

FEBRUARY 1976

FAA WORLD

Service to Man in Flight



A BICENTENNIAL FLIGHT





A Bicentennial Flight

DISCOVERING THE SPIRIT OF AMERICA

Just over a year ago, a little yellow Piper Cub took off from Van Nuys, Calif., to discover the spirit of America in a historic low and slow flight around the 48 conterminous United States.

The pilot was K. O. Eckland—a writer, artist and photographer, who's been flying as long as the plane he used—a 1946 Piper J-3 Cub. He had selected this particular plane as "representing an American classic—a name that is as synonymous with light planes

as the Model A Ford has been with automobiles."

The purpose of his odyssey, Eckland declared, was for discovering the spirit of adventure through America and capturing its vitality in a series of sketches, photos and articles he hopes to publish in a book this year. He believes that the feeling and color of the nation can best be seen through the eyes of a pilot flying low and slow in what he regards as our last true frontier—the sky.

And so, he resigned his post as Creative Art Director of the *Los Angeles Times* to free-lance as a graphic designer and make a bicentennial flight around the country. Over a year and more than

\$5,000 were spent in restoring the Cub, which he dubbed "The Spirit of N76." His instrumentation was true to yesteryear: compass, air-speed, altimeter, RPM and oil gauges, plus a cork-and-wire fuel indicator.

"There it is in its entirety—one man, one plane, one country," he said. "It doesn't take a string of ratings or sophisticated aircraft to fly around our land—just good old common sense and ability."

And Eckland did fly around our land—16,900 miles worth over a span of 25 weeks. For the vicarious experience or for those who swear they're going to do it . . . one day, here are the facts of the flight: He took off from Van Nuys on January 27 and returned there July 19, having spent 263.86 hours in the air. He made 277 stops in all 48 states, contacting 21 towers and 35 FSSs. He had no rigid schedule and did take some interesting zigs and zags at the suggestion of others. His average air-speed on the 80 hp Continental was

64 mph. His actual flight expense, \$2,400. He likes to say that he flew at 999 feet most of the way.

He found that he was doing what everyone he met wanted to do himself. This is what intrigued them the most—not so much the idea of a bicentennial flight, although their fascination with seeing the U.S. from coast to coast in a footloose, independent way is what it's all about. "I'll bet there'll be a lot of guys trying it themselves this year," Eckland said.

(Continued)

There were frequently willing and helping hands to assist Eckland on his way. Here, a "lineperson" checks the primitive float-and-wire gas gauge.



Concord, N.H., FSS chief Ed Goodin (right) briefs Eckland on flying conditions in the pilot's 22nd state.



Top: A windblown K.O. Eckland runs up the "powerful" 80 hp J-3 engine for a preflight check after completing his nearly 17,000-mile tour de force.

Left: The weary pilot rests at a flight service station between hops of his 16,900-mile flight.



Like the average pilot, Eckland availed himself of FAA services many times during his six-month trip. "FSSs are hospitality centers as far as a lonely pilot is concerned," he mused after the trip was over. "They're good sources for local information, as well as weather. You might say they're good tourist centers. But mainly, I'd seek them out because they were warm yellow spots on a cold day or because I had a passing curiosity about those gray masses on the horizon heading my way.

"There's nothing bad that I can say about FSSs and the crews that grind away 24 hours a day, every day of the year, tearing up their yellow sheets of undecipherable weather codes and scrawling their particular brand of graffiti all over the maps that decorate the stations. They're not always right, but they are helpful," he admitted.

"The FSS personnel are really doing what they can. They act like they're really into what they're doing—like they enjoy it."

Eckland is one of those pilots who isn't thrilled with the idea of FAA, controlled airspace, aerial cops and electronics gear, and that's why a J-3 Cub and his skirt-ing of metropolitan areas. Nevertheless, the trip did some re-educating.

"By New Hampshire, some one-third of the way into my flight, I had come to realize something that not too many of my fraternity is aware of—an FAA badge does not automatically put someone on the other side of the fence. These are real, live and breathing beings, for the most part sentient and sympathetic. They just throb to a different engine, so to speak."

Reflecting on this theme, Eckland continued. "About that yellow warmth I mentioned earlier . . . Get yourself trapped by some deteriorating weather in the middle of nowhere, with darkness just around the bend, and there's a good chance there'll be an FSS nearby. There'll be a pot of hot

liquid that could pass for coffee, some spot you can flop for the night, clean johns and good conversation. This is all unofficial, but it's certainly there. I was taken out of the rain and cold four times on this trip alone. It's a strange world of clattering Teletypes, crackling radios and rotten coffee, and I'm sure glad it's there.

"One time, darkness had caught up with me at Deming, N.M., so I asked what the weather would be like that night. I was told there was a pretty good chance of dew. So, I selected a spot on the grass next to the station. I would outfox the dew by putting my sleeping bag on top of a space blanket. Unfortunately, the prediction was a wee bit off on the direction and volume of the dew. It turned out to be a downpour, and my space blanket turned into a reservoir.

"About two in the morning, I felt the seepage working into my pants and a chill taking over. I was soaked. The night man in the station, Ron Kingcaid, looked startled at the soggy mass sloshing into the warmth. 'I saw something out there,' he commented, 'but I thought it was a bunch of building material under a tarp. They're fixing the roof, you know.' I really didn't much care at that moment as I headed for a portable electric heater. In a stunning display of sympathy, Kingcaid brought out every available heater and turned the coffee pot on high, getting me

and my creature comforts dried and thawed out by the time the New Mexico sun chased away the gray clouds of night."

