AIR AMERICA LOG

VOL. VI NO. 3 KADENA, OKINAWA 1972

AAM'S NEW TWIN OTTER

THREE TWIN OTTERS NOW BASED AT VTE

Three de Havilland DHC-6 Series 300 Twin Otter aircraft were recently added to the fleet of aircraft at Air America's Vientiane, Laos, Base.

The Twin Otter — which carries the quaint cablese moniker "Twotter" — is powered by two wing-mounted, turboshaft engines, each driving a three-bladed reversible pitch, full-feathering propeller 8 feet 6 inches in diameter. Plane carries a pilot (copilot is optional), and up to 20 passengers. Alternatively, the Twin Otter can be converted to cargo carriage and other uses.

The Twin Otter's powerplants are two United Aircraft of Canada Limited PT6A-27 engines housed in wing nacelles. Each engine has two independent turbines, one driving the engine compressor, fuel pump and accessory gearbox, the other driving the propeller through reduction gearing. Take-off power of the engines is 620 shaft horsepower each.

Features of the Twin Otter include:

- Fixed tricycle landing gear with the main gear rubber-sprung which requires little maintenance.
- Full-span, double-slotted flaps, give the aircraft a low stalling speed and excellent maneuverability for take-off and landing in confined areas.
- All of the main components of the plane's 1,500 psi. hydraulic system are mounted below the cockpit floor on a readily removable tray to permit servicing or checking away from the aircraft.
- The Twin Otter comes equipped with a 22 ampere-hour nickel-cadmium battery which has excellent charge retention properties and is very ruggedly constructed. It has ample power to start the aircraft's engines where there is no outside power source is available.

Some Twin Otter specifications are (all figures given are for standard conditions and at sea level where applicable): maximum operating speed: 160 knots; minimum control speed: 66 knots; maximum take-off weight: 12,500 pounds; maximum payload: 5,200 pounds; take-off distance: (STOL technique) 820 feet, (CAR-3 technique) 1,010 feet; landing distance: (STOL technique) 560 feet, (CAR-3 technique) 1,140 feet; range: 650 miles; service ceiling: (2-engine) 25,000 feet, (1-engine) 9,200 feet.

Aircraft's dimensions are: wing span—65 feet; length—51 feet 9 inches; height—18 feet 7 inches; main wheel track—12 feet 6 inches; wheel base—14 feet 9 inches.

"AIR AMERICA'S MOTTO: 'ANYTHING, ANYTIME, ANYWHERE—PROFESSIONALLY'"

AIR AMERICA MEMORANDUM

DRUGS AND THE FLYING MAN

Courtesy: Safety Division & Medical Department

Dear Doc:

I've been in this flying business for several years now. During that time I've listened to you body mechanics preach over and over again about the dangers of self-medication. In the past few months I've also had pharmacists and reformed junkies tell me about the dangers of LSD, Speed, and everything else you can think of, including my morning coffee.

Okay, I'm convinced that drugs are a no-no. If some sneaky-looking guy on the street offers to sell me a handful of pills, I won't buy them.

But let's be reasonable about this. I do take drugs. I start almost every day with some caffeine and on some occasions I've been known to imbibe a little alcohol. I've used nicotine; and when I have a headache, I take aspirin.

My point is this: all of us take drugs in some form or another — some relatively harmless and others that may be really harmful. How am I supposed to know which are which? When I go into a drug store, which items should I avoid if I'm going to fly or drive a car soon after? And please, don't tell me something like "dextromethorphan hydrobromide." I'm not a doctor and I don't always read all the ingredients because I wouldn't understand them if I did. Please use simple terms. Thanks.

Puzzled Pilot

Puzzled Pilot

Dear Puzzled,

Your point is well taken. Virtually all of us take drugs of some kind. We must, however, always keep in mind the effects of the drugs we take. Some of our everyday drugs, like caffeine in coffee, produce few side effects and can be taken before or during flight. With others we may have to be a little more careful.

For example, a few years ago at one hospital, we found three pilots who were apparently having heart attacks while taking their annual physical exams. Turned out that they were taking diet pills they'd gotten from their wives. (The pills were diuretics or "water pills" — ask your wife, she probably knows all about them.) They were losing weight, but they were also experiencing side effects they hadn't counted on.

