

Orders go out on new recon gear

BLOOMFIELD, Conn. — Purchase orders in excess of \$3 million have been issued here for equipment and services for the new prototype Airborne Weather Reconnaissance System (AWRS) for AWS.

Announcement of the orders was made by the president of Kaman Aerospace Corp., Jack G. Anderson, whose company will develop AWRS and install the prototype in an AWS WC-130 weather-reconnaissance aircraft.

Under an AFSC Electronic Systems Division contract, Kaman is system prime contractor for AWRS, which applies a systems approach to problems of measuring and recording the internal forces of tropical storms, expected to lead to improved tracking and forecasting of such violent weather.

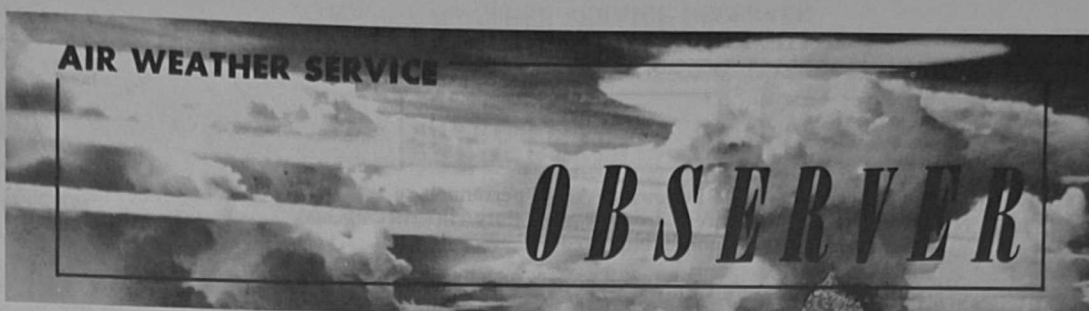
Design phase of AWRS subsystems is nearing completion, the Kaman Corp. subsidiary president said, and equipment development is about 90 percent complete.

The prototype aircraft, drawn from AWS's 55th Weather Reconnaissance Squadron of the 9th Wing, McClellan AFB, Calif., has arrived at Kaman's facility at Bradley International Airport at Windsor Locks, Conn. Airframe modifications, equipment installation and systems testing and evaluation will take place there.

Systems integration and testing, including flight testing of the reconnaissance prototype, will continue through 1972.

Ultimately AWRS may be installed in 22 additional AWS WC-130s and six WC-135s for world-wide coverage of weather and atmospheric conditions, including hurricane and typhoon reconnaissance.

Employing advanced meteorological sensors and electronic



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NEW VIEWING port in fuselage of a WC-130 reconnaissance aircraft is examined by Capt. Richard A. Baker, 9th Weather Reconnaissance Wing. The 9th Wing weather aircraft is at Windsor Locks, Conn., where Kaman Aerospace Corporation is modifying it as the prototype of the Airborne Weather Reconnaissance System (AWRS) for which Kaman is contractor.

equipment, on-board data processing, recording and display, as well as a precise inertial/Omega navigational system and modern communications equipment, AWRS is expected to increase greatly the accuracy and reliability of weather data collected by AWS's global reconnaissance program.

Improved measurement and analysis of natural forces in tropical storms may result in increased knowledge of storm structure and enhance predictability, as well as helping weather scientists to learn to alter or divert storm forces and lessen their destructiveness over populated areas.

The Observer regretfully reports the deaths of the following AWS people.

Mrs. Sandra K. Winger, wife of TSgt. James E. Winger, March 2, at USAF Regional Hospital, March AFB, Calif., of cancer. Sergeant Winger is assigned to Detachment 3, 17th Weather Squadron, March AFB, Calif.

Lt. Col. Jacob Follmer (Ret.), February 26 of a heart attack at the Langley AFB, Va., hospital. He had retired from AWS in August 1964.

AWS wins MAC safe-flying award for first time

RAMEY AFB, P. R. — For the first time since its inception in 1957, the Military Airlift Command's Flying Safety Award has been won by Air Weather Service. Accepting the award here for AWS from presenter Gen. Jack J. Catton, MAC commander, was Brig. Gen. William H. Best Jr., AWS commander.

Five AWS wings also won MAC safety awards for 1971. The 9th Weather Reconnaissance Wing, McClellan AFB, Calif., won a MAC Flight Safety Achievement Award, while 1st Weather Wing, Hickam AFB, Hawaii, took the MAC Ground Safety Achievement Award.

Receiving MAC Private Motor Vehicle Safety Awards were the 1st Wing, 3d WW, Offutt AFB, Nebr., and 4th WW, Ent AFB, Colo.

Wing awards are being mailed directly from MAC headquarters to the safety officer of the winning unit.

Another AWSman wins NCO award

NORTON AFB, Calif.—MSgt. Larry L. Steele, weather forecaster with 6th Weather Wing's Environmental Technical Applications Center, Washington, D. C., won the Commandant's Award for Class 72-7 of Military Airlift Command's NCO Academy.

Award is given to student displaying outstanding attitude, progress, effort and leadership qualities while at the academy. Sergeant Steele was honored from a select student body of 136 non-commissioned officers attending his class.

Other weathermen gained honors as distinguished students: MSgt. Robert L. Miles, 7th WW, Scott AFB, Ill., MSgt. Charles Ronan, 2d WW, Wiesbaden AB, Germany, MSgt. John R. Zemba, Det. 17, 20th WS, Yokota AB, Japan, TSgt. Harold D. Ashcraft, Det. 12, 9th WS, Ellsworth AFB, S. D., and TSgt. Harvey D. Mc-

AWS aided historic trip to Peking

AWS Hq.—When President Nixon made his historic flight to Peking, China, last month, AWS units and individuals provided the normal weather support given all Air Force One flights.

Weather briefings for Presidential crew members were provided by AWS at Andrews AFB, Md., and at all en-route stops to and from the Chinese mainland. The normal meteorological watch during the flight was carried out.

From the computers at Offutt AFB, Nebr., Air Force Global Weather Central produced 285 mission-tailored forecasts, upon which were based total support for the President's flight.

AFGWC's Univac 1108 computers ground out 107 planning, operational and no-notice return flight plans and updates for Air Force One, as well as 21 flight plans for other Military Airlift Command aircraft.

In addition, 131 terminal forecasts for three Chinese cities and 26 briefing packages for National Emergency Airborne Command Post aircraft were produced by AFGWC.



NEW GENERAL officer from among the ranks of AWS alumni is Robert L. Moeller, nominated to be brigadier general. Now vice commander of MAC's 437th Military Airlift Wing, Charleston AFB, S. C., Colonel Moeller served in AWS from 1949 to 1968, beginning as a student pilot with the old 2078th Air Weather Reconnaissance Squadron (Special) and later commanding the 58th and 53d WRSs. Colonel Moeller has been named to succeed retiring Brig. Gen. Thomas B. Kennedy April 1 as commander of the Charleston MAC wing.

Innis, Det. 11, 2d WW, Torrejon AB, Spain.

Others from AWS graduating were MSgt. Forrest E. Gray, Det. 10, 6th WW, Eglin AFB, Fla., MSgt. Richard C. Kreger, 11th WS, Elmendorf AFB, Alaska, MSgt. Claude R. Morris, AWS Hq, Scott AFB, Ill., MSgt. Wesley D. Shales, Det. 3, 9th WS, Fairchild AFB, Wash.,

TSgt. John A. Ashe, 53th WRS, Andersen AFB, Guam, TSgt. Herbert W. Barnes, 20th WS, Fuchu AS, Japan, TSgt. Tolono U. Elliott, Det. 41, 4th WW, Ft. Lee AFS, Va., TSgt. James F. Jendeki, 55th WRS, McClellan

(Continued on Page 3)

Contract let for standardized fog system

HANSCOM FIELD, Mass.—Of foggy bottom will be no more. Due to the expertise of military weathermen, military aviators can look forward to clearer skies ahead in those areas where cold (supercooled) fog now abounds.

Following on from several years of work by AWS specialists, a standardized system to break up "soupy" conditions is being developed by engineers of Air Force Systems Command's Electronic Systems Division here.

Designed for use on a global basis, the prototype Cold Fog Dissipation (CFD) system is the forerunner of units which will be deployed to US-operated bases in Great Britain, Germany, Alaska and the Netherlands. All have a high incidence of cold-fog conditions in temperature ranges below 32 degrees Fahrenheit, at which the technique is effective.

EG&G, Incorporated's Bedford, Mass., Division has been awarded a \$361,494 contract to produce and test a prototype CFD system.