Airport managers as well as FAA people laid out their welcome mats for him, frequently not permitting him to bed down under his wing. They always said they had a warm room for him or would take him home. After that drenching in New Mexico, Eckland convinced himself to buy a tent. He pitched it only eight times, but because of the pervasive hospitality, he slept in it only four times.

Anything extra in the tiny aircraft was a problem. He would carry only a few days of food to lower his gross weight and even picked up his sectional maps along the way, for fear that 50 sectionals aboard might prevent the Cub from lifting off. He got one of those giant keys to the city in El Paso, Tex., but had to mail it home because of the same fear. In fact, Eckland often found that as he used the gas in the tanks, he had to shift his gear from the rear to the front seat to adjust his center of gravity.

Eckland usually avoided tower-controlled fields because of his lack of two-way radio and transponder, but weather and the plane's appetite for 80-octane sometimes dictated otherwise.

Out of some 20 such landings, Eckland had one small run-in with a tower controller, which he figures



At the tie-down at Meacham Field, Fort Worth, public affairs officer K.K. Jones (right) discusses the J-3's simple manual with K.O. Eckland.

ministrations, Eckland picked up the following item in Texas, which he thinks must qualify for the world's shortest briefing. A flier widely known as Old George planned a flight that he made continually throughout the year and called the Cotulla FSS as his custom, whenever the weather didn't look friendly. The phone rang at the FSS:

"Cotulla."

"O! George."

"Uh-uh."

"Thanks."

Comments Eckland, "Now you know where the 'brief' in 'briefing' came from."

Eckland said he began to realize during the trip what a futile little line he was making and how many places he wasn't seeing. At his altitude, all he was seeing was a swath a couple of miles wide in this big country. "I realize I did the whole thing all wrong, and I'll have to do it again," he said.

"As an example, I strode into an FBO's office one evening in Louisiana. Everyone had gone home, and I had nothing to do until I got sleepy. There was a world map on the wall, and I decided to plot, with a piece of string, how far I had gone on my drunken-fruit-fly meanderings. When I held it in a straight line from New York, I discovered I had already gone further than Lindbergh did to Paris, and in a little 60 mph plane. It made quite an impression on me about the size of the United States."

Eckland finished his discourse on the trip saying, "To all of you out there, thanks for your invaluable part in my adventure, for helping make it a little more adventurous and, perhaps, a little less perilous. I'll be by that way again, so don't thin out the coffee too much."

"was mutually attributable to his borderline ulcer and my natural Swedish bullheadedness." The controller claimed that he had tied up an active runway by not clearing it fast enough, and he claimed that it wasn't much of an active runway since he was the only plane in the air around there.

Eckland described one of the other landings that gave him a warm feeling. "Coming into a Florida field, I monitored the tower frequency with a small portable all-band radio and circled to the left above pattern altitude, waiting to see if anyone noticed me. Someone did, and I thought for a moment it was W. C. Fields with a southern accent:

'Pretty li'l yeller Cub in the pattern . . . If you hear, kindly rock your wings.'

"I rocked my wings.

'Okay, li'l friend, come on aboard. You're cleared for landing.'

"I don't recall where this type of dialogue is considered prescribed tower-to-plane terminology in the FAA handbook, but it certainly was pleasant to hear. The tower was humanized, and I hope it never has to change."

The assistance that Eckland received in a variety of ways was much more than he had anticipated. He had a comprehensive tour through the Aeronautical Center with public affairs officer

Mark Weaver, which he believes any pilot stopping by Will Rogers or Wiley Post Airports should arrange for. He describes the center as a huge, sprawling complex that is run with cold efficiency by some rather talented people.

"Names in my little notebook," Eckland said, fishing in his shirt pocket, "include Mike Gawley and Bill McNease at Shreveport (La.) Tower; the bunch at New Orleans Lakefront—Marceau, Perez and Delgado; Herschel Anderson and the Gulfport (Miss.) bunch; Dick Grube and 'Louisiana Redneck' Milner at Carlsbad (N.M.); 'Vet' Payne in the wilds of Boston; Ralph Adams and the mob at Miles City (Mont.); Larry Henriques and his band of gypsies at Walla Walla (Wash.); Spokane's George Allen and Al Nowland plus Porter and Cody; the FSS man at Red Bluff (Calif.) who came up with a dog-eared but vital sectional when I needed it most and whose name is somewhere on that chart which is also somewhere. These are but a random selection of those dedicated souls who saw fit to dedicate some fair amount of their time and wisdom to seeing that the Spirit of N76 would safely trundle along on the next leg. And this list doesn't even begin to include those shapeless voices who counseled me by telephone or that I snooped on with my portable receiver."

Speaking of flight service station

CO-OP PROGRAM ATTRACTS CREAM OF THE CROP



Steve Stratori (seated) checks out a piece of data-compressor equipment, which was designed and built in this "miracle electronics" lab, while supervisor Ed Mack (rear) checks the procedure and Richard DeMarco stands ready with some additional wire.

Mathematics co-op students at NAFEC Gwendolyn Evans (standing) and Rita Ann Sudowniczak work at the main console of the IBM 7090 digital computer with supervisory mathematician Robert DiMeo, chief of the Data Processing Branch's Engineering Applications Section. The students are from Drexel.



