, Mont., from Keesler AFB, Miss.
 Staff Sgt. Leon E. Maxwell -- to 341st OSS/DOW, Malmstrom AFB, Mont., from California ANG
 Airman 1st Class Joseph E. Ellis -- to 341st OSS/DOW, Malmstrom AFB, Mont., from Keesler AFB, Miss.
 Airman Daniel S. Wolentarski -- to 341st OSS/DOW, Malmstrom AFB, Mont., from Keesler AFB, Miss.
 Tech. Sgt. Stephen W. Kammierer -- to 24th WS, Howard AB, Panama, from Moody AFB, Ga.
 Staff Sgt. Jorge C. Benavides, Jr. -- to 24th WS, Howard AB, Panama, from Korea
 Staff Sgt. Gary A. Hall -- to 24th WS, Howard AB, Panama, from Korea
 Airman 1st Class Lakisha A. Burton -- to 24th WS, Howard AB, Panama, from Reese AFB, Texas
 Capt. Brent Helmick -- to 24th WS, Howard AB, Panama, from Hickam AFB, Hawaii
 Senior Airman Richard Press -- to Det. 2, 607th WS, Camp Humphreys, Korea
 Staff Sgt. Troy Marshall -- to Traben Trarbach, Germany, from Det. 2, 607th WS, Camp Humphreys, Korea
 Staff Sgt. Charles Smith -- to Sheppard AFB, Texas, from Det. 2, 607th WS, Camp Humphreys, Korea
 Senior Airman Shannon Meyer -- to Det. 2, 607th WS, Camp Humphreys, Korea, from Little Rock AFB, Ark.
 Airman 1st Class Gary Porter -- to Camp Stanton, Korea, from 13th ASOS/ASW, Ft. Carson, Colo.
 Staff Sgt. Sylvain Grippen -- to Lajes AB, The Azores, from 13th ASOS/ASW, Ft. Carson, Colo.
 Sgt. Daniel McRoberts -- to Yongsan AIN, Korea, from 13th ASOS/ASW, Ft. Carson, Colo.

RETIREMENTS

Staff Sgt. Anton Hembrock, 24th WS, Howard AB, Panama
 Maj. Robert M. Ryan, 181st WF, Dallas, Texas (ANG)
 Capt. Nemesio Quintanilla, 57th OSS/OSW, Nellis AFB, Nev.

SEPARATIONS

Capt. Debbie Wagner, 45th WS, Patrick AFB, Fla.
 Senior Airman Eric Hughes, 45th WS, Patrick AFB, Fla.
 Senior Airman Leslie Lagerquist, 30th WS, Vandenberg AFB, Calif.

AWARDS

Air Force Space Command Forecast Challenge Selectees

Staff Sgt. Robert Kane and Senior Airman June Ramsdell
 30th Operations Group NCO of the Quarter
 Staff Sgt. Chad Deal, 30th WS, Vandenberg AFB, Calif.

Israeli Airborne Wings

1st Lt. Jason Hoffman, 19th ASOS/CDW, Fort Campbell, Ky.

United Arab Emirates Airborne Wings

Staff Sgt. Ben Delozler, 19th ASOS/CDW, Fort Campbell, Ky.

Dragon Challenge participants

Airman 1st Class Jeremia Thumberg, 15th ASOS/ASW, Hunter AAF, Ga.

Senior Airman Jason B. Anderson, 15th ASOS/ASW, Hunter AAF, Ga.

Headquarters Air Weather Service Company Grade Officers of the Quarter

Capt. Christopher S. Bjorkman, HQ AWS/XOS, Scott AFB, Ill.

Headquarters Air Weather Service Senior NCO of the Quarter

Senior Master Sgt. Penny Helinen, HQ AWS/SYD, Scott AFB, Ill.

Headquarters Air Weather Service NCO of the Quarter

Tech Sgt. Mike Nelson, HQ AWS/CVV, Scott AFB, Ill.

Headquarters Air Weather Service Junior Enlisted Member of the Quarter

Senior Airman Lisa Gray, HQ AWS/RMP, Scott AFB, Ill.

Headquarters Air Weather Service Civilian (GS-9 and Above) of the Quarter

Ms. Carolyn Hopke, HQ AWS/SYK, Scott AFB, Ill.

Headquarters Air Weather Service Civilian (GS-8 and Below) of the Quarter

Ms. Darlene Sandheineich, HQ AWS/SYK, Scott AFB, Ill.

Headquarters Air Weather Service NCO of the Year

Tech Sgt. Mike McAnenan, HQ AWS/NOTS, Scott AFB, Ill.

Headquarters Air Weather Service Senior NCO of the Year

Master Sgt. Patrick R. Coyle, Jr., HQ AWS/SYK, Scott AFB, Ill.

Headquarters Air Weather Service Company Grade Officer of the Year

Capt. Christopher S. Bjorkman, HQ AWS/XOS, Scott AFB, Ill.

Headquarters Air Weather Service Senior Civilian of the Year

Earl P. Wilsing, HQ AWS/RMK, Scott AFB, Ill.

Headquarters Air Weather Service Junior Civilian of the Year

Dorothy J. Kennedy, HQ AWS/SY, Scott AFB, Ill.

47th Flying Training Wing Senior NCO of the Quarter

Master Sgt. Robert F. DuFrance, 47th OSS/OSW, Laughlin AFB, Texas

47th OSS/OSW Forecaster of the Year

Staff Sgt. Kurt R. Rohl, 47th OSS/OSW, Laughlin AFB, Texas

47th OSS/OSW Observer of the Year

Airman 1st Class Lakisha A. Burton, 47th OSS/OSW, Laughlin AFB, Texas

375th OSS NCO of the Quarter (Oct.-Dec. 1995)

Staff Sgt. Mike Blount, 375th OSS/OSW, Scott AFB, Ill.

375th OSS Airman of the Quarter (Oct.-Dec. 1995)

375th OSS Airman of the Year

Senior Airman Pedro Gonzalez, 375th OSS/OSW, Scott AFB, Ill.

52nd OSS NCO of the Quarter (April-June 1995)

Tech. Sgt. Patrick J. Flegg, 52nd OSS/OSF, Spangdahlem AB, Germany

52nd OSS Airman of the Quarter (April-June 1995)

Senior Airman Jen. E. Houghboom, 52nd OSS/OSF, Spangdahlem AB, Germany

341st OSS Airman of the Quarter (July-Sept. 1995)

Airman 1st Class Scott A. Loseniekey, 341st OSS/DOW, Malmstrom AFB, Mont.

ACC Quality Air Force Assessment Superior Performers

1st Lt. John R. Spruill, 57th OSS/OSW, Nellis AFB, Nev.

Tech. Sgt. Steven R. Grimes, 57th OSS/OSW, Nellis AFB, Nev.

TACC Airman of the Quarter

Senior Airman Paul R. Rogers, TACC/WXC, Scott AFB, Ill.

HQ AWC Airman of the Quarter

Senior Airman Paul R. Rogers, TACC/WXC, Scott AFB, Ill.

