

AREA AIRLINE ROUTES
APPLIED FOR BY
SOUTHWEST AIRWAYS
TO THE
CIVIL AERONAUTICS BOARD
MARCH 25, 1942
DOCKET NO. 722
AS AMENDED

The THUNDERBIRD



PUBLISHED MONTHLY BY
The Industrial and Public Relations Department
Paul G. Sturges, Director
SOUTHWEST AIRWAYS • PHOENIX, ARIZONA
VOLUME 2 — NUMBER 3 — MAY, 1944

In This Issue:

News of the Month	1
What Did You Do Today? (Editorial)	1
Radio Contact All the Way	2 & 3
Lord and Lady Halifax Visit Falcon	4
Medals Awarded Thunderbirds	5
Cargo Line Sets Record	6
Maintenance Head Wins War Bond	6
Post-War Plans	7
The Paper Work Behind Flying	8 & 9
"War Workers"	10 & 11
Technical Libraries Given Cadets	12
"Sirs" Instead of "Misters"	13
By Public Relations Department, AAF Western Flying Training Command	
Thunderbird II Cadet Presented Bond	14
"Strictly Feminine"	15
Our Poets' Corner	16
Ground School Graduates Class of Girls	16
"Gossip and Hearsay"	17
Thunderbird Graduates in Action	18
"Biographically Speaking"	19
Service Pin Winners	20
Visitors of the Month	Inside Back Cover



COVER

This map shows the 18 routes proposed by Southwest Airways in its amended application for Pacific Coast feeder airlines, recently filed with the Civil Aeronautics Board. The recommended 4,235-mile system would serve 252 Pacific Coast cities in California, Oregon, Washington, Idaho and Arizona.

BACK COVER

The national insigne of all forces in the campaign to save waste paper.

VICTORY IS NEARER

Fledgling cadets in PT-17s and AT-6s at Thunderbird, Thunderbird II and Falcon fields are 2,722,415 miles nearer victory, a count of April flying hours shows.

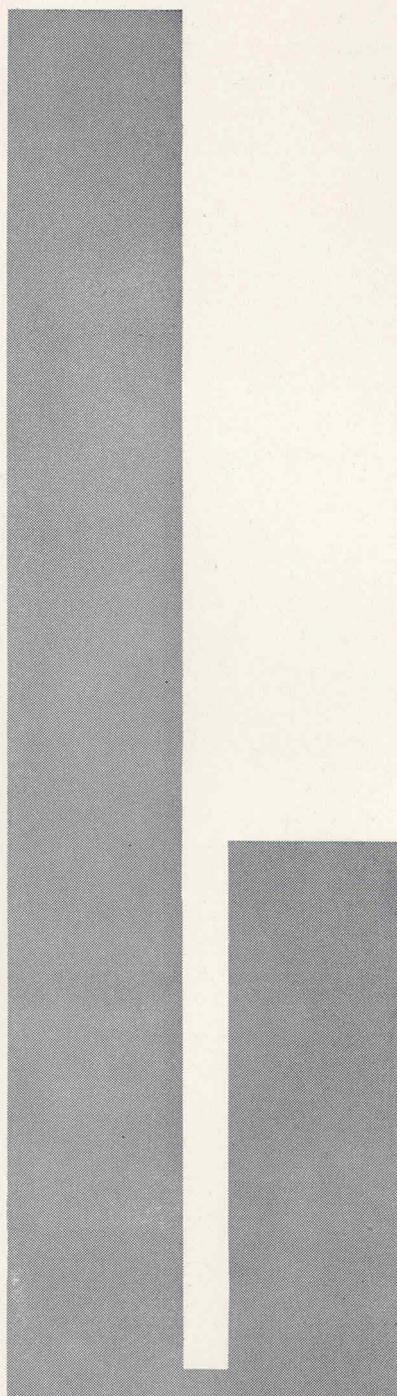
Two years ago, Southwest's training planes flew less than half this figure per month. Comparing the number of hours flown in the first four months of this year with the same period in 1942, an increase of 173.49% is revealed. (See graph.)

In fact, more hours were flown last month alone than were flown during both January and February, 1942. Greatest gain per field came at Thunderbird, largest and oldest of the training schools, where planes spend on an average of over 500 hours per day in the air.

A similarly high increase is found in the number of cadets in training. As of the end of April, 1944, 154.51% more cadets had entered training than had matriculated during the first four months of 1942. Last month there were 95.52% more cadets enrolled than in April, two year's ago. Greatest individual gain was at Falcon.

At the Cargo Division, last month, eight daily flights carried over 100,000 pounds of high priority military freight and mail, a 54.47% gain over April last year. The milage total for the month, 92.32% more than was flown in April, 1943, sustained Cargo's present average of nearly 70,000 miles flown per month. Greatest gain was in the number of shipments of urgently needed airplane parts, instruments, blood plasma and other critical materiel—12.29% more than July's all-time high.

Such rapid expansion of Southwest operations has necessitated a similar growth in the number of personnel employed. Today's nearly 2,000 people represent an increase of 135.42% over the number employed in 1942. As might be expected, the two newest operations show the largest gains, namely, Cargo, with 25% and Overhaul Division with 24.52%.



1944 1942
% Hours Flown
Jan., Feb., Mar., Apr.

This Month In Brief

CARGO DIVISION

CONTRACTORS TO AIR TRANSPORT COMMAND

Aircraft set operational record by flying 99.6 per cent of scheduled routes . . . Carry largest number of individual shipments of Army Air Forces' high priority freight and mail since operations began.

FALCON FIELD

CONTRACTORS TO ROYAL AIR FORCE

Distinguished visitors to the valley, Viscount and Lady Halifax, make Falcon their first stop . . . Superintendent of maintenance receives \$100 War Bond from Aero Digest magazine for war-production short cut invention.

THUNDERBIRD

CONTRACTORS TO AAF FLYING TRAINING COMMAND

Ground school instructors set up technical library for cadets . . . Honor Roll board shows 692 decorations awarded ex-Thunderbirds . . . Squadron Eight wins safety contest with fewest accidents per number of cadets graduated.

SKY HARBOR

CAA-APPROVED PRIMARY AND ADVANCED FLIGHT SCHOOL

Second college indoctrination flight class graduates.

THUNDERBIRD II

CONTRACTORS TO AAF FLYING TRAINING COMMAND

War bond presented to A/C Earl Sherwood, winner of plane identification contest . . . Ground school instructors set up engine laboratory for cadets.

OVERHAUL DIVISION

CONTRACTORS TO AIR SERVICE COMMAND

Employees receive tenure of service pins . . . contribute highly to the company's War Bond program.

COMPANY

Southwest's application for feeder airline routes on the Pacific Coast amended to include 18 routes, serving a total of 252 Pacific Coast cities and towns . . . Formal hearings on application to be held in San Francisco, beginning August first . . . Employees receive insurance claims in the amount of \$20,899.15.

What Did You Do Today?

The Fifth War Loan will begin June 12th and close July 8th.

The goal is \$16,000,000,000, of which six billions will be sought from individual investors.

The Treasury Department is asking everybody's co-operation, over and above any other buying he is doing or has done in this war.

Millions of words have marched across thousands of sheets of paper exhorting Americans to support the men and women of the Armed Forces who are offering their lives for victory.

On the battlefields of Africa, Lt. Dean Shatlain, a Tank Commander, who had amputated his own foot with a jackknife and thought he was dying, said it this way:

What did you do today, my friend,
From morning till the dark?
How many times did you complain
The rationing is too tight?

When are you going to start to do
All of the things you say?
A soldier would like to know, my friend,
What did you do today?

We met the enemy today
And took the town by storm.
Happy reading it will make
For you tomorrow morn.

You'll read with satisfaction
The brief communique;
We fought,—but are you fighting?
What did you do today?

My gunner died in my arms today,
I feel his warm blood yet;
Your neighbor's boy gave out
A scream I can't forget.

On my right a tank was hit,
A flash and then the fire;
The stench of burning flesh
Still rises from the pyre.

What did you do today, my friend,
To help us with the task?
Did you work harder and longer for less,
Or is that too much to ask?

What right have I to ask you this,
You probably will say;
Maybe now you'll understand,
You see, I died today.

Lt. Shatlain was rescued by American soldiers after two hours of hiding, and taken to a hospital in England. Think of him next month when you're asked to purchase an extra bond for the Fifth War Loan.

RADIO CONTACT ALL THE WAY

"Testing . . . testing . . . one-two-three-four-five-six . . . testing."

The words, loud and clear, boom out over the microphone at Tri-City Airport, San Bernardino home of Southwest's Cargo Birds.

The voice is that of Virgil Anderson, chief technician, making a last-minute radio check before the ship takes to the air.

Normally, radios are given daily checks by pilots, 50 and 100-hour inspections by radio mechanics, special 250-hour checkups and at 1500 hours are overhauled. But at Cargo Division, the routine is different. Before each day's run, every airplane radio receives the same inspection it would normally receive on the 250-hour check. In addition, pilots are required to make daily reports on how the radio is operating. Detailed log books are kept in each ship on the number of hours flown, number and frequency of communications, and unusual reception conditions.

"San Bernardino, this is Trip Four. Trip Four calling San Bernardino."

Half-way between Sacramento and San Bernardino—terminal points on Southwest's military feeder line, operated as a part of the Air Transport Command for the Army Air Forces—Captain Larry Anderson radios home base.

A girl's voice answers, "Come in, Trip Four, this is San Bernardino. Over."

"My position is ten miles northwest of . . . 4,000 feet, at zero-seven-five-zero. Destination San Bernardino. Estimated arrival, zero-eight-three-zero. Unloaded eight at . . . Loaded 200. Have on board 881, 60 gallons fuel."

With one hand on the volume control, the other on the typewriter, the radio operator types up the flight information given her. By means of radio communication, she has at her fingertips accurate and detailed information concerning any of the eight daily flights which radiate in all directions from the huge San Bernardino and Sacramento depots. At a glance she can tell where each of the ships is, how many pounds of high priority military freight and mail there are on board, its destination and the estimated time of arrival.

Besides making a record of all conversation over the network, the operator must keep a record of all reports radioed in, transmit the messages, post the progress of all the flights—assemble and distribute the weather information from the entire state, and telephone all stops regarding schedule deviations.

Always at her side to guide and direct

communications is the control pilot, or dispatcher, as he is sometimes called. He may be Steve Martino, first pilot to fly the Cargo route; Bill Brown, chief pilot of the operation; or any one of the other pilots who flys the Cargo run.

Each day a different pilot is in charge of flight control. And as Hank Potter once put it, "It's pretty nice to know when you're out there in bad weather, that one of your buddies is looking out for you."

The teletype machine is the control pilot's Bible. Noisily banging out its coded messages, he relies on it for up-to-the-minute weather reports, radio range information, airport facility announcements, and notices to airmen.

"What is the weather at my next stop?" Pilot Bill Thompson asks.

"Stand by," the operator answers.

A quick consultation with the tele-

type machine, and the control pilot replies.

"Tell Captain Thompson weather at . . . , by the 8:30 sequence, is 5,500 feet broken. . . . Pass measures 700 feet overcast, visibility one-half mile due to light fog. Wind, 18 miles from the West. All mountains obscured."

"Roger."

Specially trained in meteorology and navigation, and knowing every inch of the run from experience, the control pilot's decision is never doubted.

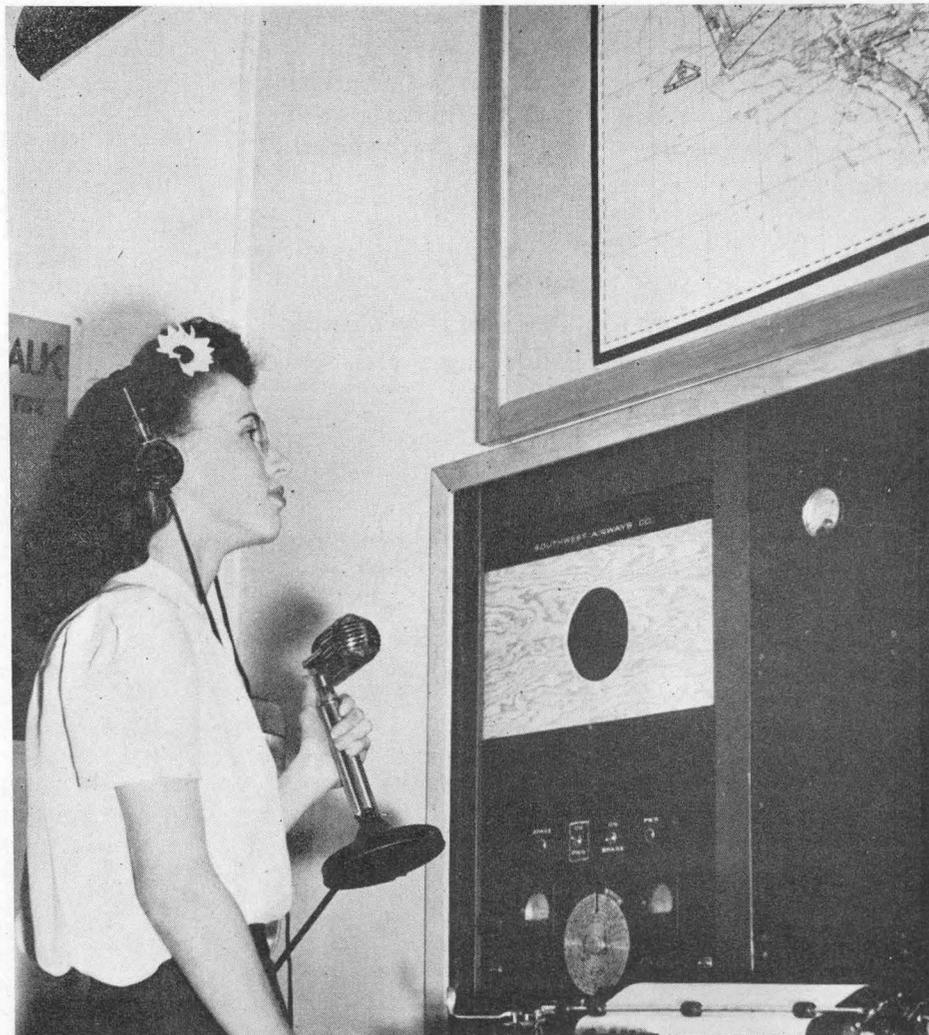
"There's a 30-40 miles an hour wind at . . . my next stop," radios Bill Walters. "What do you want me to do?"