NAFEC has a good thing going. For over 15 years, the center has successfully operated a Cooperative Work-Study Program that has netted more than 40 graduates for the agency who are considered among the most progressive of the new breed of technical professionals.

With such programs, employers enter into agreements with sponsoring colleges and universities that permit student participants to divide their time between school and the working environment after their first year of college. Neither party is committed to providing employment to the graduates, but NAFEC has been fortunate in being able to hire over 75 percent of its co-op graduates. While areas of specialization may vary greatly among employers, the center concentrates on engineers and mathematicians, hiring at the GS-7 level.

One measure of the quality of the program is that three NAFEC co-op students finished second, third and fourth in a 1975 graduating engineering class of 338.

So far, three schools have participated in the program—Detroit University, Philadelphia's Drexel University and New York's Pratt Institute. Detroit's participation ended a few years ago, primarily because graduates were not too interested in working so far from home. Last year, there were 20 students from Drexel and three from Pratt.

Generally, student groups rotate

between work and school, providing four separate employment periods. According to Frank Griendling, Training Branch chief, "This provides three to four different activity assignments, which gives them a broader exposure to different facets of their chosen fields—extremely helpful for making career decisions."

The program was started by Griendling's predecessor, Hank Budde, now with the Management Training School at Lawton, Okla. "It was not an easy job," Griendling recalls. "It was difficult luring professional talent to relatively rural southern New Jersey, where NAFEC is, especially when competing with nearby industries.

Budde persevered and the program flourished. Two guidelines established early proved invaluable—insisting on the schools being recognized academically as quality schools and on the students being in the top third of their class.

A primary contributor to the education of these students has been Ed Mack, himself a co-op graduate from Detroit University in 1964. An electronics engineer in the Air Traffic Systems Division, Mack conducts a laboratory that has been dubbed "miracle electronics." Word has it that there they do anything with anything. But like the work-study program it serves so well, one of the things the lab does best is help plant the feet of young engineers firmly in the work environment. —By Ed Shoop

First Jet Finds Its Last Hangar



This looks familiar," Frank "Bud" Kelley, Jr., said, as he lowered himself into the cockpit of the XP-59 parked on the littered floor of the new National Air and Space Museum in Washington. And well it should look familiar to Kelley, because he was the guy who tested it—the first jet plane to fly in the United States.

Kelley, who is now an aerospace engineer on the agency's Technical Program Staff, Flight Standards Service, was the pilot who took that first propellerless plane up into the sky on Nov. 16, 1942, to see if it worked.

Before his first flight, he is reported to have asked Larry Bell, president of Bell Aircraft, the manufacturer of the airplane, if the thing would fly. We're not sure what Bell answered, but it was Kelley who proved that it did fly when he put through its paces this first jet to go operational in the Air Force. The scene was Muroc Dry Lake, Edwards AFB, Calif.

He started slow, Kelley remembered, as he sat in the cockpit in the high-ceilinged museum. He took time to study the plane and the instruments in front of him before he took off. He was impressed by what he saw—struck by the simplicity of this revolutionary aircraft.

As a Navy pilot and subsequently as a test pilot of conventionally powered planes, he had become accustomed to little headaches and chores, but here in this new-fangled jet, the chores were reduced. For instance, there was no prop control to worry about since there was no prop; there was no mixture control to set; and no magnetos to test.

He just opened the throttle that chilly morning, and he was on his way—but his first impression was

that he was on his way very slowly. He wasn't used to the slow initial acceleration of jet-powered planes, but then—except for a few German and a couple of British pilots—no one else in the world was used to it either.

But Kelley hung on and waited. Since he was taking off from Muroc Dry Lake, which was 10 miles long and as smooth and flat as a billiard table, he had plenty of room. The plane gained speed gradually, and, as it did, Kelley discovered another plus for jet power: As he roared across the dry lake, he was not fighting the torque effect of a whirling propeller, which in a conventional plane would have been pulling his nose to the right.

Later in the test program, he found out what the plane would do simply by going places no one had ever been before. He determined the maximum altitude for the jet by pulling back on the stick and climbing until the plane would climb no further. As he munched along at the top of the world, he duly reported that the altimeter read a little over 39,000 feet.

He also found the critical altitude for the jet, which is the altitude at which the plane will fly the fastest. For the XP-59, this was about 25,000 feet. Here, using all 2,000 pounds of thrust generated by each of the twin engines, the X-rated jet raced through the ozones at 432 miles an hour. Remember, this was 1942 and, although this is close to 200 mph slower than the cruising speed of today's passenger jets, it was faster than the piston-engine fighter planes of that day.

Kelley also recalled other things—that the main
(Continued on page 15)

FACES and PLACES



QUARTET OF SAVIORS—Administrator John L. McLucas (left) chats with the four Outstanding Flight Assist Award winners for 1975—(from the left) Lester B. Massey, Tenn.; John L. Louthan, London, Ky.; Toby Cooper, FSS; and Robert A. Hutchings of the Anchorage ARTCC.



OLD TIMES GABFEST—Dr. Lewis Jackson (third from left), vice president of Sinclair Community College, Dayton, Ohio, and a member of the Citizens Advisory Committee, chats the fat with former World War II pilots who trained under him at Tuskegee Institute. They are (from the left) Col. Carl Johnson, FAA emergency operations officer; William Broadwater, chief of the Airspace and Air Traffic Rules Div.; Luther Pugh, chief, Contract Support Branch, Western Section; Spann Watson, air-traffic specialist in the Military Activities Branch; and J. T. Valentine, FAA attorney and chief of the Contracts Service Section.



