

OCTOBER 1974

FAA WORLD

Service to Man in Flight



HANGING IN THERE

FAA WORLD

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The cover: *The nearest thing to flying like a bird, hang gliding is a booming sport that FAA has been looking into. Here, 19-year-old Taras Kiceniuk pilots his rigid-wing Icarus II over the California coast.*
Photo by Floyd Clark, Caltech



A Golden Opportunity

Shakespeare wrote, "The fault . . . is not in our stars, but in ourselves, that we are underlings." In less poetic terms: If we wish to succeed in life, it must be through our own efforts. We may be offered a helping hand, but it is up to each of us to clasp it and then move off under our own power.

Never have the opportunities for self-help in FAA been better. Among the newest national programs, and one gaining momentum through the efforts of the employees themselves, is the Federal Aviation After-Hours College Opportunity Program—FAACOP for short—which you can read about on the facing page. The program represents a golden opportunity to capitalize on your FAA training, as well as other college-level work, and earn a degree.

The pilot programs that began at Dowling College in New York and Rivier College in Massachusetts (FAA WORLD, December 1972 and June 1973) now have been expanded, through an FAA contractor, because of their outstanding success. The blueprint is there for other offices and facilities to follow at the initiative of interested employees.

I am convinced that the rewards for your initiative can be great, leading you closer to achieving your personal goals, whether it be just self-improvement or enhancing your career opportunities by improving your knowledge and skills or by providing a base for further training in a new direction.

I urge FAA employees everywhere to get involved, to form higher-education committees in your communities and negotiate with local colleges to establish programs for your areas. You have everything to gain in reaching for the stars instead of blaming them.

Alexander P. Butterfield
ALEXANDER P. BUTTERFIELD
Administrator

CHANGE OF ADDRESS: FAA employees should send their changes of mailing address for FAA WORLD to the control point in the region or center where they are employed: AAC-44.3; AAL-52.1; ACE-20; AEA-20; AGL-13; ANA-14; ANE-14; ANW-14.7; APC-52; ARM-5; ASO-67.1; ASW-67A7; AWE-15; and Headquarters employees, AMS-112. You should not send change-of-address information to Washington. If you move from one region or center to another, you should submit your change of address to the region or center to which you move on Form 1720-9.



Jack Hardy (left) and Charles Hough (right) of the FAA Academy look over the Oklahoma City University campus with Connie Mack McCoy of the admissions office.

work and with classes arranged to suit their working hours.

The first fruits of the program appeared this summer when 33 FAAers from Dowling College on Long Island; six from Rivier College in Nashua, N.H.; 12 from Jones Business College in Jacksonville; eight from Westminster College in Salt Lake City; and six from Oklahoma City University donned caps and gowns for their graduations.

Among the first graduates was the chief of the New York ARTCC, Billie Vincent, who plans to continue toward a Master's degree at the State University of New York at Stony Brook, also on Long Island. Another graduate from the New York Center, Larry Greene, crowed, "It's a great experience. I had to drop out of college when I was younger, so I welcomed the opportunity to return to get a degree. I have the personal satisfaction of having reached one of my goals in life, and I also feel it will aid me in further job progression in the FAA."

The Boston program has maintained an enrollment of well over 100 per semester for its two years, which includes Air Traffic, Airway Facilities, data systems, administrative and managerial personnel. The Boston Center chief, Don Turner, who with the technical assistance of the Educational Research and Services Corp.—the current contractor for the program—was instrumental in setting up the initial program at Rivier College, is himself a student there. Says Turner, "The interest exhibited by the large number of our employees enrolled and by those who plan to enroll points to an in-depth understanding that continuing higher education is a worthwhile endeavor that bodes well for the future of the FAA and its employees."

His thoughts are echoed by Raymond Belanger, Director of the Air Traffic Service. "Participation in this program is a profitable investment of off-duty time in providing the participant with a broader cultural background; a greater opportunity for career progression; preparation for a second career; and a chance, in some cases, to accept the

Heading for The Ivied Halls

When a person stops learning, he stops growing. Many people reach plateaus in their lives and jobs, stymied by the lack of opportunity to carry on their educations and by other needs in raising families. Now, the way upward has been reopened for FAA employees through the FAACOP program.

The Federal Aviation After-Hours College Opportunity Program, which began just two years ago in Oakdale, Long Island, and Nashua, N.H., has spread across the land, thanks to the initiative of

FAA employees themselves and the Office of Train-

ing benefits. All air traffic employees so inclined

FEDERAL AVIATION AFTER-HOURS COLLEGE OPPORTUNITY PROGRAM

College	Enrollment Fall '73			Training Credit	Transfer Credit	Cost Per Credit	Degrees	Programs	Average Tuition	FAA Facilities
	AT	AF	FS							
Rivier, Nashua, N.H.	91	9	—	60	30	\$30	BS, BA, BBA	Bus Adm Accting Lib Arts	\$1500	Bos ARTCC Tower, FSS Manch Twr Bedford Twr Concord FSS
Johnson & Wales Providence, R.I.	25	—	—	60	30	\$27	BS	Mgmt Accting Data Sys Mkting	\$1450	Prov Twr radar, FSS GADO
Dowling, Oakdale, N.Y.	40	2	—	60	30	\$72	Bach Profssl & Lib Studies	General Studies	\$2365	NYARTCC McArt Twr & FSS
George Washington U., Washington, D.C.	NA			60	30	\$50	BS	General Studies	\$2425	Wash ARTCC DCA Twr, AFS
Stockton State, Pamona, N.J.	NA			16 (32 tot)	30	\$93	BS	Info- Science	\$535	NAFEC
Jones, Jacksonville, Fla.	112	—	—	60	30	\$18	BS	Mgmt Accting Data Proc	\$1225	Jax ARTCC Twr, FSS GADO
Memphis State U., Memphis, Tenn.	30	—	—	NA	NA	NA	AB, BS	NA	\$348	Mem ARTCC Twr, FSS GADO
Barry, Miami, Fla.	18	—	—	60	30	\$45	BS, BS in Prof & Lib Stud	General Studies	\$1720	Miami ARTCC Twr, FSS GADO
Embry-Riddle U., Miami, Fla.	13	—	—	60	30	\$45	BS in Profssl Aeronau	Aviation Mgmt	\$1260	Miami ARTCC Twr, FSS GADO
Marion, Indianapolis, Ind.	36	4	2	60 (add for DSS & AF)	30	\$50	BA	Bus Adm Accting Hum Res Lib Arts	\$2000	Chi ARTCC O'Hare Twr GADO
Baldwin Wallace, Berea, Ohio	30	—	—	60	30	\$35	AB, BS	Bus Lib Arts	\$2569	Cleve ARTCC Twr, FSS GADO
Aurora, Aurora, Ill.	NA			64	30	\$26	BS, BA	Accting Bus Lib Arts	\$1690	Ind ARTCC Twr, FSS GADO
Mankato State, Mankato, Minn.	33	—	—	60	30	\$45	BS, BA	Bus Lib Arts	\$145	Minn ARTCC Twr, FSS GADO
Mid-America Nazarene, Moberly, Mo.	30	—	—	60	30	\$45	BS, BA	Bus Lib Arts	\$145	Mid-America ARTCC Twr, FSS GADO



Four of this season's crop of six graduates from Rivier College are from the Boston ARTCC. From the left are Paul Cannon, Carl Amelio, Vernon Ellars and Patrick Murphy.