Manager of the CFD project is Capt. Robert N. Hill of ESD's Aerospace Instrumentation Program Office. According to Captain Hill, "Ground seeding via liquid propane has proven very successful. The Air Force (AWS)

has been able to break fog blankets, clearing both approach and touchdown zones of runway complexes."

Key to solution of vexing cold-fog problem has been the colorless, odorless liquid propane sprayed as a mist into cold-fog masses. Both pollution and safety angles of propane's use were thoroughly investigated by DOD before approval was given for its use.

Vaporized from tanks at pre-selected sites upwind of a runway complex, the gas cools the air and causes ice crystals to form. Moisture absorption in the fog occurs, and the crystals grow larger, falling out as light snow.

"Fog clearing," says Captain Hill, "results in substantial dollar savings to the Air Force. Instead of having to stand down, aircraft are able to carry out regularly scheduled missions."

The new CFD system will be transportable, remotely controlled and modular in construction. During cold-fog occurrences, an array of liquid-propane dispensers (500-gallon tanks, fitted with 20-foot-high pipes with nozzles) will be triggered into action.

They will already be positioned in an arc at selected points around the runways, propane to

be conducted from tank to vaporizing nozzle by a flexible hose.

Placement will depend upon the range of wind speeds habitually experienced by a particular airfield. Normally, five or six dispensers will be capable, experts say, of clearing an area of three square miles.

Each unit will be selectively turned on from a central control in the AWS base weather station. A display there will indicate when and which dispensers are currently in operation. Gauges in the weather station will reflect the accumulative operating time and the amount of propane still on hand.

System components will include the central control unit with control encoder, RF transmitter-receiver and display panel, plus the dispensers, with palletized platform bases, propane tanks, radio receiver-transmitters, control valves and sensors and power sources.

ESD's prototype calls for a central control unit and 20 dispensers. Plans call for field testing the new CFD system by early 1973.

Interest in the Air Force CFD system has been expressed by both Federal Aviation Administration and US Army.



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BRIG. GEN. WILLIAM H. BEST Jr.
Commander, Air Weather Service

LT. COL. WILLIAM H. QUELCH Jr., Director of Information

MR. JOHN D. RUGG, Executive Editor

MSGT. ED BURCHILL, Associate Editor

Pride in the Past--Faith in the Future

Where Are They Now?

The first of this July will mark the 35th anniversary of transfer of US military weather responsibility from the Army Signal Corps to the Air Corps. It is the date commonly accepted as the birthday of Air Weather Service, although historic cases could be made for other dates—1815, when Army surgeons began to observe and record weather conditions at their posts and camps; 1870, when the first US weather service was formed under the Army Signal Service; 1946, when the name Air Weather Service was first applied to AWS.

Much is known of the small group of officers who made up the weather service on July 1, 1937; much remains to be recorded. Less is known of the somewhat larger group of enlisted weathermen who were in (or came into) the weather service on that date. For some time, the Observer has been collecting names and facts—meager and incomplete—about the small cadre of enlisted men who were part of the military weather service of 30 years ago.

The time has come, it seems, to ask our readers to add to (or subtract from) our fund of data. We are reasonably certain that there were 22 officers in the July 1937 weather service; we do not know what the total number of enlisted men was.

This is an anniversary-year appeal. On page 3 of this issue appears a list of the names of men believed or known to have been among the number, probably less than 200, who manned the 40 Army Air Corps weather stations on July 1, 1937. In preparation for a July 1972 full-scale Observer article on those early people, please write the Editor with any other names, corrections to our list, more data on those listed, the loan of any pictures of those people or those days, etc. Your help will be sincerely appreciated. (JDR)



WEATHER EXPERTISE, preserved for AWS use in providing even better Army weather support, was the name of the game that brought two former AWS colonels briefly out of retirement. Arranged by Lt. Col. Peter N. Micale, AWS director of observing services and equipment, retired Col. Leonard V. Gillespie, left, and Walton L. Hogan Sr. visited AWS headquarters this month to discuss Army support with the AWS commander, Brig. Gen. William H. Best Jr., center, and others. Here the weathermen examine an AN/TMS-23 portable observing kit. (US Air Force Photo by Jack Cavern)

Retirees

Following AWS personnel retired from active duty in the month indicated:

February 1972

Lt. Cols. Charles L. Bennett and Wilbur V. Stephens and Capt. F. McGrath, all of 9th WRW, McClellan AFB, Calif.

Lt. Col. Robert A. Danielson, 58th WRS, Kirtland AFB, N. M.

Capt. Robert A. Pauls, 53d WRS, Ramey AFB, P. R.

MSgt. Harry E. Maloy, Det. 3, 3d WS, Myrtle Beach AFB, S. C.

MSgt. Louis Schunk, Det. 58, 16th WS, Ft. Carson, Colo.

MSgt. Robert L. Smith, Det. 10, 6th WW, Eglin AFB, Fla.

TSgt. John Carney 3d, Det. 10, 26th WS, Westover AFB, Mass.

TSgt. Roger B. Facklam, Det. 1, 16th WS, Ft. Campbell, Ky.

TSgt. John W. Millard, Det. 24, 25th WS, Holloman AFB, N. M.

TSgt. Darrell E. Miller, 6th WS, Tinker AFB, Okla.

SSgt. Paul Roodbeen, 4th WW, Ent AFB, Colo.

SSgt. Katherine E. Witz, AFGWC, Offutt AFB, Nebr.

March 1972

Lt. Cols. Jesse A. Burleson, 6th WW, Andrews AFB, Md., James R. Stephenson, AFGWC, Offutt AFB, Nebr., and John R. Powell, 9th WRW, McClellan AFB, Calif.

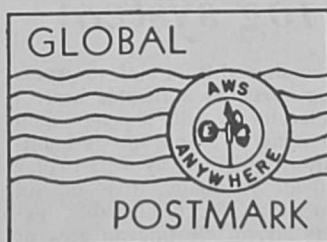
Maj. Edwin H. Hull, 58th WRS, Kirtland AFB, N. M.

Capt. Wayne E. McCollom, 1st WS, MacDill AFB, Fla., and Duane W. Baker, 58th WRS, Kirtland AFB, N. M.

CWO Wayne L. Albright, 53d WRS, Ramey AFB, P. R.

MSgt. Rodolph A. Boucher, Det. 30, 6th WW, Vandenberg AFB, Calif.

MSgt. William F. Dame, 6th WW, Andrews AFB, Md.



The Battle of the Coral Sea Association will sponsor a 30th anniversary reunion this year, commemorating the May 1942 battle this May. Coral Sea veterans or history buffs interested in attending or in receiving news of the association may write to PO Box 1172, Rockville, Md. 20850.

William F. Surgi Jr.
President

Preparing for forthcoming (29-30 April) 2d Weather Wing Bowling Tournament at Ramstein AB, Germany. Actual date this tournament began and some certain years are unknown.

Request anyone having information about the years, where the tournaments were held, winners, runners-up, other pertinent information please contact:

SSgt. David G. Lane
Hq 2 WWg, CMR Box 894
APO New York 09332



MISS F TROOP, so-called by the 58th Weather Reconnaissance Squadron from its WB-57F-flying missions, prepares to give a good send-off to 58th Commander Col. Click D. Smith. Safety officials say sudden stop at the end of Seat-Belt Convincer's 7-mile-an-hour ride convinces most nonbelievers of value of seat belts. The Convincer toured 58th's home base, Kirtland AFB, N. M., last month—without, as luck would have it, the presence of Miss F Troop, whose real name is Carol Kwasnik.

MSgt. Donald R. Jones, Det. 1, 26th WS, Castle AFB, Calif.

MSgt. Lee E. Isom, Det. 5, 6th WS, Wright-Patterson AFB, Ohio.

TSgt. Lloyd R. Cyr, Det. 27, 4th WW, Hancock Field, N. Y.

TSgt. William C. McDonald, Det. 36, 3d WS, Selfridge AFB, Mich.

TSgt. Donald L. Garbutt, 6th WS, Tinker AFB, Okla.

TSgt. Michael T. Hardyman, AFGWC, Offutt AFB, Nebr.

SSgt. Charles O. Bailey, 9th WS, March AFB, Calif.

SSgt. Edward F. Hurley, Det. 6, 26th WS, Pease AFB, N. H.

SSgt. Edmund J. Potter, Det. 35, 25th WS, Forbes AFB, Kan.

Can your wife lift 450 pounds?