"How much gas do you have?" control pilot wants to know.

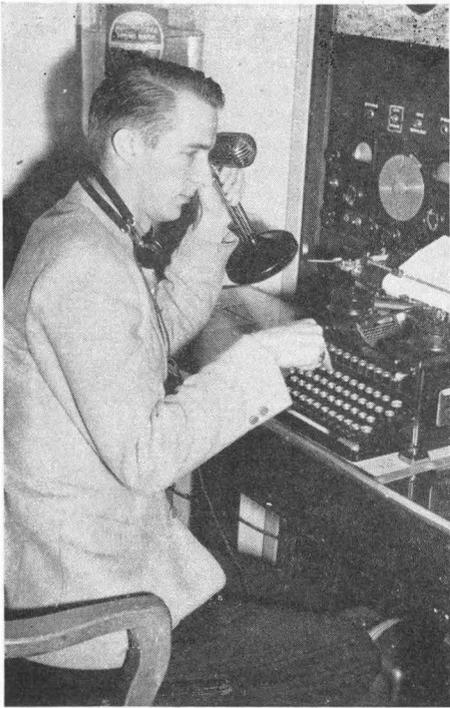
"Both tanks are a quarter full."

"Roger."

"The man in the tower says several light ships have flown in there and



A COMPLETE MAP, showing each stop on the Cargo run, is directly above the radio transmitter. Constant check is kept on the eight daily flights emanating from San Bernardino.



IN CHARGE of all radio equipment at the Cargo Division is Ed Rein, superintendent of communications. He holds both commercial and amateur radio operator licenses.

made it. Do you want me to land?"

"You don't have enough gas to come straight to San Bernardino, and you can't stop between there and here. Better land."

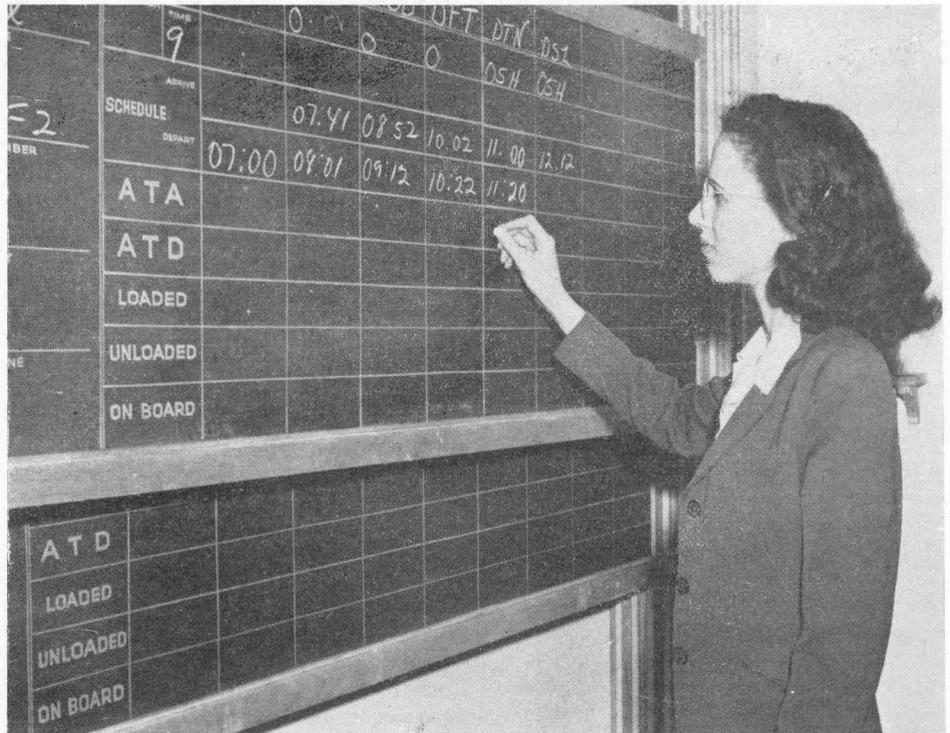
"Roger, wilco."

Such decisions are part of the routine to be expected in the performance of a day's work.

It has been estimated that as many as 75 such planes of all types possibly are flown every day in the areas our Cargo Line serves, as a direct result of our Southwest flights. And one of the important reasons for the safe and swift delivery of cargo—any of our planes reach certain bases three days faster than would ground means of transportation—is radio communication.

Our cargo aircraft average perfect radio contact 97 per cent of the time they are flying. Extracts from the radio log indicate as many as 30 transmissions within the hour, many less than a minute apart.

Responsible for these mechanically sound radios is an efficient maintenance crew in the communications department. Daily checks on the antenna, transmitter, receiver and panel serve as a preventative means of keeping all equipment sound and in first-class condition. In a spotless workshop, radios are carefully overhauled after 1500 hours service—whether they need it or not. Each tiny part is meticulously inspected, and



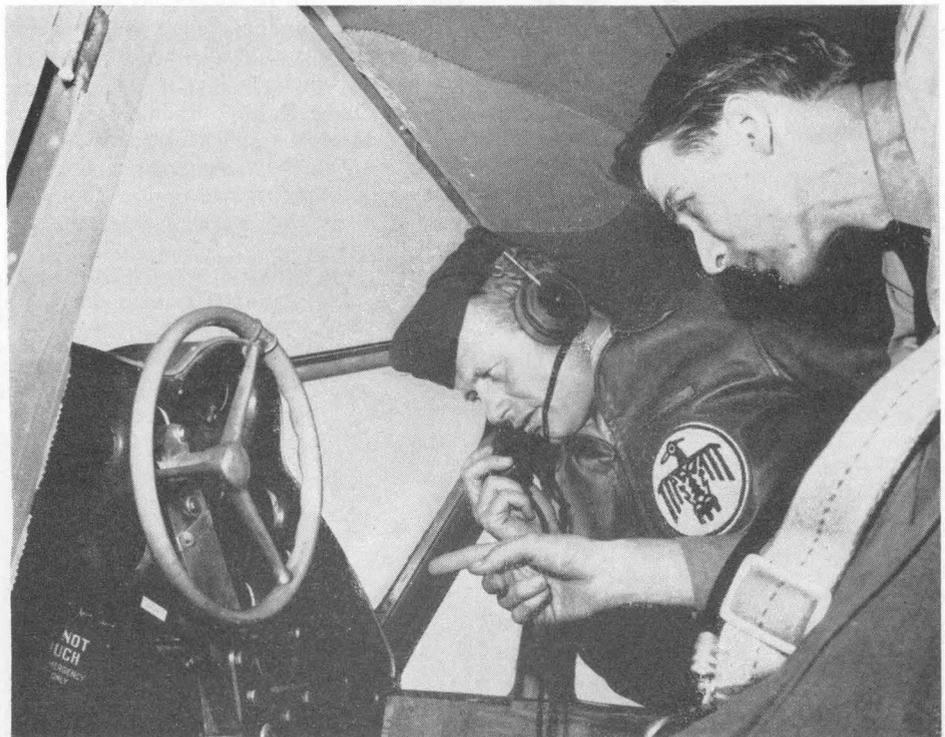
ONE MORE way in which the radio room is able to keep a rigid check on its flights. Above, Joan Crane, radio operator, chalks up the statistical data during each trip.

all worn pieces restored. All tubes are replaced by new ones from the factory.

Reinstalled in company Waco ships, overhauled radios are thoroughly checked and inspected before the ship is al-

lowed to leave the ground.

To a pilot, there is no more assuring sound than that familiar voice, "Testing . . . testing . . . one-two-three-four-five-six . . . testing."



CARGO PILOTS make a daily inspection report to the communications department regarding radio equipment. Hank Potter, left, explains reception conditions to Superintendent Ed Rein.

LORD AND LADY HALIFAX VISIT

You can take it from Falcon Field employees, officers and cadets—Viscount and Lady Halifax can come back any time.

The distinguished British ambassador to the United States and gracious Lady Halifax, who made our Royal Air Force training base the first stop on their recent visit to Phoenix, were, perhaps, the most distinguished guests ever to visit the field; certainly they were among the most charming.

From the time the official party stepped out of their special Vega Ventura and Lord Halifax almost immediately entered into a prolonged conversation with cadet officers of his special honor guard, until just before departure when Lady Halifax again took advantage of an opportunity to chat with members of Falcon's feminine flight maintenance crews, informality was the keynote.

Two impromptu speeches were made by Lord Halifax. Standing in a hangar surrounded by British and American cadets, the Viscount termed RAF trainees "ambassadors just as much as I am."

He praised the manner in which cadets of the two nations had "pitched in together" to receive their training—taking special time out to praise Southwest's field employees for making possible the operation—and urged that the relationship be continued for the future good of the world, even after military operations were no longer necessary.

"The partnership you have started here must be continued; our two nations must stay together."

Later, Lord Halifax re-emphasized in a brief talk at a luncheon attended by many important visiting officers from nearby military installations, the appreciation of his government for the

work being done at Falcon, and paid special tribute to the flight instructor staff.

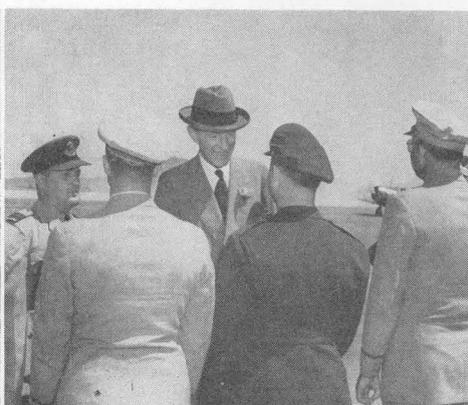
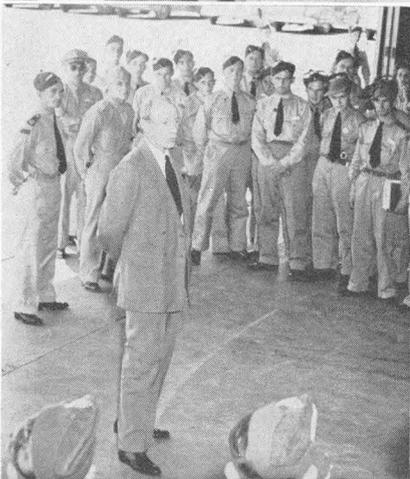
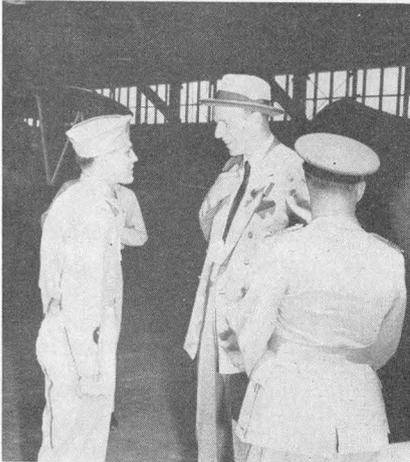
Progress of the air war over Europe was a subject Hord Halifax avoided commenting upon whenever possible. He did point out that while "Germany is accustomed to regarding war as a very profitable national industry to export, the Nazis now were finding it not such a good item to import."

He reiterated the oft-expressed warning that future military operations would be far from easy, and obviously referred to "D Day" when he mentioned that "we all keep our fingers crossed these days I suppose." Morale of AAF and RAF fliers in combat zones was pictured as being so high that the only effective punishment for infractions of rules was to ground pilots for a week at a time.

In addition to Lord and Lady Halifax, other members of the visiting party included Colonel Augus McDonnell, honorary attache at the British embassy in Washington, D. C., and Major J. G. Lockhart, his private secretary.