Three of the 33 Dowling College FAA graduates earned special honors last June. They are (left to right) Dan Downing (cum laude), Martin Issacson (magna cum laude) and Sidney Finkleberg (summa cum laude).



Signing a letter of agreement between the University of Northern Colorado and FAA are the university's president, Richard Bond (left) and Denver Center training officer Ray Lansbery. Others in the near background are (left to right) center chief Bill Bruce and Harold Eggers, AF Sector manager.

edge and professional training needed to achieve the individual's potential within the FAA. The program is seen as yielding employees with greater analytical ability, enhancing personal competence and communications proficiency, increasing confidence and providing a solid base of knowledge on which further training and experience can build.

It's also a means for controllers to prepare for a second career. As Wendell Cordeiro of the Honolulu Center puts it, "If I take early retirement, I'll need the degree. Especially anyone 40 years or older needs a degree if he expects to go into a new field or a second career. In the next few years, it will be even more difficult without a degree."

The program has infinite variations, according to the individual college concerned and the needs of the employees, but there are common denominators. The universities and colleges participating have recognized the value of the education and technical training obtained in the FAA to the extent that they generally allow up to half the credits required for a bachelor's degree to the training undertaken for journeyman status. Up to 30 additional credits are allowed for transfer credits from other institutions of higher learning. The colleges have liberal entrance requirements under the program. Entrance examinations are usually waived for FAA employees, and a high school diploma or equivalency in the GED tests is an adequate educational credential for enrollment in a degree program.

Many of the colleges offer reduced tuition rates for large FAA group enrollments and particularly when the courses are conducted other than in their own classrooms, such as at FAA facilities. In cases where the college is beyond the normal commuting distance from a facility and there is a large number of prospective students, colleges have agreed to conduct the courses at the facilities. One example is the external degree program offered at the Great Lakes Regional Office by Aurora College, some 50 miles away. Barry Clements, Flight Standards Division—the higher education committee chairman—spearheaded this particular effort.

Another unique program in the Chicago area is the Civil Rights-Training Branch effort to establish a two-year program at Oakton Community College for a group of more than 100 GS-1-7 FAAers who are interested in higher education.

Because many FAA employees work shifts, classes are often scheduled for the evening and repeated the next morning with the same instructor. Classes also may be videotaped to permit students to view sessions missed.

At the Boston Center, nine courses in liberal arts and business were repeated in the morning, where classes had minimum enrollments of 15. In the Washington area, however, where the Columbian College of George Washington University offers FAACOP courses at both the Washington ARTCC and the Washington National Tower twice a week, students may attend either of two classes scheduled on the same day—just prior to the evening shift and just after the end of the day shift.

The degrees offered vary according to the specialty of the college and the agreement negotiated by the particular higher-education committee. They range from aviation management to business administration, from general studies to computer science and engineering.

Norman Jones (standing), Director of Admissions for Mercer College in Atlanta, counsels Atlanta Tower controllers Doug Randolph (left) and Howard "Hank" Aaron as they take a Scholastic Achievement Test (SCAT).





It's a proud day for New York Center chief Billie Vincent and his family as Dowling College graduates him.

Commenting on this, Airway Facilities Service Director Jeff Cochran said, "FAACOP provides career-development opportunities that had not been within the reach of AF watchstanding personnel. The fields of study are being expanded to cover engineering. This has opened another avenue of conversion to engineering status, which is the long-range goal of many of our high-caliber technicians."

The nucleus of FAACOP is the higher-education committee. The first step in launching the program in a new area is to form one that represents all categories of FAA personnel from the facilities concerned. The committee serves to keep the employees continuously informed on program developments through meetings, reports and announcements. It makes the survey of employees to determine interest, selects the college, negotiates the agreement and promotes the program.

The survey questionnaire should request information on previous college education, interests, residence to work in miles, veteran status and courses desired.

When an after-hours college program has been organized, its membership should be expanded to include the college officials. While meetings may take place on agency time, after-hours work is sometimes needed to organize the program.

The committee should study regionally accredited, four-year colleges and universities in the area, obtaining catalogs, campus information publications and current schedules of day and evening classes.

The salient points to be considered are the accreditation, academic program and degree requirements, campus location as to employee convenience and whether agency facilities can be used, tuition costs and fees, continuing and non-traditional educational experience and counseling and special programs.

In the initial meetings with college officials, the committee should determine whether that college can meet the needs of the prospective students, followed by a presentation on the FAA mission, results of the employee survey and FAA training for equivalency credit evaluation. College officials then pay a field visit to FAA facilities. In developing a FAACOP, each institution appoints a faculty-evaluation committee that makes credit recommendations for FAA training.

Finally, the negotiated agreement should spell out all the above cited factors, as well as admission procedures; additional credit allowances through transfer, the College Level Examination Program and military schooling and experience; the planned flexible or dual scheduling of classes; veteran benefits and the forms needed.

Additional information and curriculum material can be obtained through regional training branches and the Management and General Training Division, ATR-200, including the publications, "Guidelines for Establishing After-Hours College Opportunity Programs" and "Guide to the Evaluation of Educational Experience in the FAA."

Summing up the program, Howard Richardson, Director of the Office of Training, said, "FAACOP not only provides all qualified FAA employees the opportunity for personal growth, but it gives the agency the chance to realize the greatest potential from its workforce. It's a unique effort in government that will continue to grow, and I hope other agencies will be able to avail themselves of FAA's pioneering approach."

What is your facility doing about FAACOP?