Let me answer your question specifically. Here is a list of commonly available drugs which cause drowsiness and which should not be taken before flying or **driving:**

Coricidin — cold relief tablets; Dristan tablets; Allerest; Dristan Nasal Mist; Vicks Formula 44 Cough Syrup; Contac — cold capsules; Cheracol capsules; Cheracol Cough Syrup; Cope; Anahist; Nyquill; Sleep-Eze; Sominex.

You'll notice that some of these are sold as "sleeping pills" so the resulting drowsiness shouldn't be a complete surprise. The others are mainly "cold remedies" but will make you almost as sleepy.

On the other side of the fence, these drugs will cause increased restlessness and irritability:

Vicks Va-Tro-Nol Nose Drops; PAC Compound; No-Doz.

There are just a couple of more points I would like to make. First, you know you don't have to be falling-down, knee-walking drunk to be under the influence of alcohol; likewise, you don't have to be glassy-eyed or on a trip to be under the influence of drugs. A little drowsiness, a slowing of physical reactions, a little confusion which produces an error in judgment; one of these at a critical time in flight can be disastrous. You don't have to be bombed out of your mind to be in trouble.

One last thing to remember: the total effect of a combination of drugs usually is more than the sum of their individual effects. A headache tablet might not bother you. A cold remedy might not bother you. A tranquilizer might not bother you. But if you take them all together you may easily get much more than you expect. This goes double if you are tired or upset and can be ten times worse if you add some alcohol to the mixture. Several very prominent people discovered this the hard way in the last few years.

We all take drugs of one kind or another. We take some of them without a prescription and without a doctor's supervision, normally with no ill effects. But we should always know what we're taking and what it might do.

See ya around the system,

Doc

Doc

EXTRA!

SNOOPY INVADES LOWER MANHATTAN!

Has Snoopy invaded lower Manhattan? There is **A** Sopwith Camel down there—could it be his?

A Sopwith Camel in lower Manhattan? You must be kidding! But there it is—scourge of von Richtofen's Flying Circus, pride of the Royal Flying Corps, latter-day champion of Snoopy's comic-strip vendetta against the Red Baron—poised for take-off from its Astroturf runway 77, atop a lower Manhattan building at 77 Water Street. But it is not going anywhere. It's a 32-foot welded steel replica of the RFC's most famous plane.

Close-up view of the 32-foot welded steel replica of the RFC's famous Sopwith Camel recreated on a one-to-one scale.

Aerial view of the steel Sopwith Camel poised on its Astroturf runway atop a lower Manhattan skyscraper.

It appears that the builder wanted a change from the usual drab Manhattan building roof. So he hired an imaginative designer and sculptor to recreate the venerable Camel in one-to-one scale.

(Story and photos courtesy: Corwin F. Overton, Director of Public Relations and Advertising, Stone & Webster, Incorporated; and Bob Lyon, Sorg Printing Company.)

AILING ANGEL (BLUE) HEALED AT TAINAN

When the Navy's crack aerial acrobatic team, The BLUE ANGELS, visited Taiwan recently, one of their F-4s developed heat duct trouble.

Knowing that Air Asia Company Limited (a subsidiary of Air America) had F-4 capability, the ailing aircraft was brought to Air Asia's Main Maintenance Base at Tainan for repair. That is where the photos on this page were taken.

ABOVE
Mr. John Berry, Director of Aircraft Maintenance, (white shirt) chats with a couple of "Blue Angels" while aircraft No. 4 undergoes repair in an Air Asia hangar.

LEFT
The BLUE ANGEL'S support aircraft, a C-130 operated by the United States Marines, parked on Air Asia's ramp at Tainan.

BELOW
BLUE ANGEL F-4 No. 4 is towed from the hangar—repairs complete.

AAM DISPLAYS MODEL AIRPLANE PROWESS AT VIENTIANE FAIR

1. Captain James H. Rhyne, then Chief Pilot/VTE, shows His Majesty, Sri Savang Vatthana, King of Laos, the radio control box used to guide model aircraft used in a flight display. The gentleman in the dark suit standing to Captain Rhyne's left is Lieutenant Colonel Khouang, Royal Laos Air Force, who acted as interpreter for the King.

2. Captain Rhyne's model aircraft starts its ground run preparatory to taking off from That Luang Fair Grounds at Vientiane, the Administrative Capitol of Laos.