Among the guests invited by field commandant Wing Commander J. F. McKenna to welcome Lord Halifax, were E. A. Cleugh, British counsel general from Los Angeles; Col. L. S. Norman, commanding the 1921st Service Command unit, Phoenix; Commander C. F. Cotton, USN, Litchfield Park; Lt. Col. George Barber, commanding officer, Corps of Military Police, Papago Park; Lt. Col. G. M. Bates, Luke Field; Major M. W. MacDowell, MC, commander of the proving ground detachment, Royal Canadian Ordnance Corps, South Mountain Park; Major E. W. Worley, Williams Field, and Major R. E. Riordan, Military Intelligence, Papago Park.

PICTORIAL HIGHLIGHTS of Lord and Lady Halifax's recent visit to Falcon Field: Top, Britain's ambassador is welcomed to Falcon by Wing Commander J. F. McKenna; he talks with A/C W. E. Southwick, cadet wing adjutant from Seattle; greets RAF and AAF cadets informally; inspects Honor Guard; converses with company department heads; lunches with company officials and visiting military officers.



MEDALS AWARDED THUNDERBIRDS

Every day headlines tell the story of our Air Forces dealing devastating blows on the Axis. Airmen who make raids over Berlin or Japanese-occupied territory in the Pacific frequently are boys who just a few months ago were receiving their primary training at our Thunderbird fields.

Take Lieutenant Ralph A. Thiessen, a cadet in Class 43-C at Thunderbird, as an example. Today, he holds the Distinguished Flying Cross and Silver Star. His citation for the latter award is exciting reading:

"Leading a group of 15 P-38's on a high altitude bomber escort mission over Greece on last January 11, Lieutenant Thiessen's formation encountered solid overcast en route to the target. Despite the fact that approximately half of the bomber formation turned back because of the weather and he was unable to see the remaining bombers during most of the time en route, Lieutenant Thiessen, by his excellent knowledge of instrument flying and navigation, led his group through the overcast without straying from the bombers. As they approached the target, the formation was attacked by 20 ME-109's and FW-190's. Outnumbered, Lieutenant Thiessen displayed great courage and excellent leadership in keeping his formation intact, completely breaking up the enemy's attacks, and not allowing a single enemy fighter to render damage to the bombers. Lieutenant Thiessen himself accounted for the destruction of one ME-109 in this engagement. The bombers then made their bombing run unmolested and succeeded in inflicting heavy damage to the docks and other military installations. Lieutenant Thiessen's sound judgment in this encounter, and his excellent and thorough protection of the bombers despite adverse weather conditions, was greatly responsible for the successful completion of the mission. By his consistent aggressiveness and personal resourcefulness under fire, Lieutenant Thiessen has reflected great credit upon himself and the Armed Forces of the United States."

For reasons of military security some citations seem by comparison to be drab reading. Often the Air Medal is awarded with a citation which reads merely, "for meritorious achievement while participating in five sorties against the enemy." Undoubtedly, if we could but see the damage inflicted on enemy installations by five such sorties, this terse, undramatic statement would have more meaning to us.

Captain Clarence W. Godecke, Jr., Class 42-H, and Lieutenant Robert V. Liljegren, Class 42-G each were awarded the Air Medal with nine Oak Leaf Clusters for participating in 45 sorties

THE BOX SCORE

The Roll of Honor at Thunderbird Field this month reached a total of 692 decorations won by former cadets. The complete list now shows:

1 Distinguished Service Medal
25 Silver Stars
100 Distinguished Flying Crosses
15 Oak Leaf Clusters to D. F. C.'s
226 Air Medals
307 Oak Leaf Clusters to A. M.'s
14 Purple Hearts
4 Soldiers Medals

Official confirmation from the Historical Division of the War Department is the basis upon which additions to the list are made.

against the enemy; to Lieutenant Douglas L. MacCarter, Class 42-H and Lieutenant John K. Martin, 42-G, went the Air Medal with eight Oak Leaf Clusters for taking part in 40 sorties. Simple? Who knows but this intrepid quartet?

Pilots, bombardiers, navigators, gunners all share in the credit for our Air Forces' mighty striking power. Lieutenant William J. Farkas, Class 42-G, and now a bombardier-navigator on a B-26 airplane, holds the Air Medal with Oak Leaf Cluster and the Distinguished Flying Cross.

Also serving their country heroically are Lieutenant John K. Brush, 41-I, now holder of the Distinguished Flying Cross and Air Medal with one Oak Leaf Cluster; Lieutenant Winton A. Scott, 42-G, who has been awarded the Distinguished Flying Cross; and Lieutenant William Gunby, 42-I, with the Purple Heart "for wounds received in action against the enemy."

Still another Thunderbird graduate who holds the Air Medal with one Oak Leaf Cluster and the Distinguished Flying Cross is Lieutenant Grant A. Seeley. This is the official War Department story of the feat which won for him the latter award:

"For extraordinary achievement while serving as pilot of a B-26 airplane on a bombing mission over enemy occupied Europe, August 19, 1943. Prior to reaching the objective one engine of his plane was knocked out by anti-aircraft fire. Handling his crippled plane superbly, Lieutenant Seeley maintained his position in the formation and continued on to successfully bomb the target. On leaving the target area enemy fighters, seeing the condition of his plane, immediately began to attack persistently. During the running fight which followed, Lieutenant Seeley maneuvered his airplane so skillfully on its one good engine

that his gunners were able to destroy two of the attacking fighters. Reaching the coast of England, he landed his airplane on the first available airfield without further damage. The courage, determination and flying skill displayed by Lieutenant Seeley on this occasion reflect highest credit upon himself and the Armed Forces of the United States." They might have added: "and upon his primary flight instructor who first taught him to fly so well."

Many of the boys Southwest has trained hold the Air Medal with Oak Leaf Clusters for action against the enemy. Lieutenants Cecil M. Hall, 42-H; Donald O. Trumbold, 43-D; Richard M. Abrams, Jr., 43-D; Richard H. Mayfield, 42-J; and William D. Zaharte 42-F; recently received the Air Medal with citations such as this:

"For meritorious achievement while participating in five separate bombardment missions over enemy occupied territory, where the possibility of encountering enemy ships of fighter type or anti-aircraft fire involved great personal danger to all members of the crew. Under these trying circumstances, the courage and skill displayed by this individual reflect highest credit..."

Captain Arthur J. Kacewicz, 42-G and Lieutenant Evan R. Bruner, 43-A each have been awarded the Distinguished Flying Cross and Air Medal with one Oak Leaf Cluster. Captain Kacewicz's DFC citation follows:

"For extraordinary achievement while serving as a pilot on a B-26 airplane on 25 bombardment missions over enemy occupied continental Europe. Captain Kacewicz participated in the highly successful mission against the heavily defended gun emplacements at (censored) 9 September 1943. His superior flying skill and courage have marked his work on these bombardment missions against enemy targets, many of which have been neutralized for considerable periods of time. The services of Captain Kacewicz reflect highest credit on himself and the Army Air Force."

Other Thunderbird graduates who have received the Air Medal according to recent War Department releases include Lt. Howard R. Hartley, 42-J; Lt. Gustave E. Hoffman, 42-J; Lt. Lyle V. Jensen, 43-B; Capt. Robert L. Kelly, 42-G; Lt. John A. Kilmartin, 42-J; Lt. William E. Osis, 43-B; Lt. Malcolm Powell, Jr., 43-D; Lt. John E. Wenzel, Jr., 43-E; Lt. James W. Wilcox, 43-D; Lt. Herbert L. Abrahamson, 43-D; Lt. Burton J. Anderson, 43-D; Lt. Edwin J. Anderson, 43-D; Lt. James A. Baxter, 42-I; Lt. Russell R. Biddick, 42-G; Lt. Joseph A. Green, 42-G; Lt. Bernard L. Cohen, 43-F; and Lt. Robert H. Fleckenstine, 43-D.

CARGO LINE SETS RECORD

One of the finest operational records in the history of airline contractors to the Army's Air Transport Command was completed last month, company officials have been permitted to announce.

Cargo Division aircraft, flying 99.6 per cent of scheduled mileage on California-based ATC feeder routes, missed a perfect 100 per cent score on the last day of the month. According to operations manager, Ted Mitchell, weather prevented one plane from reaching the final station on its route. Less than 200 miles of the scheduled approximately 70,000 miles was not flown.

The high performance record was considered particularly remarkable in view of variable weather conditions prevailing during April in the mountains over which considerable flying is done, and also since it reflects outstanding maintenance by Southwest's mechanics.

Largest number of individual shipments in the 18-month's history of the eight-route system also was reported by Mitchell in his summary of April operations.

Rumor Only

Rumors that Thunderbird and Thunderbird II primary training bases are scheduled for closure — such talk has flooded the Phoenix area in recent weeks — apparently are groundless.

A number of contract schools conducting primary training for the West Coast Training Command have been closed recently but, according to President John H. Connelly, Southwest has received no notification or even indication that its schools are among them.

UNEXPECTED GUESTS

Unexpected visitors arrived at Thunderbird II recently, via parachute. They were navigator, tail gunner and two waist gunners from a B-24. The men bailed out when the ship, on photo maneuvers from Biggs Field, El Paso, Texas, developed engine trouble. The pilot, copilot and engineer stayed with the Liberator and landed safely at Falcon.

IN SYMPATHY

Employees were shocked recently at the unexpected death of James Earl Netser, advanced flight instructor at Falcon. Netser, who had the day off, was repairing the cooler at his home when he suffered a heart attack. He had been with Southwest a little over two years.



ALL SMILES, Joe Wischler, Falcon superintendent of maintenance, accepts the \$100 War Bond presented him by Wing Commander J. F. McKenna. McKenna, who presented the bond on behalf of Aero Digest magazine, complimented the maintenance department on the fine work they have been doing.

Tire Rationing

Very few more tires and tubes will be available for Arizona motorists than have been during the past few months, according to word from the company's personnel office, also in charge of rationing.

"In spite of a relaxation of regulations," Frieda Cantrell, rationing chairman, said, "no more than minimum needs for tires can be met."

The increase in the passenger tire quota for May, from 3,391 to 4,702 for the entire state, still leaves Arizona with 150 fewer tires than were allotted it in May, 1943. So it behooves Southwest motorists to continue to recap worn tires and avoid excessive speeds.

Class Graduates

Sky Harbor, temporarily making available its flight facilities to the Civil Aeronautics Administration for completing the last 90 days of a contract for ten hour college indoctrination courses, has graduated its second class of cadets.

Meanwhile, private instruction has continued with facilities and equipment not required for the CAA program.

Wins War Bond

Each month Aero Digest magazine awards a \$100 War Bond to the person whose production short cut is considered the most valuable to the industry by the judges. And each month the winning name is added to the Digest's roll of honor.

April's winner, Falcon's superintendent of maintenance, Joseph S. Wischler, was the first Southwest employee to be added to the growing list.

Joe, whose stay at Falcon dates back to early 1941, has invented many time-saving devices now in use at the British Flying Training School.

His safety coupling for keeping locking-pin segments in place, which won for him the \$100 award, was devised after investigation of a near crack-up showed flap failure to have been caused by a broken locking pin in the universal actuating joint.

A flexible rubber hose slips over the flap universal actuating joint and keeps locking pin segments in place, should they break. Without the safety sleeve, broken pins drop out and the universal assembly falls apart. With the tubing in place, operation of the flaps is not impaired even though pins do fracture.

POST - WAR PLANS DEVELOP RAPIDLY

AUGUST DATE BOOKED FOR C. A. B. HEARINGS

Formal hearings on Southwest's amended application for Pacific Coast feeder airline routes will be held before the Civil Aeronautics Board, beginning August first, according to word from Vice-President Jim Ray.

Start of the hearings, which are expected to last at least two full weeks, will bring to a climax company plans which date back to early 1942. Southwest is considered to be one of the nation's pioneer feeder line applicants, its original proposals having been filed with the Board in March, 1942.

Two other dates of importance to applicants for Pacific Coast routes also were announced at the same time, Ray revealed. May 20 was set as the final date on which amendments to applications already on file could be recorded with the Board, and July 1 is to be the deadline for exchanging exhibits among the applicants.

Several months undoubtedly will pass after the conclusion of the hearings, before Southwest will learn if it has been granted operating franchises.

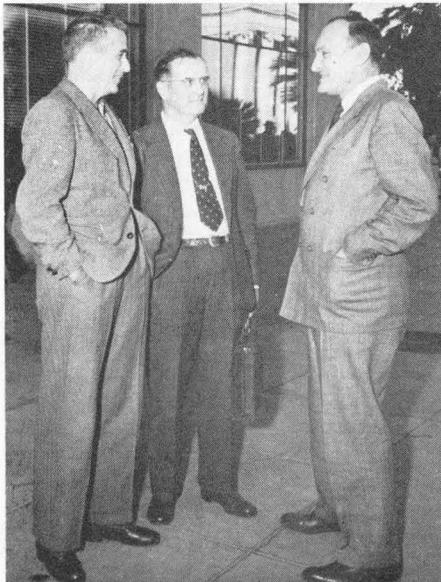
It is expected that the CAB examiners who conduct the hearings will require from two to three months to pour through the voluminous exhibits and testimony, and to reach and announce their recommendations. Their report and the supporting material then will be submitted to the members of the Board themselves for review, confirmation and awarding of the actual franchises.

All of this lengthy but necessary procedure may take until the first of the year, it is believed, although the Board undoubtedly will make every effort to announce its decision with the least possible delay due to the importance of this particular case.