The Milwaukee higher-education committee looks over a university prospectus with James Strnad (striped tie), Office of Training, and FAACOP contractor James Morrisor (right). The committee members are (from the left) Dona Carter, Milwaukee AF Sector SET; Ronald Tuck, Mitche. Field controller; Christine Fitas, Timmerman Airport controller; Robert Gerde, GADO operations inspector; and Gene Urbik of the Great Lakes Region Training Branch.

Federal Notebook

PENSION RATIONALIZATION FAILS
A House-Senate conference on bills to liberalize annuity survivor benefits has failed to reach an agreement. While some hope was seen, many believe legislation is dead for this session. The Senate measure would eliminate the annuity reduction when the retiree outlives the beneficiary. The House bill would eliminate the reduction completely. Legislation is expected to be reintroduced early next year.

by those who retire on disability and still are able to work at other jobs. Union leaders are opposed to these provisions.

SICK LEAVE TO COST MORE
The House Ways and Means Committee wants to eliminate the \$100-per-week sick leave tax exclusion and limit the tax exclusion for those who retire on disability. The \$5,200 exclusion would still apply to those totally and permanently disabled; however, it would be reduced dollar-for-dollar if the retiree drew more than \$10,000. If he earned \$15,200, his exclusion would be completely eliminated. The provision attached to the general tax reform bill is designed to curb abuses

PAY COMPARABILITY
Many are balking at how the pay comparability system operates, and so does a General Accounting Office report, which suggests that white-collar Federal employees should be compensated for the six-month lag between the private-sector pay survey and the actual pay adjustment. The surveys are conducted January through May, reflecting the actual rate in March, resulting, according to the GAO, in the loss of half or more of the value of the raise in the first year. ■ At this writing, OMB and CSC have recommended a 5.52% white collar comparability pay raise to be effective for the first pay period this month, which begins October 13. While the unions complain it's too low, the President wants to delay the raise to January. If Congress doesn't go along, here's what you can expect this month:

Federal Pay Chart

GRADE	1	2	3	4	5	6	7	8	9	10
GS-1	\$ 5,294	\$ 5,470	\$ 5,646	\$ 5,822	\$ 5,998	\$ 6,174	\$ 6,350	\$ 6,526	\$ 6,702	\$ 6,878
GS-2	5,996	6,196	6,396	6,596	6,796	6,996	7,196	7,396	7,596	7,796
GS-3	6,764	6,989	7,214	7,439	7,664	7,889	8,114	8,339	8,564	8,789
GS-4	7,596	7,849	8,102	8,355	8,608	8,861	9,114	9,367	9,620	9,873
GS-5	8,500	8,783	9,066	9,349	9,632	9,915	10,198	10,481	10,764	11,047
GS-6	9,473	9,789	10,105	10,421	10,737	11,053	11,369	11,685	12,001	12,317
GS-7	10,520	10,871	11,222	11,573	11,924	12,275	12,626	12,977	13,328	13,679
GS-8	11,640	12,028	12,416	12,804	13,192	13,580	13,968	14,356	14,744	15,132
GS-9	12,841	13,269	13,697	14,125	14,553	14,981	15,409	15,837	16,265	16,693
GS-10	14,117	14,588	15,059	15,530	16,001	16,472	16,943	17,414	17,885	18,356
GS-11	15,481	15,997	16,513	17,029	17,545	18,061	18,577	19,093	19,609	20,125
GS-12	18,463	19,078	19,693	20,308	20,923	21,538	22,153	22,768	23,383	23,998
GS-13	21,816	22,543	23,270	23,997	24,724	25,451	26,178	26,905	27,632	28,359
GS-14	25,581	26,434	27,287	28,140	28,993	29,846	30,699	31,552	32,405	32,258
GS-15	29,818	30,812	31,806	32,800	33,794	34,788	35,782	36,776*	37,770*	38,764*
GS-16	34,607	35,761	36,915*	38,069*	39,223*	40,377*	41,531*	42,685*	43,839*	
GS-17	40,082*	41,397*	42,732*	44,067*	45,402*					
GS-18	46,336*									

* The rate of basic pay for employees at these rates is limited by section 5308 title 5 of the United States Code to the rate for level V of the Executive Schedule (currently \$36,000).



HANGING IN THERE



**Newest airborne sport draws
Flight Standards' attention**

For hang glider pilots, there seems to be no greater thrill in the world than running from the crest of a hill, lifting gently into the air and gliding breezily down the slope as the glider responds to the pilot's own body movements. The skilled pilot flares his glider (raises the nose) while still a few feet from the ground, slows to walking speed and drops deftly to the surface on bi-ped landing gear.

Almost unheard of four years ago, the sport of hang gliding has grown at breakneck speed from obscure beginnings in southern California to nationwide popularity. Unfortunately, the sport has also broken a few necks, but most hang-gliding enthusiasts are anxious to promote safety throughout the sport. They are equally anxious to avoid regulation of any kind, including any by FAA—all the more reason for their hope to achieve a good record.

In May 1971, the first annual Otto Lilienthal hang-gliding meet was held at Capistrano Beach, Calif., and drew about 25 contestants. The event received wide press coverage and sent hang-gliding on its way as the latest wrinkle in the art of flying.

It should be noted that hang gliding really began with Otto Lilienthal, who made pioneering gliding experiments in Germany in the late 1800s and who

died in the crash of his "bat-wing" hang glider in 1896.

There are now from 5,000 to 10,000 hang glider pilots, a U.S. Hang Gliding Association, a Hang Glider Manufacturer's Association and numerous hang gliding clubs scattered across the U.S.

There is also the Federal Aviation Administration. FAA has been observing the sport with benevolent but watchful eyes while hang-gliding devotees have been watching FAA and the government in general, like frolicking kids wary of their parents.

The agency's view, as always, is that any possible regulation would be primarily to protect the public, and by extension, the participants. For example, this philosophy underlies FAA's rules on parachute-jumping. Jumpers are not certified, but there are rules on the kinds of locations where jumps can be made and on advance notification to FAA when jumps are planned. A similar view might apply to hang-gliding, but no decision has yet been reached.

The real problem would arise if hang gliders begin to fly in the "airspace"; that is, if they got up where airplanes are likely to be found, which could be anywhere above 500 feet, or even below that altitude over water or sparsely populated land. Already, some sky-surfers are jumping off mountains far above that height, and the new rigid-wing hang gliders are able to soar on wind currents higher than the point of takeoff.

Most of the photos taken at Nags Head, N.C., were made by Brad Banks, 17-year-old son of Sam Banks, chief of the Raleigh, N.C., GADO.