3. First Officer Don Whitaker and Captain Rhyne eyeball Jim's entry as it overheads the crowd at the That Luang Fair Grounds.

4. Left to right: Lao Police Major Tiao Kham Luang Khantignarath; Captain Rhyne; Lieutenant Colonel Khouang, RLAF; HRH the King of Laos; and U.S. Ambassador G. McMurtrie Godley.

5. (Background) Police Major Khantignarath; (foreground) HRH the King, Ambassador Godley, Lieutenant Colonel Khouang (back to camera), Captain Rhyne. The King is asking Captain Rhyne a question about the model F-51 on the table in the foreground.

6. Behind the table, on which is Captain Rhyne's scale model of the B-70, stand (l. to r): Ambassador Godley, HRH the King, and Lieutenant Colonel Khouang. The B-70 model, although capable of flight, required a few more modifications before being committed; it was statically displayed.

7. Captain Rhyne, while flying a model aircraft, radio-controlled by the box in his hand, explains some of the finer points of radio-controlled flight to Colonel F. Stuart B. Peach, Attache of the Armed Forces of Australia, (left) and his assistant, Warrant Officer Robert Baker.

COMMENDATION

EMBASSY
OF THE
UNITED STATES OF AMERICA
Vientiane, Laos

November 4, 1971

Captain James Rhyne
Chief Pilot
Air America, Inc.
Vientiane, Laos

Dear Captain Rhyne:

I wish to extend my compliments and express my great appreciation for your flight demonstration at the American Pavilion of the That Luang Fair Tuesday. His Majesty, King Sri Savang Vatthana, was interested in your explanation of the functioning of the model aircraft and delighted by the flight.

The audible reactions of the crowd, which included a large number of the most influential people in Laos, made their pleasure obvious.

Both you and Captain Don Whitaker deserve praise and gratitude for your generous contribution of personal time and the high degree of skill you showed. You contributed in great measure to the success of the American community effort in this most important annual event in Laos.

Sincerely yours,

G. McMurtrie Godley
American Ambassador

cc: Captain Don Whitaker
Air America, Inc.

(Editor's Note: *Jim Cunningham, our genial VP, Laos, advised us of this interesting sidelight: Following his accident, (Captain Rhyne recently lost his right leg below the knee to anti-aircraft fire) the U.S. Embassy in Vientiane enlarged pix 1 on opposite page, had it autographed by His Royal Highness King Sri Savang Vatthana and Ambassador Godley, and sent it to Jim Rhyne in Lafayette, Georgia, where Jim is recuperating. According to Jim Cunningham, Jim Rhyne really appreciated this thoughtful gesture. In a letter to VP, Laos, Captain Rhyne said, in part: "...The pictures of the model airplane event sent me by Ambassador Godley are great. I really appreciate them:* THAT *I never expected...")*


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BELL 204B CHOPPER PASSES 10,000 HRS.

by: B. D. Mesecher, MTS/SVN

On 1 September 1971, Air America's Bell 204B turbine-powered helicopter N1303X accumulated exactly 10,000 hours of airframe time. This was the first Bell in our Company to reach this esteemed mark. Since N1303X had been operating for some 53 months since it joined AAM's Saigon fleet, the chopper averaged about 189 flying hours a month; that's a lot of chopper flying.

When 03X touched down on Air America's helipad at Saigon's Tan Son Nhut Airport on 1 September 1971 and achieved the enviable 10,000 hour mark, the flight was met by Civil Operations and Rural Development Support (CORDS) Customer Representatives Mr. Jim Jackson, Deputy Chief Air Operation, Saigon; Mr. E. D. Boyce, Air Operations Officer, Saigon; and Mr. Tom Lily, Air Operations Officer, Nha Trang. Also in attendance were Mr. Jack Barnhisel, Base Manager, Saigon (BM/SGN); and Mr. Boyd D. Mesecher, Manager-Technical Services, South Vietnam (MTS/SVN). The honored flight crew consisted of Captain L. G. Stadulis, Senior Instructor Pilot-Rotary Wing (SIP/RW); First Officer D. R. Riley; and Chief Flight Mechanic Vernon Durham.