Southwest is expected to present a number of exhibits to prove the "convenience and necessity" of its proposed routes and also that it is the most "fit, willing and able" of the various other feeder airline applicants. This will be done both through printed exhibits and oral testimony.

Most of this material already has been prepared by a department of the company headquartered in Beverly Hills and working under the personal direction of both Ray and Leland Hayward, chairman of Southwest's board of directors.

Remember the Fifth War Loan begins June 12th.



THIS TRIO of Southwest executives has been guiding company's preparations for hearings on its Pacific Coast feeder airline application. Left to right: Leland Hayward, chairman of the board of directors; Walter Roche, legal counsel, and James G. Ray, vice-president of operations.

Benefits Paid

Nearly 400 Southwest employees have received benefits from the group insurance plan offered them the day they became a part of the company's ever-expanding payroll.

Employee and management make this inexpensive protection possible by contributing equally to the insurance company—the employee half, management half.

From September 16, 1943, when the company began making the adjustment claims, through May 8, this year, impressive amounts have been paid to employees who were prevented from working as a result of a non-occupational accident or a disease for which benefits were not payable under the State Workmen's Compensation Law.

Total weekly indemnity for time lost from work amounted to \$13,044.69. Checks paid to employees ranged from \$1.43 to \$520, averaging \$54.13.

Daily benefits paid to individuals confined in the hospital totaled \$4,152.46, benefits ranging from \$6 to \$216 and averaging \$66.98.

During the last eight-month's period, surgical benefits received by Southwest employees totaled \$3,702. Amounts paid averaged \$53.65, ranging from \$5 to \$150.

AMENDED APPLICATION INCLUDES NEW STOPS

(See Cover Illustration)

Southwest's original application for feeder airline routes on the Pacific Coast, which has been on file with the Civil Aeronautics Board for more than two years, was supplanted by a new, expanded series of amended routes recorded with the Board in a surprise move that was one of the highlights of the recent pre-hearing conference.

Purpose of the amended application was two-fold: to make formal application for a franchise permitting the carriage of passengers, as well as air mail and air express, and to propose establishment of a number of additional routes, primarily in eastern Washington and eastern Oregon.

Under its amended plan, the company has applied for 18 routes, serving a total of 252 Pacific Coast cities and towns. Ninety-five per cent of these communities, which together have a total population in excess of 5½ million people, presently do not have any direct air service.

Total route mileage contained in the new, five-state plan reaches a figure of 4235 miles. This means that if two round trips are flown daily over each route, as now planned, Southwest's feeder airliners would fly 16,940 miles daily.

Despite this impressive total, it still is far short of the mileage covered daily by our present operations. Even under the presently limited classes training at our Army Air Forces installations, mileage is estimated to reach nearly 100,000 miles daily, excluding that flown by the Cargo Division.

Filing of its amended application by Vice-President Jim Ray and Company Counsel Walter Roche was Southwest's only participation in the pre-hearing conference.

Previously, the company also had participated in the two-day session before the Board devoted to oral arguments on the list of recommendations announced by the examiners who conducted the general feeder airline hearings last October. (Complete list of recommendations was carried in the March issue of *The Thunderbird*.)

Two specific recommendations were commented upon in a printed brief submitted to the Board, and additional points were brought out by Roche during a brief appearance on the witness stand.

You can buy War Bonds or War Stamps in any one of the million places during the Fifth War Loan drive.

THE PAPER WORK BEHIND FLYING

From the first day that A/C John Doe goes out to look over his PT-17 with his civilian flight instructor, until the day that he is awarded his wings, daily records are kept of his flying progress.

These grades not only constitute an important part of his training record but also serve as aids when John is classified for combat training. For at the completion of primary, he is recommended for the type of aircraft that he will fly later—fighter or bomber.

How is this determined?

John is classified by his instructor on leadership, judgment, responsibility, military bearing, initiative, self confidence, force of character, alertness, comprehension, cooperativeness, attention to duty, professional proficiency and flying. Other determining factors are his grades in primary acrobatics, his temperament and personality.

Thus when John leaves primary for basic school his all-inclusive record follows him—and you can be sure, from the few items listed above, they've left nothing out.

John's record begins when he signs

a slip stating he understands local flying regulations, knows boundaries of the local flying area, and realizes that violation of the regulations will result in severe disciplinary action. A few hours walking around the "T" makes even the most uneager cadet regulation-happy. By placing his signature on this form John recognizes one of the first rules of good airmanship — strict adherence to flying regulations, a rule that will carry over even after he is engaged in combat against the enemy. After a talk with his instructor the age-old axiom, "ignorance of the law is no excuse" takes on new meaning to John.

The first day on the flight line he and his instructor go over the airplane. Together they check such things as goggles and helmet, use and care of the parachute, and discuss the function of the instruments and controls.

John learns to start and stop the engine, test the magnetos, keep a perpetual check on his gasoline gauge and discovers how to fill in the ever-present Forms I and IA.

It may seem that this is a mighty big

dose for one day, however John goes over each of these things until he is positive he understands their operation. He must understand them, for he initials a slip stating that he does, and (you guessed it) that slip also goes into his permanent grade book.

The next morning there are no laggards at the flight line. Reason, of course, being that now the cadets are to receive their "dollar ride." It has taken months for John finally to reach the place where he can begin flying and he isn't going to miss a minute of it.

An elementary phase grade slip is used during this period, listing only those simple maneuvers to which the tyro pilot is introduced. The grade slip serves a double purpose—charting John's daily progress and also serving as a master check sheet for his instructor. As each of the required maneuvers is introduced the instructor marks "demonstrated" on the grade slip, thereby making sure that nothing is overlooked.

Each day John flies, he is tested and graded on what he was shown during previous days. He receives an "A" if he is superior; a "B" if excellent; "C" if very satisfactory; "D" if satisfactory; "E" if unsatisfactory; and "F" if failing.

This system of daily grading John involves hours of paper work for his instructor; when John finishes his primary training there will be between 60 and 65 sheets in his grade book. But it's worth it, for this comprehensive record helps to check faults before they become habits.

At the end of each week in John's ten-week primary career there is a summary grade slip—a report card of the entire week's progress. By reading it any instructor or Army officer (of course, John is never permitted to see any of his grade slips) can easily determine his standing as of that week.

John receives five stage checks during his primary training beginning with a dual cross-wind stage before he solos. He is given six chances on each of these checks, graded on each one individually and the individual checks averaged to ascertain the final stage grade.

After approximately two weeks of dual instruction, John is ready for his solo flight. He has received the minimum of nine hours dual instruction, 40 landings and 15 spins. However, before his instructor steps out of the cockpit and lets him "take to the wild blue yonder" alone, there first must be a pre-solo proficiency rating. This check usually is performed by the instructor, but if he is fairly new to the field's flight staff, the student is checked by

ELEMENTARY PHASE

Date: 5-4-44

Student: Kinimoth Grade: D

Instructor: Kinimoth Grade: D

1. Effect of Ctrl.	C	12. Landings	
2. St. and Level	C	13. Spins	
3. Turns	D	14. Spirals	
4. Coordination Ex	D	15. Forced Ldgs.	
5. Cls. & Cl. Turns	D	16. Steep Turns	
6. Cls. & Gl. Turns	D	17. Elementary 8s	
7. S Across Road	D	18. Lazy 8s	
8. Rectan. Courses	D	19. Chandelles	D
9. Stalls	C	20. Progress	D
10. Taxiing	C	21. Judgment	D
11. Take-offs	C		

Remarks: Can't hold altitude, climbed, ...

**PROGRESS CHECK
CHANGE OF INSTRUCTORS
FINAL STATEMENT**

Date: 5/4/44

Student: _____ Grade: D

I have checked this student in climbs, stalls, spins, steep turns, forced landings, S turns, traffic pattern, take offs, and landings and I consider his progress, technique and judgment to be satisfactory.

... climbs too much without turning, over banks when he ...

STUDENT: _____ INSTRUCTOR: Snyder, M.C.

ELEMENTARY PHASE — WEEKLY

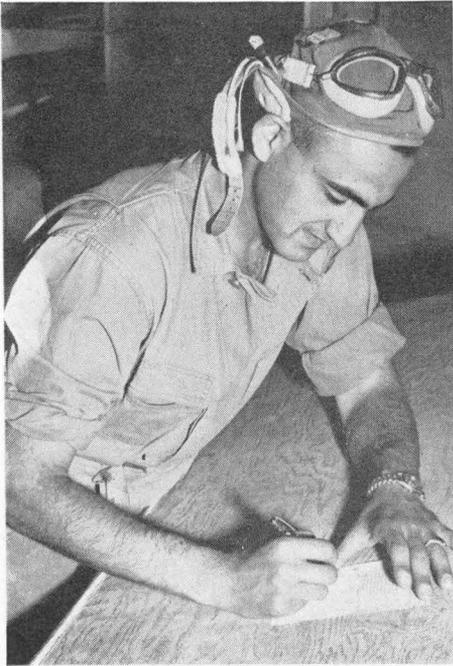
CLASS	Effect of Con.	St. & Level	Gl. Turns	Coord. Ex.	Cl. Cl. Turns	Cl. Gl. Turns	"S" Across Rd.	Rect. Courses	Stalls	Taxiing	Takeoffs	Landings	Spins	Stages	Fed. Ldgs.	Sip. Turns	Element. 8's	Lazy 8's	Chandelles	Progress	Judgment	Progress Check	Grade	
44-5																								
Week Ending 4-29-44																								
MONDAY	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
TUESDAY	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
WEDNESDAY	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
THURSDAY	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
FRIDAY	D	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
SATURDAY	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	OV
SUNDAY																								

REMARKS

Progress and Judgment are very Satisfactory for week. Control touch & Use of Throttle good. Altitude Control weak, over controlling in rough air. Student has good knowledge of all traffic Patterns.

FORM H & C 31 5M 1-44 HENNINGER 20895

THE GRADE SLIP in the foreground is the weekly report card of the cadet's grades. It is an exact duplication of the elementary phase grade slip, left, without the remarks made by the instructor. At right, is pictured the slip used when students are checked by instructors or supervisory personnel.



A/C SARKIS P. BEZIGIAN signing his Preliminary Phase sheet, indicating that he has received his equipment and understands local flying regulations.

the civilian squadron or flight commander prior to solo—another double check on both instructor and cadet.

After the first solo, time passes rapidly, for John now is kept busy with both solo and additional dual flights, and each time a report is turned in.

Besides being filed in John's book, grades also are kept on a master grade sheet in the operations office. Of course, this presents only an over-all picture—supervisory personnel must go to the individual grade book to discover John's strong or weak points.

After John's instructor has demonstrated the 180 degree side approach, a new grade slip is used on "accuracy and acrobatics." A few elementary items are carried over—"progress" and "judgment"—but for the most part it contains the more difficult maneuvers really "hot" cadets in the upper class are learning to do.

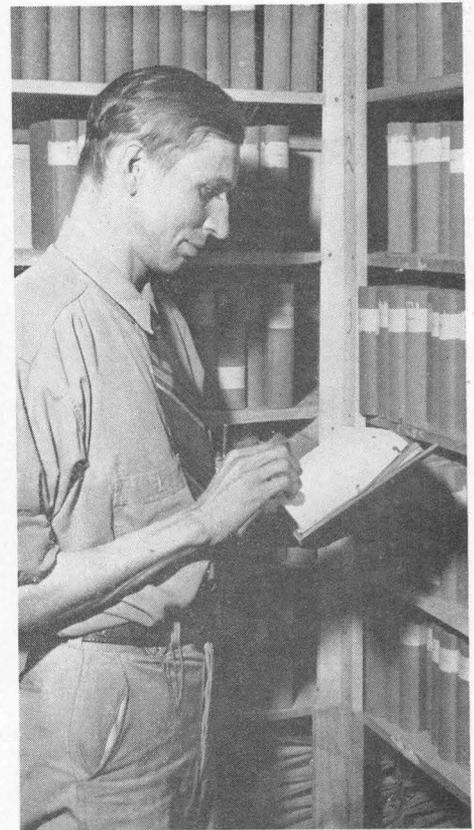
As the course progresses John probably will have a little trouble, and his instructor will turn in a pink slip—the indication of a failing grade. The next day he is checked on the pink slip flaws. If he corrects his errors, he is given a clean slate; if not, he draws another "pinkie." Three successive pink slips mean John must be given a check ride by either Army or civilian supervisory personnel. If John gives the check pilot a good ride he's "out of the pink" once more. And it's time for the 40-hour check and another grading on performance and progress.

Stage flights have become routine for John now. He gets through the power approach and hurdle stage with flying colors, and is ready for his solo cross-country. Final stage is the dual or solo cross-wind—then just his last Army check is left before he's off to basic school to start all over again in the second chapter of his by now important little book.

The final statement written by the instructor after he has given John his last ride, completes the history of his primary training insofar as flying proficiency is concerned. But until the day John receives his wings and commission the same little grade book, growing one page larger day after day, never leaves his training base.

Then? It is sent to Washington, D. C., where it becomes a part of the permanent War Department file on John's entire military career.