314th AW Outstanding Weather Company Grade Officer of the Year

2nd Lt. Darryl N. Leon, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS Senior NCO of the Quarter (Sept.-Dec. 1995)

Master Sgt. Philip D. Thompson, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS Civilian of the Quarter (Sept.-Dec. 1995)

Frederick G. Martin, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS/OSW Forecaster Technician of the Quarter (Aug.-Oct. 1995)

Frederick G. Martin, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS/OSW Observer Technician of the Quarter (Aug.-Oct. 1995)

Senior Airman Jennifer C. Barnes, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS/OSW Company Grade Officer of the Quarter (Sept.-Dec. 1995)

2nd Lt. Darryl N. Leon, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS/OSW Senior NCO of the Quarter (Sept.-Dec. 1995)

Master Sgt. Philip D. Thompson, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS/OSW Civilian of the Quarter (Sept.-Dec. 1995)

Frederick G. Martin, 314th OSS/OSW, Little Rock AFB, Ark.

314th OSS/OSW Airman of the Quarter (Sept.-Dec. 1995)

Senior Airman Jennifer C. Barnes, 314th OSS/OSW, Little Rock AFB, Ark.

Eagle Scholarship Award

Staff Sgt. James O. Williams, 611st OSFWEX, Alaskan Forecast Unit, Elmendorf AFB, Alaska

611th OSF NCO of the Quarter

Staff Sgt. Joseph E. Haas, 611st OSFWEX, Alaskan Forecast Unit, Elmendorf AFB, Alaska

13th ASOS/ASW NCO of the Quarter (July-Sept. 1995)

Tech. Sgt. Gail D. Anderson, 13th ASOS/ASW, Ft. Carson, Colo.

57th OG Company Grade Officer of the Quarter

1st Lt. J.L. Golemboski, 57th OSS/OSW, Nellis AFB, Nev.

60th OSS NCO of the Quarter

Staff Sgt. Jay S. Curtis, 60th OSS/WXF, Travis AFB, Calif.

60th OSS Airman of the Quarter

Airman 1st Class Wendy S. Conklin, 60th OSS/WXF, Travis AFB, Calif.

EDUCATION

Airborne School

Senior Airman Walt Chumney, 19th ASOS/CDW, Fort Campbell, Ky.

1st Lt. Bryan Griffith, 19th ASOS/CDW, Fort Campbell, Ky.

1st Lt. Richard Bens, 17th ASOS, C. Fl., Fort Benning, Ga.

High Frequency Network Communications School

Master Sgt. Donald Garske, 19th ASOS/CDW, Fort Campbell, Ky.

GOBOWING School

Master Sgt. Donald Garske, 19th ASOS/CDW, Fort Campbell, Ky.

Air Assault School

Airman Brian Carnes, 19th ASOS/CDW, Fort Campbell, Ky.

1st Lt. Joe Benson, 19th ASOS/CDW, Fort Campbell, Ky.

AWS Manager Course

Senior Airman Dean P. Matuzewski, 15th ASOS/ASW, Hunter AAF, Ga.

Senior NCO Academy

Senior Master Sgt. Christopher Andrejick, Det. 4, 50th WS, Holloman AFB, N.M.

NCO Leadership School

Tech. Sgt. Jeffrey L. Morris, 17th ASOS, C. Fl., Fort Benning, Ga.

NCO Academy

Tech. Sgt. Harold D. Effert, TACC/WXC, Scott AFB, Ill. (Distinguished Graduate)

Tech. Sgt. John D. Greenwood, TACC/WXC, Scott AFB, Ill.

Tech. Sgt. Royce S. Marton, TACC/WXC, Scott AFB, Ill.

Airman Leadership School

Senior Airman Stacey A. Jones, 15th ASOS/ASW, Hunter AAF, Ga.

Senior Airman Simon J. Perry, 341st OSS/DOW, Malmstrom AFB, Mont.

Senior Airman Paul R. Rogers, TACC/WXC, Scott AFB, Ill. (Distinguished Graduate)

Senior Airman David S. Hancik, 355th OSS/OSW, Davis-Monthan AFB, Ariz.

Senior Airman Jason Fenn, 13th ASOS/ASW, Ft. Carson, Colo.

HSRR8-D PLP Operator/Manager Course

Staff Sgt. Eric Diaz, 15th ASOS/ASW, Hunter AAF, Ga.

Airman Education and Commissioning Program

1st Lt. Raymond S. McLeod, 52nd OSS/OSF, Spangdahlem AB, Germany (B.A. in Meteorology)

Weather Technician Course

Senior Airman Brian P. Hailey, 52nd OSS/OSF, Spangdahlem AB, Germany (Honor Graduate)

Weather Specialist Course

Airman Norman B. Snook, 52nd OSS/OSF, Spangdahlem AB, Germany

Airman Terrance S. Smiley, 52nd OSS/OSF, Spangdahlem AB, Germany

CCAF Associates Degree in Weather Technology

Staff Sgt. Alton E. Stiversom, Det. 4, 50th WS, Holloman AFB, N.M.

BIRTHS

Diane Nicole Fitzpatrick, to Capt. and Mrs. Michael Fitzpatrick, 45th WS, Patrick AFB, Fla.
 Corey Strnad, to Staff Sgt. and Mrs. Steven Strnad, 45th WS, Patrick AFB, Fla.
 Georgia Marie Foster, to Tech. Sgt. and Mrs. Steven and Maureen Foster, 611th OSFWEX, ALC, Elmendorf AFB, Alaska

The 45th Weather Squadron



by Capt. Jim Sardonia
45th Weather Squadron
Launch Weather Officer

The 45th Weather Squadron's mission is to "Exploit the weather to assure access to space". It executes this mission at the busiest space launch complex in the world, located along 30 miles of Florida's Space Coast barrier islands. It is home to the Air Force's Cape Canaveral Air Station (CCAS), Patrick Air Force Base (PAFB), and NASA's Kennedy Space Center (KSC).

To execute its mission effectively, the weather squadron has developed and focuses on the following set of core squadron values: Perform the mission superbly; Organize effectively; Equip properly; Train rigorously, and Support the customer totally.

In the fall of 1994, the 45th WS reorganized to better execute the mission. It was forced to do this because of an ever increasing operations tempo with no corresponding increase in manpower.

The new organizational structure is made up of Operations and Systems Divisions. Within the Operations Division are the Range and Base Weather Flights, and the Training and Standardization and Evaluation branches. The Systems Division is comprised of a Systems Support Flight and a Requirements and Plans Flight.

The 45th Weather Squadron's Base Weather Operation (BWO) flight is located at Patrick AFB. It provides daily flight operations support for Air Force assets stationed at PAFB and numerous multi-service aircraft that use PAFB's runways for space launch support, drug enforcement, Search and Rescue, and fuel and supply stops to 45th Space Wing

assets at Antigua and Ascension Islands.

These aircraft include PAFB's C-130s and M11-60s that support the Department of Defense's Manned Spaceflight Office for Search and Recovery Operations during NASA's

OBSERVER

manned space flights: Navy's P-3 Orions in support of SLBM launch operations; the Drug Enforcement Agency's drug enforcement aircraft and helicopters; and other transient aircraft.

The BWO Flight supports the Joint Surveillance Target Attack System (JSTARS) program operating out of Melbourne, Fla., and has supported on several occasions TDY aircraft staging out of PAFB — including UPHOLD/RESTORE DEMOCRACY missions.