By Col. Richard D. Hansen
Luke AFB, Ariz., Medical Services Director

If your wife can lift 450 pounds, then all I need to say to you is beware of family arguments and I wish you good luck and good health in your marriage! If your wife can't lift 450 pounds, then be aware that you're risking your child's life every time she holds him on her lap in a moving automobile.

In a sudden stop (like a rear-end collision at 10 mph), a small child will generate a sudden force of more than 450 pounds. This is enough to tear him out of the average wife's arms and hurtle him into the dashboard or windshield like a fresh egg—with much the same results.

We get all too many of these injuries in our emergency room. Are people just careless? Can they be unaware of the great forces that are generated in sudden crashes from relatively slow speeds? Do they assume it can't happen to them?

A recent survey on this base showed less than half the people driving automobiles were wearing seat belts. There have been gobs of publicity on the value of seat belts in the prevention of death and injury, but people still ignore this lifesaving device.

I won't bore you with statistics, but remember if you are in any auto accident you stand a 76-percent chance of injury or death if you don't wear seat belts, compared to a 30-percent chance of injury if you are wearing them. If you don't care about your own safety, at least consider your children.

Little children present a special problem, because they are difficult to keep under a standard auto seat belt. The usual car seat which hooks over the back of the front seat is useless in protecting a child in anything other than a normal stop. In the sudden stop of a collision, seat and child will smash into the windshield or dashboard.

When you buy a car seat for your little one, make sure the seat conforms to the Federal Vehicle Safety Act 213 (for seats) and 209 (for harnesses). If it does, it will say so proudly. These seats protect your child as your own seat belt protect you—if you use them.

No matter how good a driver you are, there's always the idiot who can kill you or your family by his own criminal negligence. Get the odds in your favor by using your seat belt every time you drive. If necessary, force your wife and kids to use them (unless your frau is a 450-pound lifter, in which case try persuasion rather than force).

If you do take precautions, perhaps you won't be one of those who come into our emergency room covered with blood and dirt, screaming with pain—or even worse, one of the crumpled, silent, pale, cold ones who complain of nothing, ever again.



AWS ALUMNI Brig. Gen. and Mrs. Thomas A. Aldrich had the unusual "chore" of playing host recently to the President of the United States. General Aldrich, long-time weatherman and former AWS vice commander, is now commander of US forces in the Azores. Mr. Nixon was in the Azores for talks with French President Pompidou and Portugal's Prime Minister Caetano, used the Aldrich home as a temporary White House. (Photo by Capt. L. Lee Manning)

AWS's name marks its 26th birthday

AWS Hq—Although the year 1972 (July 1) marks the 35th anniversary of the weather service as an air-arm function, the name Air Weather Service is only 26 years old this month.

Dated March 13, 1946, a letter from the Adjutant General's office, War Department, directed in part: "Effective March 13, 1946, the following activities are

redesignated as indicated and assigned to the Air Transport Command, without change of station or function:

"Present Designation: Headquarters, Army Air Forces Weather Service. New Designation: Headquarters, Air Weather Service."

The same letter redesignated the Army Airways Communications System to be the Air Communications Service and established and assigned to ATC the Flying Safety Service, Langley Field, Va., and the Aeronautical Chart Service, Air Rescue Service and Flight Services, all with Washington, D. C., headquarters. In addition, the 53d, 54th, 55th and 59th Reconnaissance Squadrons, Very Long Range, Weather, were brought under ATC and further assigned to the new Air Weather Service.

This month also marks the 109th anniversary of the establishment on March 3, 1863, of the Army Signal Service, in which the military weather service began in 1870.

Where are they now?

AWS Hq—On the first of July 1937, according to information gleaned from various sources by the Observer staff, there were 22 officer positions in the new Army Air Corps weather service.

These positions, and the officers believed to have held them on that date 30 years ago, were as follows:

Commanding Officer, Weather Group, Bolling Field, D. C.—**Capt. Randolph Piersol Williams**
Chief, Weather Section, Office of the Chief, Air Corps—1st Lt. **Robert Moffat Losey**

Regional Control Officer, 1st Meteorological Region, March Field, Calif.—1st Lt. **Harold Huntley Bassett**

Regional Control Officer, 2d Meteorological Region, Langley Field, Va.—1st Lt. **Julius Kahn Lacey**

Regional Control Officer, 3d Meteorological Region, Barksdale Field, La.—**Capt. Leon William Johnson**

Base Meteorological Officer, Randolph Field, Tex.—1st Lt. **Don Zabriskie Zimmerman**

Base Meteorological Officer, Hamilton Field, Calif.—1st Lt. **Theodore Mathew Bolen**

Base Meteorological Officer, Bolling Field, D. C.—**Capt. William H. Wenstrom**

Base Meteorological Officer, March Field, Calif.—1st Lt. **Sam Houston Wiseman**

Base Meteorological Officer, Barksdale Field, La.—1st Lt. **Arthur F. Merewether**

Base Meteorological Officer, Selfridge Field, Mich.—1st Lt. **Anthony Quintus Mustoe**

Base Meteorological Officer, Scott Field, Ill.—1st Lt. **Robert Edward Lee Eaton**

Base Meteorological Officer, Mitchel Field, N. Y.—1st Lt. **Royden E. Beebe Jr.**

Base Meteorological Officer, Langley Field, Va.—1st Lt. **Torgils Grimmel Wold**

Base Meteorological Officer, Kelly Field, Tex.—either 1st Lt. **Milton Wylie Arnold** or 1st Lt. **Elmo Stewart Mathews**

Base Meteorological Officer, Moffett Field, Calif.—1st Lt. **Robert George Henry Meyer (?)**

Base Meteorological Officer,



JUNIOR OFFICER of the Month this month at Scott AFB, Ill., is 1st Lt. Robert I. Sax, AWS directorate of atmospheric and space sciences. Here Col. Charles E. Shannon, Scott base commander, presents a certificate to the young officer, who holds the doctor's degree in cloud physics. Lieutenant Sax is the second weather officer in three months to win this Scott honor. Officials urge AWS-wide support to young AWS officers and airmen by nominating them for similar distinctions at their own bases.

Chanute Field, Ill.—1st Lt. **Robert George Henry Meyer (?)**

Officer in Charge, Air Corps Meteorological School, Patterson Field, Ohio—**Capt. Don C. McNeal**

Base Meteorological Officer, Maxwell Field, Ala.—**Capt. Benjamin Stern**

Depot Meteorological Officer, Patterson Field, Ohio—1st Lt. **Donald Philip Graul**

Meteorological Officer, 2d Group, GHQ Air Force, Langley Field, Va.—1st Lt. **Ernest M. Moore**

Meteorological Group Duty, Bolling Field D. C.—1st Lt. **Floyd B. Wood**

Enlisted men on board on that historic date are believed to have included the following:

Karl A. Abrahamson, **Diran Arakelian**, **Frank Arietta**, **Keith H. Asher**, **William Shores Barney**, **Ralph W. Beatty**, **George J. Belejchak**, **William F. Bernheisel**, **William B. Booth Jr.**, **Charles Breske**, **Leon B. Burke**, **Charles E. Bushon**,

Lewis N. Chittock, **Harry J. Cuskey**, **Howard G. Dice**, **Otis Dixon**, **Karl C. Elder**, **William L. or S. Farrell**, **Ernest J. Fawbush**, **Jacob Follmer**, **Horace Franklyn**, **Charles A. Franz**,

Richard M. Gill, **Leonard V.**

Gillespie, **Robert M. Glenn**, **Benjamin D. Goodnick**, **Harold F. Guth**, **Charles Harlon Harrison**, **Orville J. Haskins**, **Frederick B. Howe**, **Andrew G. Irick**, **John A. Kapral**, **Herman A. Kutz**, **Louis D. Laurin**, **Homer Love**, **Alden MacArthur**, **Robert Machinski**, **Francis T. McHenry**, **Ernest R. Miller**,

Arthur E. Oates, **William J. O'Brien**, **Floyd E. Oliver**, **William Partington**, unknown first name **Phillips**, **Walter Pikula**, **Jerome A. Pryber**,

Anthony F. Ranere, **Lester R. Robinson**, **Martin F. C. Sebode**, **Everett A. Severn**, **James Strange**, **Bernard T. Streeter**, **William J. Stricker**, **Milton J. Svoboda**, **Jay T. Treat**, **Oscar H. True**, **Norman L. Tyler**,

Charles G. Vaughn, **Carl E. Wagner**, **Kenneth R. Walters**, **Donald F. Yatteau**, **Sebastian Zappulla** and **Raymond Zilinka**.