At the second annual Tactile Flight Meet at Nags Head, N.C., last June, Doug Moore and Roger Jones (left to right) of the Southern Region Flight Standards Division spoke with this lady contestant, among other competitors, along with region photographer Bob Lewis (right).

Then there is the problem of low flying over people, houses, etc. Here, of course, the problem isn't as serious as it would be with airplanes, since hang gliders, as a club official says, can't crash in a ball of fuel-fed fire. FAA, however, has received reports of glider collisions with "bathing beauties on the beach," and at least two pilots have died in collisions with power lines. About two dozen others have plunged fatally to the ground.

FAA's first official words on the sport are contained in an Advisory Circular issued in May of this year. A hang-gliding publication took note of the circular in a story headlined, "The Giant Awakens." In the circular, the agency says "FAA is interested in this activity . . . It is the FAA's intent to observe the growth and safety status of this activity as it

progresses and to continually assess the need for FAA involvement."

The circular suggests that flights be made less than 500 feet above the general terrain; away from clouds; outside controlled airspace; away from populated areas; and at least five miles from airports. It also urges manufacturers, clubs and others to set standards for hang-glider construction and pilot training and to foster safety programs.

Issuance of the circular was received by glider groups with a strong note of warning to their members that the continued "freedom" of the sport from governmental regulation depends on a good safety record. As one club official put it, "The safety image of the sport is on the line with every flight."

The biggest danger of hang-gliding appears at first glance to be the likelihood of the pilot falling out of his or her craft. In fact, the really serious dangers are the same as those known to pilots of powered airplanes; stall and loss of control.

Because the gliders fly at slow speeds to begin with, only a small loss of airspeed can cause a stall. Since pilots generally fly no more than a few hundred feet high, there is less room to regain control. Also, the gliders are very susceptible to loss of control from wind gusts; there is universal agreement that hang gliders should not be flown in winds stronger than 15-20 mph. Beginners are strongly advised to fly in winds no greater than 10 mph. It is also foolhardy and sometimes fatal to tow the gliders behind vehicles, because gliders designed for foot launches aren't strong enough to withstand a tow.

On the bright side, hang-glider pilots feel an exhilaration when flying that seems to surpass that found in most other human activity. They even write poems about it:



A running start . . .

Gear lowered!





Photo by Floyd Clark, Caltech

Invasion of the Rogallos—Flexible sail-wing design was conceived and patented about 25 years ago by now-retired NASA engineer Francis Rogallo.



The ultimate in ultralight rigid-wing gliders: Carrying builder and pilot Volmer Jensen, it has mechanical controls much like an airplane for pitch, roll and yaw. Other rigid-wing gliders depend on body movement.

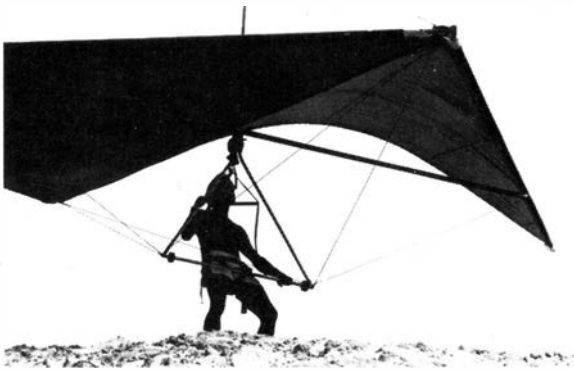


*... Your sail is filled with
The breath of the sky
And the life that it gives
As it passes you by
As you wheel and turn
You understand why
Since man was born
He has wanted to fly . . .
(Anthony Matthews)*

Dangling from 30 to 100 pounds of glider, pilots come closer to true flight—bird flight—than anyone has before, with the possible exception of angels. Pilots speak of the experience with reverence and delight.

A full-scale industry has developed around hang-gliding—complete with manufacturers, dealers, associations, clubs, flying schools and a national magazine. Although industry members exhibit a certain degree of paranoia about possible FAA regulation (“Hang Loose 321, cleared to the beach via direct from the dunes, maintain VFR below 400 while in the TCA, departure control frequency is 124.3, squawk 0700 . . .”), they responded cordially and helpfully when the agency sent Charles Schuck and Larry Youngren of the Flight Standards Service on a fact-finding trip into the world of hang-gliding last January.

Lloyd Licher, President of the U.S. Hang Gliding Association, wrote back to FAA: “We will certainly



do our best to earn FAA's trust and discharge the responsibility we have to make hang-gliding a safe, rewarding form of flight . . ."

In July, the agency followed up the Advisory Circular with another official piece of paper related to the sport. A Notice was sent to all Flight Standards regional divisions and field offices asking for reports about activities in the sport—especially incidents and accidents—to help Washington decide what the agency's next step, if any, should be.

There's no doubt that FAA is just as anxious to see safety in the sport as the glider manufacturer who said that the hang-gliding fraternity must show FAA "we're not just a bunch of nuts jumping off cliffs."

—By Don Braun

HEADS UP

ALASKAN

Donald T. Keil, former senior management analyst in the DOT Office of the Secretary, has reported in as regional executive officer . . . the new chief of the Anchorage GADO is *Albert Crook* . . . *Ernest Mundt* was selected as Juneau assistant sector manager.

CENTRAL

Don Early has moved from chief of the Milwaukee Mitchell Tower to chief of the St. Louis Tower.

GREAT LAKES

Assistant chief *Alan Schwitz* has transferred from the Indianapolis Tower to the Toledo, Ohio, Tower . . . The new chief of the Chicago ARTCC is *Roger Brubaker*, deputy chief of the Minneapolis Center . . . *Temple Johnson* from the Southwest Region Operations Branch is chief of Milwaukee Mitchell Tower.

NAFEC

George Bates has been named chief of the Communications & Guidance Division . . . *Loring Craymer* has been tapped for chief of the Aircraft & Airports Safety Division.

NORTHWEST

Assistant chief *Larry Henriques* of the Seattle FSS has been selected as chief of the Walla Walla, Wash., FSS.

SOUTHERN

Taking over as chief of the Valdosta, Ga., Tower is *Gerald Smith*, formerly chief of the Orlando, Fla., Tower . . . Moving from the Jacksonville, Fla., Tower to his new job as chief of the Brunswick, Ga., Tower is *Harold Wilson* . . . *Richard Lien* has been selected for the deputy chief's slot at the San Juan International Tower . . . the former assistant chief of San Juan's Isla Grande Tower, *John Atkinson*, was picked as chief of the Craig Tower in Jacksonville.