The nerve center for all space launch weather support at KSC and CCAS is the Range Weather Operation (RWO) flight. It provides comprehensive operational weather services to all aspects of NASA's manned Space Shuttle program, the Air Force's expendable space launch vehicles including the Titan IV, DOD and Commercial Atlas/Centaur, Delta II programs, and the Navy's Trident II submarine launched ballistic missile program. A 24-hour operating center, the RWO's services include: forecasting and resource protection support during routine daily operations; evaluation of pre-launch ground constraints; and critical Launch Commit Criteria (LCC) evaluation during launch countdowns.

One of the most important products that the RWO delivers is a five-day planning forecast, issued every day, providing the 45th Space Wing and KSC customers with a comprehensive look at operationally significant weather conditions expected in the area. The five-day forecast combined with custom tailored



(Left to right) Tech Sgt. Klaus Lammers and Tech. Sgt. Rick Osteen conduct training on the Radio Automated Theodolite Sounder in preparation for space shuttle launch support.

support from launch weather officers (LWO) and range weather forecasters is extensively used by range customers to support a wide variety of daily pre-launch ground operations that includes: booster transports; booster segment and spacecraft stacking on the pads; launch rehearsals; launch tower moves; shuttle rollouts to launch pads; vehicle tanking; press briefings;

and Mission/Launch Readiness Reviews. In fact, the RWO provides weather support to over 5,000 separate ground operations each year.

During launch countdowns, a team approach is used to assess safety-related and user vehicle-related Launch Commit Criteria (LCC) evaluation. These LCCs consist of a complex series of standardized triggered lightning constraints and vehicle specific criteria (wind, precipitation, and cloud restrictions) necessary to prevent a catastrophic vehicle loss.

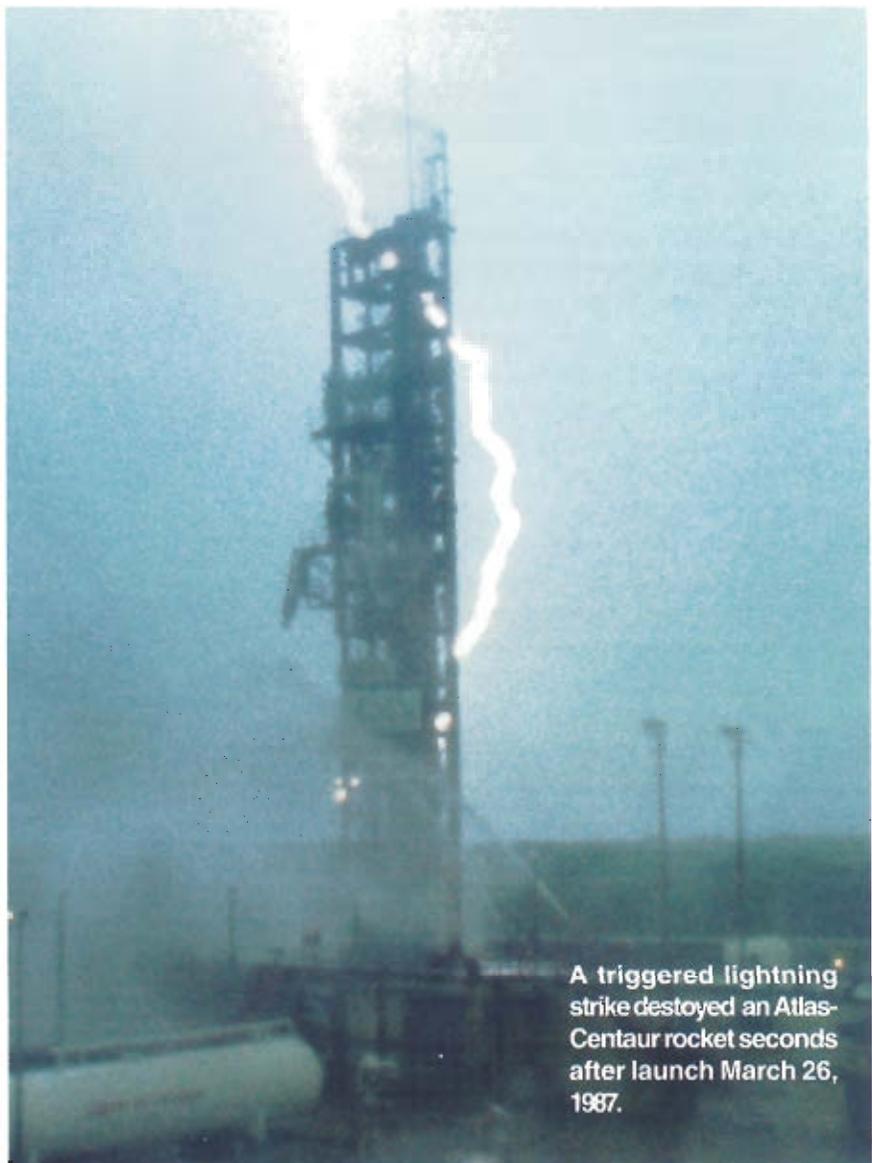


Clark Pinder (left) and Master Sgt. Rodney Rabenneck monitor weather on the range using the WSR-74C radar.

The launch weather team consists of the IWO, who is the focal point and the primary voice of the 45th WS to the launch customer during launch operations. Next is a deputy IWO for radar who is the weather radar expert and is primarily responsible for evaluating triggered lightning constraints; and a deputy IWO for weather reconnaissance who is responsible for directing and monitoring communications from a reconnaissance aircraft used for real-time evaluation of the launch commit criteria.

Also present is an Upper Air Systems Controller who schedules upper-air balloon launches and provides real-time quality control checks for the upper-air data used in critical load calculations. The RWO Flight Commander oversees all launch support in the RWO, and the duty forecaster and forecaster assistant who monitor CCAS and KSC. Either the squadron commander or director of operations meets with senior wing staff as necessary and provide, as a fail-safe, an independent assessment of the LCCs.

Another member of the launch team, and one without the 45th WS mission could not do without, is the range technical services contractor, Computer Sciences Raytheon (CSR). A team of 50 CSR meteorologists, engineers, and technicians provides 24-hour maintenance and sustaining engineering support to the \$30 million network of meteorological equipment that makes up the CCAS/KSC weather network, as well as surface



A triggered lightning strike destroyed an Atlas-Centaur rocket seconds after launch March 26, 1987.

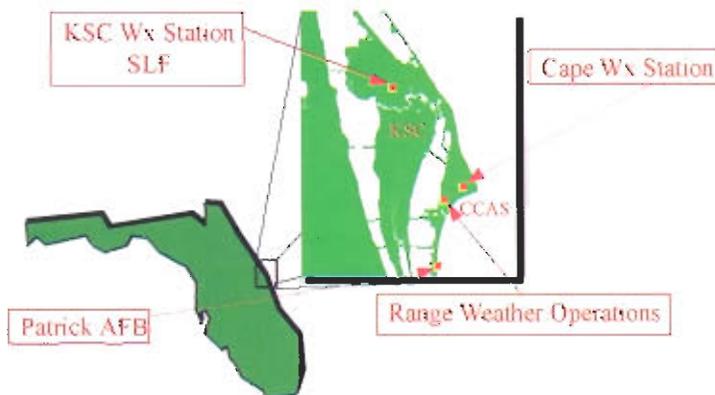
and upper air observations at the Shuttle Landing Facility, and day-of-launch balloon releases at CCAS.