Never for long do Thunderbird's instructors regret the tedious hours which they have spent in preparing John's daily grade slips. When they do, they need only recall the hundreds of Johns who have gone before and now are listed on the field's famed Honor Roll board. For few of these graduates would be dishing out so much hell to the Luftwaffe and Tojo's airmen today had it not been for this daily systematic method of weeding out weaknesses.



KEEPING GRADE books up to date is a full-time job. Here Edward Abbott, is making the daily entry in a student's book.



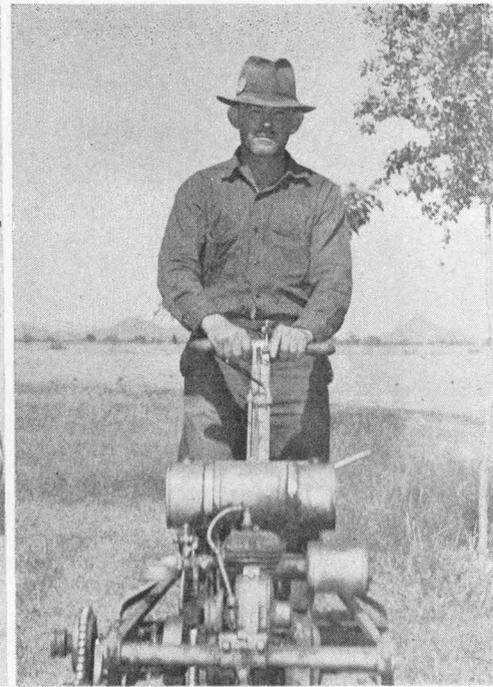
GRADE SLIPS are made out daily by instructors. In this corner of the Thunderbird II grade room instructors are noting what has transpired in the work day. These slips go into each student's log to chart individual progress.



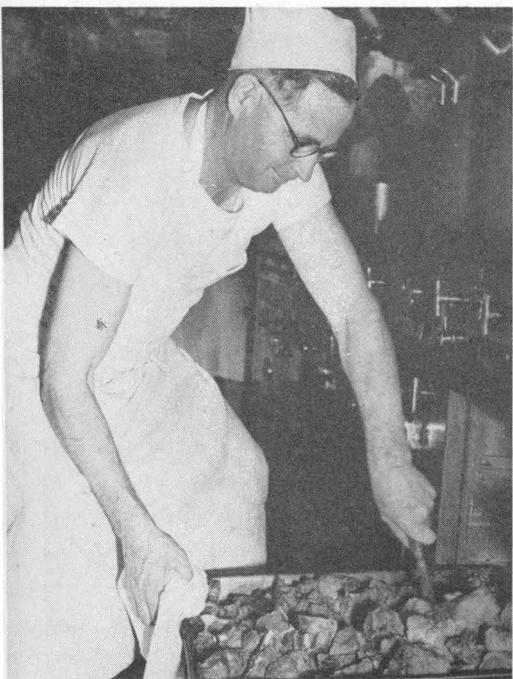
Oil-laden fuselage and cowl parts are whisked clean on the Falcon wash-racks by Opal Sanders. It's part of the practice of keeping Southwest ships grime-free at all times.



Sound training of aviation cadets would be an impossibility without capable instructors such as John Johansen of Thunderbird II. Every Air Corps pilot takes his training from such civilians.



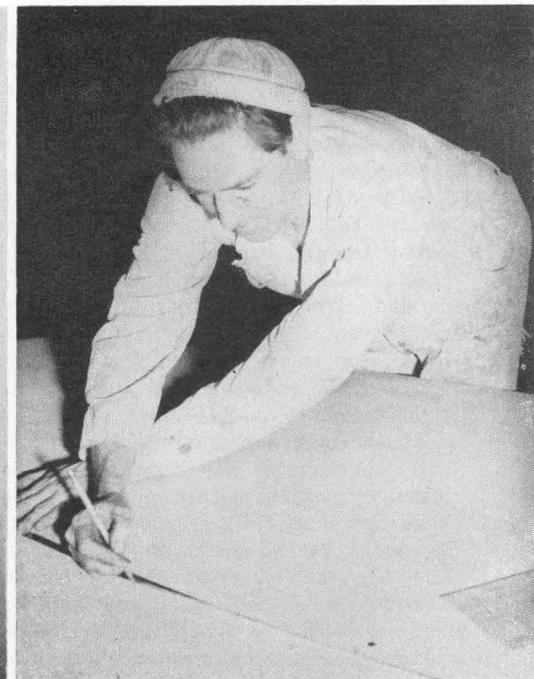
Acres and acres of greensward are clipped daily at Thunderbird II by Gardner I. L. Campbell whose power-mowing machine is a prime factor in keeping grounds neat and tidy.



Good food and good morale are synonymous. By that token Harry Warfel, cook at Thunderbird, is a three-times daily ambassador of good-will. He is shown above barbecuing lamb for the cadet mess.



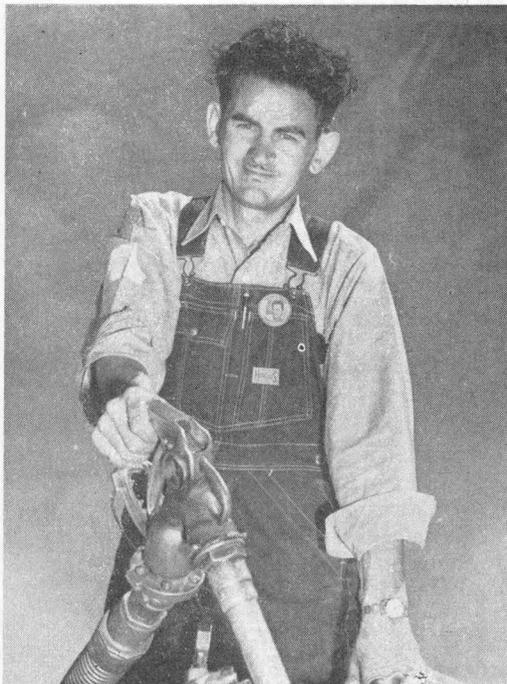
"Time out for a drink" says Billy Azbell, one of the office girls kept busy maintaining operational records at the Cargo Division terminal at San Bernardino.



Replacing a compartment sidewall for one of Cargo's ships W. Gill measures the wafer-thin plywood section for proper size before installation in the roomy Waco.



Tugging a plane into position is Sky Harbor Line Boy Louis Wilcox. Personal groom to the Harbor's fleet, he sees that ships remain spotless and in tip-top condition.



Thunderbird's active training program calls for copious quantities of gas and it keeps a corps of crewmen like Steve Lisick hustling to quench the sturdy Stearman's thirst.



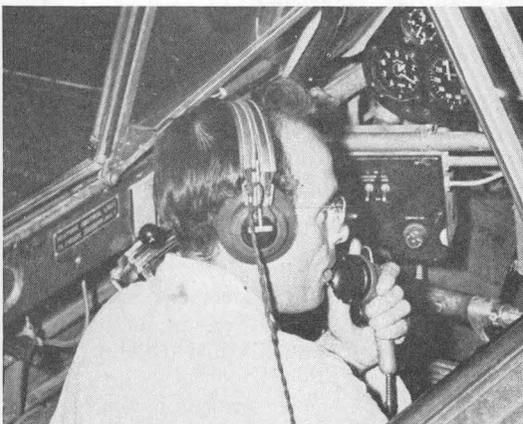
Precious lives someday may depend upon the Link-training given by such experts as Burt Hollis, Falcon instructor who has been "blind flying" cadets for the past 2½ years.

WAR WORKERS

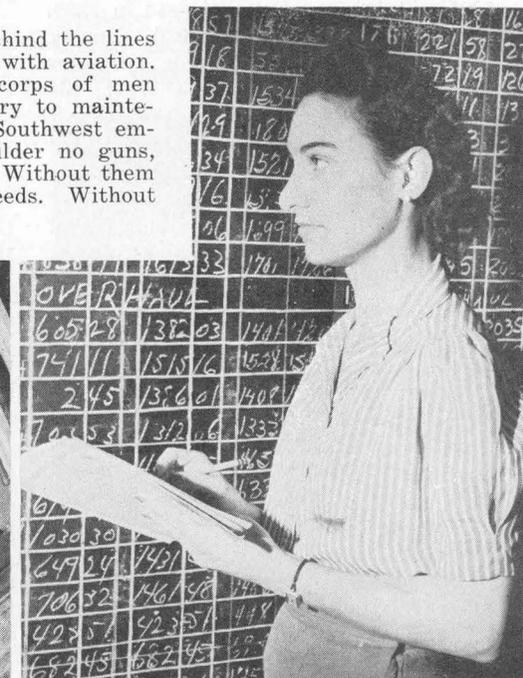
For each man on the battle front, ten are needed behind the lines to keep him supplied and in fit fighting shape. So, too, with aviation. Behind each "buzz boy" on the flight line stands a corps of men and women, each performing a varied, vital job necessary to maintenance, operation, morale. Such are the roles filled by Southwest employees pictured on these pages. These Americans shoulder no guns, wear no medals. But their work is vital to the victory. Without them it would have been impossible to meet pilot production needs. Without them the triumph of peace would still be far-distant.



Wielder of a nimble needle is Anna Goble, seamstress in the Overhaul depot's fabric department. When the picture was made she was fashioning a custom built aileron covering.



Radio plays a vital role in training at Falcon and a crew of experts keep sets in flawless repair. Here Leonard Young calls the control tower after checking AT-6A communications.



Keeper of the charts and graphs which tell of the condition of Thunderbird planes is Lelia Carpenter of maintenance records shown checking one of the master boards on which are listed shop reports.



"TINY" DOUTHETT

They called him "Tiny" at 15, when he was goal-keeper for a Minnesota professional ice hockey team. Even then he stood five-feet-11 in his stocking feet, weighed 160 pounds. Today, Clarence Douthett, Thunderbird's flight commander, tops the scales at 198 lbs., is six feet four inches tall.

Asked whether he would endorse any brand of breakfast food, Douthett claims it is not what he eats but the exercise that keeps him healthy.

He soloed his JN-4D Jenny early in 1925, obtained an F.A.I. license in 1928, and his C.A.A. ratings in 1930. During those years, Tiny spent his summers barnstorming in the Middle West; his winters crop dusting on the Coast. Specifically, he sowed rice, planted seed for a forest, and dusted cotton. In his spare time, he did aerial mapping for the City of Los Angeles, and spin-tested rebuilt and new experimental airplanes. He never bailed out, not even when the wind removed the windshield.

In 1931 he signed on as a tri-motor pilot for Hanford Airlines.

It was shortly thereafter that Tiny forsook aviation for photography, and "Douthett Photos" marked publicity pictures for Chevrolet cars and Love brassiers. In 1938, he was photographer for R.C.A. (Racing Corporation of America) and exclusively handled publicity shots for Gilmore Stadium's midget auto races.

"Once a flier always a flier" Douthett says by way of explaining his return to aviation.

The 39-year-old pilot joined Southwest in December, 1941, immediately following the Pearl Harbor attack.

Of every \$100 Americans saved in 1943, they loaned \$44 to the government.

LIBRARIES FOR CADETS

Ground school instructors at Thunderbird and Thunderbird II, sensing a keen desire on the part of all cadets to know the actual workings of the ships they fly, have established technical libraries at the two fields.

At Thunderbird, the library is open from 8:00 in the morning until 8:30 at night. During this period two ground school instructors are on duty to answer questions, explain equipment and check out service manuals.

Both schools have on display numerous parts from Army Training ships. Among them are a Rolls Royce Merlin engine from a Curtis P-40 "Warhawk" and a Wright from a B-25. Other heavy parts include propellers, landing gears, self-sealing gasoline tanks, and a turbo supercharger.

On the walls are hundreds of silhouettes, models, charts and pictures of hostile and friendly aircraft and, at Thunderbird, a projector and slides have been provided as a further means of keeping recognition ability to split-second identification.

Thunderbird II's "Training Guide for Hydromatic Propellers" is in constant demand as are technical orders and text books.

The army-provided demonstration equipment at the two fields is valued conservatively at approximately \$300,000.

Dog Joins Crew

From the Pacific comes the story of Snafu, a six month's old mischievous, Honolulu-born cocker spaniel. Snafu, meaning the famous Air Force phrase "situation normal, all fouled up," joined the crew of the B-24, christened Royal Hawaiian, last November.

Her co-owners, Lt. Paul B. Van Metre, Thunderbird Class 42-H, and his crew mates, insist she makes their missions much easier, although at times she's a little troublesome by becoming too playful.

"Probably you won't believe this," they say, "but Snafu has learned to spot Japanese Zeros from the cockpit and points like a bird dog."

She is a veteran of 13 combat missions—almost 200 hours—over Japanese territory in the Marshall and Gilbert islands.

At present, the bomber crew is having a special parachute made for Snafu, but has been unsuccessful to fit an oxygen mask to her nose. As a result, she goes on low flight missions; never on missions where oxygen is needed by the crew.



ALBERT McNALLEN

Eleven years ago the forerunner of today's ocean soaring, world used, glider was but a sportsman's toy.

One Southwest employee who can speak with authority on the motorless craft is Albert Jerome McNallen, night maintenance foreman on the Cargo Division. He'll tell you that compared with present 8,000-pound capacity ships, yesterday's fragile sailplanes weighed but 175 pounds.