Any reader who can correct any errors or omissions in the foregoing list, provide mailing addresses, date and place of death for any men whose names are or should be on this list are urged to write the Editor, Observer, AWS/OI, Scott AFB, Ill. 62225, without delay. Names which appear in bold-face type are those men known or believed to be dead.

Graduates

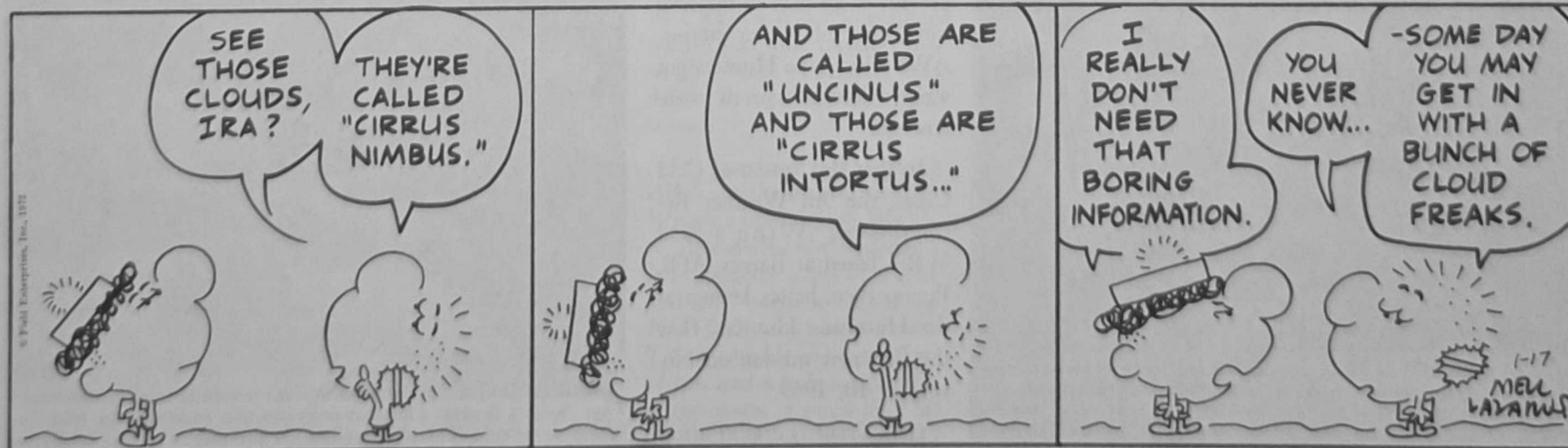
(Continued from Page 1)

AFB, Calif., TSgt. **Richard T. Koon**, AFGWC, Offutt AFB, Nebr., TSgt. **Gilbert E. Mullen**, Det. 7, 16th WS, Ft. Ord, Calif., TSgt. **Robert S. Robinson**, 53d WRS, Ramey AFB, P. R., TSgt. **William Williams**, 5th WW, Langley AFB, Va., TSgt. **William I. Willis**, Det. 21, 24th WS, Craig AFB, Ala.,

SSgt. **Alan G. Baker**, 9th WRW, McClellan AFB, Calif., SSgt. **Eleanor B. Funk**, 1600 Support Gp, Clark AB, P. I., and SSgt. **Charles E. Thompson**, 58th WRS, Kirtland AFB, N. M.

Our thanks to Miss Peach and her "father," Mell Lazarus

By Mell Lazarus



They're always chasing snowstorms

Photos by Sgt. Jeff McGuiness



SNOW-GRIPPED in February 1969 was New York City. In this official National Oceanic and Atmospheric Administration photo from Associated Press, one of "the city's finest" bends into the biting

wind as the snowbound patrolman trudges away from his bogged-down patrol car. It was the height of the big winter storm which dumped 16 inches of snow on New York City streets and highways.



BELOW FLIGHT LEVEL, data is secured for winter-storm support in the same manner as AWS collects data on hurricanes, typhoons and other tropical storms, by dropsonde. Here a weather crewman prepares to drop one of the miniature weather stations, which automatically collect weather data as they fall by parachute and radio it back to the reconnaissance aircraft.

PATRICK AFB, Fla. — They call it the Cold Coast mission—and it is an apt name, because the huge weather-modified Lockheed WC-130 (W for weather) Hercules aircraft and their Air Weather Service crews patrol the waters off the eastern coast during the colder season of the year.

At the request of NOAA's National Weather Service, to provide more data to improve forecasting of winter storms, AWS Hurricane Hunters got a new winter mission two winters ago.

In that first season of Cold Coast, the 9th Weather Reconnaissance Wing's 53d WRS, based at Ramey AFB, Puerto Rico, better known as the Hurricane Hunters, flew the first new mission on November 10, 1969.

Cold Coast is a joint effort of the Department of De-



VISIBILITY for the collection of winter-storm data to aid the nation's forecasters is the most obvious feature of the flight deck of a weather-modified Lockheed WC-130 Hercules. With these rugged aircraft, here piloted by 1st Lt. Terry L. Self of the 53d Weather Reconnaissance Squadron, AWS collects vital data on storms and other atmospheric conditions around the world.

fense, National Weather Service, Federal Aviation Administration and US Coast Guard. Objective is to provide accurate and timely warning of snow storms which annually strike and cripple portions of the northeastern United States.

Forming over the Atlantic in areas where there is little weather surveillance, these winter storms develop and move rapidly. Thus, daily aerial surveillance by Air Force and Navy weather aircraft is needed to ensure accurate forecasts.

During the 1971-72 winter season, AWS WC-130s have made daily overwater flights, beginning at Florida's Patrick AFB in early morning, returning to Patrick later in the day. Two WC-130s and flight crews for this season have been provided by the 55th

WRS, based at McClellan AFB, Calif.

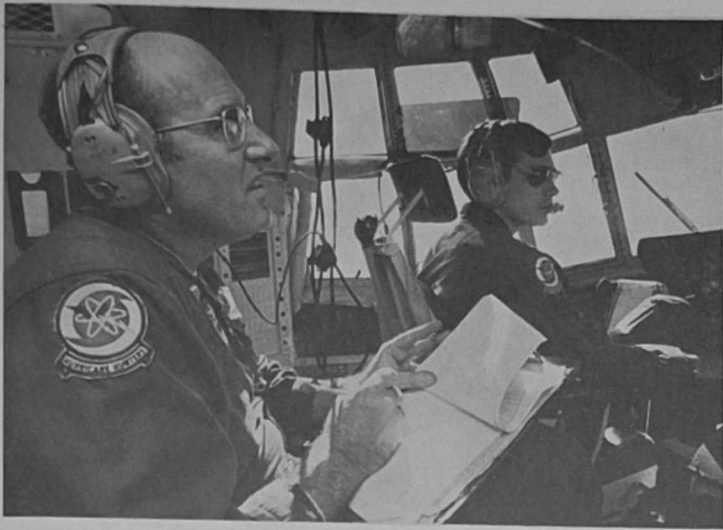
Crewmen involved, including some from the parent 9th Wing, have been rotated to and from Patrick all winter, providing fresh crews for the vital Atlantic storm watch. Backup support has been provided by the 53d WRS, which flew all Air Force Cold Coast missions in prior years and for much of this current month.

National Weather Service forecasters use Cold Coast data as forewarnings of storms which will move up the Atlantic coast. Throughout the flight, weather specialists aboard the WC-130 collect data on cloud formations, winds, pressure, temperature and humidity over the trackless ocean.

Cold Coast crews consider some of the winter storms they encounter to be even more dangerous than the most se-



STORM DATA is evaluated by the airborne weather observer, TSgt. Robert Beaver, who also processes and encodes data from the falling dropsonde. This information, on pressure, humidity and temperature below flight level, is transmitted from the WC-130 by single-sideband radio to the ground weather network.



FUEL CONSUMPTION in flight is monitored by the flight engineer, TSgt. Albert Munoz, while the pilot, 1st Lt. Terry Self, drives the weather aircraft.

vere of hurricanes and typhoons, also reconnoitered by AWS crews. Winter-storm crews are plagued by constant turbulence and heavy icing conditions.

As with hurricane missions, Cold Coast flights are directed by the Chief of Aerial Reconnaissance Coordination, Atlantic Hurricanes, known as CARCAH. From his office at Coral Gables, Fla. (Miami), CARCAH controls both AWS and Navy flights to fill data needs of NWS forecasters.