NO HOBBY HORSE THIS—Verte Beckstead, GFET at Cedar City, Utah, and his wife, Fonda, raise Morgan horses in their spare time. Mrs. Beckstead shows off "Tom-boy Tammy" a grand champion filly that has been grand champion or junior champion in every competition entered.



TEAM ACT—Paul and Eileen Stebelton are an accident-prevention team. Paul is the accident prevention specialist at the Allentown, Pa., GADO, while Eileen—a private pilot and teacher—accompanies Paul to clinics and has made presentations before more than 2,000 persons.



AMERICANSKI BALALAIKA—Dr. Georgy Pakholkov, Deputy Director of the Leningrad Radio Equipment Research Institute, takes time out in his visit to SRDS for a USSR/FAA Microwave Landing Systems discussion to entertain on the banjo with "Hello Dolly," "When the Saints Go Marching In" and Russian folk songs. It was 30 years ago in his student days when he last played as a member of a Russian Dixieland band.



STRIKING A BEACON—NAFEC equipment operator Robert Brooks attaches a hook to a radar beacon antenna for dismantling. The experimental antenna was tested, then returned to the manufacturer, prior to further NAFEC testing.



THE MASTER'S VOICE—Chris Baird, 14, of Chelmsford, Mass., gets some pointers on landing from his father, Chet, a pilot on the New England Flight Standards Div. staff, after the boy completed a solo in a glider.



LEGAL PAIR—Southern Regional Counsel Len Thorton and the agency's first Paralegal Assistant Len Thorton (left), Jean Leonard, confer on a point of law. The position is a developmental one in which Leonard will learn all legal functions except trial work.



TOP ORGANIZER—E. Nootenboom, Acting Director of Management Systems, presents Rita Freeman, Documentation Methods Branch, with the Federal Paperwork Management Award for Special Merit for her leadership in developing the agencywide word-processing program. Use of the program in headquarters is reported to save over 31 clerical man-years annually, worth \$310,000, plus savings in managers' time.



A NEAT TRIO—Selected for the 1976 NEAT (New England Administrative Training) Program were (left to right) David Stifle, Mabel Wolff and Raymond Pinault, who will be assigned to the Boston ARTCC Training Department, Civil Rights Office and Management Systems Div., respectively.



SAFETY FOR BALLOONMANIA



For the third year in a row, balloonmania took over Albuquerque in October. Everywhere you might look during that fiesta season, balloons were the motif and aeronauts were the heroes of the hour. Highway billboards shouted it; the local press was full of it. Even the year-round signs are evident: In the new downtown convention center/hotel complex, you dine in the "Six Balloons" restaurant or the "Montgolfier Room."

Aeronauts from more than 20 countries have been descending on Albuquerque since 1973, and the locals love it—both for the spectacle of a polka-dot sky and for the green that the balloonists bring with them in these two weeks of world competition and strictly-for-fun amateur events.

The first Albuquerque World Championships drew 138 balloons

in 1973, 167 the following year and nearly 200 in 1975. The numbers match the ballooning growth of the sport itself. From 13 active hot-air balloons registered with the FAA in 1962, the fleet had increased to more than 600 last October. As you might expect, this explosive growth has been challenging the FAA in keeping up with the required inspections and certifications.

Because inspectors from each GADO are required to certify the airworthiness of balloons and airmen, seminars are held at many ballooning events for inspectors whose areas have significant ballooning activity.

The Albuquerque GADO, with some 60 balloons in its area (more than 40 in the city itself), qualified as the obvious candidate for a seminar last year at this event. Maintenance inspector Jim Barnes

coordinated the three-day seminar with assistance from inspector G. C. Johnson and GADO chief Al Reed.

Inspectors from every region except Europe studied the peculiarities of ballooning, while mulling the fact that a number of Federal Aviation Regulations just don't fit the nature of balloons. For one, the FARs require a seat belt for each passenger in an aircraft, but balloons don't even have a seat! What wind conditions are appropriate for flight and whether there should be strength requirements for gondola construction and attachment to the balloon were others.

It also became quite evident that different applications of the regulations were being made in different regions, and the seminars could effectively serve to insure better uniformity.

When not busy with the seminars, which were held afternoons, Barnes spent eight to 12 hours a day at the launch site as a festival official, as did Jay Winder, an EPDS at Albuquerque Tower, who

annually serves as air-traffic coordinator between the festival and air-traffic facilities at the tower and Kirtland AFB.

Of course, high-performance jet fighters, air carriers and business jets don't mix well with balloons, whose top speed—depending on the wind or lack of it—may be zero or measured in vertical terms.

"We watch the situation very closely when the wind threatens to blow the balloons over the airport," Winder said. (The launch site is some 10 miles north of the airport.) "Balloons have the right of way over other aircraft because they lack maneuverability. If they get too close to the traffic pattern at International, we have to suspend operations there."

Winder was quick to point out that this situation has occurred only once, though, and it was during Albuquerque's first championship. "We had about 40 balloons out, and a freak snowstorm came, dropping visibility to less than three miles. We couldn't see all of them—there's no way to see them

on radar—so we had to close down the airport." He added, "We learned from that experience and used it to plan better for future balloon events. It's worked out extremely well ever since."

