

Thunderbird II Anniversary Issue

The THUNDERBIRD



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THE COVER

Training—quickly, efficiently, safely—is the story behind this picture taken on Thunderbird II's flight line, as four Army Air Force aviation cadets return from their flights. It is a job we are doing well every day, not only at Thunderbird II, but at our other fields, too.

Back Cover: Fifth and last in a series of company advertisements now appearing in all leading aviation trade magazines.



In ten more minutes what will you be doing?

IN ten more minutes they'll be in action—American fighters risking life and limb to conquer one more bridgehead on the road to freedom.

And in ten more minutes—what will **you** be doing to help win this war?

Because it's up to you as much as it's up to them. Unless you—and all the rest of us at home—are devoting every spare minute of our

time to fighting this war as civilians, **their** chances of victory are slim.

Next time you read of an American raid on enemy positions—with its tragic footnote of lost planes and ships and men—ask yourself:

"What more can I do today for freedom? What more can I do tomorrow that will save the lives of men like this and help them win the war?"

EVERY CIVILIAN A FIGHTER

Contributed by the Magazine Publishers of America

"THERE IS MUCH TO DO"

This week Thunderbird II is celebrating the first anniversary of its operations in Paradise Valley, and at the same time is holding graduation exercises for Class 43-K. The Army personnel and all the civilians who have been at Thunderbird II can look back with pride to the day, one year ago, when this field was activated. They all will remember the trials and tribulations besetting even the normally simple procedure of sleeping and eating, much less the difficulties confronting the flying operations mid the summer heat and afternoon dust storms.

Since that time, many cadets have been trained at Thunderbird II, and many changes have come about which have naturally assisted in affording the cadets a better opportunity to learn the simple rudiments of flying. Some of these changes have been on the practical, tangible side, such as the enlargement of the paved area for flying, extended grass area to provide dust control, installation of the Link Trainers, etc. But the more important changes have been the continual seeking of new safety methods, better ways for conducting the flying curriculum, which have been brought about through the cooperative efforts of both the Army and the civilian personnel.

The Flying Training Command is now endeavoring to condition aviation cadets at the various induction centers, in order that they will be better equipped, better able to absorb and digest the flying and ground school training they receive at primary schools. Young people from all over the country undergo a rigorous course of physical training, together with education, swimming, the use of life rafts and other safety devices against forced landings in open sea, how to exist when forced down in jungles, together with the more usual courses that are closely identified with the actual operation of an airplane. When cadets are sent out to primary schools, they are well equipped, physically fit, mentally stable, morally alert and well disciplined soldiers.



It is up to the primary schools to carry on and to further the splendid start that has been given these future fliers for the armed forces. It is up to the primary schools not only to give them the finest flight training, but to keep their physical condition and mental outlook at a high peak. For the fine work along these lines in the past at Thunderbird II, all civilian personnel and members of the 12th Army Air Forces Training Detachment may feel justly proud and are to be congratulated. But let us not rest too long on the thought of the past; for there is so much to do in the future.

Thunderbird II at the present time is training more cadets than ever before. The press of war is having its effect on every form of work and existence in America. The increase of potential fighters and bomber pilots must in no way detract from the quality of training that each one receives. The present air war in Europe and the coming air war over Tokyo will exact many lives of highly trained personnel and much equipment, but at the same time it will exact a greater degree of training from the moment a cadet goes into a Stearman airplane for his first ride. So, in dedicating this field, it is not the purpose to dedicate this past year, but to dedicate the future. And in dedicating the future, let us make every graduate of Thunderbird II, the finest tribute to the training methods of the Army Air Forces.

May we be able to look back in another year and say with equal pride: "We still are doing our part and doing it well." For then, we will have kept faith with those who have placed their trust in us.

Thunderbird II Field Manager

THUNDERBIRD II BIRTHDAY PLANS SET

A Southwest Airways training field will be opened to the general public for the first time in almost two years next Sunday, July 24, when Thunderbird II celebrates its first birthday with elaborate ceremonies.

Co-incident with the "open house", the field will be re-dedicated to Victory, and its 11th class of cadets graduated.

The ceremonies will occur on the 366th day of operations at Thunderbird II, for although its training detachment was activated in June, 1942, operations did not begin at the new field until July 23. Despite its youth, it already has flown more than 100,000 training hours and its graduates number "well over a thousand".