In 1933, teamed with Earl Akin who learned to fly with the Wright brothers, McNallen built a soaring plane and started a glider school. Akin, who had pioneered glider towing behind aircraft, and who is believed to have made the first recorded long-distance hop from a fixed base—a distance of 100 miles—was chief instructor. McNallen was general manager and maintenance foreman.

But the school came to an end one sunny afternoon when McNallen, piloting a Cessna glider behind a special-built tow car, became caught in a cross wind and stalled in on the nose.

Besides 50 hours' glider time, McNallen claims over 5,000 air hours as a barnstorming mechanic. There isn't much of Texas he hasn't seen from the air, nor many Texans who haven't seen his brightly painted plane.

For awhile, McNallen gave up aviation to become a general field mechanic in the oil wells of Texas. Later—in 1941—he enrolled in the Curtiss-Wright Technical Institute, Glendale, Calif., and upon graduation, joined Southwest as a night maintenance mechanic at the Cargo Division. It wasn't long before he earned his A and E mechanic's rating and progressed to foreman. Now, after 14 months, he is in charge of the entire night crew.

“SIRS” INSTEAD OF “MISTERS”

Third in a Series of Articles

By the Public Relations Department
AAF Western Flying Training Command
Santa Ana, California

Pilots of multi-engine bombers are playing an important part in the winning of the war. After all, only multi-engine bombers can dump 2,000 tons of hell on Berlin in a single night. They make up the offensive arm of the Air Forces.

From the first day of Advanced twin-engine training, bomber pilots are taught to use their own and their plane's topmost capabilities.

It starts with pre-flight inspections. Checks before entering the cockpit, starting the engines, taking off must always be made with maximum care. When your ex-Thunderbird preflights his bomber a few weeks from now, the lives of a highly trained crew depend on his thoroughness. Multi-engine planes have too many controls which must be set properly, too many instruments and indicators which must be depended on implicitly to allow any slips in inspection.

In twin-engine school the student learns to handle two of everything. And if he graduates to Fortresses or Liberators, he will have quadruplets on his hands—four engines, four throttles, four times what he handled at Thunderbird and Thunderbird II fields.

Multi-engine operation is different right from the take-off. The student taxis out, locks his tail wheel, and moves

his throttles up steadily and easily to take-off manifold pressure. His job is to hold the plane straight. Rudder control comes fast as speed picks up, and he has to guide her by rudder. The runway is racing under him now. Up comes the tail wheel—in seconds he breaks away.

But as soon as he is airborne (just ten or fifteen feet off the ground) he levels off, retracts landing gear and flies at take-off power until critical single-engine speed is reached. Before starting his climb he must attain the speed at which his rudder has safe control even if one engine should go out.

Landings, too, are different. There are more things to watch and handle. In some twin-engine trainers a student touches the mat at speeds faster than Indianapolis racers. Angle of glide must be straight and constant. Plane must be brought in tail low. And then the critical landing roll. Hurtling along the pilot keeps her straight with the rudder as long as he has rudder control. Then he uses the brakes sparingly, easily and finally a touch of throttle, if necessary.

He's riding big stuff, but sometimes he can't set it down this easy. Maybe a few months from now he'll come back to a landing strip that has sprouted bomb craters since he saw it last. So he practices go-around procedure in Advanced. Let's say his wheels are down before he decides not to land. He levels off, advances throttles to climbing manifold pressure and goes around again. His flaps are "milked" up slowly, gently. He is all right as long as he maintains airspeed above minimum slow flying speed.

This slow flying is important to multi-engine pilots. It teaches them to fly by "feel" alone at airspeed considerably lower than power-off stalling speed. Such knowledge pays off in short field landings, for instance, where a pilot has to "feel" his way down in a hurry with no time to watch a panel full of instruments.

In combat the light control-touch developed in slow flying helps pilots to bring back damaged planes. The race over the target may be to the swift, but the walk back with flak holes in your shoes is often a triumph for this light handed technique.

Any cadet with two engines must learn to get along with one. It's a lucky bomber indeed that gets home every time with all engines firing. So the student takes off on another training flight. Everything is so peaceful he is just about to yawn when—oops!—his instructor cuts out an engine without warning. No place

to stop here!—the trick is to increase both prop controls and advance both throttles (this eliminates the hazard of pinning faith on the wrong engine). Next drag is reduced by feathering the dead propeller or setting it up to full high pitch, if feathering isn't possible. Then single engine flying really gets under way—stalls, turns into the dead engine, turns into the live engine, single engine landings, what to do if an engine conks out on take-off.

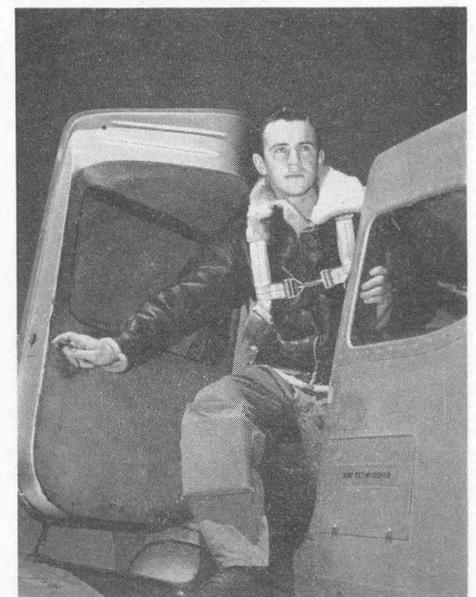
After they know their planes inside out twin engine cadets, like their single engine brothers, go into formation flying. If possible, this is even more important to bomber than to fighter pilots. Sticking together means getting more planes to the target, laying more bombs where they will do the most good, and staying alive. In tight formation a very few big bombers will generate more fire power than a whole infantry regiment, power that literally chews up enemy fighter squadrons. But flying alone they are clay pigeons.

Of course, twin engine students also go over the hurdles of navigation, instrument flying, interception problems, cross countrys and all the things that together caused a high ranking R. A. F. officer to exclaim about American pilots, "Lord, but they can fly!"

Then suddenly it's all over. They have mastered the most exacting flight training in the world. At last they are "Sirs" instead of "Misters".



AVIATION CADET Raymond J. Chiaevta, Thunderbird Class 44-D, slides down the wing of one of Stockton Field's AT-17's after a long training flight.



WILLIAM B. COLVIN, climbs out of his advanced trainer after a solo flight. He began his training at Thunderbird, Class 44-D.

FIGHT LASTS 3 MINUTES

"It was just like one of those sensational movies we used to sneer at in training."

With this statement, Lt. Richard C. Holman, Thunderbird, Class 43-A, summed up a brief but bitter air battle high over Brunswick.

It was all over in three minutes, according to press dispatches, but his Liberator was perforated by nearly 100 bullet holes ranging from the size of a baseball to rips more than a foot long.

"Everything was all right and we did not see an enemy fighter until just before turning for the bombing run," Pilot Lieutenant Holman said.

"Then as one big bunch drew the attention of our fighter escort three or four thousand feet below, others dove from above and took us by surprise so fast we didn't see them until they were right in our faces.

"Twelve Focke-Wulf 190s and Messerschmitt 109s roared right through out formation from dead ahead in single file, then made a 180-degree turn and came through again from the rear.

"It was a terrific sight. All the guns were going at once and tracers from our ships were crossing theirs in the sky."

Heroes

Two typical examples of the high quality military fliers civilian schools such as Southwest's have turned out in this war in six figure numbers, were brought to the nation's attention this month.

Cal-Aero revealed that Captain Don S. Gentile (pronounced Gen-tilly), America's new ace of aces with 30 Nazi aircraft to his credit, was a product of the school which it operated at Glendale and Lancaster in 1941 to train Yanks for Britain's "American Volunteer Group."

From Augusta came word that Major Robert Morgan, pilot of the famed "Memphis Belle," a Fortress which is the subject of a War Department documentary film now being shown throughout the country, received his training at Georgia Aero Tech.

Southwest's graduates, too, have earned "hero's" plaudits by the score; its Thunderbird Field Honor Roll board alone currently shows 692 decorations won. Bit by bit, the nation is learning about the important A.A.F. assignments in training which the civilian schools did so well, that six months ago we already had more than 100,000 Army pilots.

FIELDS GRADUATE CADETS



WAR BOND award for the best score in aircraft identification was presented Cadet Earl Sherwood by Thunderbird II Field Manager John Swope as a feature of the recent graduation.

Parents, friends and relatives of cadets at Thunderbird and Falcon fields recently were privileged to witness a review at public graduation exercises.

At Falcon, cadets passed in review before Group Captain Robert Spaight, director of training, R. A. F. delegation, who flew from Washington, D. C., to attend.

In his address to cadets, Group Captain Spaight counseled the young fliers not to forget Falcon field.

"Remember, when you leave here," he said, "the instructors and staff of this school. It isn't given to everyone to go and serve his country on the field of battle. Some have perhaps a harder task, because it hasn't the excitement and thrill of battle, but here they are doing work every bit as valuable. Every man and woman at Falcon is contributing very largely to the Allied nations' war effort . . . Be grateful for Falcon and all those who trained you here."

Immediately preceding and all during the ceremonies, the U. S. Army Air Forces' First Motion Picture Unit shot scenes of the valley training school. The film, which is being made of training fields in Newfoundland, Canada and the

U. S., is in cooperation with the R.A.F. It is expected that the picture will be shown in Phoenix after it has been completed.

Escorted to and from the flight line by cadets, some 500 spectators watched American and Chinese graduates at Thunderbird parade before high ranking military officers. Among visiting Army personnel were Brig. Gen. Martin Scanlon, Maj. Gen. P. T. Mow of the Chinese delegation, Colonel W. A. Robertson and Brig. Gen. Leland R. Hewitt.

The field's newly organized drum and bugle corps provided the music for the parade.

Thunderbird's II's 19th class of cadets completed its primary training by participating in the traditional graduation day review. Post officers received the cadet salute.

Highlight of the day's ceremony was presentation by Field Manager John Swope of a \$25 War Bond to Aviation Cadet Earl Sherwood, winner of the cadet aircraft recognition competition.

Twenty-seven million Americans are putting almost ten cents of every dollar they make into War Bonds



Strictly Feminine

They're not factory workers nor Wacs; they don't wear uniforms; and they aren't known by any special name. But the work they are doing is of vital importance to the winning of the peace.

These are the women who have invaded one of man's last domains—aircraft maintenance.

At Southwest's training schools, where approximately 40 per cent of the ground crews are women, feminine ingenuity is conceded to be little short of amazing. A majority of these workers have had no previous mechanical experience. They started and developed from scratch, but there's proof of their capacity for learning in the C.A.M. ratings they now hold.

Typical of the wives, mothers and sisters of service men who are determined to contribute their utmost to an early victory, is Hazel Luck, Thunderbird II, C.A.M. mechanic.

An alumna of Indiana University, Hazel taught school for two years, was married, and moved to Arizona. Shortly after Thunderbird II was activated—in September, 1942, to be exact—she joined the Southwest family. Mrs. Luck's oil paintings, on which she was working at the time, still are unfinished.

"Time enough for portraitures and sketches after the war is won," she says, "and my two brothers and sister return."

One brother, a private in the Infantry, is missing in action. Another brother is a Captain in the Air Forces, and a sister is a Lieutenant in the Army Nurses Corps. Her oldest brother served in World War I.

There's not much extra time left for a woman who holds down two jobs yet, besides her household duties, Mrs. Luck manages to teach an adult Bible class every Sunday morning.

For every flier in the sky there must be 10 mechanics and service specialists on the ground, it has been estimated. This is the approximate ratio at Thunderbird, where training planes, on an average day, spend 500 hours in the air.

Two years ago, Esther Mae Harper, native of Indiana, was in charge of diet trays at Good Samaritan Hospital. Today, at Thunderbird, she is a full-fledged mechanic with her C.A.M. rating.

The fact that she had had no previous mechanical experience was no barrier to Mrs. Harper, who started out as a crew helper. Progressing from carburetors to engines to hydraulics, she

quickly mastered the complexities of the training plane.

Although, occasionally, she helps out in the supply office, making use of her business college training, Esther Mae prefers the shop.

By the time a plane has had 1,000 hours in the air, it has required more man-hours of maintenance work than were necessary to build it originally.

Versatile Mary Cavin, who has toiled in almost every department in maintenance, alone has contributed over 1,300 work hours since coming to Thunderbird II last November.

The former North Dakota school teacher presently is stationed in the wing and aileron department, doing fabric covering, woodworking and doping.

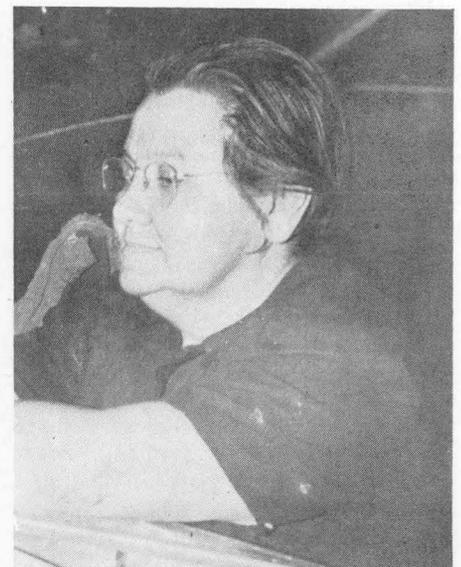
Thus are women devoting themselves to the winning of the peace. At Southwest, where aircraft fly on an average of nearly 40,000 hours per month, more than 400 planes daily are serviced and maintained. The war is teaching that many women have exceptional mechanical aptitude and can operate delicate instruments and complex machinery, sometimes more skillfully than men.