Collected in-flight data is radioed from the WC-130 through weather circuits to the NWS Regional Weather Center in New York City, where it is used to prepare timely warnings.

New York University also uses the data, for research. NYU scientists are trying to discover why storms vary so greatly in intensity and attempting to determine which areas of a storm will yield the most useful reconnaissance data.

Experts report that aerial weather reconnaissance has been even more effective than before in this third season of Cold Coast flights. Last winter's final report pointed out that "16.9 percent of all aerial weather observations provided information which changed existing or anticipated forecasts or warnings."

Cold Coast missions in the first year of 1969-70 totaled nearly 50, flown out of Pope AFB, N. C., as well as the 53d's home base at Ramey. Flying hours that initial season were 450.

From November 1, 1970, through March 1971 saw the second Cold Coast season again flown by the 53d from Ramey and various bases in the southeastern United States. Flights that season exceeded 200.

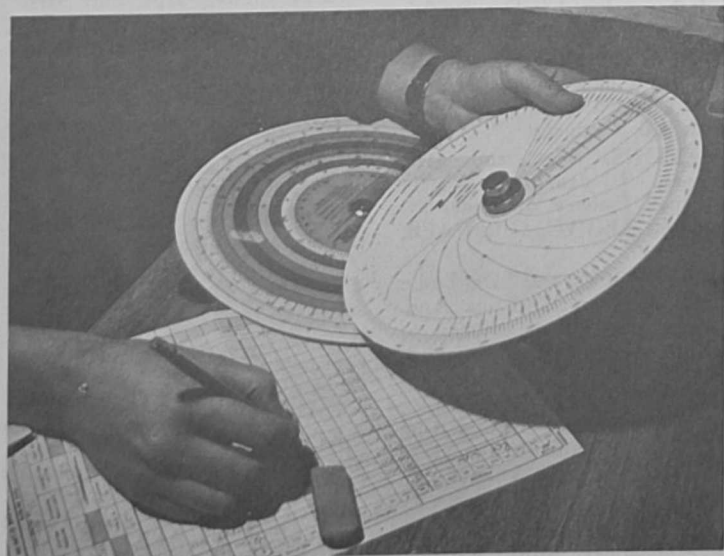
During the third season of Cold Coast, which ends at the end of this month, missions from Patrick have averaged 30 monthly. Estimated total for the season is 115,



FLIGHT CREW awaits refueling of their weather aircraft at Patrick AFB, Fla., prior to departure on another Cold Coast mission in search of vital data for forecasting of winter storms.



WEATHER INSTRUMENTS, installed at the new weather officer's position aboard the WC-130, are monitored by CWO Wayne L. Albright (left) and Sgt. Gary Peel, airborne weather observer.



HAND COMPUTER is used for checking base-line data for the dropsonde data collected and radioed to the WC-130. Just before release, each dropsonde must be corrected slightly to compensate for minute manufacturing differences in its sensing elements.

bringing the three-season total to 445 Cold Coast missions. This number of missions over the stormy Atlantic in search of forecast-building data for the nation's weathermen—and thus for the man in the street—translates into 4,000 flying hours in three seasons.

In summary, the flying AWS weathermen of the 9th Wing's 53d and 55th Weather Reconnaissance Squadrons have in three years of a new and vital mission racked up 1,334,000 statute miles flown. This is roughly the equivalent of two and a half round trips to the moon or more than 50 times around the earth at the equator.



SCHEDULE BOARD for aircrew assignments is updated for Cold Coast winter-storm missions by Capt. Herman O. Schwingel.

160 spaces for 1st termers

RANDOLPH AFB, Tex. — First-term airmen only will be eligible for 160 commissioning spaces during Fiscal Year 1973. AF Military Personnel Center has announced establishment of that number of Officer Training School spaces for first-termers.

Applicants, in addition to being first-termers, must be US citizens between 20½ and 29½ years of age who are college graduates, and must have 12 months remaining on active duty at time of application. Commander's recommendation is required.

Applicants will not have to take the Officer Qualification Test (AFOQT) and the physical examination will be deferred until selected.

Selection boards of officers, using "whole man" concept and stressing educational qualifications and in-service effectiveness, will convene April 10, June 12 and October 9, 1972.

AWS to lecture at Army schools

FT. MONROE, Va. — AWS Environmental Support of US Army has become a lecture subject at nearly half of Continental Army Command's 13 schools.

Six CONARC schools have added a lecture presentation on the subject, developed by 5th Weather Wing's 16th Weather Squadron. Lectures will be presented by the nearest staff weather officer or 16th Squadron detachment commander at the Air Defense School, Ft. Bliss, Tex., Armor School, Ft. Knox, Ky., Artillery School, Ft. Sill, Okla., Intelligence School, Ft. Huachuca, Ariz., Ordnance School, Aberdeen Proving Ground, Md., and Transportation School, Ft. Eustis, Va.

Fort Ritchie soldier receives AWS training

FORT RITCHIE, Md. — The Transition Training Program has taken on a new look here for personnel of Detachment 29, 6th Weather Wing because of a US Army specialist's interest in meteorology.

SP-4 Leroy VanRiper, 572d Military Police Company here, graduated from the State University of New York at Albany in 1970 with a B. S. degree in meteorology. Through Project Transition, he is using his last six weeks in the service to update his background in meteorology.

He is training in weather codes, bulletins and communications, plotting and analysis of weather maps and weather balloon data, weather observing, processing of facsimile charts, preparation and processing aids and the techniques of forecasting and aviation meteorology.

Detco Lt. Col. David A. Bush said, "It is a rare occasion for us to provide Transition training and we take great pleasure in the opportunity. Specialist VanRiper has been a willing and eager pupil and provided a challenge to all of my people to explain the what, why and how of our business. Lee has learned by doing and his work positively contributes to the accomplishment of the unit's missions."

Criteria for the FY73 program are considerably broader than before, will provide wider opportunities for commissions for airmen. Selectees will be classified during training, based upon individual desires, educational background and Air Force requirements.

Guidance on application procedures can be gotten from local base personnel or education offices.

Johnson is everywhere

CHANUTE AFB, Ill. — Two offices in the Weather Forecaster Branch of the 3345th Technical School's Department of Weather Training are presently completely occupied by Johnsons.

All three persons in one office answer to Captain Johnson. Captains D. B. Johnson, J. R. Johnson and J. D. Johnson are instructor supervisors.

The second office is occupied by a civilian instructor, Don Johnson.

Still another Johnson (Gerald) works just upstairs in the curricula section of weather.

Gerald Johnson and Don Johnson live four doors apart on Pinecrest Place in Rantoul. Another Johnson (Wayne) lives on the same side of the street between Gerald and Don.

Wayne and Don are retired military people and Gerald will retire shortly.

Confused? Very simple. Everybody else around them has a sign that says "NOT JOHNSON." (Reprinted from Chanute AFB's Wings)



WEATHER OPEN HOUSE—Air Weather Service headquarters held its second annual open house for AWS wives this month, with more than 100 ladies attending. Here, Lt. Col. John G. Joern (extreme right) shows a portable wind set to his wife, Nancy, and to 1st Lt. Tom W. Utley and wife, Donna. Both officers are assigned to DCS Operations. (US Air Force Photo)

MAC eliminates Pride program

SCOTT AFB, Ill. — MAC is discontinuing the PRIDE (Personal Responsibility In Daily Effort) Program.

The move, announced by Gen. Jack J. Catton, MAC commander, will redirect emphasis from a structured program to an informal approach. This will remove administrative overhead and manpower resources tied up in the motivational program.

"I feel that the program has fulfilled its original objectives," General Catton said, "but that it has run its course and lost much of its initial appeal as an employee motivator."

The PRIDE program was established by MAC in July 1965 as a part of the Air Force Zero Defects Program. MAC officials

stress that MAC continues to operate under the Air Force Zero Defects Program.

General Catton explained, "I expect each commander and staff officer to continue to foster personal motivation and recognition of individual quality performance through already existing programs and the application of long-standing management principles."

He said the Air Force Suggestion Program should be used in place of the Error Cause Identification and Removal (ECIR) Program. He added that various DOD, Air Force and Civil Service incentive awards programs

can adequately compensate for elimination of PRIDE awards.

MAC units are still allowed to set up local, informally operated motivational programs, so long as they are run with minimum administrative overhead and no manpower resources are exclusively allocated to administration.

General Catton told members of his command, "I thank you for your support of the MAC PRIDE Program in the past. I shall continue to rely upon you to maintain high standards of quality throughout the command by your attention to those objectives established under Personal Responsibility in Daily Effort."