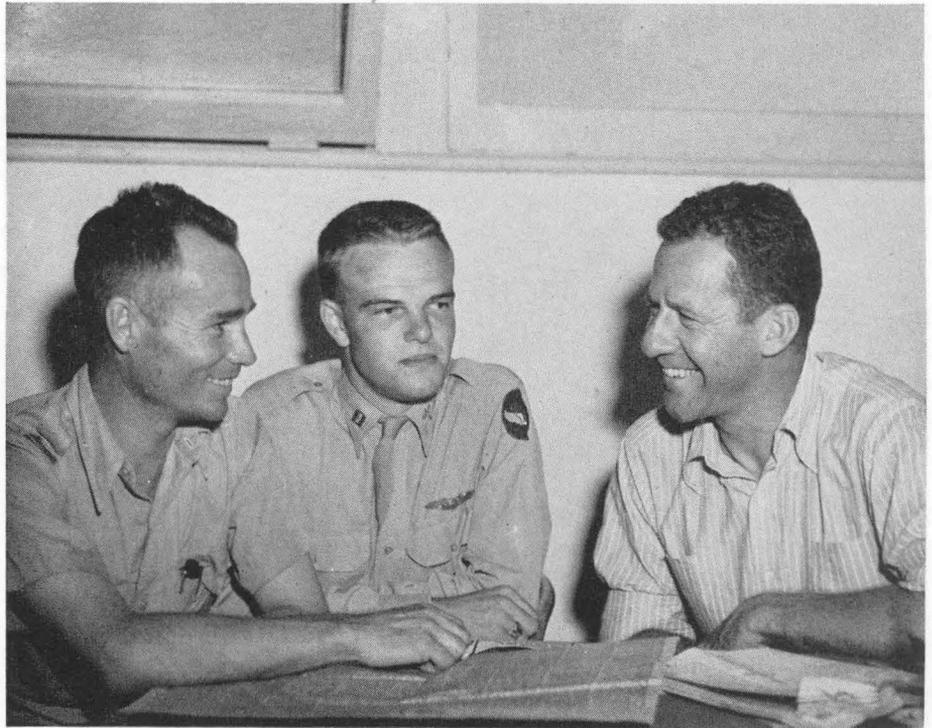
Not since Thunderbird Field was formally dedicated on May 30, 1941, has the public been permitted to inspect a Southwest field—a fact which alone is expected to create unusual interest among Salt River Valley residents. In addition, field executives, both company and military, have arranged an impressive program.

First visitors will be permitted on the field at 9 A. M., and taken on tours of the entire post by cadet personnel. Every phase of the training program will be explained in detail to the guests, and they will be permitted to inspect ground school and flight rooms, as well as barracks, maintenance hangars, canteen and mess hall.

Tours will be conducted for a period of one hour only, as formal ceremonies are scheduled to get underway promptly at 10 A. M.

Cadets will pass in review for the guests, with the Williams Field band providing music. Commanding officers of all other training schools in the Valley and of other West Coast Training Center primary fields have been invited to attend by Capt. Howard T. Van De Car, Thunderbird II's commanding officer.

In the course of the review, the class will hear brief messages from Leland Hayward, chairman of the board of Southwest; Brig. Gen. Alvin



BUSY MAKING PLANS are Thunderbird II's top company and Army officials, left to right, Director of Training Mike DesMarais, Capt. Howard T. Van De Car, commanding officer, and Field Manager John Swope. They're working out details for the field's big first anniversary celebration, scheduled for next Saturday, July 24. Field will be opened to public inspection for the first time, with graduation review and air show as other highlights.

C. Kincaid, commanding general of the 37th Flying Training Wing, A.A.F., and John H. Connelly, president and general manager of South-

west.

Immediately following, a 30-minute air show will be presented by top-ranking members of the flight department. Director of Training Mike DesMarais, Chief Pilot Ernie Pelton and Group Commander Wally Pankratz will illustrate various parts of the cadet's training program, and also do formation flying as well as acrobatics.

It is expected that a group of P-38s from Williams Field will be on hand for the ceremonies, and that they will give an extensive aerial exhibition of why these are among America's finest pursuit planes.

A parachute drop test from an altitude of 300 feet will complete the scheduled program, although visitors will be permitted to remain on the field until noon.