Following the traffic problem, a letter of agreement between Albuquerque FAA facilities and balloon officials was hammered out, requiring the aeronauts to climb to 7,500 feet, well above the airport's traffic-pattern altitude; when changing winds carry them toward the airport. When prevailing low-level winds are blowing toward the airport, the launch is postponed or delayed.

Winder describes cooperation with the agreement letter as excellent. In return, the balloonists receive valuable assistance from GADO personnel on flying the Albuquerque area, tips on balloon performance at the high New



Air-traffic coordinator Jay Winder explains that the day's winds won't carry the balloons to the vicinity of Albuquerque International Airport.



Mexico elevations and weather information tailored to ballooning needs from the Albuquerque FSS crew.

The meet also gets FAA help of another kind, this from an unexpected source. Several employees of the Albuquerque ARTCC and other offices are members of the Albuquerque Citizens Radio Association—now called the ACRA Emergency Net—which maintains a communications/first aid/rescue station at the launch site. Most of their customers, though, involve snake bites, lost children, fingers caught in car doors, etc.

Balloon enthusiasts hasten to inform newcomers that the sport is very safe when performed properly, which means flying only when the wind is blowing at 10 knots

or less and staying away from power lines, among other things. ACRA is on call for the entire meet to handle the rare balloon accident that does occur.

ACRA's presence is typical of the way Albuquerqueans support the balloon happening each year. The entire population gets involved in one form or another. The parades, the hometown pride in being the "Balloon Capital," the prevalence of signs mentioned earlier and the brilliant New Mexico sky against the wide-open spaces all combine to convince the visitor that here's a sport that's found an enthusiastic home.

If the enthusiasm of local FAAers is any indication, it'll stay that way for a good many years to come.

—Story and photos by Jon Ellis

That ballooning is safer than driving proves out when it's a member of a chase vehicle crew who needs first-aid treatment from a bumpy ride. He gets it in the ACRA trailer from volunteer Jim Gray of the Albuquerque ARTCC.



GADO inspectors Harold Phillips (left) of Lubbock, Tex., and Travis Boren of Houston inspect a propane burner during the Albuquerque seminar on balloon certification and inspection.

After air is blown into a balloon's envelope by high-powered fans, it is heated by propane burners of up to several million BTU capacity.



THAT'S MY BOY . . . Brimming with paternal pride, an Arizona man recently petitioned FAA to exempt his son and namesake from the minimum-age requirements for a student pilot's certificate so the boy could fly solo. The proud pop pointed out that his son, who is 12, is an extremely capable and proficient pilot with a total of 32 months experience and some 50 hours of logged flight instruction, but the agency wasn't buying. It emphasized that maturity and judgment are essential qualities for a pilot's certificate and denied the request on the grounds that the exemption was not in the public interest. We think this is a sound decision, but we would like to suggest a possible compromise: How about if the kid used training wheels?

WRONG RUNWAY . . . Since they work at the world's busiest commercial airport, the controllers at O'Hare Tower get all the publicity. But we want you to know that there is plenty of action at Chicago Midway, as well. One night recently, for example, the Midway Tower had just cleared an Air Chicago DC-3 for take off when the pilot informed them that he was holding short of the runway because there was a woman dancing on it. Then he advised that he was shutting down his engines because the woman was dancing toward the aircraft and he was afraid she might be hit by a propeller. Police were called and arrested the 43-year old woman for disorderly conduct. They might have added some additional charges as well. After all, it was the sight of 43-year old women dancing down the runway that finally killed burlesque. That . . . and dirty movies.

NOT SO HAIRY SITUATION . . . "Small World" isn't the kind of column that leaves its readers hanging. Last March, we reported that United Air Lines was testing various kinds of moustache wax to determine their spontaneous flammability in an oxygen atmosphere, and we cautioned FAA pilots not to Simonize their hairy upper lips until the test results were in. Well, we just had an exclusive interview with a United man involved in the project, and he said moustachioed airmen have nothing to fear. He noted that their tests were completely negative, and he suspects that stories about moustaches burning up in an oxygen environment are apocryphal . . . whatever that means.

FIRST JET *continued from page 9*

bearings of the experimental jet engines had a habit of overheating and that shutting down one or the other engine became more or less routine. He especially remembered one flight when the cockpit window-defroster system failed. It was a minor malady in that only the defroster failed, but to him, it was catastrophic—suddenly he was cut off from the world, surrounded by gray, opaque glass. He managed to scrape a tiny hole in the ice on a side window and ultimately land on that thankfully big and smooth dry lake bed. Without that almost limitless expanse of runway, Kelley said he would have been in trouble.

With a flying career, of course he had been in trouble before. In fact, he was picked for the jet-testing job because of the way he had handled trouble while testing the Bell P-39 Airacobra. He had been commended for his "cool courage" in landing a plane that was badly damaged in a dive test. Bringing what was left of the plane home in one piece enabled engineers to determine exactly what had gone wrong and to fix it. If he had jumped from the plane, which would have been the prudent thing to do, the malady might not have been discovered until another pilot suddenly found his horizontal stabilizer mostly sheared off by defective landing-gear doors.

Kelley's old XP-59 will be only one of hundreds of displays at the new National Air and Space Museum when it opens on July 4th this year, including a permanent air-traffic-control display. If you can't make it, we will, and we'll tell you about it.