This Bell 10,000 hour milestone in our Company's history resulted from a lot of team spirit, hard work and devotion to duty from many employees. Considerable credit goes to two of the Company Bell pioneers, Mr. Jim Schulze of Technical Services and Captain Bob Hitchman of the Flying Department. These two men were the key people who put the birds in the air and laid the ground work for establishing an excellent maintenance and flying program for the Company's Bell helicopters.

Many other employees have also made substantial contributions to the Bell program. Among them is Mr. Gary Neufeld, Supervisor, Regional Mainteance Department, with his fine team of maintenance men and flight mechanics who did more than their share to provide safe and on-time aircraft to meet all operational requirements.

A second Saigon-based 204B (N1305X) reached 10,000 flying hours on 8 November 1971 and a third (N1304X) on 27 December 1971.

PHOTO CAPTIONS:

1. *Bell 204B chopper O3X approaches AAM helipad at Saigon's Tan Son Nhut Airport to rack up 10,000 flying hours.*
2. *O3X touching down on AAM's helipad with exactly 10,000 hours flying time.*
3. *CORDS customers shown with AAM group as O3X is secured from historic flight culminating in a total of 10,000 flying hours. Left to right are: V. F. Durham (Chief F/M); Tom Lily (CORDS Chief Air Operations, Nha Trang); Jim Jackson (CORDS Deputy Chief Air Operations, SGN); Ed Boyce (CORDS Air Operations Officer, TSN); Boyd Mesecher (MTS/SVN); Jack Barnhisel (BM/SGN); Captain L. G. Stadulis (SIP/RW); D. R. Riley (F/O).*
4. *Mr. Mesecher, MTS/SVN (second from left), shaking hands with Chief Flight Mechanic Vernon Durham (second from right). Jack Barnhisel, BM/SGN, is at far left; Captain L. G. Stadulis, SIP/RW, SGN, is at far right.*

AIR AMERICA LOG ★ AKLAT SULATAN NG AIR AMERICA

MAIN ROTOR BLADE EROSION ON S-58TS

Because of their twin turbine power, AAM's fleet of S-58Ts are used extensively in work which requires a lot of hovering—such as carrying heavy external loads.

Since a lot of this hovering is done over dirt pads, the main rotor blades kick up a great deal of dust and small pieces of gravel when near the ground. This dust and gravel erode the leading edge of the main rotor blade making it rough and changing the contour. The roughness disrupts the air flow and, along with the change in contour, reduces blade performance or efficiency and, thus, the load the helicopter can lift.

A magnified view of main rotor blade erosion on AAM S-58T PHA.

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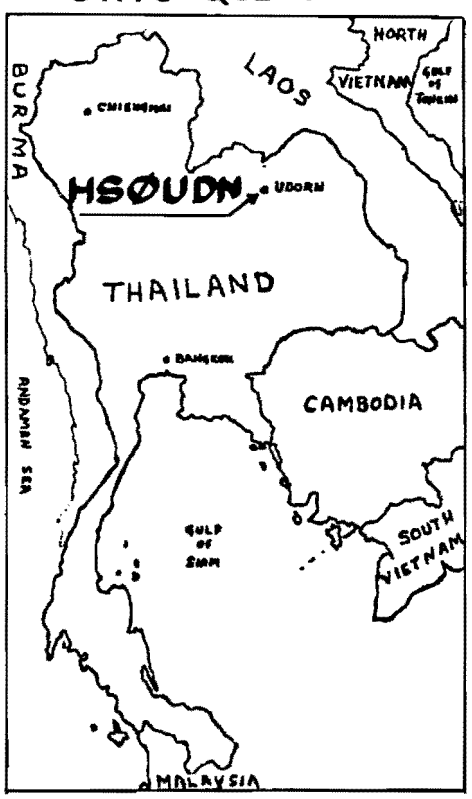
UTH'S QSL CARD



Reproduced above is the QSL (contact acknowledgment) card for the Company's amateur radio station, HSØUDN at AAM's Udorn, Thailand Base.

AIR AMERICA MEDICAL MEMO

ANOTHER REASON TO KEEP YOUR HEAD UP

Courtesy: Medical Department

Anyone who has ever had the impression, while flying, that he was tumbling head over heels while, in fact, his eyes and instruments told him he was in a level turn has to be familiar with what is known in aerospace medicine as the "Coriolis effect," a form of disorientation not uncommon among pilots. Frequently it is accompanied by various symtoms of air sickness and can be temporarily incapacitating.