Employees of other company operations have been issued a special invitation by Field Manager John Swope to be in attendance, and to bring their families and friends.

OPERATIONAL HIGHLIGHTS

CARGO DIVISION — New routes proposed by Army surveyed in anticipation of continued expansion of feeder line service.

FALCON FIELD — Pilots reach and pass total of 17,000,000 miles flown since start of operations in September, 1941.

OVERHAUL DIVISION — War Manpower Commission honors by "borrowing" General Manager Sturm to establish production line at Army base in Pacific Northwest.

SKY HARBOR — Student enrollment up 100 per cent under new, two-course War Training Service program; new classroom building in use.

THUNDERBIRD FIELD — Flags representing 29 countries from which Southwest has trained pilots are displayed for first time; largest class in field history now in training.

THUNDERBIRD II — Plans completed for gala celebration this week of field's first birthday; three million square feet added to landing mat.

THEY HEAD DEPARTMENTS

Men with experience, gained throughout the country, were gathered together by Southwest Airways to head the departments at Thunderbird II.

With the exception of Field Manager John Swope and Director of Training Mike Des Marais, whose backgrounds have been published in previous issues of THE THUNDERBIRD, the biographies of field department heads are compiled, capsule-form, in the following paragraphs.

Arthur L. Brittain, officer manager. Born, Loveland, Okla., 1911, attended school in Apache, business college in Anadarko, and came to Arizona in 1933 working as an accountant for a wholesale oil company in Phoenix.

Started at Thunderbird in December, 1941; nine months later moving to Thunderbird II. He's married, has two children, would like to play baseball but doesn't have much chance, but does work around the yard and fish.

Raymond Hand, ground maintenance. Waco, Tex., was the birthplace of Hand, 33.

Before coming to Southwest he was in the butter department of a Glendale creamery. On April 21, 1941, George Frock put him to work doing "just about everything," around Thunderbird. On Sept. 8, 1942, he was transferred to Thunderbird II and named head of the ground maintenance department.

Fred Kuhl, payroll, was born in 1912 in Cleveland, Ohio, and attended Heidleberg College and Western Reserve University. Before coming to the Southwest, he was office manager for a wholesale coal company in Cleveland.

Fred started at Thunderbird in April, 1941, and has been with the company ever since. Married, he likes to work with tools, play with his miniature railroad, garden, sing and play the piano.

Newton H. Oliver, guard, was born in Martindale, Texas, February 2,

1908; schooled there and in Sutter City, Calif.

In 1925, he began a six-year stretch with the Marine Corps, serving on the West Coast and on the battleship, U. S. S. Tennessee. He was a silversmith in Phoenix until he became a guard at Thunderbird in April, 1941. Married only about five weeks, he still thinks washing dishes is fun.

Ernie Pelton, chief pilot. A native of Jenue, Mont., where he was born in 1915, Pelton worked at the Lewiston, Idaho, airport as a mechanic in exchange for flying time, taking his first lesson in 1937. By 1939 he was flying in earnest, and soon became a Civilian Pilot Training instructor at Lewiston.

He started as an instructor at Thunderbird with the second class of cadets in April, 1941, and came to Thunderbird II when it opened.

Thomas Raymond Wardell, chief ground school instructor. Born in Denver, Colo., 34 years ago, he attended school at Dawson, Northern New Mexico, and, later, Carnegie Institute of Technology, where he majored in industrial design and education.

During four years of teaching and coaching high school football and basketball, Tom exhibited his paintings and ceramics in many national shows. After four years of construction work in the East, he returned to Phoenix in 1939, where he has been active in art circles. Married, he has a daughter nine and a son two.

Howard P. Walker, maintenance. Born in Los Angeles in 1912, he was schooled in Phoenix and San Diego, then returned here to farm.

Howard learned radio engineering in a trade school before joining Southwest. Farming keeps him so busy in his off-duty hours that he hardly has time to read, his favorite hobby.

John C. (Jack) Ward, steward. Born in New York in 1901, he attended Brown University, and then began a career in foods that took him from coast to coast.



MUCH CREDIT FOR Thunderbird II's outstanding first-year record is due to this hard-working group of department heads, who make sure everything clicks day in and day out. Left to right: front row, Newton Oliver, guards; Art Brittain, office, and Jack Ward, steward; back row, Raymond Hand, ground maintenance; Howard Walker, flight maintenance; Tom Wardell ground school; Fred Kuhl, payroll, and Ernie Pelton, chief pilot.