In addition to launch customer sup-

port, the 45th WS also supports the Department of Defense Manned Spaceflight (DDMS) office by supervising the training and deployment of military weather personnel to Shuttle Transoceanic Abort Landing (TAL) sites in Spain and Africa. In the event of a shuttle landing somewhere other than KSC, the 45th WS provides a weather officer to accompany the return of the Orbiter and the 747 Shuttle Carrier Aircraft (SCA) on the critically important and meteorologically-sensitive "ferry flight" back to KSC.

Providing launch support and resource protection to 25,000 personnel and \$8 billion in assets requires a complex array of weather sensing and analy-

45th WS FACILITIES



sis equipment, and a team of professionals to manage the equipment. This team consists of 45th WS' Systems Division personnel, and personnel from CSR, 45 SW/I.G, and the tri-agency (NASA-DOD-DOC) Applied Meteorology Unit (AMU).

Some of the key systems we currently have are: the Launch Pad Lightning Warning System (LPLWS) which is a ground-based field mill system; the Cloud to Ground Lightning Surveillance System (CGLSS); and the Lightning Detection and Ranging (LDAR) system. These systems help mitigate the influence of triggered lightning on launch vehicles. To compliment the lightning detection capability, the squadron uses two weather radars: the WSR-74C and the WSR-88D. Additionally, the squadron operates 44 towers with 201 sensors around the Eastern Range (ER) providing real time readouts of winds, temperature, humidity, and pressure from the surface through 500 feet.

Data from these sensors are tied directly to launch commit criteria and have utility in Range Safety's toxic dispersion models.

Another key area involves upper air sampling. To accomplish this task, the 45th Weather Squadron uses Meteorological Sounding Systems (MSS) balloon trackers, a rocketsonde for Space Shuttle support, five metric radars to track mylar coated Jimsphere balloons, a 50 MHz Doppler wind profiler, and five 915

MHz wind profilers.

This data helps users assess loading stress on the vehicle, and safety and toxic launch commit criteria. Finally, all commercial and local data sets are captured in two IBM 4381 main-frame computers for forecasters and Launch Weather Officers to support Eastern Range activities.

As one can imagine, to operate and maintain such a variety of equipment, and to use this equipment to properly assess complex weather launch commit criteria, and provide weather warning/advisory support, is a major challenge.

To meet this challenge, the 45th WS has a Training Branch (DOT) and a Standardization and Evaluation Branch (DOV). DOV manages the extremely rigorous AFSPC mission ready (MR) program, and is dual-hatted as the Chief of the Weather Section on the Operations Group's DOV staff.

Currently, the LWO position is MR, and soon, LAW recent AFSPC guidance, the CC/DO will become MR positions as well. DOT is responsible for mission ready



Range Weather Operations Forecasters: (Standing from left) Staff Sgt. Bob Kane, Tech. Sgt. Rick Osteen, Staff Sgt. Shawn Starrs, Tech. Sgt. Lawrence Gross; (kneeling from left) Master Sgt. Rodney Rabenneck, Staff Sgt. Sandee Keane.

training, unit qualification training, and technical recurring training.

Another important goal of DOT is forecast improvements. Some recent successes have received national level attention: analysis of chaff impacts on weather radar and new wet microburst forecast techniques (jointly developed with the AMU).

The article on chaff impacts on weather radar and methods of identifying chaff was presented at the 45th WS-sponsored Southeast US WSR-88D Users Workshop and published at the 27th Conference on Radar Meteorology. The article on new microburst techniques will be published at the 18th Conference on Severe Local Storms. Both techniques were adopted for use by AFGWC.

The 45th Weather Squadron is a totally professional team of military, civilian and contractor members who are organized, trained and equipped to help execute the nation's manned and unmanned spacelift mission. If you want to be part of the team and help fulfill its vision to be "The world's premier weather service for spacelift operations", let us know.



45th WS Launch Officers: (from left) William Roeder, Johnny Weems, Joel Tumbiolo, Ed Priselac, Lt. Col. Anthony Guiffida (flight commander), Capt. Maria Reymann, 1st Lt. Julia Borowiak, Capt. Tim Robbins, Capt. Jim Sardonia.

Your Feedback Is Valuable

Help Us Acquire The Best Tools And Systems For Field Units

"In the post-Cold War era, the Department of Defense (DoD) will rely more heavily on modifications and upgrades to modernize weapon systems. There will be a corresponding decrease in new development and production programs." (*John M. Deutch, Undersecretary of Defense, Acquisition; now Director, Central Intelligence Agency, Oct. 14, 1993.*)

These words ring true for the Air Force Weather (AFW) Weapon System as well. Two of our major acquisition programs, the Combat Weather System and the Automated Weather Distribution System (AWDS) Pre-Planned Product Improvement Program, fell under the budget axe in 1994.

To continue meeting requirements which were part of the programs, a number of modification programs were developed in cooperation with the major commands (MAJCOMs).

User input to the modification process is vital to identify shortcomings, state requirements, participate in operational testing and evaluation,

and to ensure the successful fielding of system upgrades.

If you have ever thought, "Gee, it would sure be nice if this equipment could...", "This task would certainly be easier if...", or, "If the people who designed this stuff had only talked to me first..." you probably have an idea that deserves to be written down and evaluated.

There are avenues open to you — the user — to identify equipment/capability shortfalls for standard AFW equipment. The AF Form 1000, Suggestion, can be submitted by anyone. The AF Form 1067, Modification Proposal, is the requirement document for all upgrades with a total cost less than \$10 million.

by Master Sgt. Rick Coyle
Superintendent, Airfield
Weather Systems

As with the AF Form 1000, anyone can submit a modification proposal. These documents are forwarded to us by MAJCOM directorates of weather or SC functional areas.

After further screening through the initiating MAJCOM, the proposals are presented to all MAJCOMs semiannually. Each August, the Product Improvement Working Group (PIWG) meets to cover logistics and support issues. The PIWG provides a forum for MAJCOMs to validate new modification requirements and advocate importance of all valid modifications.

"There are avenues open to you -- the user -- to identify equipment and capability shortfalls for standard Air Force Weather equipment."

**Master Sgt. Rick Coyle
Superintendent, Airfield Weather Systems**



The Weather Weapon System review conference held in February reviews the progress made since the PIWG, focusing on execution/near-year modifications. MAJCOM support of these two meetings is critical and provides key opportunities for using weather command input to the modification process. A system affiliate (or system lead) as outlined in AFI 10-901 is assigned at the PIWG for each modification.

The system affiliate is a MAJCOM who will provide technical advice, test-

ing assistance (test sites, technicians, observers, etc.), and using command feedback to AWS. The system affiliate also acts as a collection point and voice for other using commands.

We will be fielding the FMQ-8 Temperature Dew Point Measuring Set sensor modification this year. This modification will increase dew point accuracy at extremes of temperature and humidity, solve the oscillation problem at dew points near freezing, and increase Mean-Time-Between-Failure tenfold to 15,000 hours.

The requirement was identified by you — the user — and reported to the 1991 PIWG (all MAJCOMs unanimously declared the FMQ-8 dew point sensor their #1 modification priority). After problem identification and solution studies, SM-ALC contracted Arinc Corporation to perform the modification at five test sites.