SOUTHWESTERN

El Paso, Tex., Tower chief *Earl Wolfe* has become the new chief of the Houston Intercontinental Tower . . . *John Greene* has been chosen as assistant sector manager for the Albuquerque AFS.

WESTERN

Charles Horner has moved from the Oakland, Calif., TRACON to become an assistant chief of the Sacramento, Calif., Tower . . . the new chief of the Oakland TRACON is *Vince Mellone*, who comes from the chief's job at O'Hare International Airport.

FACES and PLACES

SOME PEOPLE HAVE ALL THE LUCK—Sandy Bathon, a developmental controller at the Madison, Wis., Tower, took a familiarization ride in a TF-102 jet piloted by Capt. Dave Thompson of the Air National Guard 115th Fighter Group, based at Truax Field. Despite some butterflies, she was enthusiastic enough to have the jet go through its paces.



TRACKING ON EEO—Honoring Denver Mayor William McNichols (left) and the City Council for the success of three minority-owned concessions at Stapleton International Airport (Chinese, Spanish and Black) are (left to right) Leaford Williams, FAA Office of Civil Rights; Herman Flora, Office of Minority Business Enterprise, Department of Commerce; Robert Michael, Denver Director of Aviation; and I.H. Hoover, Rocky Mountain Region Deputy Director.

TOP SECURITY—All four of Southwest's Air Transportation Security Field Office chiefs—(left to right) Marcus Wright, Dallas-Fort Worth; Richard de la Garza, San Antonio; Stewart Newman, New Orleans; and Irwin Horn, Houston—received Special Achievement Awards at the region's All Chiefs Conference for their role in cutting skyjackings.

RECOGNITION — Don Turner (right), chief of the Boston Center, accepts an award from Col. Richard Byrpee, commander of the Strategic Air Command's 509th Bomb Wing at Pease AFB, for the outstanding support for SAC over the years by the ARTCC's men and women.





OLD BIRDS NEVER DIE—Ray Stephen (right) offers some pointers on the control system of his vintage 1929 Ford Trimotor prior to his taking a proficiency check ride from accident prevention specialist Jerry Widmayer of the San Jose, Calif., GADO. It was a novel experience for him.



A CAREER ENDS—Raymond G. Smith, formerly chief of the Airway Facilities Evaluation Staff, who designed and implemented the first effective evaluation system for AF, received a Distinguished Career Service Award plaque from Administrator Alexander P. Butterfield.



SORE-FINGERED BRIGADE—Bedecked with miles of adding machine tape, these five women of Alaska's Employee Accounts Section, Accounting and Audit Division, punched out about 22,000 calculations to get out retroactive paychecks on time to the region's 1,600 employees. They netted individual Special Achievement Awards for their efforts. From the left are Alice Miller, Wilma Stymans, Elinor May, Cleo Ossenkop and Virginia Wilhoit.



CHIEF TO CHIEF—The personnel action promoting him to chief of the Eastern Region Procurement Branch is presented to Charles Jamison (left) by Logistics Division chief Thomas Lynch. Jamison did a stint in the Pacific Region prior to returning to New York in 1972.

MEMORY LANE—On hand for the opening of a Lighter-Than-Air exhibit at the Pate Museum of Transportation near Fort Worth, Tex., was Lt. Cdr. Frederick Tobin (second from left), veteran airshipman of the '20s and '30s; and Thom Hook (right), Office of Information Services, who is the author of a book on the airship "Shenandoah" and helped the museum locate memorabilia on the subject.



THE HIJACKER'S NEMESIS



As he puts it, James T. Murphy used to be in the “hijack management” business. But he worked himself out of a job and hopes that there will never again be a need for his specialty.

For almost two and a half years, Murphy, a former FBI agent, was the man in charge of the FAA’s antihijacking team. His team appears to have won, because there hasn’t been a successful hijacking of a scheduled airline since November of 1972.

But when he was appointed to head the Office of Air Transportation Security in September of 1971, hijackings were occurring with alarming frequency and civilian aviation in this country was facing a crisis.

His assignment was to prevent hijackings where possible and to handle them with a minimum of deaths or injuries when he couldn’t. The extent to which he and his staff succeeded is reflected in the big zero in the current hijacking statistics and the fact that the National Civil Service League selected him for its 1974 Award for Special Achievement.

In March of this year, Murphy moved on to become director of the Metropolitan Washington Airport Service, but the team is still there, ready to go into action again if necessary.

In his modern and spacious office at Washington National Airport, Murphy, whose Irish humor can’t help but break through even when he is talking about the most serious matters, looked back on those two and a half years and said, “The name of the game right from the beginning was to get adequate screening on the ground. The worst place in the

world to try to stop a hijacking is on a plane 30,000 feet in the air.

“We didn’t have much to start with,” he continued. “A special FAA Anti-Hijacking Task Force had developed a behavioral profile and other techniques to help identify potential hijackers. But compliance was voluntary, and only one airline—Eastern—was using it.

“We didn’t have any equipment to speak of and not much cooperation from the airlines. At the same time, the flight crews were screaming for help.”

Running his fingers through his thick black hair graying at the sides, Murphy explained that a recurring problem was that the airlines were not fully cooperating with the then-voluntary ground screening program, because they feared that their passengers would resent having themselves and their carry-on luggage searched.

“They thought the passengers wouldn’t stand still for being searched, while the truth is that most of them wouldn’t stand still for not being searched.”

There was some resentment, Murphy continued, and it mostly had to do with the searching of women’s purses. “Many women think of their purses as very private things, and the thought of having them searched is comparable to someone else reading their mail.

“But the x-ray machines that came along later solved that problem,” Murphy continued. “They don’t seem to mind having them x-rayed.”

Murphy breaks the hijackings down into three phases. “First came the homesick Cubans, then the

political terrorists and then the extortionists.”

Murphy, who was with the FBI for 10 years and with the Department of Labor for three before coming to the FAA in 1963, said the problem of air-traffic cooperation persisted during the first two phases.

But the problem was solved indirectly, he said, by the man calling himself D. B. Cooper who, on the night before Thanksgiving in 1971, started the rash of hijackings for extortion.

“We began getting cooperation,” Murphy said, “when the airlines started getting hit by extortion and had to pay to get their aircraft back.”

As the drive to stop hijackings by ground screening continued—voluntarily at first and finally on a mandatory basis—Murphy and his staff also had to work out a method for, as he describes it, “managing” those that did take place.

“To do this,” he continued, “We set up a sophisticated hijack management center in a room behind the communications center in the FAA headquarters building. Whenever we had a hijacking, that’s where we would go.