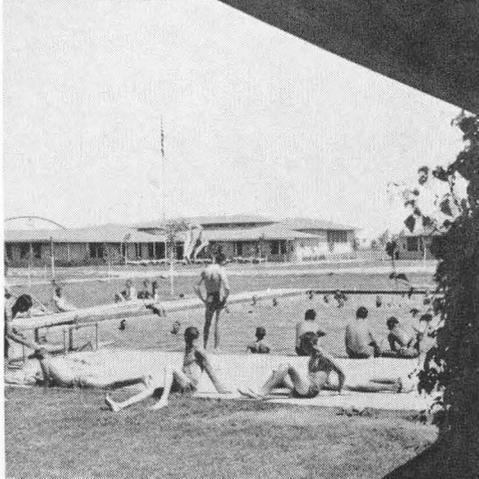
THIS IS THUNDERBIRD II PICTORIALY



Right
NO PICTORIAL story of Thunderbird II would be complete without Susie Q, the little Sicilian ass who was chosen field mascot in a moment of weakness.



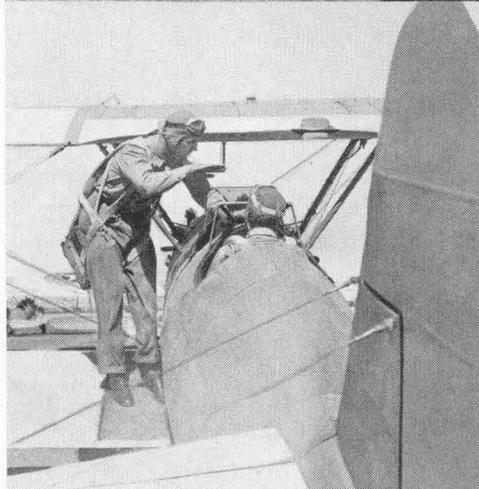
Left
THEY MAY BE the only Argentians serving in the Army Air Forces—Ignacio F. de Elizalde and Alejandro Paqliere, Thunderbird II flight instructors shown here with their chief, Mike DesMarais.



Right
MEMBERS OF this week's graduating class whip through a final game of basketball in the extensive athletic area. Cadets play an hour daily as part of their training program.



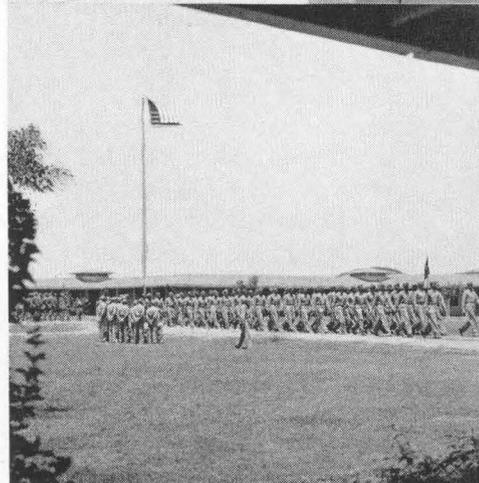
Left
TRAINING OVER for the day, cadets cool off in the swimming pool. In the background may be seen some of the neat, comfortable barracks which mark Thunderbird II one of the Army's most modern primary schools.



Right
UNDER THE Stars and Stripes, Thunderbird II's maintenance crews "keep 'em flying." This is Mrs. Evelyn Softley, who lists oiling props among other duties.