—By Theodore Maher



REVIVING AN ANCIENT ART

Pilot-students do an ice-masonry job in constructing an igloo.



The beginning of a snow shelter with an un-keystoned arched roof and, at right, the finished snug survival domicile.



The art of igloo-making in Alaska is being revived. It may sound a bit like carrying coals to Newcastle, but in recent years, it has been rare—if not impossible—to see an igloo in modern-day Alaska.

Sad to say, the renaissance is not by the originators; the ancient art of building snow houses is making a small comeback among pilots who fly over the barren areas of the Arctic, and not for a cultural exercise but necessity.

Last winter, 56 air-taxi pilots attended a one-day winter survival seminar in Anchorage to learn how to build igloos and live off the land, as well as what survival equipment they should carry in their aircraft if they should be forced to make an unscheduled landing in the frozen wastes. Anchorage accident-prevention specialist Charles Berns and Alaska Rescue Group, Inc., a private or-

Pilots were shown how to use native material—snow—for air-rescue signs.

ganization dedicated to rescuing lost hikers, fishermen, miners and pilots, set up the seven-hour seminar.

Survival techniques and the value of the Emergency Locator Transmitter were detailed by Berns and Chuck Rigson, president of the rescue organization. Among the subjects were travelling in arctic areas, avalanche avoidance, winter shelters, clothing, food, fire building, signaling, first aid and frostbite protection.

After a series of lectures, the group moved outdoors to practice making igloos, snow caves, fighter trenches and molded-dome shelters. They also used smoke, flares, mirrors and ELTs to become expert in summoning help.

"It is important that air-taxi pilots operating in this region know their survival techniques," Berns said, "because it is they, not their passengers, who will have to be the leaders in providing life support if they have to make a forced landing." Although the pilots didn't want to be in the position of putting their new-found knowledge to use, he said, interest in the seminar was high, like money in the bank.

"Acceptance of the Winter Survival Seminar was so universal," Berns added, "that the Alaskan Region is planning to conduct other survival seminars for both winter and summer."

—By Al Garvis

Not only a good energy conservation practice but a safety factor and a cost-saver is the result of the work of a pair of Aeronautical Center engineers.

Dale Reynolds and Charles E. Gage of the Airway Engineering Support Division's Modification Branch developed a modification for the remote-control equipment used to turn on lighting at various airports. Now, 10 different ground-to-ground and 30 different air-to-ground frequencies are available to illuminate fields by controllers or pilots. FAA plans to install these controls by the end of this year at more than 300 airports having approved instrument approach procedures.

When a pilot approaches an airport not in constant use at night, he can turn on the lights by keying his microphone a specified number of times with his radio tuned to a discrete communications frequency. He will also have the option of selecting different light intensities for approach lighting. The system



Dale Reynolds (left) and Charles Gage display the compact remote-control equipment for keying airport lights.

SHEDDING LIGHT ON AIRPORTS

will be on an automatic timer, which will turn off the lights in 15 minutes, normally long enough to complete an approach and landing. If necessary, however, the pilot can restart the lights by again keying his microphone.

Ground-to-ground control systems are planned for some airports

with full- or part-time ATC facilities, where the lighting can be turned on by controllers when needed.

Remote control of airport lighting by pilots on which these improvements are based has been in use at a number of airports since 1972.



Helping accident-prevention specialist Chuck Berns (right) talk survival safety was Gary Lacena, chief of the Flight Instruction Clinic in Oklahoma City.



Reflections on "The Devil's Triangle" story



Not if you pinch yourself!

—By Dwane Powell, Reprinted from the Raleigh, N.C., News and Observer

DIRECT LINE



Q. In our center, the data systems specialists aren't allowed to take physicals. Why do other centers allow DSSs to take them on a voluntary basis? This helps when bidding on jobs that require a physical. Also, why are the DSSs not on the Management Training School list in this region?

A. Agency Handbook 7210.3C, Para. 629, requires all ATCSs in centers who are required to handle air traffic directly to possess a current Second Class Medical Certificate. All other center ATCS personnel are not so required. DSS personnel are in the latter category, and medical examinations are only provided in accordance with available medical resources. Medical officials at your facility have decided that the resources are not available, while other regional medical officials find otherwise and do administer physical exams to DSSs. However, administering or non-administering the medicals is not a promotion factor, since all promotional selections are contingent on the selectee meeting required medical criteria. If you were selected for a position requiring the medical certificate, the exam would be administered immediately. As to MTS, Order 3330.32, "Requirements and Selection Criteria for Supervisory and Management Training," sets guidelines for eligibility for attending such training. DSSs do not serve in a supervisory/managerial capacity and, therefore, do not meet the eligibility criteria. An order in your region identifies positions in the program divisions that, while not supervisory, require certain skills and knowledge taught at MTS. The positions indicated in the order were submitted by each division and reviewed by the Training Branch; DSS was not identified as needing those skills.

Q. I am a GS-14 flow controller (temporary—one year). I was upgraded to this position through the selection process of MPP. We are awaiting approval from headquarters to make this position permanent. What I want to know is, in bidding for any permanent GS-14 position, will I be considered as an in-grade bidder?