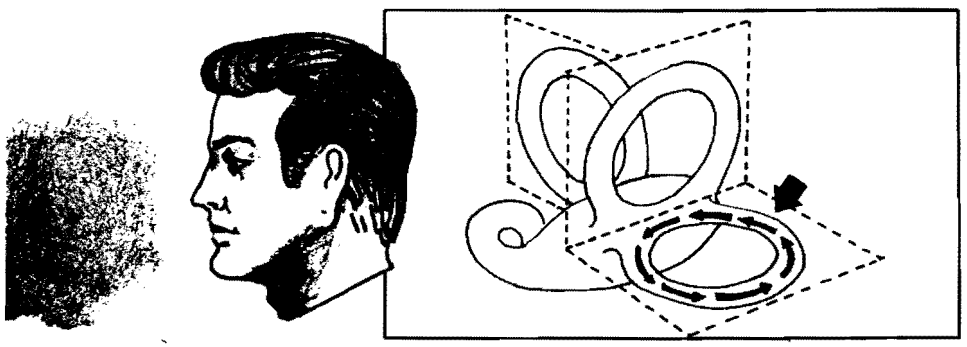
Civilian doctors as well as military flight surgeons occasionally are puzzled by patients who, for no apparent reason, report instances of disorientation, with headaches and nausea, while flying their aircraft under normal conditions. Upon further investigation they often find that the problem is associated with the pilot's habit of bending his head forward or to one side (for more convenient map-reading, for example) while his aircraft is in a turn. This combination of circumstances causes a contradictory impression of movement to be reported by the vestibular sense organs, producing disorientation, vertigo, etc.

The vestibular sense organs are composed of three semi-circular canals located within the head near each ear — although they have nothing to do with hearing. Each canal is positioned at a right angle to the other two. A turning acceleration in any direction causes fluid within the canals to move, transmitting directional signals to the brain.

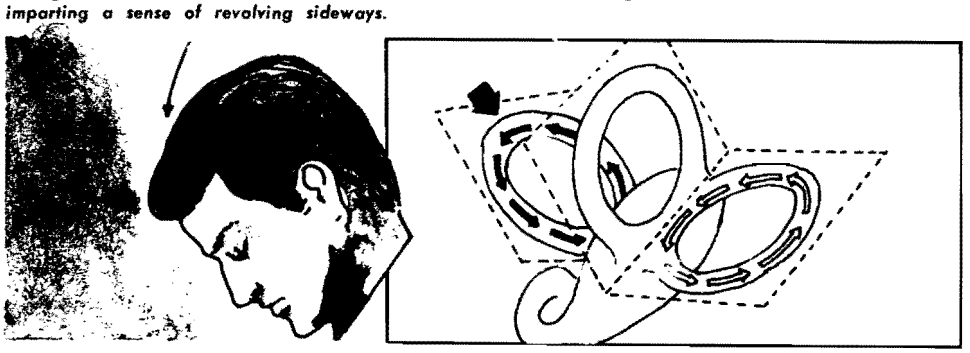
For example, when a person is rotated while sitting in a chair, the fluid in a horizontal canal is affected. If he were to be tumbled head over heels, a back-to-front vertical canal would be affected. If he were to be rotated sideways (as in a snaproll) a third canal (vertical side-to-side) would be influenced.

This problem occurs during flight only when the head is tilted sharply. If, during a turn, the pilot were to bend his head to examine documents on his lap, the canal which is normally in a horizontal plant (and is affected by a level turning motion) would be tilted into a nearly vertical position while the transverse (side-to-side) vertical canal would be tilted into a nearly horizontal position. Thus, the pilot would have an impression that his aircraft was in a roll, rather than in a turn as reported by his instruments and visual reference, if any. The net effect of these contradictory impressions is disorientation and air sickness.

The symtoms disappear soon after the head is returned to an upright position, or the turn ceases, but in some cases the loss of orientation can lead to putting the aircraft into a dangerous attitude. The danger can be diminished if the pilot remembers to keep his head upright at all times while the airplane is turning. If he has to look at material on his lap or on the adjoining seat, he should look by moving his eyes rather than bending his head. Understanding the cause of disorientation ascribed to the Coriolis effect (which can be particularly dangerous under IFR conditions, or when there is no distinct horizon) provides a cure in two words: chin up!