Air Weather Service provided FY95 funds. Air Education and Training Command served as system affiliate. Air Combat Command played a vital role in all aspects of maintenance and testing, and SM-ALC is building the modification kits. Five bases from four different MAJCOMs allowed us to test the modified sensor. The support and information from "the field" was invaluable in this effort.

We encourage and solicit your feedback regarding modification and upgrade efforts. Please work through your MAJCOM counterparts who will be attending the February 1996 Weather Weapons Systems Review and August 1996 PIWG meetings.

Our goal is to acquire the best systems and tools for field units to aid them in accomplishing their missions more effectively.

Contact Master Sgt. Rick Coyle at HQ AWS/SYXE, Rm. 105, Scott AFB, Ill.; at DSN 576-3840, ext. 419; or by E-Mail at "coyle@hqaws.safb.af.mil".

FAP: A Roadmap Toward The Future of Air Force Weather

Have you stopped for a minute to consider what Air Force Weather (AFW) will look like in the year 2020?

Will the base weather station host a fully automated observing section? Will terminal forecasts be produced automatically at one or more centralized facilities? Will inexpensive, miniaturized sensors across the landscape in concert with nanosatellites and LIDAR beams allow us to know the weather at anytime, anywhere?

These are the sort of questions Secretary of the Air Force Sheila Widnall and Air Force Chief of Staff Gen. Ronald R. Fogleman have challenged the AFW community to answer. In recent remarks to the Air Force Association, General Fogelman said the programmatic approach the Air Force has used in the past to meet future requirements "constrains our expectations with present fiscal concerns." This approach is safe, but it's not very imaginative.

We continue to improve our current systems — bigger, faster, better, cheaper — but we really don't change how we do business. The general suggests we need to "fly into the future, maybe to the year 2020." We should put ourselves into a position to take a look at what the world will be like, at what society will be like and at what warfare in this period of time will be like.

Armed with this perspective, we should look back to the present and identify what we must do to get us where we

by Chris Konze
Manager
Weather Program Needs

need to be in the year 2020, providing the nation the air and space forces it needs." If this sounds like an easy thing to do, consider that in 1944, Adolph Hitler was launching V-2 rockets at London. In 1969, 25 years later, Neil Armstrong set foot on the Moon.

Fortunately, there is a process in place to approach this formidable task. It's called Air Force Policy Directive 10-14, Modernization Planning. The first step in the process is to perform a Mission Area Assessment (MAA) where Air Staff,

"The key to developing a quality strategy-to-task analysis is the inputs from AFW field units who provide face-to-face support to the warfighter on a daily basis."

**Chris Konze
Manager, Weather Program Needs
Headquarters, Air Weather Service**



Air Force and Army major commands, National Program, and Field Operating Agency weather organizations use the National Military Strategy and our customers operational tasks to identify "enduring" weather tasks, those we'll likely perform 25 years from now. Naturally, the key to developing a quality strategy-to-task analysis is the inputs from AFW field units who provide face-to-face support to the warfighter on a daily basis.

The next step in the process requires the MAJCOMS and MACOMS to analyze such things as force structure, geopolitical environments, projected advances in technology, interoperability

concerns, and expected threats affecting their current and programmed capabilities to accomplish these tasks.

In other words, how will the future change the way weather folks support the warfighter? This task-to-need evaluation is a Mission Needs Analysis (MNA). If done properly, a series of "deficiencies" in weather operations are identified and solutions proposed. Keep in mind that these deficiencies are primarily in our ability to support our customer's future needs, not so much in the way we do business today.

The final step in the process is development of the Functional Area Plan (FAP), Air Force Weather's roadmap to the future. The FAP outlines measures to correct the MNA deficiencies and defines them in two ways. The first is based on the timing of the solution:

- *Near Term:* Those implemented within the current Program Objective Memorandum (POM) cycle.
- *Mid Term:* Solutions implemented from 6 to 15 years.
- *Far Term:* Solutions implemented from 15 to 25 years.

The second is based on the nature of the solution:

- ◆ *Non-material:* Changing strategy, doctrine, tactics, techniques, training, or procedures.
- ◆ *Modification:* Modifying and/or modernizing existing equipment.
- ◆ *Material:* Increasing quantities in terms of acquisition, manpower, or other support.
- ◆ *Levenging Science & Technology:*

See ROADMAP
continued on Page 23

AFW Stan Eval

Taking The "Black Hat" off Standardization and Evaluation

by Lt. Col. Michael Stanley
Chief, Air Force Weather Technical Standardization and
Evaluation (AFWTSE) Division

Much mystery still surrounds the Standardization and Evaluation team. Who are they? How many team members are there? How long do they stay at each location? What do they actually check? What are proficiency tests? What are checkrides? What kind of ratings do they use? Are the major commands (MAJCOMs) involved? When will they visit me? Et cetera, et cetera.

Hopefully I'll be able to answer these questions and more in the following article. First of all, I'm Lt. Col. Michael Stanley, the Chief of the Air Force Weather Technical Standardization and Evaluation (AFWTSE) Division at Headquarters, Air Weather Service. I work directly for Col. Gerald Riley, the Air Weather Service Vice Commander. At this time we have one team comprised of three other individuals—a captain and two master sergeant selects conducting stan eval visits. In February, a master sergeant will arrive, and by the summer, three more senior non-commissioned officers should be here.

Additionally, we are looking for an officer to serve as the second team chief. We figure we'll have two complete teams on line and ready to go by September 1996. AFI 15-215, *Air Force Weather Standardization and Evaluation Program*, gives us our charter. AFMAN 15-125, *Weather Station Operations*, is our bible. Both publications describe standardized guidance for implementation by Air Force weather units. Both are currently still in draft, but the Headquarters Air Force Directorate of Weather staff is working hard to publish them in final form. The latest draft versions can be downloaded from the Air Weather Service Bulletin Board.

The ultimate plan is to have four teams of four personnel. Each team will travel two weeks a month. With this schedule, we should visit all base weather stations on a 24-month cycle. Our main focus right now is on garrison operations. After all, that's the focus of Air Force operational service.

Our visits last three or four days depending on the size of the unit. We won't be evaluating specialized areas at this time, such as space, solar, army deployed support, special operations deployed support, and weather support units. MAJCOM rep-

representatives who travel with us may or may not evaluate these areas separately. We do not look at functional areas pertaining to information management, security, safety, etcetera. Our focus is strictly on the technical areas.

The Standardization and Evaluation team has completed its initial eight "test" bases encompassing almost every MAJCOM. We visited Ellsworth AFB, S.D. (Air Combar Command); Altus AFB, Okla. (Air Education and Training Command); Fairchild AFB, Wash. (Air Mobility Command); Giebelstadt AIN, Germany (U.S. Air Forces in Europe-Army); RAF Mildenhall, United Kingdom (USAFE-Air Force); Kadena AB, Japan (Pacific Air Forces); Eglin AFB, Fla. (Air Force Materiel Command), and Peterson AFB, Colo. (Air Force Space Command).

While this was a rigorous schedule, we completed these visits in three short months. Since then, we have done some refining and retooling of our processes — especially in the area of checklists and standards.

The MAJCOMs have recommended a visit schedule by deconflicting with other visits and exercise and contingency schedules. We've compiled all the inputs, developed a schedule, and in turn, asked for MAJCOM concurrence.