ESTHER MAE HARPER



HAZEL LUCK



MARY CAVIN

Our Poets' Contributions

Many mothers and fathers of Southwest cadets have sent us poems in honor of their sons. "To Our Cadets" was written by Mrs. Rose Janovsky in memory of her son, Joseph Robert Janovsky, Thunderbird 42-G, killed while in command of his ship.

* * *

TO OUR CADETS

A highway north leads to a shady knoll
That's where I take my daily stroll
Where meadow larks sing and the air is sweet
Wild flowers, orchards and flocks of white sheep
Truly, that's not really what takes me there
'Tis Thunderbird Cadets—high up in the air.

Like beautiful eagles in blue and gold
Each doing his lesson as he is told
Spin, loop, flip, soar straight in the skies
My heart skips a beat, I doubt my own eyes
Take courage, firm hand, clear mind and brave heart
To guide these huge eagles to perform their part.

Sometimes I stay 'till the day is done
And whisper soft prayer for every one
Mixed emotions pour through my poor heart
I don't seem able to tell them apart
It is pride, pain, fear, or could it be joy?
For one Cadet is my own, my only boy.

They work hard for their wings and commission
For Uncle Sam needs them on a serious mission
'Twas not their idea of Christian life
To enter this maddening murder strife
But Uncle Sam has always been right
And they must help their brothers win this fight.

Somehow I feel that win—they must
For, remember, Our motto "In God We Trust"
He alone is our judge and will decide
And bring them safely back, to our fire-side
Tears blind our eyes, our hearts how they ache
But we are trying to smile just for their sake.

We will pray for those whom we so dearly love
And wait the coming of our pure white dove
With message of harmony, love and peace
Our loved ones back home, our hearts at ease
So in the care of the Lord I place my only son
With this great solace, "Thy Will Be Done."

EPITAPH

Beneath this stone lies Murphy
They buried him today.
He lived the life of Riley—
While Riley was away.



FUTURE FEMININE FLIERS at Thunderbird have proven themselves adept at absorbing the intricacies of flight. In the classroom scene above, Instructor Duane Maley is teaching a course in weather.

Sends Letter

Captain Robert J. Brooks, Thunderbird, Class 42-I, now with the 354th Fighter Group in England, recently sent the following letter to THE THUNDERBIRD.

"There are a number of men from my class in this theatre of operations. Some flying bombers, light bombers, and others pursuit. Lt. James M. Lane is still with our squadron and is credited with the destruction of 1½ enemy aircraft.

"Our squadron C. O. was, until a few days ago, Major James H. Howard. You perhaps have read of his adventure and achievement against the enemy in a recent raid to the continent. We are very proud to have him as our group commander. I am deputy C. O. and operations officer for the squadron, and wear the Air Medal for participation against the enemy.

"This above information should be of interest to the present aviation cadets at Thunderbird. For, like myself when in actual combat, they will look back at the excellent training they received from your field and civilian instructors.

"I wish you'd give my former instructor a greeting for me—W. R. Kelly. You might remind him that one of his old cadets who ground-looped on his first solo ride is now doing his best to ground-loop the Luftwaffe."

Girls Study

"It's rough and rugged, but we like it."

So sums up the opinion of a group of 15 army and civilian girl employees currently taking ground school instructions at Thunderbird in order to learn all there is to know about airplanes and aviation in general as a means of furthering personal flying aspirations and as an aid to better understanding of their every-day work.

The girls study the same courses and take the same exams given to regular army aviation cadets. They sharpen their knowledge on such subjects as aircraft, meteorology, weather, navigation and engines, and upon completion of their course are qualified to take the regulation Civil Aeronautics Authority examination. In fact ten members of the present class are nearly ready for their CAA tests.

A few of the girls already have started their actual flying, taking their time at Sky Harbor and all are serious about following up their ground course with flight instructions.

In taking the course each of the girls sacrifices her lunch hour for classes convene during the lunch period and students cram in theory of flight between bites of sandwiches and sips of coke.



Gossip and Hearsay

Newest of "Maresy Doates" among the flight instructors at Southwest is: "Lazy eights and pylon eights And little loops and dives. I can do slow rolls, too, Why can't you?"

Brig. Gen. **Martin F. Scanlon**, Commanding General of the 36th Flying Training Wing, recently had breakfast with T-2 cadets . . . **Andy Anderson** and **Glenn Ball**, T-Bird maintenance, among the first four men to be hired for that department, became friends in the Navy back in 1938. They have been together ever since . . . He doesn't look that old, but **Kelley H. Rogers**, T-Bird flight instructor, has a son 20 years old who is flying Hellcats for the Navy in the Pacific.

Lee Wright, T-2 parachute department, recently was injured in a motorcycle accident; is back on the job now with only a tell-tale cut on his chin . . . Six foot **Jack Robinson**, Falcon flight instructor used to stand in for Taylor, Gable and Montgomery before he came to Southwest . . . T-2 softball team won its first game from Luke field 1-0. The boys looked mighty sharp in their new red and white uniforms.

Everyone has his own idea of how to spend New Year's Eve, however, we think you'll agree that **Andy Anderson's** trek to the top of Pikes Peak on a motorcycle in 1940 heads the list of unusuals.

Weddy Kraenzel and **William Willis**, Falcon, just received their aircraft mechanics' licenses . . . Congratulations to **Howard P. Walker**, former assistant superintendent of maintenance at T-2 (old-timers will remember him) who has a baby girl.

Donald Ludwig, **Edwin Olsen** and **Clifford Sandburg**, ex-T-2 flight instructors, visited the field recently. They had just completed their officer's training at Nashville, Tenn., and were en route to Long Beach to take up duties with the ATC's sixth ferrying group. **John Bonnell**, Falcon's chief ground school instructor, visited the Cargo Division on a recent trip to the coast . . . **Robert C. Reed**, T-2 ground maintenance is in Texas on his vacation.

Ted Waters and **Malcolm Moss**, Over-

haul Division, had good luck on a recent fishing trip to Roosevelt Lake. Caught a nice mess the first night. They traded their last fish for a quart of thirst-quenching beverage with a disgruntled angler who was long on liquids and short on fish. There seems to be some questions among fellow-workers, however, as to the success of the venture. The way we heard it was that they posed for a picture with the beautiful string of fish. **Johnny Williams**, assistant superintendent of aircraft, snapped it. The sad part came when they discovered the camera was devoid of film—thus no proof.

Congratulations to **P. M. Andrews**, T-2 instructor, and to **Donald McDonald**, T-2 maintenance, who have new babies. . . . **Jeanette Williams**, lead on dope crew, slaved over a victory garden, could practically taste the fruits of her efforts when aphides beat her to it.

Joining the family of pets at Southwest operations are young ducks **Ike** and **Mike** latest additions at T-2 . . . Thunderbird's bowling team finished third in the Industrial League.

If **Ernie Pelton**, T-2 chief pilot doesn't seem quite himself lately, it probably has something to do with a new E. R. C. regulation. There were two less Javelina at South Mountain Park recently. **Frank Carson**, T-Bird flight instructor saw to that. He aimed, fired, and hit his mark. . . . **Lt. Dusty Rhodes** sez: "The shorter a girl wears her skirts the easier it is to get up stares."

* Falcon link instructor **Johnny Winn** has been giving Chief Instructor **Mel Lyster** dual lately. **Johnny** has a Cadillac 60 special which, according to **Mel**, is one hot car . . . **Betty Patterson**, T' Bird maintenance clerk has returned to her home in Newaygo, Michigan.

Special congrats to Falcon's **Wingco McKenna**, his staff and our field personnel for the smooth manner in which the reception for Lord and Lady Halifax was handled. It couldn't have been done better from start to finish . . . and save a few special compliments for the swell luncheon which **Vyron Ros-siter** dished out to the important guests. . . . Phoenix newspapers were slightly

perturbed because Lord Halifax liked Falcon so well he over-stayed his schedule a full hour. Tsk, tsk, boys, we didn't want him to go then.

Lt. Billie Russell of the Air Corps and Seaman 1/C **Don Myers** recently visited friends at T'Bird. Both formerly worked in the shop . . . **Mary Gollie**, T-2 shop recently became Mrs. Hogancamp . . . E. R. C.'s with aching muscles might do well to talk with **Eleanor Libby**, T-Bird dispatcher. She took three years of military drill at Agontz finishing school—drilled with wooden rifles, and at the end of each semester officers from West Point came over to review the girls.

Barney Barnard, **Bill Mitchell**, **Dick Tuttle**, and **Vincent Gonsalves**, Falcon flight instructors, recently were promoted from primary to advanced . . . No one knew **Lelia Carpenter**, T'Bird maintenance, could smile so happily until Ensign **Keith Sasser** visited the field recently on leave. **Sasser**, former Southwest employee is with the Naval Air Corps.

Why won't **Sarah Koors**, Link secretary, take a ride in a Link? Is she afraid she'll spin in? . . . **James Vick**, T-2 flight instructor used to spend his summers fishing for tuna off the coast of South America . . . **Guy Barnett**, T'Bird maintenance night clerk, believes that variety is the spice of life and is wishing he could find a different route to come to work every day.

Heard recently at Southwest, was the phrase, ". . . I do hereby take thee for better or for worse, till draft do us part. . . ." At Falcon the primary ball team including **Don Cross**, **Horace Griffen**, **Jerry Bacon**, **Jack Sponhauer**, **Jimmy Moses**, **Bob James**, **Dick Worthen**, **John O'Conner**, **Johnny Parsons** and **Don Seymour** hasn't lost a game yet.

T-2 dispatchers **Jeanne Beardsley** and **Marjorie Taylor** have more than their job in common—both are violinists. **Jeanne** used to play in the Portland Symphonic orchestra . . . **Kenny Hopwood**, T'Bird preflight crew, has the most original idea of the week. He had different employees guess when the European Invasion would start—meaning the day

(Continued on Page 20)

HOW MANY CAN YOU ANSWER?

Gather around for a session of dissa and datta. They're posers concerning our own operations and those of our aviation neighbors. Score ten points for each correct answer—100, we can use you on our staff; 80, you're still a sharp shooter; 70, even you will admit you're droopy; below that, you're in our class.

The answers are on page 20.

1. The airfoil on a plane which produces thrust is: (a) engine; (b) propeller; (c) wings.
2. Aeronautical Training Society figures indicate one fatal accident for every.....hours flown in the nation's primary schols. (a) 34,800; (b) 43,789; (c) 60,000.
3. The approximate range of the B-24 is: (a) 2500 miles; (b) 4000 miles; (c) 3500 miles.
4. A break in the flow of air over an airfoil is called: (a) profile drag; (b) burble; (c) skid.
5. Southwest Airways has trained pilots from.....countries representing every continent and corner of the world. (a) 29; (b) 30; (c) 18.
6. A parachute pilot is: (a) a pilot who bails out; (b) a small auxiliary parachute; (c) a member of the Caterpillar Club.
7. The average age of flight instructors at Southwest is: (a) 24; (b) 27; (c) 29.
8. The barometric pressure per square inch at sea level is: (a) 14.7 lbs.; (b) 15 lbs.; (c) 15.7 lbs.
9. A chandelle is: (a) the right nacelle of airplane; (b) the lighting system in the fuselage; (c) a maneuver in flight.
10. Southwest's operations cover acres: (b) 3,683; (b) 3,700; (c) 5,000.

Pilot Returns

"You haven't seen aerobatics until you've seen them done in twin engine ships by the boys in the South Pacific."

This statement, by Lt. Charles B. Riley, Falcon, Course 14, on his recent visit to the field, was only one of many he made in praise of combat pilots.

A member of the Ferrying Command, Riley talked fluently of Puerto Rico, Cuba, Brazil, Guadalcanal, New Guinea, Australia, Hawaii, and other global points.

Since May, last year, when he was graduated from Falcon, Riley has flown 17 different types of twin and four-engine ships.



FIRST TO REPEAT in Thunderbird's series of safety squadron contests was Charlie Jenkins' Squadron 8. Pictured at the dinner party given winners each month are squadron members, left to right, back row: Raymond Dinsen, Edmund Pillsbury, Dr. J. Gordon Shackelford, Harry Findley, Mrs. Cassetta Flynn, squadron dispatcher; Robert Kersting, Jerry Buckman, John L. Jones, Thomas G. Smith, Walter J. Morris and Conrad Wade. Front row: Charles Jenkins, Caldwell Mothershed, John Bensley, Richard Swingler and Bud Trott.

Cadet Graduates See Action

Official military and press reports show increasing activity by Thunderbird graduates flying on all continents. Around the world, from Sardinia to the Solomons, the field's alumni are winning decorations, citations and special press notices.