A. As stipulated in the Federal Personnel Manual, Chapter 335, Subchapter 4-4, a temporary promotion is used

when the services of an employee is needed in a higher-grade position for a limited amount of time. It may be used during the extended absence of the incumbent, to fill a vacant position until a permanent appointment can be made, to assume responsibility for an increased workload for a limited period or to participate in a special project that will last for a limited period. An employee selected for a temporary promotion is informed in terms that leave no doubt of the temporary nature of the action and of all conditions relating to it, including duration. Documentation is needed to show that the employee has full knowledge of the action and conditions. An employee who has been temporarily promoted to GS-14 is considered to be a promotional candidate for a GS-14 position, if the qualification standards are met. When a temporary position is made permanent, competitive promotion procedures apply, unless the temporary promotion was initially made under competitive procedures and the fact that it might lead to a permanent promotion was made known to all potential candidates.

Q. In an attempt to discourage the Federal Incentives Awards Program, the Aeronautical Center employee must receive the award from his supervisor in the presence of a mahogany-roomful of GS-15s who don't know you from Adam. The presentation is expected to be letter-perfect. I would be more proud—and I am certain it would be more motivating to others—to receive an award in the presence of my fellow workers. I am positive that my supervisor would also prefer this, with the whole team at the job site. Why can't we have uniform and fair rules in administering the awards program? Why must we deviate from a Civil Service policy of encouraging employee recognition?

A. The Aeronautical Center policy stems from the desire to encourage participation and make the program meaningful by getting management officials involved in their own awards program, as well as add dignity to a ceremony honoring persons who have earned such recognition. Cash awards for performance are granted infrequently; when they are, there is a deep sense of personal pride on the part of the employee. The center's procedure, in part, is as follows: "All quality step increases, special achievement awards and outstanding ratings will be presented in the Director's staff meeting . . . It is expected the immediate supervisor will present the award; however, the division/staff chief may make exceptions if desired. The organization responsible for presenting the award shall . . . arrange for appropriate publicity and photographic services. In addition to the presentation ceremony at the Director's staff meeting, a second ceremony at the individual's work site by the immediate supervisor is encouraged . . ." The center's Management Analysis Division recently made a survey on the performance awards ceremonies, which included interviews with employees who had received such recognition. The summary report on findings stated: "Almost without exception, the award recipients surveyed stated that they were appreciative, honored or pleased by the staff-meeting ceremony."

Q. Current travel regulations provide that the per-diem rate shall not exceed \$18 when temporary duty is continued after 60 days at the same location, unless a waiver to that reduced rate is granted. My supervisors authorize only \$18, since this is the amount provided for in the FAA supplement to the DOT travel manual. This is not enough to cover subsistence expenses; it should be at least \$20 a day.

A. At the time this inquiry was received, action had already been initiated to eliminate the \$18 maximum from the FAA supplement (1500.14, FA SUP 2, Appendix 1) for temporary duty after 60 days at the same location. The elimination has been approved and the FAA travel supplement is being revised accordingly. The revised regulations permit discretion in reducing the per diem rates in accordance with the guideline in the DOT regulations (DOT Order 1500.6, Para. 727). This gives the authorizing official the authority to waive the reduction after 60 days, if justifiable, and makes that official responsible for establishing a lower rate if the employee is able to secure lodging and meals at lower costs.

Q. Last year, there was a question in FAA WORLD on hazards to the non-smoker from smokers. In your reply, you stated that several spot checks were made and that no health hazards were present. A Surgeon General's report, "Public Exposure to Air Pollution from Tobacco Smoke," makes me think that the effect on non-smokers, as well as smokers, is of a very critical nature in light of the high degree of timing and judgment skills required of air traffic controllers. Why don't your medical personnel come to the same conclusions as the Surgeon General?

A. The Office of Aviation Medicine has determined that smoking in FAA offices and facilities does not produce tobacco-smoke combustion by-products of sufficient levels to adversely affect the health of non-smokers. In fact, we do not agree with the report of the Surgeon General that these by-products are a health hazard to non-smokers. In view of this, future Unsatisfactory Condition Reports or written complaints alleging smoking problems in offices and facilities are to be referred to the Office of Personnel and Training for processing.

Q. When an employee reaches the top step of a grade, why must he remain at a stalemate? I am a GS-9, Step 10 and have been at this level over three years. It would be reasonable that if an employee reached the top step of his grade and had worked at an acceptable level of competence for a period not to exceed his previous waiting period, he should be able to go to the next grade at a comparable step level. This would be an incentive to strive to attain. I grant that we have such things as a Special Achievement Award, but I think most of us would welcome a structure that would give us another stepping stone.

A. An explanation of the reasons for granting within-grade increases and promotions is needed before responding

to your suggestion. Within-grade increases for positions in the general schedule are required by law (5 USC 5335) if the employee: (1) has performed at an acceptable level of competence and (2) has not received an equivalent increase during the waiting period. The within-grade increase is a legal right of the employee as long as he meets the requirements. It rewards the employee for continuing performance of an acceptable level. The idea of promotion to the next grade after having reached the tenth step of a lower grade is not possible under existing law. Under the present system, there is an attempt to compensate employees for substantially equal work with equal pay. This system provides for definable differences between work performed at different grades. We recognize the potential loss of incentive when one reaches the tenth step and cannot look forward to future pay increases; however, it is not fair to compensate such an employee with a higher grade when the employee is not actually performing the work defined for the higher grade. The present 10-step system was created in 1962 with the intent of providing more-equitable increases within each grade than existed under the previous system. Only Congress can change the law governing the present system. You are right in recognizing that the only remedies are to be selected through MPP for another position at a higher grade or to receive monetary rewards through the Incentive Awards Program.