The stan eval team will notify units and group commanders via message no later than 45 days prior to the scheduled visit date. Message details will include a request to arrange billeting and other needs, set inbriefing times, and identify what the unit's command meteorologist needs to do to assist the stan eval team.

We also ask that the command meteorologist schedule inbriefing and outbriefing times with the group commander or designated representative. Important items we ask for prior to arrival are copies of the Forecaster and Observer Standing Operating Procedures, Local Analysis and Forecasting Programs (weather station and tactical), the Terminal Forecast Reference Notebook, and the Weather Support Plan or Regulation. By reviewing these items ahead of time, we can start our evaluation process immediately upon arrival.

The evaluation phase of the visit is broken down into two main parts—the proficiency section and the operations section.

The proficiency section consists of tests, comprising 20-25 questions. Though we only used a forecaster and observer test during our initial eight visits, our goal is to have a bank of questions available to units. We will then select specific questions for testing. The tests are open book and time limits are liberal. The proficiency area makes up 30 percent of the evaluation and everyone available in the unit will be given these proficiency tests.

The operations area makes up the biggest part of the evaluation — 70 percent. For this phase, the stan eval team issues "checkrides" to individual unit members.

A checkride is similar to that used for pilots — evaluating an individual from take-off through flight to landing. By using checklists that were derived from the AFMAN 15-125, the team members basically watch individuals "fly the plane."

We may ask questions during the "flight" because we need to know what you know, i.e. how did you arrive at that conclusion? Remember, we're looking for sound meteorological reasoning. The MAJCOM representatives play a crucial role during this entire process as they maintain a check and balance throughout. They add their expertise and experience, and participate fully in the evaluation process.

The scoring system will see the biggest change from the first eight units. The system used during the test visits weighted all discrepancy items the same; this helped lead to a preponderance of high grades. The key to the new scoring is that every unit will start out as fully qualified or Q1. In order to earn an Exceptionally Qualified (EQ) rating, the unit will have to perform above and beyond that level. Up to twenty total areas will be evaluated. Each

area starts out at four points and goes up or down from there depending on how many discrepancy items are noted in the checklists. An area can be rated anywhere from 0-5 points. Having no discrepancy items noted in an area does not necessarily equate to a "5".

Remember, everyone starts out at four points. Additionally, some checklist items are weighted more heavily.

Overall, the new scoring system will be more fair. To score an EQ, a unit will be the best of the best, as it should be. In addition, the new system puts units in the position where they will now want to show their best to the team instead of trying to argue why an individual

discrepancy shouldn't be written up.

A report will be written and handed to the Group Commander prior to the outbrief. Throughout the process the operations support or weather squadron commander is kept informed of the evaluation so that there are no surprises. The report as well as the outbrief will key in on discrepancy areas instead of individual items and we will make recommendations if areas need improvement. We will also point out positive observations and exceptional performers as well.

I hope I've been able to answer some of the questions you may have had and take the mystery out of the AFWTSE team. We look forward to working with field units throughout the weather functional community. We'll see you on our rounds.

Visit Schedule for 1996

Feb. 5-9	Beale AFB, Calif. (ACC)
Feb. 12-16	Fort Polk, La. (ACC)
Feb. 26-March 1	Misawa AB, Japan (PACAF)
March 4-8	Yokota AB, Japan (PACAF)
April 1-5	Ramstein AB, Germany (USAFE)
April 8-12	Grafenwoehr, Germany (USAFE)
April 29-May 3	Dyess AFB, Texas (ACC)
May 13-17	Wright Patterson AFB, Ohio (AFMCC)
May 20-24	Fort Campbell, Ky. (ACC)
June 3-7	Fort Carson, Colo. (ACC)
June 24-28	Luke AFB, Ariz. (AETC)
July 8-12	Wheeler AFB, Hawaii (PACAF)
July 15-19	Hickam AFB, Hawaii (PACAF)
Aug. 5-9	Fort Eustis, Va. (ACC)
Aug. 19-23	Charleston AFB, S.C. (AMC)
Sept. 9-13	F.E. Warren AFB, Wyo. (AFSPC)
Sept. 16-20	Fort Hood, Texas (ACC)
Sept. 30-Oct. 4	Fort Lewis, Wash. (ACC)
Oct. 7-11	McChord AFB, Wash. (AMC)
Nov. 4-8	Fort Belvoir, Wash. (ACC)
Nov. 18-22	Langley AFB, Va. (ACC)
Dec. 2-6	Fort Benning, Ga. (ACC)
Dec. 9-13	MacDill AFB, Fla. (ACC)

To reach the AWS Stan Eval team, call DSN 576-3240, ext. 350 for Colonel Stanley; ext. 404 for Capt. Chan Keith; ext. 407 for Tech. Sgt. Mike Nelson; ext. 500 for Tech. Sgt. Mark Anderson.

Save Money And Improve Capabilities?

SSG, OL-B does just that with WINDS II, AWNCOM upgrades

Anyone involved with the government knows that balancing the budget means pinching pennies and slicing spending.

Usually, this belt tightening is both painful and difficult, involving hard compromises and real sacrifices. But, every once in a while, it's possible to painlessly save money *and* increase capability at the same time.

Here at SSG/SDFW (Air Force Weather Software Systems), we've been helping our customers do just that, by replacing expensive, outdated systems with inexpensive modernized equipment.

At Offutt AFB, Neb., we recently replaced eight vintage teletype machines with ordinary desktop personal computers. To lease the eight 1960s-era Model 40 and 141 teletype machines, the government had been paying \$4,000 a month — \$48,000 a year for each machine. They were replaced by desktop 386's running WINDS II and AWNCOM software. In this case, we were able to cut the cost to virtually nothing by using surplus machines for the replacement.

Even if new PC's were bought, the one-time cost would have been a small fraction of the annual rental fees for the teletype machines.

While "leaner and meaner" is an admirable goal, we all know that budget cutting often means reducing capabilities as well — sometimes you just can't do more with less.

In this case, however, exactly the opposite held true. With the old teletype machines, users had only one option: all the data coming in over the AWN (Automated Weather Network) was printed out.

WINDS II and AWNCOM preserve the ability to print messages if necessary, but also

by Col George Yurchak, Jr.
Chief
Standard Systems Group
Operating Location B
Tinker AFB, Okla.

provide much greater flexibility. They allow users to be more selective about which messages are received. Incoming messages can be saved to disk, and the software automatically preserves up to 30 days' worth of weather data in this manner. The user can save and edit these files, and retrieve particular files easily and electronically.

WINDS II and AWNCOM provide a user-friendly Microsoft Windows interface, and we can provide the customer service. Unlike earlier versions of the software, almost everything is automated.

"Usually, this belt tightening is both painful and difficult, involving hard compromises and real sacrifices. But, every once in a while, it's possible to painlessly save money *and* increase capability at the same time."

Col George Yurchak, Jr.
Chief, SSG, OL-B

For example, users no longer need to erase old databases as they accumulate — the software itself keeps track of saving recent data and deleting old data to make room for the new.

More than 100 of these old teletype machines have been replaced already, but we suspect that there are still some in use. We do not have any comprehensive list of AWN users and rely upon people in the field to contact us.

How can you tell if you are a candidate

for this technology replacement?

First, note that you don't have to be an Air Force user; we also support many customers from other government agencies, both inside and outside of the Department of Defense. If you have a connection to the AWN through a PACMEDS or EURMEDS terminal, or a teletype machine (like the Model 40s and 141s), then the old system can be replaced by a PC.