Only last month, Lt. Rodney C. Clare, Class 42-H, achieved the distinction of being among the crew of the first land-based American bomber to drop bombs on Truk, Japanese stronghold in the Caroline Islands. The announcement came in a communication from Seventh Air Force headquarters in the Marshalls, and also disclosed award of a bronze oak leaf cluster, the equivalent of a second Air Medal.

Lt. Gordon L. Willits, Class 42-D, is a member of a group of 44 Thunderbolt pilots who has been commended by five generals for gallantry and skill. Voluntarily returning to escort attacked Liberator bombers, after having been ordered to leave the task when their gasoline supply became low, every pilot fought long after his fuel had passed the critical stage. So effective was the group's counter-attack that they destroyed three enemy fighters and drove off the others without loss to themselves.

In Sardinia, there's "the best natural bomber pilot" in the Air Corps. Theodore O. Edwards, Class 42-G, who earned the

name from his buddies, has never turned back from 46 missions, and his plane has been hit by flak only once. "Touch-the-Ground Edwards," they nicknamed him, after a few bellybusting buzz jobs when he handled the heavy Marauder like a hedge hopping fighter.

"Coming in on a Wing and a Prayer" isn't just a song so far as Boris Slanin, Class 42-G, is concerned. The 23-year-old Fortress pilot with the 8th Army Air Force in Britain brought his "Lady Stardust II" home from a war industry target in France with two engines shot out by flak, a failing oxygen system, four bombs jammed in the bomb bay, the electric system sputtering, a dead radio, and no escort. "But we prayed and we made it," Slanin said. "And when I got out of that plane I really patted the ground!"

Lieutenant Edwin O. Fisher, Class 43-E, undertook a difficult job, did it and lived to tell the tale. Returning to his English base after a raid, Fisher destroyed a German flak tower built to knock down airplanes. Zooming at the tower until his Thunderbolt was only a few feet above the ground, he fired all his guns. "As I pulled up and rolled over," he said, "enemy fire hit my engine. I flew 20 miles without being able to rise 30 feet above the ground, but I got home eventually."

Pleasure in Introducing One Who Needs No Introduction

Biographically Speaking

Three years ago this month Stanford B. Roper, Thunderbird Chief Pilot, became a member of Southwest's family. From instructor, to assistant flight commander, to flight commander, to stage commander, he progressed to his present position.

Stan, who got his pilot's license early in 1927, boasts one of the oldest licenses in the company—number 3146.

Although a native of Ohio, he has lived in Phoenix—with the exception of two years—since 1913. For several years Stan worked as a mechanic in exchange for flying time. Then, in 1928 he went to St. Louis to instruct at Parks Air College. Two years later he returned to Arizona to operate Desert Airways, a private flying school.

His hobbies are outboard motor racing and miniature railroading.

In the basement of his home there is approximately 180 feet of HO gauge track, five engines and over 100 cars, the product of three year's construction.

He has given up hysteros for the time-being. But he still has his fancy collection of cups and trophies.

Raymond Hand, Thunderbird II superintendent of maintenance, has a job that requires answering to everyone on the field 24 hours a day.

Carpenters, electricians, janitors—all are in Ray's department. And it is up to him to see that everything from replacing a broken window, to cleaning the swimming pool to building a bookcase for one of the offices is accomplished—a painstaking job that is responsible in a large part for the beautiful grounds and buildings at our school.

Ray came to Southwest in April, 1941; went to work in the ground maintenance department at Thunderbird field; was transferred to Thunderbird II in September, 1942; and in February of the following year became superintendent of ground maintenance.

Although most of the construction work was completed when Ray moved to Thunderbird II, planting grass and shrubs and the general upkeep of buildings and grounds keeps his staff of 24 employees busy daily.

Vital statistics: Born in Texas, January 29, 1910. Moved to Arizona at the age of 11.

Frederick Yale (of the family who established Yale University) Toy first became interested in Arizona 15 years ago because of an irrigation project near Phoenix.

Then a New York City investment banker, Toy made frequent trips to the West. In 1939, in order to take an active part in the management of the Maricopa Reservoir and Power Company he closed his investment business. He is now vice-president and director of the company which irrigates some 38,000 acres of land.

Through a fortuitous meeting with Southwest officials, Toy was asked to take charge of the complicated cost accounting system of the Overhaul Division. He organized the present system for cost accounting and job reference, and earned for himself the position as its efficiency expert.

A former Annapolis midshipman, Toy holds a Bachelor of Science degree from the University of Richmond. He entered the university on the Chandler English scholarship award, given each year to the outstanding English student at Richmond Academy.



STAN ROPER



RAY HAND



FRED TOY



SERVICE PIN WINNERS at Falcon field this month include, left to right: Link Operator **W. J. Robertson**; **Iva Shea** of the Canteen, Maintenance Mechanic **Hester Swanner** and **James Baker** of the Stewards' Department.

Twenty-one gold service pins were awarded Southwest employees this month, the management's acknowledgment of two year's service. Forty employees qualified for the silver one-year service pins.

Two-year employees follow:

THUNDERBIRD

Administrative—Charles H. Renthal.
Flight Instructors—R. F. Anderson, Hans E. Johnson, Paul H. Linstrom, John P. Stillman.
Ground School—Kenneth Brown.
Shop—Norman J. Hinz, Clarence C. Kraft, Frank Medaros, Floyd Patrick.
Guards—D. L. McGovney, George L. Spencer.

FALCON

Flight Instructors—E. A. Abbott, M. C. Phippen, R. A. Rose, D. A. Thiele.
Ground School—Earl G. Peterson.
Guards—James Faylor.

THUNDERBIRD II

Flight Instructors—Paul F. Fryer, George W. Goforth, James E. Montgomery.

Those receiving one-year pins were:

SKY HARBOR

Airplane Maintenance—Wayne Wilcox.

THUNDERBIRD

Flight Clerical—Grace Gartside, Thelma M. Shaw.
Flight Instructors—Arthur G. Clay, William J. Butters.
Ground School—Charlotte Broe.
Airplane Maintenance—Jewell L. Wolfe, Robert W. Eans, Marion B. Little, Alma R. Wolfe.
Gasoline Department—Young E. Lindsay.
Steward's Department—Ethel B. Know, Tillie H. Van Laar.

Ground Maintenance—Richard L. Greaves.

Building Maintenance—John J. Montoya.

Janitors—Amie F. Tannehill.

FALCON

Administrative—Margaret Duke.
Flight Instructors—A. N. Campbell, Jr., James L. Moses, Claude M. Downs.
Link Department—W. J. Robertson.
Airplane Maintenance—Hester Swanner, Ethel Covington.
Radio Department—R. D. Cross.
Steward's Department—James Baker, Frances Phelps, Iva Shea.

THUNDERBIRD II

Administrative—Frank C. Botkin.
Flight Instructors—Henry W. Hyde, Stephen W. Lowell, Gerald H. Oppenheimer.
Ground School—Charles A. Wright.
Airplane Maintenance—James J. Vick, Ida G. Windes.
Ground Maintenance—Sam Heyduck.

OVERHAUL

Aircraft Division—Carol J. Emerson, William K. Ford, Robert H. Osborn, Ira M. Rhodes, Emma Vickers.

Guess 'Em?

1. (b) propeller.
2. (b) 43,789 hours.
3. (b) 4,000 miles.
4. (b) burble.
5. (b) 30 countries.
6. (b) A small auxiliary parachute.
7. (c) 29 years.
8. (a) 14.7 lbs.
9. (c) A maneuver in flight.
10. (a) 3,683 acres.

GOSSIP (Con'd)

and hour. The one who comes closest will win approximately \$50.

Fred Merha and **Paul Robart**, Falcon advanced instructors, can't tell an airplane from a sheep herder's hut. Got everybody out at T'Bird one night, when night flying, to go to a burning plane. It turned out to be a sheep herder's hut. . . . **Ruth Lassiter**, T-2 maintenance, has returned to work after her vacation. . . . Also **Frank Medaros**, T'Bird hangar 5, is back from a week's vacation.

Falcon ex-ground school navigation instructor, now **Lt. M. A. Coddington**, is flying P-38's in combat in England. . . . **Bob Landing**, a former T-Bird mechanic, now working with the Navy in the Hawaiian Islands, wrote recently that out in the Pacific he has been nicknamed "Thunderbird."

Wedding bells have been ringing at Falcon of late. . . . Our congratulations to instructor **Max Kaufman** and **Harold Schwilk**, both recently married. And **George Bliss**, Falcon advanced dispatcher, when are you trekking the middle aisle?

Art Reed, former mechanic at T'Bird, now a lieutenant in the ATC dropped by for a short visit recently. . . . New additions to Falcon's flight staff are **R. N. Elliott** and **Frank Petella**, both recently transferred from T'Bird. . . . **Florence Grogg**, T'Bird maintenance, was the lucky winner of an electric clock for which **Frank Chestnut** sold the chances.

Frieda Cantrell, personnel department, recently had a tonsillectomy. . . . **Norma Belle Ekiss**, T'Bird Hangar four, is back after a few day of illness. . . . And **Gene Walser**, Falcon ground school, has been off work with a strep throat.

We notice that **George Tayrien**, **L. L. Groomer**, **Lynn Aldrich** and **H. E. Hibbard**, T-2 flight instructors, have made contributions to the "Gadget Gazette." How about sending some in to us?

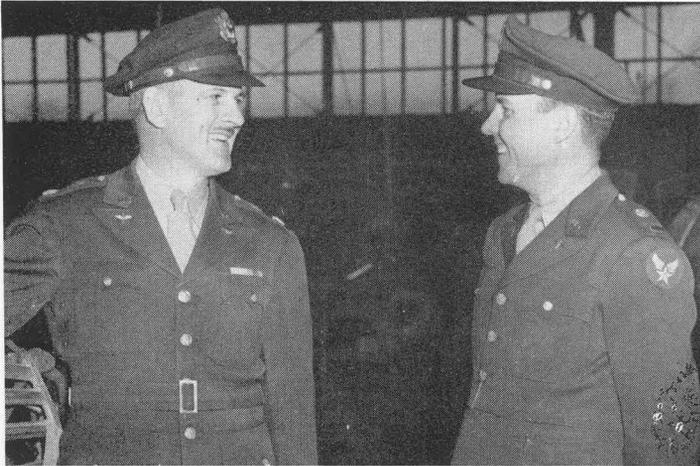
Johnny Winn and **Lewis Colby**, Falcon link instructors both are capable pilots. **Lewis** has an Aeronca Chief for sale now and will also rent it if anyone is interested. **Johnny** has a Bellanco.

Delilah Romine, secretary to Wing Commander **McKenna**, arises at 5:00 every morning to get breakfast for her boarders. . . . T-2 chief pilot, **Ernie "Diamond Jim" Pelton**, found **Betty Coe's** lost diamond in thirty seconds flat after the girls in the Flight Records office had been crawling around on their hands and knees for an hour and a half.

THE THUNDERBIRD STAFF

Editor . . . **Bernadine Wurzbacher**
 Photographer . . . **Frank Gianelli**
STAFF ASSOCIATES
 Genevieve Buckles
 Jim Yerkes Elizabeth Olson

★★ VISITORS OF THE MONTH ★★



OVERHAUL OPERATIONS of Southwest Aircraft Corporation were inspected recently by Lt. Col. J. E. Warrick (left), chief of the supply division of the San Bernardino Air Service Command. He was shown the depot by Lt. Franklin DeVore, army inspector.



REVIEWING OFFICERS at Thunderbird's graduation included, left to right, Brig. Gen. Leland R. Hewitt, Maj. Gen. P. T. Mow of the Chinese delegation, Brig. Gen. Martin Scanlon, Col. W. A. Robertson and Captain Julian Adams.

They Also Stopped By

FALCON: Harvey Preston, Federal Communications Commission inspector.

THUNDERBIRD: Lt. Col. Joseph E. Terry, director of all pilot ground schools, 3000th AAFBU, Western Flying Training Command.

THUNDERBIRD II: Captain S. G. Cooper, Major J. A. Gugliemetti, Lt. Col. A. J. Mickle, 3000th AAFBU, Western Flying Training Command.

OVERHAUL: Lt. Col. Theodore Turner, Jr., Capt. Louis B. Atkinson, Col. C. P. Porter, Lt. V. C. Wright, all from San Bernardino Air Service Command.



NOTED AUTHOR Wil-lard Weiner of New York spent several days visiting Southwest fields gathering information to incorporate into a book telling the civilian contractor schools' training story.



FALCON'S GRADUATION review was taken by Group Captain Robert Spaight, director of training, R.A.F. delegation, Washington, D. C., Captain Marvin Grant, commandant of AAF cadets, and Wing Commander J. F. McKenna, field commanding officer.



ILLINOIS VISITORS to Thunderbird II recently included ranking state officials. Above, left to right, are Illinois Attorney General George F. Barrett, Mrs. Dwight Green, Richard Searles of Phoenix, Mrs. Barrett, Captain J. R. Breeden, and Governor Dwight Green.

★ AVOID USELESS WRAPPINGS! ★ ACCEPT SIMPLER PACKAGING!
★ SHARE THE PRINTED WORD! ★ MAKE EACH PIECE STRETCH!
★ HITCH!

PAPER PACKS A WAR PUNCH!