Births in AWS

BACICH, Sgt. and Mrs. Robert W., a daughter, Tina Marie, February 20, father assigned to AWS headquarters, Scott AFB, Ill.

COX, TSgt. and Mrs. Larry W., twins, Stephanie Michelle and Stephen Michael, January 31, father assigned to Det. 32, 9th WS, Grand Forks AFB, N. D.

WILSON, Capt. and Mrs. Michael B., a daughter, Janet Lee, father assigned to 2d WW, Wiesbaden AB, Germany.

HASKINS, SSgt. and Mrs. Thomas, a daughter, Angela Christine, January 28, father assigned to AFGWC, Offutt AFB, Nebr.

WAITE, SSgt. and Mrs. Leslie V., a daughter, Christina Ann, February 14, father assigned to Det. 4, 17th WS, Altus AFB, Okla.

WELLS, Sgt. and Mrs. Wesley F. Jr., a daughter, Cynthia Ann, February 25, father assigned to Det. 17, 20th WS, Yokota AB, Japan.

BREEN, SSgt. and Mrs. Kevin P., a daughter, Molly Kristine, February 17, father assigned to 7th WW, Scott AFB, Ill.

KERR, Capt. and Mrs. Robert J. Jr., a son, Robert Marvin,

February 18, father assigned to 7th WW, Scott AFB, Ill.

HARRIS, SSgt. and Mrs. James W., 4th, a daughter, Jennifer Leigh, March 3, father assigned to Det. 6, 9th WS, Malmstrom AFB, Mont.

PETERSON, Capt. and Mrs. Robert D., a son, Robert D. 2d, February 29, father assigned to Det. 3, 9th WRW, Yokota AS, Japan.

TOAY, SSgt. and Mrs. Donald K., a son, Robin Louis, father assigned to Det. 39, 25th WS, Buckley ANGB, Colo.

CHAMBLESS, SSgt. and Mrs. James O., a daughter, Frances Dianne, father assigned to Det. 9, 16th WS, Fort Rucker, Ala.

CHAPLIN, Capt. and Mrs. Wallace H., a son, Eric Wallace, February 3, father assigned to OL-A, 6th WW, Wright-Patterson AFB, Ohio.

KOLCZYNSKI, Capt. and Mrs. Edward F., a son, Edward Franklin 2d, February 3, father assigned to OL-A, 6th WW, Wright-Patterson AFB, Ohio.

WHERLEY, MSgt. and Mrs. Myron R., a son, Kimon Nicholas, February 5, father assigned to Det. 11, 24th WS, Reese AFB, Texas.



PLOTTING A MAP — SP-4 Leroy VanRiper, 572d Military Police Company, Ft. Ritchie, Md., processes a surface map just received over the facsimile. Sgt. Glenn R. Hall, weather observer, Detachment 29, 6th Weather Wing, provides guidance on processing procedures. Later VanRiper plotted and analyzed a surface weather map from raw weather observations and completed the process by making weather forecasts.

Awards and decorations

Bronze Star

MSgt. Ralph E. Powers
TSgt. David R. Anderson
TSgt. Leroy A. Jones

Meritorious Service Medal

Maj. William V. Yelton

Air Medal

Maj. James M. Smith (1 OLC)
Capt. Lawrence R. Latimer
Capt. Charles L. Steverson
(1 OLC)
Capt. Dennis F. Wolf (1 OLC)
1st Lt. Ramon D. Clatanoff
(1 OLC)
MSgt. Darius P. Meuer
(13 OLC)
TSgt. Bobby G. Brook (4 OLC)

Air Force Commendation Medal

Maj. Saul A. Rosenthal (1 OLC)
Capt. Vilhelm Bjerknes (1 OLC)
Capt. Leandro V. Delgado
Capt. Clarence C. Drumeller
Capt. Andrew J. Kovach Jr.
Capt. Paul J. McDonnell
(2 OLC)
Capt. Arnold R. Moon
Capt. Kenneth F. Persin
Capt. Robert D. Peterson
Capt. Gary D. Robertson
(1 OLC)
Capt. Harold E. Williams
(1 OLC)
CWO Wayne L. Albright
(1 OLC)
CWO Joseph C. Mangan
(1 OLC)

CWO Oscar L. Muffley (1 OLC)
SMSgt. William H. Frazell
(2 OLC)
MSgt. Rodolph A. J. Boucher
(1 OLC)
MSgt. William F. Dame
MSgt. Thomas W. Draper
(2 OLC)
MSgt. Lee E. Isom (1 OLC)
MSgt. Leonard G. Nauman
MSgt. William H. Nixon
MSgt. Ralph G. West (1 OLC)
TSgt. Francis J. Adamczyk
(1 OLC)
TSgt. Rafael Lopez-Aponte
(2 OLC)
TSgt. Gerald L. Carpenter
(1 OLC)
TSgt. Harold F. De Gal Jr.
TSgt. Roger B. Facklam
TSgt. Donald L. Garbutt
(2 OLC)
TSgt. Robert L. Gunderson
TSgt. David J. K. Lee
TSgt. David E. Quarles Jr.
(1 OLC)
TSgt. Richard C. Roush
TSgt. Roy E. Rubich
TSgt. Robert W. Starling
(1 OLC)
SSgt. Wallace B. Anderson
SSgt. Chris J. Balm
SSgt. William E. Bennett Jr.
(1 OLC)
SSgt. William W. Blalock
(1 OLC)
SSgt. James W. Burns
SSgt. Michael Carter
SSgt. Billy L. Cline
SSgt. James P. Elliott

SSgt. Paul E. Hargrove
SSgt. Edward F. Hurley
SSgt. Shilah S. Jones (1 OLC)
SSgt. Jerald R. Koepp
SSgt. Robert C. Manuel
(1 OLC)
SSgt. Clarence P. E. Miller
(1 OLC)
SSgt. Wayne A. Nasman
SSgt. Charles G. Payne
SSgt. Richard R. Presutte
Sgt. Terry W. Fischer
Sgt. Kenneth G. Perrin
Sgt. Phillip Shideler
Sgt. Lawrence C. Spath

Gold Pride Award

Maj. Forrest N. Dye
SMSgt. Clarence J. Morin
MSgt. James D. Anderson
TSgt. Ronald H. Dufour
TSgt. Mack A. England
TSgt. Freeman D. Roberts
TSgt. Sergio J. Rodriguez
TSgt. James H. Welborn
SSgt. Leslie F. Bush
SSgt. Hillery O. Davis
SSgt. Wayne Gray
Sgt. Kenneth J. Sommerville
Sgt. Harrold G. Spillman
Sgt. Fred M. Strom
A1c Joseph M. Currin

Blue Pride Award

55th WRS Maintenance
Administration
55th WRS Unit Administration
Section
55th WRS AGE Section

ON THE skew-↑ AWS Global Report

Highlights of Air Weather
Service people at work and play

Yokota AB, Japan

Lt. Col. Joseph C. Lach Jr., Detachment 17, 20th Weather Squadron, commander, and TSgt. David L. Buzzard, Unit Project Officer, recently presented Capt. R. Gerald Greene, Area project officer, with a total of \$281 for the Overseas Combined Federal Campaign. The contribution of \$6.53 per man assigned (43) represented 100-percent participation within the unit. In addition, the AWS unit was the first on Yokota AB to reach the 100% participation mark.

Kadena AB, Okinawa

Three officers of Detachment 8, 20th Weather Squadron, were recently sworn into the Air Force with regular commissions by Lt. Col. Lawrence S. Hansrote, Detco. The three weathermen were Capt. William M. Cox, Randall B. Falzgraf and Gregory L. Logan.

Buckley ANG Base, Colo.

Sgt. Edward A. Shelton, Detachment 39, 25th Weather Squadron, graduated as the Top Honor Student in the 22d Air Force NCO Leadership School, Class 72-2, at Norton AFB, Calif. Sergeant Shelton also won the school speech contest and received an athletic achievement award.

Yokota AB, Japan

Maj. Jettie Earl Padgett, Detachment 3, 9th Weather Reconnaissance Wing, was recently presented with a Certificate of Scholarship from the University of Maryland during an awards ceremony here. Major Padgett distinguished himself academically in the U of M's Overseas Program and had his name on the Dean's List for Term I, 1971-72.

Holloman AFB, N. M.

Wives of Detachment 24, 25th Weather Squadron, were recently invited to attend the monthly commander's call here. The wives witnessed an awards ceremony and got a chance for better understanding of what their husbands do. They were also given better insight into current operations, changes and problems of the detachment.