“We had open lines to the airports involved, to senior airline officials with authority to make decisions, the FBI hijacking desk, the White House situation room, The National Military Command Center at the Pentagon and the State Department.

“And,” Murphy added, “There was always at least one psychologist there to advise us on the type of person we were dealing with.

“We didn’t have any orders, any memos—nothing down on paper. We just worked together to manage the hijackings, and we got to know each other pretty well.

“Our priorities,” he said, extending a finger, “were always the same. One, get the plane down. Two, get the passengers off. Three, get the crew off. Then, we could deal with the hijacker.”

A WHIFF OF TOMORROW'S AIR SECURITY

An electronic nose that can discreetly sniff out explosives and a “smart” x-ray machine that can spot firearms and explosives by itself—these are among the advanced anti-hijacking devices that FAA is now working on and hopes to have available for service in the next few years.

Further down the road, depending on whether the technical problems can be worked out, is a system that could sniff out an entire aircraft for explosives and flash a green light on the flight deck to show that all is clear.

According to Arthur R. Beier, program manager for security in the Systems Research and Development Service, the electronic nose would involve a sensor that could detect the odor of explosives. It would quietly and unobtrusively check out boarding passengers after they had been gone over for firearms by a metal detector. In a test next year, Beier expects to find that the nose knows all, as it extracts the odor of people and distinguishes it, perfume and shoe polish from that of explosives. In these days of unisex styles, the sensor even may be able to distinguish male from female!

The “smart” x-ray machine would not show a picture of the contents of carry-on luggage; instead, it would recognize firearms and explosives and trigger an alarm. It would be superior to the machines now in use, Beier said, because it would not require watching by an operator, who might get tired or be distracted by a pretty face.

The system for checking out an entire aircraft is probably many years away, Beier warns, but when and if it is developed, he believes it would eliminate the need for costly unloading and searching an aircraft every time a bomb threat is received.

“If we got a bomb threat,” Beier explained, “we could just ask the pilot to check. If the green light came on, he could just say, ‘thanks, but we know there’s no bomb aboard.’”

Leaning back in his chair, Murphy said, “In retrospect, we were lucky. Aviation was getting into deep trouble in 1971 and 1972. Sooner or later we were bound to lose an airplane. I just don’t see how we didn’t.”

A former journalism student and a bombardier-navigator in World War II, Murphy said that, in





all, there were 19 extortion hijackings and that “only one of them got away with it, if he’s still alive. That was D. B. Cooper. He caught us by surprise.”

The last hijacking of a scheduled airliner involved a Southern Airlines jet that wound up in Cuba after an erratic flight up and down the East Coast and in which the co-pilot was shot and wounded by the hijacker.

Shortly thereafter, the FAA issued regulations requiring that all boarding passengers be screened and their carry-on luggage be inspected. It also required an armed guard at each gate. This was followed by an accord with the Cuban government under which it agreed to return or punish any hijackers seeking refuge in that country.

There have been three hijacking attempts since then. In two cases, the hijacker surrendered while the plane was still on the ground. In the other, the hijacker killed a guard and then himself after having been wounded by a policeman.

Will there ever come a time when we can relax our anti-hijacking procedures?

“I don’t foresee an end for a long time,” Murphy said. “How do you let go? At what point do you satisfy yourself that you don’t have a problem anymore?”

“There could be some technological advances in the future that might make it easier, but, for now, it’s a real problem.”

Meanwhile, the team Murphy put together is still intact—in terms of the specialties involved if not necessarily the same individuals—under Richard F. Lally, the head of the newly created Office of Civil Aviation Security. And the hijack management center is still there.

—By Fred Farrar



BIRTHDAY BLOWOUT . . . When the subject is airport security, it’s always better to be safe than sorry. So when a young man was observed recently at Washington National Airport secreting a package between two vending machines near a busy airline gate, FAA police called in the bomb squad along with specially trained “sniffer dogs.” Because one of the dogs reacted positively to the package and an x-ray scan showed a suspicious blob inside, the neatly-wrapped box was taken to an isolated spot by the bomb squad and detonated with a small charge. Fortunately, this time, no bomb was found. Only a birthday cake . . . or what was left of a birthday cake.

ARNIE’S AIRLINE . . . For years, golfing has been Arnold Palmer’s vocation and flying his avocation. Now with tournament victories coming farther apart, he’s looking to turn a buck with his Lear Jet and has obtained a Part 136 Air Taxi/Commercial Operator Certificate from FAA’s Pittsburgh GADO. Initially, his company will provide on-demand charter service from his home base in Latrobe, Pa. Who knows? . . . If he’s anywhere near as successful in the flying business as he was on the Pro Tour, United American, PanAm and the rest had better move over.

FAIRWAYS OR FOUL . . . While we’re on the subject, one of the dumbest things anyone can do is to beat his/her boss at golf. With this in mind then, we’ve concluded that there are a lot of smart people working for FAA in the Pacific-Asia Region. The regional office in Honolulu recently held its annual championship golf tournament, and Regional Director Jack Webb won.

OPEN DOOR/CLOSED MOUTH . . . A door from a light airplane turned up in the parking lot of a Ft. Smith, Ark., motel not long ago and the Little Rock GADO inspectors have been looking for its owner ever since. So far their efforts have been vain and one wonders if the owner isn’t afraid someone will ask him embarrassing questions about that motel.

HOW TO MAKE

A BLIP

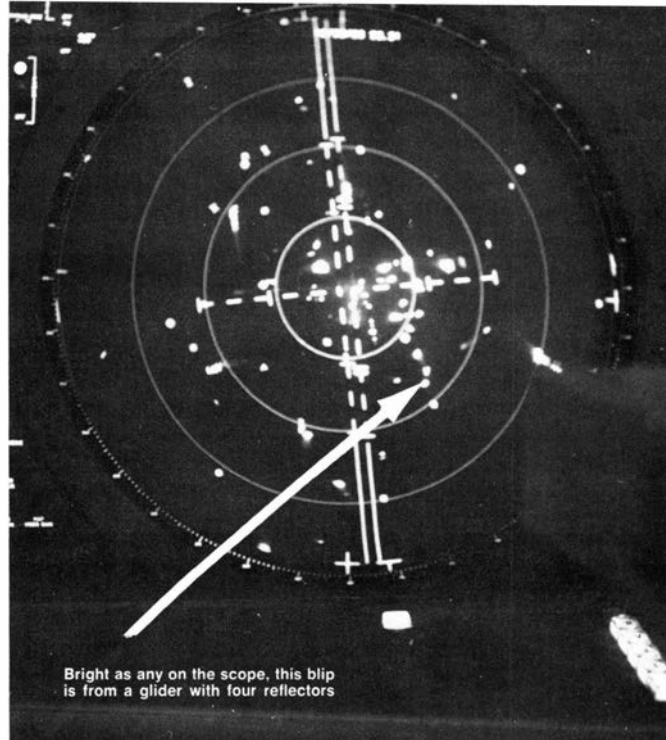
Photos by Henry Lile

The average sailplane doesn't exist for the radar controller. Its wood, fiberglass, fabric and even steel-tube construction provides virtually no reflective return on the scope. The only way he knows the glider is there is when its pilot calls in on a radio or a powered pilot reports a near miss.