To run WINDS II and AWNCOM, you will need a dedicated line or asynchronous MEDS circuit to one of the three weather switches: Tinker AFB, Okla.; Hickam AFB, Hawaii; or RAF Croughton, England.

The hardware requirements are a dedicated 386/25 megahertz (MHz) or better PC, mouse, monitor, eight megabytes (MB) of RAM, and at least a 100-megabyte hard drive (possibly more, depending on your application).

Since WINDS II and AWNCOM will run just fine on an old 386, it is often possible for our customers to recycle computers being replaced by newer 486 or Pentium models.

The software installation process is extremely simple, and customer support is available from our office from 7 a.m.-4 p.m. (Central Time), Monday-Friday.

If you already use WINDS II and AWNCOM, check the version numbers on your system.

If you are running something other than WINDS II v. 2 and AWNCOM v. 11, you should contact us for an upgrade. Neither we nor anyone else can provide any support for earlier versions of the software, some of which are still in use at various locations.

Also, if you obtained your software from any source other than directly from us, we urge you to contact us so that we can put you on our mailing list, and keep you informed of any product upgrades.

Contact HQ SSG OL-B/SDFW, 3580 D Ave., (201W), Tinker AFB, OK 73145-9155. Our phone number is DSN 884-7080/7020, commercial (405) 734-7080/7020. Call and ask to speak to someone about WINDS II and AWNCOM.

oh, by the way

AFGWC Hosts AWDS Users Conference

The Automated Weather Distribution System (AWDS) Software Technical Applications Facility at Air Force Global Weather Central hosted the Air Weather Service AWDS Users Conference '95 at Offutt AFB, Neb., recently.

The conference, from Oct. 30-Nov. 1, 1995, drew more than 130 people from around the world. Participants attended more than 20 sessions, which were a huge success, according to Dr. David J. Szymanski, the conference coordinator.

The conference's theme was "AWDS Operations and Communications - Present and Future." Numerous briefers, representing government and industry, presented information on the current and future status of AWDS, AWDS communications, NOTAMS, where to get help on AWDS, etc. In addition, conference attendees interfaced with new AWDS equipment following demonstrations by several AWDS vendors.

Attendees also toured various areas of AFGWC, including the AWDS Software Technical Applications Facility (STAF). This is the central point of contact for resolving AWDS operational problems.

The conference permitted AWDS systems managers and operational users

to discuss current issues, express concerns, and be introduced to the full potential of enhancements in upcoming AWDS upgrades.

The Standard Systems Division of Headquarters Air Weather Service, Scott AFB, Ill., will host the next AWDS Users Conference. Information on the next conference will be sent to the major commands when a date is selected.

For more information on the conference, contact Dr. David J. Szymanski at DSN 271-5833.

Check Out the new *Check It Out*

The Air Weather Service Technology Training Division (AWS/XOT) has developed a new publication called *Check It Out*.

Check It Out is designed to quickly pass information to the field. The subjects covered in *Check It Out* do not lend themselves to our other publications (ECHOES, T-TWOS, or FYI's) either because of the amount, the timeliness, or the perishability of the information. Distribution is based upon the subject.

Our first *Check it Out*, # 96-01, contains three papers that were presented at the 27th Conference on Radar Meteorology. Accompanying each paper is a one-page XOT summary that tells you what you need to know. Although the summary stands on its own, we encourage you to read the complete paper for a more thorough understanding.

If you haven't received your copy of this *Check it Out*, call HQ AWS/XOT, DSN 576-4721, ext. 447.



HQ Air Weather Service Technology Training Division has 24-hour voice mail and E-Mail comment lines.

If you have questions or comments on MerTIPs, Regional Conferences, MPRs, FYIs, TTWOs, Echoes, or Check it Outs, call DSN 576-4721 Ext. 441. Our E-Mail address is: hqawsxot@hqaws.safb.af.mil.

Dates set for National Hurricane Conference

The 18th Annual National Hurricane Conference takes place April 2-5, 1996, at the Radisson Twin Towers Hotel, Orlando, Fla. Among the conference sponsors and participants are: the American Meteorological Society, National Weather Service, American Red Cross, U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration, and many more. For more information, call (904) 561-1163, or fax (904) 561-1172.

Table Of Allowance 786 Review

There is a comprehensive review of Table of Allowance (TA) 786 for weather support equipment and organizational level maintenance on meteorological equipment, April 8-12 at Scott AFB, Ill.

The review, hosted by Headquarters Air Weather Service, begins at 8 a.m. April 9, in the Global Reach Planning Center, Bldg. 1097, 105 W. Martin St., and wraps up at noon, April 12.

The goal of this review is to update and simplify the TA. Any major command representatives with an interest in weather equipment support are invited. For more information, contact Senior Master Sgt. Sue Floyd at DSN 576-3840, ext. 317, or Master Sgt. Ernie Haswell at DSN 576-3840, ext. 316.

Put THIS on your "Hot List"

WEATHERNET is an attempt by the University of Michigan to capture practically all of the known weather sites on the Internet in one place. The WEATHERNET home page has links to more than 300 other postings and links.

This site on the World Wide Web also has access to the new real-time

observation cameras which include updated pictures and weather observations from various global sites.

The Uniform Resource Locator (URL) for WEATHERNET is: <http://cirrus.sprl.umich.edu/wxnet/wnetplus.html>

And of course, check out the Air Weather Service home page at: <http://infosphere.safb.af.mil/~aws/>

LANE, continued from Page 5

A lot of sergeants, finding themselves in an environment with less structure, sometimes lose focus of what is in their lane.

The sum of these responsibilities equals taking care of soldiers. Taking care of soldiers means counseling and knowing them, training them to standard, enforcing discipline and setting an example for them to emulate.

These responsibilities never waiver and are always in our lane, regardless of our mission.

They are the same for a sergeant in charge of soldiers in a personnel service center as they are for a sergeant in charge of soldiers in an infantry platoon. Soldier care responsibilities don't change with mission—they are constant.

Above and before all else, we have to remember we are sergeants. It's when we start calling ourselves by other names like NCOIC of something or other that our lanes start to get a little unclear.

In other words, when we refer to ourselves as job descriptions instead of sergeants, we start losing track of who we are and what we do. By forgetting that we're sergeants before we are anything else, we narrow our lane or focus too much. When that happens, the most important obligation and responsibility in our lane—taking care of soldiers—falls out of it.

Recently, I asked an NCOIC to tell me exactly what it was he was in charge of. He answered with a detailed briefing that included the section's mission, how it was accomplished and how well it was accomplished, measured by the Department of the Army standard for accomplishing that particular mission.

During the briefing he never mentioned his responsibilities as a sergeant—to the soldiers in the section. I was impressed with his job knowledge.

When I asked him about taking care of soldiers, his answers weren't given with the same zeal as was his mission briefing. I asked questions about things that are in the NCO lane of responsibility.

I asked about counseling. The answer offered was a recital of his unit's policy on counseling.

When I asked to see one of his counseling records he couldn't produce one because counseling wasn't being done.

When I asked about physical training, he told me, "Because of the constraints of our mission, we do it on our own." Doing it on their own meant a private now had the responsibility to develop and maintain an adequate physical fitness program—something a lot of sergeants have difficulty with.