Luke AFB, Ariz.

SSgt. Robert S. Hogue, Detachment 11, 4th Weather Wing, was recently presented with an award certificate and a check for \$164 by Brig. Gen. J. E. Paschall, 26th NORAD Region commander. The award was presented in appreciation for a suggestion that resulted in a first-year savings of \$2,085 for the Air Force. Sergeant Hogue suggested that a piece of equipment, being used to receive a perforated tape of forecast winds aloft, be eliminated and that another piece of equipment, used for receipt of other data, but which had a spare receiver, be modified to perform the same function. The suggestion proved acceptable at two other units in addition to the 26th Region.

Scott AFB, Ill.

Capt. Grant S. Boughton, AWS Aerospace Sciences directorate, recently presented a seminar on the Interplanetary Environment to 25 members of the student chapter of the American Institute of Aeronautics and Astronautics at the University of Illinois, Chicago Circle campus.

Barksdale AFB, La.

Miss Katherine Edwards, daughter of SMSgt. and Mrs. Albert W. Edwards, recently won a four-year scholarship to Louisiana State University. Miss Edwards, an honor student at Bossier High School, Bossier City, La., selected LSU's offer from a group of over 20 scholarships offered her by major universities across the country. Sergeant Edwards is a forecaster with the 26th Weather Squadron and an LSU alumnus. Miss Edwards plans to major in physics.

Westover AFB, Mass.

Detachment 10, 26th Weather Squadron, was recently named as Second Air Force's Outstanding Weather Detachment. Lt. Col. Frank E. Wencel, Detco, received a plaque from Lt. Gen. Russell E. Dougherty, 2d AF commander.

Yokota AB, Japan

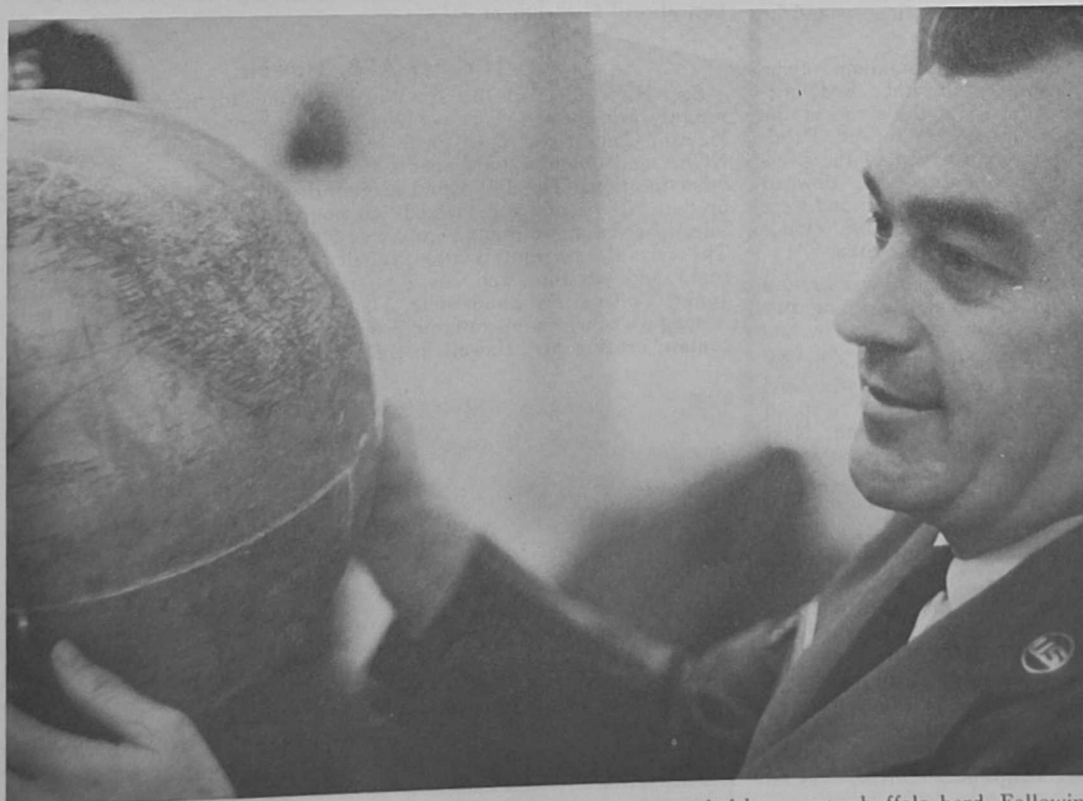
On February 14, Lt. Col. Joseph C. Lach Jr., Commander, Detachment 17, 20th Weather Squadron, held an appropriate commander's call for Valentine's Day. He extended an invitation to the wives of detachment personnel to attend, so that they could see firsthand what goes on at a commander's call. Wives saw the monthly film, "Air Force Now," and later discussed such items as career benefits, emphasis on driving in Japan, savings programs, and the married partnership relative to the USAF. Later a social hour was conducted, with refreshments provided by Colonel and Mrs. Lach.

Zweibrücken AF, Germany

For the third consecutive time, the forecasting section of Detachment 8, 31st Weather Squadron, has won MAC's Blue PRIDE Award. Award represents six months of outstanding terminal forecasting from July 1, 1971, to Dec. 31, 1971. Award was presented to Detco Capt. Bruce A. Eggers by Col. James E. McInerney Jr., 86th Tactical Fighter Wing commander. First Lt. Valente Macias Jr., MSgt. George A. McNeill and TSgt. Charles H. Crowder man the 2d Weather Wing section.

Scott AFB, Ill.

Lt. Col. Patrick J. Breitling, director of the aerospace physics and weather modification division, AWS Aerospace Sciences, received the PhD in meteorology from St. Louis (Mo.) University on February 9. Colonel Breitling received a BS in mathematics from Doane College, Crete, Neb., in 1952 and an MS in meteorology from St. Louis University in 1964. His doctoral dissertation was "Optical Contrast Loss by Aerosol in Downwardly Directed Atmospheric Photometry."



AROUND THE WORLD—In the 1958 film, Phineas Fogg went Around the World in 80 Days at considerable financial—and physical—expense. But MSgt. Joe Overly, Detachment 14, 31st Weather Squadron, managed the globe-circling trip in 29 days and spent only \$51 on transportation. All but one of his flights were by military courier aircraft. Story started on last October 1 when, after signing up for the courier flight seven days in advance, Overly departed Wiesbaden for Torrejon AB, Spain. An embassy flight took him to Bangkok, Thailand, with en-route stops in Saudi Arabia and Karachi, Pakistan. During an overnight stay in New Delhi, India, he and a companion were

nearly trampled by a water-buffalo herd. Following that narrow escape, Overly spent eight days in Korea visiting friends. From Kadena, Okinawa, he flew to Elmendorf AFB, Alaska, then to McChord AFB, Wash., where he spent the \$51 for a commercial flight from Seattle to Omaha, Nebr., where he spent nine days with his family. October 28 saw the Air Force wayfarer begin the journey back to Germany. Next day—after 29 days and 24,000 miles on seven different types of aircraft—a world-weary but happy Joe Overly returned to Hahn AB, Germany. (Extracted from the Jan. 28 issue of the Hahn Hawk base newspaper.)



SPACE WEATHERMAN—AWS Maj. Dell V. McDonald (right) is a space weatherman at Air Force Space and Missile Systems Organization (SAMSO) in Los Angeles, Calif. With Major McDonald, Col. Joseph M. Bird, 6th Weather Wing commander and Air Force Systems Command staff meteorologist, holds a spectral hygrometer, used to measure the total amount of vapor present between the instrument and the sun. (U. S. Air Force Photo)

High Flight officer is space weatherman

Los Angeles, Calif. — AWS Maj. Dell V. McDonald is a different kind of weatherman, unlike the ones seen on television.

He deals in space weather and its effects upon the machines man put into space.

Major McDonald works in the office of the staff meteorologist at the Space and Missile Systems Organization (SAMSO) in Los Angeles, Calif., where most Department of Defense satellite and missile development programs are managed.

"Strange as it may sound, there is weather in space," says Major McDonald, "but it is an entirely different kind of weather. It is tied to activities of the sun, and can cause serious problems for both manned and unmanned satellites.

"Satellites, as well as the earth, are affected by a steady stream of electrically charged gases and electromagnetic radiation spewing from the sun. This includes the sunlight we can see, as well as invisible X-rays and some radio waves."