In the vicinity of an airport, this can be a real problem for maintaining separation. With the growth of sailplanes operating from Harvey Young Airport near Tulsa International Airport and a number of reported near misses, accident prevention specialist Jay Nelson of the Tulsa GADO began seeking a solution, "short of requiring transponders in all gliders." Some sailplanes do carry battery-powered radios and transponders, which are used only when absolutely necessary, he pointed out, but that doesn't solve the problem.

"The radar controllers set up a class scale for blips 'one to five,'" Nelson explained, "with one being an absolute minimum target for traffic identification. With the cooperation of the Tulsa Skyhawks Soaring Club, we tested a glider in normal flight; the scope painted a target that was classed at from zero to one-half. I found out that since the radar cancels out a stationary or slow-moving target—under about 40 mph—a glider circling in a thermal shows no return."

With the help of Tulsa avionics inspector Don Stroud, Airway Facilities Sector personnel and McDonnell-Douglas radar technician Bob Burkhart,



Nelson designed several types of radar reflectors, each of which was test flown by the soaring club. Their criteria demanded that, aside from doing the job, the reflectors had to be extremely cheap and easily built by almost anyone. "On the flight of the successful design using two reflectors," Nelson reported, "an excellent return was made on the scope, but the target was still intermittently on and off during a 360-degree turn. With four reflectors installed however, we had a continuous target at all times through all normal maneuvers." One reflector was placed aft in the fuselage and the other three were staggered behind the rear seat to avoid canceling out in varying attitudes.

The reflector consists of two triangular pieces of aluminum interlocked at right angles on each side of a square of aluminum. Each unit can be built in 20 minutes or less, according to Nelson, and using scrap aluminum and pop rivets, it should cost under 50 cents. The .020 material used made each unit about 3½ ounces, but any thickness rigid enough to hold its shape under the normal shocks of takeoff and landing or turbulence will do. Nelson pointed out that the reflector installation constitutes a minor change and doesn't require formal approval, but good aeronautical procedures should be used in mounting.

Witnessing the successful demonstration in the IFR room, Tulsa Tower watch supervisor Carl Walker commented, "It worked real well; we'll be able to see the gliders now. It makes all the difference in the world." With the "five" reading they got on the scope—brighter than the blips from some powered aircraft—Nelson believes the sailplane reflectors are good enough to be used nationally.

Accident prevention specialist Jay Nelson (left) demonstrates the positioning of reflectors with Jim Rhine, operations manager of the Tulsa Skyhawks Soaring Club.



DIRECT LINE



- Q. I was due a step increase from 7 to 8 last year when I took a downgrade that put me in step 10. This year will be my fourth in which I have not received a salary increase. Am I to assume that someone in step 10 who is unsuccessful in getting a higher grade through MPP, obviously because of age, must be satisfied to remain that way until retirement?**
- A. Unfortunately, once an employee reaches the maximum rate of pay for a grade, there is no entitlement to further advancement. As you have pointed out, securing a position at a higher grade or one that has greater career progression would resolve the income problem. There is now a provision of law that prohibits discrimination on the basis of age in the Federal sector. Persons who wish to file a discrimination complaint on this basis must have been at least 40 and less than 65 years of age at the time the alleged offense occurred and not prior to May 1, 1974. If you believe that your advancement to positions of higher grade levels or to those with greater career progression has been hampered because of your age, you should contact an EEO counselor at your facility, who will make an initial judgment on your claim. Should you wish detailed information regarding the discrimination complaint process, get in touch with your regional Civil Rights Staff.**
- Q. Why is unnecessary watch rotation condoned or encouraged? Reports indicate that FAA medical authorities are concerned with the effect of jet lag—irregular working/traveling hours of airline pilots and passengers. Doesn't the rapidly rotating watch schedule—sometimes five changes in a basic five-day workweek—have a similar effect on ATCSs, resulting in fatigue, affecting judgment and morale and showing up in sick leave, early retirement and job dissatisfaction? Exceptional cases when Ch4 12a must be disregarded are rare, whereas the multi-rotation of the watch is the rule rather than the exception in many facilities. The reason usually given is that the employees want it that way, which may be true. But do you think they should be allowed to drink on the job, too, if they want to? I believe that the violation of P3600.3 is definitely detrimental to the effectiveness of a facility. If we are concerned with**
- the flying public, shouldn't we be more concerned with the employee?**
- A. Shift rotation may be considered an unpleasant feature of a career in air traffic control. However, aviation activity, efficiency and economy of operations make it unavoidable. FAA has been concerned about the possible effects of rotating shifts on employees. The agency's Civil Aeromedical Institute in Oklahoma City has conducted research in this area. Their conclusions were that irregular shift schedules were not detrimental to the health of employees. In many facilities, the practice is to allow the employees to have their choice to the greatest extent possible.**
- Q. In the past two years, I have seen many center and tower people not make the grade in their options and then are sent to FSSs. If this is an FAA policy, why doesn't it apply both ways? I have never seen an FSS washout who transferred to a center or tower.**
- A. The reassignment of an individual who fails to meet the rigorous training demands of the FSS to either the terminal or enroute options is not considered to be in the best interest of the individual or the agency. The training demands placed on terminal and enroute specialists, coupled with the recognized stress associated with the actual control of aircraft, preclude a change from FSS to those options.**
- Q. Is there any specific point at which a person's workload warrants a grade increase or a division of workload? I am a GS-856-12 unit supervisor at sector office with the responsibility for 39 facilities that are spread over a large area. The most remote ones are separated by about 250 miles. The unit's authorized staffing is 16, of which the majority are GS-856-11s. The policy of equal pay for equal work seems a bit ridiculous when there are other unit supervisors of equal or higher grade with many fewer facilities and as few as three technicians to supervise. I want to express my appreciation for the excellent replies to two previously submitted questions. Not only were the answers excellent, but the policies I was questioning were changed soon thereafter. Maybe my luck will hold up for three in a row.**
- A. We are unable to fully answer your question based on the information furnished. Two out of three isn't bad. The pertinent missing facts are those concerned with your unit's organizational makeup—whether it is based in a single location or scattered over the 250 miles you mention. If the employees are scattered, we would have to know the numbers concentrated in various places. However, we can provide some guidance for further investigation on your part. Sector Field Offices frequently cover large geographic areas, but we consider it extremely unusual for a "unit" of any kind to do so. The requirement to supervise 15 subordinates spread over a 250-mile area may well present some unique supervisory problems you as well as the employees supervised. We suggest you discuss the organizational structure with your supervisor. It may be that a more effective organization that places**