Q. Does a Civil Service employee have to perform duties, on a permanent basis, under "other duties as assigned" when this duty is not in the job description? What does "other duties as assigned" mean in a government employee's job description, and is it unconstitutional?

A. Handbook 3510.8, "Position Classification," discusses FAA policy on position descriptions. Employees are required to perform those duties covered under "other duties as assigned" in their position descriptions. Only principal duties and responsibilities need to be individually listed and specifically described. The use of the wording "other duties as assigned" is encouraged and is intended to mean minor duties. Many Federal agencies use this or similar wording in preparing position descriptions to cover miscellaneous minor duties. To our knowledge, the wording is not unconstitutional.

Is there something bugging you? Something you don't understand? Tell it to "Direct Line." We don't want your name unless you want to give it, but we do need to know your region. We want your query, your comment, your idea—with specifics, so that a specific answer can be provided. All will be answered in this column, in the bulletin-board supplement and/or by mail if you provide a mailing address.

Better two-way communication in FAA WORLD's "Direct Line" is what it's all about.

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HEADS UP

ALASKAN

The new general facilities and equipment foreman for Fire Island is *Joel Craft* . . . At the Cordova AF Field Office, *Edward Corey* is now the general facilities and equipment foreman.

CENTRAL

Now the Airway Facilities Sector manager at the National Communications Center in Kansas City is *Keith Hampton* . . . *Stanley Potter* is aboard the Kansas City International Airport Tower as an assistant chief . . . *Charles Douglass* was selected as the Springfield, Mo., Airway Facilities Sector manager . . . *Clyde Martineau* got the nod as chief of the Des Moines, Iowa, GADO.

EASTERN

Donald Maselli went from deputy chief of the Pittsburgh FSS to chief of the Morgantown, W. Va., FSS . . . *George Givens* from the Lewisburg, Va., Tower was promoted to an assistant chief of the Richmond, Va., Tower . . . A new assistant chief at the Johnstown, Pa., FSS is *Charles Trimble* . . . *Jon Peterson*, a training instructor at the Aeronautical center won a bid for assistant chief at the Elmira, N.Y., Tower . . . Selected as

an assistant chief at the Syracuse, N.Y. Tower was *Richard Harris* . . . Promoted from the Buffalo, N.Y., Tower, *Richard Bowles* has taken a slot as an assistant chief at the Binghamton, N.Y., Tower.

GREAT LAKES

The new chief of the Cleveland ARTCC is *Jack Ryan* . . . *Ray Baran* now calls himself deputy chief of the Minneapolis, Minn., Tower . . . *Bob Moore* is aboard the Ann Arbor, Mich., Tower as its new chief . . . Selected as the new chief of the Zanesville, Ohio, FSS was *Bob Kossieck* . . . A trio of new assistant chiefs at the Toledo, Ohio, Tower are *Bob Walczak*, *Walt Jones* and *Dave Brown* . . . The Milwaukee, Wis., Tower sports a new chief in *Dick Barker*.

METRO WASHINGTON AIRPORTS

Named chief of the Metropolitan Washington Airports Service Engineering Staff was *Frank Conlon*.

NORTHWEST

Bernie Tiffault, former chief of the Lewiston, Ida., Tower, was selected as an assistant chief at the Tacoma, Wash., Approach Control—formerly the McChord RAPCON.

ROCKY MOUNTAIN

Taking over as chief of the region's Employment Branch was *De Wayne Lachelt*.

SOUTHWEST

James M. Eaves was selected as Airway Facilities Sector manager in New Orleans . . . The new sector manager in

Little Rock, Ark., is *Jon C. Ryberg* . . . *Harold Marley* has taken over as chief of the Monroe, La., FSS . . . Getting the nod as chief of the Texarkana, Ark., CS/T was *David Burns* . . . *Carlos Gonzalez* was selected as chief of the Las Vegas, Nev., FSS . . . On duty at the Harlingen, Tex., Tower as its new chief is *Ben Walcott* . . . A new assistant chief at the San Angelo, Tex., CS/T is *Richard Shelton* . . . *James Heller* topped the lists for an assistant chief's post at the Riverside Tower in Tulsa, Okla. . . . Named assistant Airway Facilities Sector manager in Corpus Christi, Tex., was *Roberto Barron* . . . His boss, the Corpus Christi Sector manager, is also new—*Daniel C. Gardner* . . . Also made an assistant sector manager in Oklahoma City was *John W. Clark*.

WESTERN

Moving up to an assistant chief at the Los Angeles Tower was *Dave Ross* . . . *John Hardwick* has just reported aboard the Sacramento, Calif., Tower as an assistant chief . . . *Ron Kostecka* was promoted to an assistant chief at the Edwards AFB RAPCON . . . The Prescott, Ariz., FSS has garnered *Bill Parker* as an assistant chief from Oakland . . . *Ed Ball* reported in last fall as sector manager in Los Angeles . . . *Ben Kennedy* was selected as chief of the new North Las Vegas, Nev., Tower . . . A new assistant chief at the Napa, Calif., Tower is *Gary Stinebaugh* . . . Now holding forth as an assistant chief at the Ontario, Calif., Tower is *John Williams* . . . Selected for an assistant chief at the Santa Ana/Orange County, Calif., Tower was *Gene Stahl*.