The sergeant pushed a soldier-care responsibility that was plainly his, out of his lane. I asked the sergeant what happened if one of his soldiers failed the Army physical fitness test or became overweight. His reply was that "...the first sergeant takes care of that."

Now the sergeant was pushing responsibility out of his lane and into the first sergeant's. There were more questions with similar replies during our discussion.

When our talk was over, the sergeant had cleared his lane of soldier-care responsibilities. Too many times the responsibility was placed in the soldier's lane, or forgotten altogether.

I've faced this situation in many organizations. I find it's not germane to one kind of unit or the other. It's a clear example of a sergeant forgetting who he is and what he does.

By neglecting his soldier-care respon-

sibilities he wandered out of his lane and into an officer's lane.

Officers have a different focus, another lane. They put the main focus on the mission at hand and concentrate on the collective picture. They do that because they know who shoulders the responsibility to provide them with trained and cared-for soldiers to accomplish the mission.

Our failure to meet that responsibility violates our creed and breaks down the team. Our soldiers lose confidence in us, our support channel breaks down and officers pick up the soldier-care responsibility we neglected. When that happens, we scream like banshees because some officer is meddling in sergeant's business.

Before we do that though, we need to make sure we're not the cause of the officer being in our lane in the first place. As NCOs it's our responsibility not only to take care of soldiers, but to help sergeants define and stay in their lane.

If we allow taking care of soldiers to drop out of our lane, think what lesson we're teaching tomorrow's sergeants. Tomorrow's sergeants are who we will charge to look after our sons and daughters.

"My son, soldiers go where their sergeant lead them." Stay in your lane, sergeant.

Contact Chief Hoy at DSN 224-7410 or by electronic mail at "jhoy@pafosu3.hq.af.mil"

BOARD, continued from Page 7

lengths to ensure no single career field or speciality has an advantage. It's difficult to imagine a more fair method of selecting future leaders.

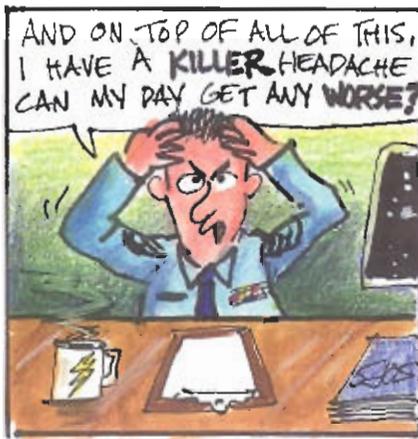
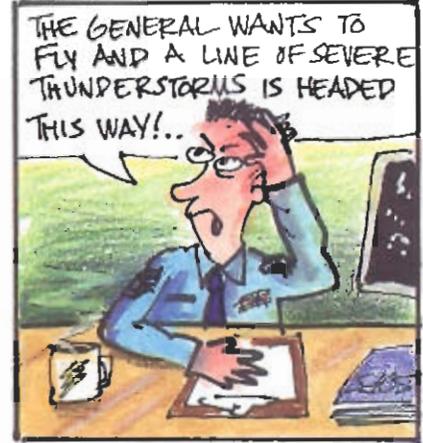
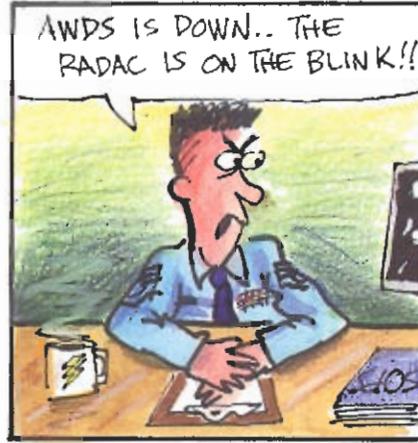
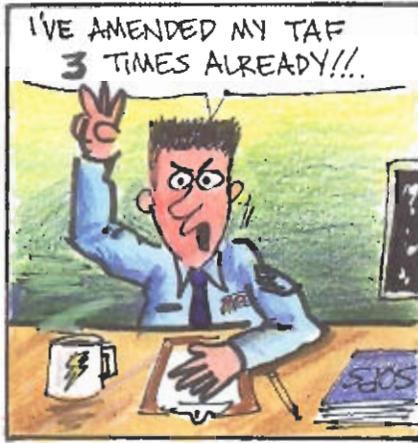
This column is written specifically to meet your needs and concerns. If you have specific career questions, suggestions for future articles, or issues which you need addressed, contact me and I'll either answer them in future columns or I'll call you right back.

My mailing address is: Maj. John Murphy, HQ Air Weather Service, Director of Personnel (AWS/RMP), 102 W. Losey St., Room 105, Scott AFB IL 62225-5206 or DSN 576-4895, ext. 344. You can also contact me through my electronic mail address at "murphyj@hqaws.safb.af.mil".

(Excerpts for this column were taken from the Dec. 18, 1995 Air Force Times article "Your Career is in Their Hands.")

Weather Weenies!

by Senior Airman Steve Plater



©PLATER

ROADMAP, continued from Page 17

Developing and/or acquiring a new capability.

At Headquarters Air Weather Service, the office responsible for developing and maintaining this document is the Technology Plans Division (AWS/XOX). Constant effort is directed to refining

solutions to the MNA deficiencies and reviewing the deficiencies to make certain none were overlooked.

Primary emphasis is on non-material solutions and capabilities we can leverage from other agencies since both people and money are in short supply now and in the future.

The Requirements Division (AWS/XOR) is the bridge between our future vision and the development of actual pro-

grams to be funded in the next POM cycle.

Without a lot of hard work on their part, new programs to assist all of you in the field would be difficult to realize. If you have ideas or suggestions on future weather support to our fighting forces, send them to your major command representatives. Help us help you make a smooth transition to the AFW of the 21st century.

Observation From The Field

The weather team from the 60th Operations Support Squadron, Travis AFB, Calif., was recently picked as the squadron's Outstanding Team of the Quarter for the third quarter of 1995.

The award recognizes a team of two or more individuals whose accomplishments most contributed to the success of the op-

erations community.

The weather flight was chosen for its "above and beyond" contributions during Travis' Operational Readiness Inspection and several severe weather events, as well as shouldering a significant increase in workload without any additional manpower, according to 60th OSS commander, Lt. Col. Jeffrey A. Thomas.

Team members include:

Staff Sergeant Edward T. Alcedan
2nd Lt. Norcen L. Balos
1st Lt. Richard F. Bens

Airman 1st Class Paul D. Bongiorno
Airman 1st Class Gary E. Burkhardt
Airman 1st Class Wendy S. Conklin
Staff Sgt. Jay S. Curtis
Airman 1st Class James B. Daugherty
Master Sgt. Carol A. Doolan
Senior Airman Kenneth A. Ferland
Capt. Jay S. Fitzgerald
Master Sgt. John D. Gerrish
2nd Lt. Gregory J. Goar
Senior Airman Ronald W. Kessler
Senior Airman Duane E. Klintzmann
Capt. Vicki D. Miretti
Staff Sgt. Samuel L. Moore
1st Lt. Robert D. Parks
Senior Airman Barry C. Patterson
Mr. Charlie Phillips
Airman 1st Class Favelino G. Quintanilla
Sgt. Jeffrey L. Sitter