The vestibular organ directional sense to the brain by means of three canals lying at right angles to one another. Movement of fluid in the canals is greatest in the canal lying nearest to the plane of bodily motion: in a level turn this is the horizontal canal (above). If the head is tilted forward during such a turn (below), one of the vertical canals is brought closer to the plane of motion, imparting a sense of revolving sideways.



AIR AMERICA LOG ★ 미 국 항 공 회 사 잡지

MR. SING PROMOTED

Mr. Sing Sanguanruang joined Air America in 1962 at Don Muang Airport, Bangkok, Thailand.

Some two-and-a-half years later, Mr. Sing (as he is called) was transferred to Udorn where he held the job of Clerk III.

Mr. Sing explains the details of preparing and processing an RPA (Request for Personnel Action) while Miss Pipatvatanapon, Training Clerk, listens.

Four years later, he was promoted to Senior Clerk; he was in charge of the clerical staff working for the Superintendents of Rotary Wing, Fixed Wing, and Shops.

On 1 January, 1971, Mr. Sing was promoted to the position of Chief Clerk.

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AAM SCOUT LEADERS GET HIGHEST AWARD

by: C. Poblete, Fireman/UTH

Two Air America Scout Leaders—both Filipinos stationed at our Udorn, Thailand, Base—received highest awards from the Boy Scouts of America in Thailand.

General James J. Gibbons, JUSMAG (Joint United States Military Assistance Group) Chief, who is the Boy Scout District Chairman, decorated Mr. Manuel J. R. Galera, AAM Supply/UTH, with a "Golden Carabao," while Mr. Philip R. Mayhew, the American

Messrs. Galera (l.) and Taal (r.) proudly wearing their "Golden Carabao" medals on red-white-and-blue ribbons around their necks.

Consul in Udorn, presented a "Golden Carabao" to Mr. Luis C. Taal, Fire Prevention Inspector, AAM Fire Brigade/UTH. Messrs. Galera and Taal won their "Golden Carabao" medals for outstanding service to the Thailand District of the Boy Scouts of America.

* * * * * *

JACK PARKE, GENERAL MAINTENANCE, RETIRES

by: Claude A. Nelson, PM/UTH

Mr. E. H. J. (Jack) Parke, General Maintenance Supervisor at Air America's Udorn, Thailand Base, retired earlier this year.

To bid him farewell, a group of his friends gave him a rousing "Sawadee" Party at Udorn's Charoen Hotel.

Jack, who had served with our various Companies for over 22 years, spent the last 10 in Udorn in the area of General Maintenance.

While Jack Parke's presence in Udorn will be missed, we hope he will enjoy his well-earned retirement with his wife, Judy, and their six children in his native Australia.

Captain C. J. Abadie, Jr., Vice President/UTH, saying goodbye to Jack Parke (foreground). Behind them are (l. to r.): J. L. Forney, Assistant Vice President, Technical Services; W. B. Burleson, Manager, General Maintenance; G. B. Young, Manager, Ground Maintenance; K. A. Hyneman, Supervisor/Utilities, GMD; and C. A. Nelson, Personnel Manager.

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AN EQUAL OPPORTUNITY EMPLOYER M/F.

VTE SUCCESS STORY

Rayong Sarai, a Senior Operations Dispatcher at Air America's Vientiane, Laos, Flight Operations Department, is the only non-American to hold a Federal Aviation Administration Aircraft Dispatcher's license at our VTE Base.

He studied for his FAA license in Vientiane; he also took the written examination in Vientiane which was given by an FAA examiner from Honolulu. He recently flew to the United States to attend the Sheffield School of Aeronautics in Miami, Fla. There he took both the practical and oral FAA Aircraft Dispatcher's examinations; he passed them both and obtained the highest grade in his class

Rayong Sarai, Senior Operations dispatcher, at work at AAM's Vientiane, Laos, Base.

in the practical exam.

He next plans to study for an FAA's Ground Instructor's license to broaden his knowledge and experience.

Rayong came to Air America five years ago and started as an Operations Clerk. He advanced to Operations Dispatcher 2, then Operations Dispatcher 1, and recently to his present position of Senior Operations Dispatcher.

Rayong is single, but expects to marry soon; a Thai, he makes his home in Vientiane.

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"SAFETY IS NO ACCIDENT"