Satellites not only encounter normal levels of solar energy, but also "storms," sudden rises in energy levels caused by solar flares.

Solar flares can disrupt radio communications on the earth and between earth stations and orbiting satellites.

More serious problems are caused by streams of high-speed electrically charged particles. These particles heat the upper atmosphere of the earth, changing its density to a point which can slow down or speed up some orbiting satellites.

Charged particles can affect satellites in various ways. Sometimes they confuse delicate instrumentation that determines if the spacecraft is flying straight and level in relation to the earth.

"Our office here at SAMSO is an AWS detachment," says Major McDonald, "and we provide weather information to program offices whose satellite and missile hardware would be af-

fectured by solar/geophysical activity.

"Although solar flares are difficult to predict, solar observatories around the world and instruments in Vela satellites more than 60,000 miles from the earth can detect them when they occur, and relay that information to the AWS Aerospace Environmental Support Center at Ent AFB, Colo."

But even a space weatherman can't ignore old, familiar things like rain, wind, lightning, humidity.

"In order to get to space," says Major McDonald, "the satellite is launched on a booster and rises through all the layers of the earth's atmosphere. Winds at different altitudes can blow the booster off course or slow it down as it climbs.

"So the launch experts have a vital interest in earth weather as well as space conditions. Naturally, if the weather is too bad, launch is postponed."

Major McDonald is a recent MAC High Flight participant, run by AWS's parent command. High Flight honors outstanding officers who show potential to fill even more responsible positions in the future.

Are you eligible?

Hq AWS—Air Force Personnel who were assigned to OL-6, 5th Weather Squadron, Camp Eagle AI, RVN, or OL-D, 5th WS, at Phu Bai CB, RVN, during the period February 7, 1969, to May 2, 1970, have been authorized wear of the RVN Civil Actions Medal, First Class. Authority is Department of the Army General Orders Number 48, dated October 14, 1971. Eligible individuals should contact their local CBPO (Personal Affairs) for assistance in acquiring the necessary documentation.

Forecasters help rescue downed pilots

NAKHON PHANOM RTAFB, Thailand—Two Air Force weather forecasters here were recently commended for helping rescue several airmen from the jungles of Southeast Asia.

TSgts. Johannes Fischer and Vito A. Mennella were cited for professionalism in providing valuable weather information during separate search and rescue (SAR) operations, which were severely hampered by bad weather.

The two members of Detachment 25, 10th Weather Squadron, calling on their skill and knowledge, accurately predicted temporary weather changes in the search area and enabled rescue personnel to be on the spot as the weather broke.

Last month, two crewmembers ejected safely from their stricken F-4 Phantom jet over rugged enemy territory. Dense low-lying clouds covered the rough terrain, preventing immediate rescue, and forcing the men to remain on the ground overnight.

That evening, Sergeant Fischer briefed the SAR commander. He explained that weather outlook for search was bad, but that there would be a short break in the weather at or just after sunrise, when cloud spillover from a nearby mountain ridge would be minimal.

Using this information, rescue helicopters and other SAR aircraft arrived at the scene as the clouds began breaking up. Dropping through a gap in the overcast, they hoisted the downed airmen into the chopper and were on their way as dense clouds again obliterated the area.

Sergeant Mennella was praised for his key role in rescuing two other F-4 crewmen.

That crew ejected late in the day over dense enemy-infested jungle, and they too had to spend the night on the ground. Next day, a number of rescue attempts failed because a thick cloud layer hugged the terrain, hiding the men from view.

By mid-afternoon the situation was critical. With the enemy in the immediate area, chances of the airmen being captured or killed were rapidly increasing.

The men had to be picked up soon. Weather in the SAR area had not improved all day and the on-scene commander was considering cancelling further rescue attempts.

Based on Sergeant Mennella's forecast of improving weather late in the day, the SAR commander decided to make one last attempt to rescue the men. As forecast, weather improved, momentarily, and the two airmen were rescued.

SAR support is not new for the sergeants. Since being assigned here, both have participated in several such missions.

SPORTS



Lightning Strikes

YOKOTA AB, Japan—Detachment 17, 20th Weather Squadron's bowling league, "Lightning Strikes," recently completed its bowling season. Individual winners were Sgt. Wesley Wells with a 246 and Mrs. Darryl Oseen with a 192 for high game scratch. High game handicap went to Mrs. Arthur Marquette with a 223 and Sgt. Philip Neeley for a 250 score. High series scratch for men went to MSgt. Arthur Marquette with a 578 and Mrs. John Simkulet with a 486. Sgt. Alan Lane with a 642 and Capt. Rita Miller with a 584 garnered the high series handicap. Team winners were SSgt. and Mrs. Darryl Oseen and MSgt. Darwin Ridsen, taking first-place 56-24 won-loss record and a 530 average. Second place went to Capt. and Mrs. James Clark and TSgt. Edwin Clark, while SMSgt. and Mrs. John Simkulet and Capt. James Hansen took third.

First-Place Team

AVIANO AB, Italy—Detachment 7, 31st Weather Squadron's bowling team is currently in first place by seven games in the Aviano Recreational Bowling League, after completing the first two thirds of the season. Team members are Maj. Tom Howshar, TSgts. Bob Zacharias and Bob Bayless and SSgts. Elmo Reddick, Lefe Drumm, John Contarino, Ed Krautsdorfer, Al Mayo and Ron Stacy.

Sets New Mark

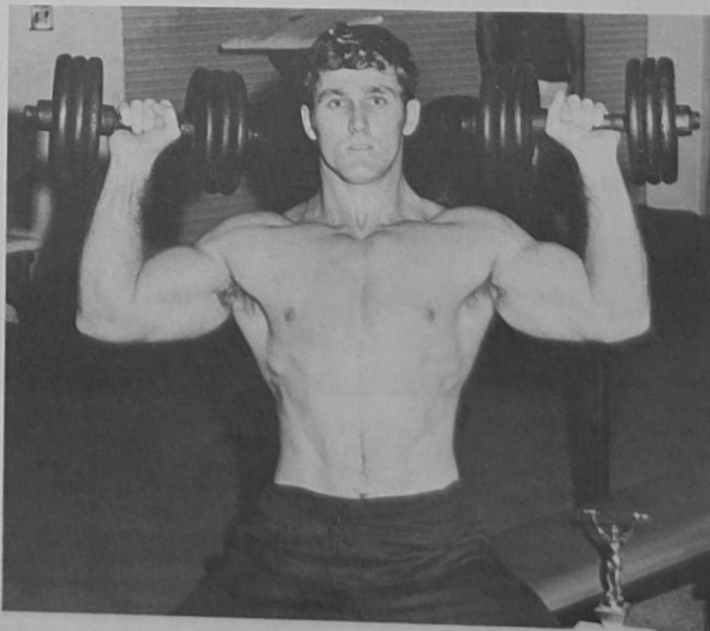
OFFUTT AFB, Nebr.—Representing the AF Global Weather Central, Lt. Richard Ingle won the 132-pound class and raised his bench press mark by pressing 250 pounds in the recent Open Power Lifting Meet here. The 130-pound, 5½-foot lieutenant holds the Nebraska state AAU record in the bench press, which he set four months ago by pressing 245 pounds.

Squash Champ

CARSWELL AFB, Texas—Capt. Charles W. Giddens, AWS Detachment 7, won the Carswell Intramural Squash Tournament, finishing first among a field of 21 participants here. He finished second in both singles and doubles in the Intramurals Racketball tournaments. His partner in the doubles was Sgt. Kenneth L. Huckabee, also of Detachment 7.

Hickam AFB, Hawaii

Sgt. Huck Liles of the 1st Weather Wing administrative section recently won the USAF Power Weightlifting contest at Wheeler AFB, Hawaii. Contest was open to all services and included former AAU, NCAA and Olympic participants from California, Japan, Korea and other locations. The 160-pound airman deadlifted 475 pounds, bench pressed 370 pounds and pressed 260 pounds for a 1,105-pound total. Liles received an additional trophy as Outstanding Lifter of the meet. The versatile sergeant is also proficient in boxing, track and field, rugby and wrestling and has a wrestling scholarship from Broward Junior College, Ft. Lauderdale, Fla., which he will attend this fall. Among his other claims to fame is winning the Mr. Honolulu Physique contest, beating Mr. Hawaii in the process.



KEEPING IN TRIM—Sgt. Huck Liles, 1st Weather Wing, flexes his muscles during one of his daily exercise sessions. The 160-pound administrative specialist currently holds the USAF power weightlifting crown. (US Air Force Photo)