less of a burden on you could be implemented. If the organization cannot be changed, we suggest you request your position be reviewed and evaluated by the regional Manpower Division. The number of subordinates one supervises does not of itself determine the supervisor's grade; however, 15 subordinates is a rather large number at the first supervisory level. A position classification specialist can consider all the factors and make a fair determination.

Q. I recently heard that any government employee can obtain a free physical examination at his request. Is this true? If so, what order covers it?

A. There is no program to provide physical examinations for all Federal employees. Most agencies try to provide examinations on the basis of program needs, such as for air traffic controllers, policemen, firemen and pilots, wherein the employee's health and/or the public safety may be directly affected by the duties of the job. Additional programs of health maintenance are sometimes provided on a limited basis, always subject to availability of funds and medical resources.

Q. I was placed on sick leave in April with a total disability. I will retire in May, 1975 when my sick leave runs out. I carried over 240 hours of annual leave from 1973 and have used no annual leave this year. I was scheduled for annual leave for this November prior to my disability. According to the new leave law, I understand that my accumulated leave for 1974 and 1975 will be placed in a separate leave account and, upon retiring, I will be paid a lump sum, which will include the 240 hours carried over from 1973 and leave accumulated during 1974 and 1975. Am I correct in this interpretation?

A. The new leave law (PL 93-181) provides for the restoration to a separate leave account of annual leave that is forfeited because of sickness. The law requires that the annual leave must be scheduled in advance to be eligible for restoration. Civil Service Commission regulations require that the sickness be of such duration as to preclude the rescheduling or use of the annual leave. In your case, if the annual leave was scheduled in writing for use in November, then nothing needs to be done until the annual leave is forfeited. If the annual leave was not requested and approved in writing, then it must be so requested before November 24. You may request to have the forfeited leave restored to a separate leave account, but the restoration may not be requested before the end of the 1974 leave year. Upon separation, an employee is entitled to a lump-sum leave payment for his carry-over leave balance, plus his restored and unused annual leave, plus his earned and unused annual leave for the year of separation, in this case, 1975. You may obtain more information from your regional Manpower Division.

What is the purpose of the non-competitive examination for women and minorities, other than allowing individuals who cannot compete to become FAA employees? An EEO recruiter explains that they only

have to make a grade of 70, and from personal observation, I have seen that they are hired almost immediately. White men who make in the 90s have told me their grade is so low they are kept waiting over five years on the Civil Service register and have no hope of ever competing with minorities and women who are given special treatment. In all honesty, what can possibly be accomplished by lowering the quality of employees and their work output, except to increase the number of such people within the organization?

A. The Civil Service Commission has delegated to FAA the authority to administer competitive tests to all interested candidates. Those who are recent veterans and qualify for Veterans' Readjustment Act appointments and status employees who qualify for non-competitive appointments under the provisions of FPM Chapter 210 of Supplement 990-1 and who meet all other qualifications required for the position may be appointed directly by the agency. Selecting officials follow the same ranking criteria required for competitive appointments—rating plus qualifications—in making these non-competitive appointments. From all indications, this method of hiring has resulted in satisfactory job performance. Since the test is administered to all applicants for ATC positions, those individuals taking the test but not eligible for non-competitive placement are referred to the CSC for entry onto the register. This type of recruitment and placement activity is part of national Federal employment policy practiced by all Federal agencies. If the result of this procedure is that FAA not only meets its mission-oriented recruiting needs but also meets Presidential directives to include qualified minorities and women in the workforce at a level commensurate with their qualifications, then we as an agency are successfully achieving both compatible employment objectives.

Q. The Great Lakes regional office seems to be more impressed with facility chiefs' writing of lengthy orders than getting airplanes landed safely. We are getting so involved in writing lengthy directives that they have forgotten that our mission is landing airplanes. Why do they judge our facility by the piles of directives we submit? We should be judged by how few accidents we have.

A. Let me reassure you that the number one item in our endeavor to provide air traffic service to the flying public has not changed; it will always be safety. Preventing the collision of aircraft and providing assistance to pilots is still the name of the game. Along with fulfilling your responsibilities as a facility chief, keep in mind when preparing directives that they should be easy to read and able to be understood by all users. It is true that long and involved writing styles are a waste of the reader's time. Make it simple and keep it short. Write so that the reader gets your message easily and quickly. Make sure that your message can be interpreted only one way—the way you intend it. The Great Lakes Region ATD is not opposed to criticism, and if it appears that they are concerned with other than the main purpose, let them know. Mr. Jack Wubbolding will be glad to discuss the situation.

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NEW GANDER AT A GOOSE

Some airplanes never die; they don't even fade away. Following World War II, the C-47 lost its military colors and came back as the DC-3 to stay and stay. A stablemate of the same era is the Grumman Goose, and one recently cropped up sporting turboprop engines.

Western Region Aircraft Engineering Division personnel hardly expected to be working in 1974 on a Supplemental Type Certification for a 1940 airplane. Nevertheless, they found themselves in the rain on Lake Berryessa in northern California aboard this Department of the Interior aircraft

operated by the Fish and Wildlife Service. Napa County Park rangers were instigating the test, having surveyed the landing strip that permitted FAA engine complete the landing and takeoff tests in and one morning.

Normally powered by a pair of 450 Whitney radial engines, the Goose in this conversion has new nacelles with a pair of Garrett Air-Research turbine engines. With the Supplemental Type Certificate, it's become the first Grumman Goose in active service with this modification.



It's not a vintage photo; it's circa 1974, following tests on Lake Berryessa, California. Left to right are Jerry Lawhorn, Interior pilot/engineer; Les Starbuck, FAA flight test engineer; Carl Jacobson, FAA flight test pilot; Terry Smith, Interior flight test pilot; and Paul Donovan, Napa County Park ranger. The Goose was there for recertification.