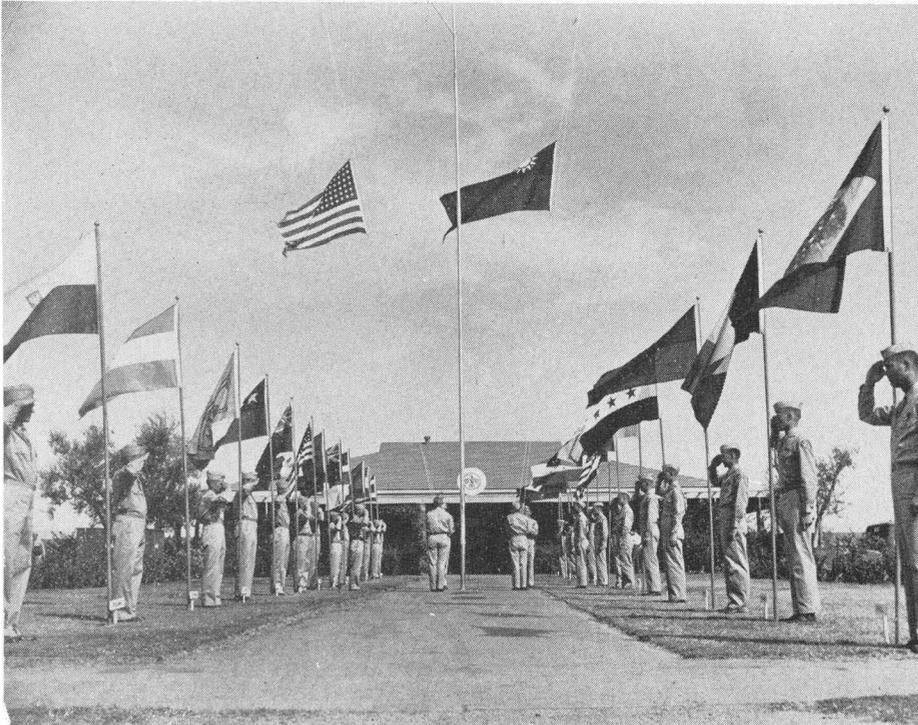
Left
KEY TO America's aerial might is the primary school flight instructor, who, in nine weeks, trains his cadets into confident, capable pilots. This is Les King, one of Thunderbird II's 96 civilian instructors.



Right
RAPIDLY CLIMBING into the warm, ever-blue skies which make Paradise Valley an ideal military pilot training base, two PT-17's pass over the flight tower.



Left
THEY MARCH in squadrons to the flight line, to ground school, and in this instance, to mess. Unheard here is the customary song which identifies marching groups.



FLAGS REPRESENTING COUNTRIES from which Southwest has trained cadets are broken out for the first time during retreat at Thunderbird. Flag ceremonial will be repeated only on special occasions. In all, Southwest fields have trained pilots from 29 countries.

Buddies Parted

Two former Thunderbird cadets have covered themselves with glory and their enemies with destruction, and one of them, now a prisoner of war in Italy, awaits the Allies he hopes will liberate him.

Inseparable companions throughout their training in Class 42-B, Captains Robert Golberg and Lawrence C. Kennedy, piloted ships which dropped bombs on Greece, Crete, Naples, Sicily, Tunis, Bizerte and Italy. Golberg, pilot of "The Witch," a Fortress which brought down five Axis planes during operational flights, was given the Distinguished Flying Cross, the Air Medal and the Silver Star.

Kennedy, holder of the D.F.C. and the Air Medal, was on a mission that was to be his last before returning to the United States. It would have given him 300 hours of combat flying, but his ship was knocked down.

Golberg, on the same mission, saw his companion's ship crash-land in the water 100 yards from the shore near Naples, which they had just plastered with bombs.

Service Pins

Tenure of service pins, suggested by an employee as a "Why Don't We?" in the April issue of The Thunderbird, have been approved by company officials, it was learned recently.

An order already has been placed for the pins, and it is expected they will be received here within 30 days. The pins will be for coat lapels, and will be a cut-out of the Thunderbird insignie, $\frac{3}{8}$ inch in diameter.

It is understood sterling silver pins will be given to all those who have been with Southwest for at least one year; gold plated pins to all those with two years of service behind them.

NEW PHOTOGRAPHER

Selection of J. Robert Burns, former newspaper photographer and reporter, as Southwest's staff photographer, has been announced by the Public Relations Department.

Burns formerly was with the Los Angeles Daily News, and also has handled numerous photographic assignments for Life Magazine and the Associated Press, among others.

TWENTY MORE MEDAL WINNERS

Twenty more fliers who received their first training at Thunderbird have been added to the 30 cadets reported last month as having received decorations for outstanding performance in combat.

Eleven were members of the 8th Air Force in England, decorated for "exploits over Europe in the last several months:"

ADAMS, LYLE M., 42-B, Oak Leaf Cluster to Air Medal.

ANDERSON, CLAYTON L., 42-H, second Oak Leaf Cluster to Air Medal.

CAMERON, WILLIAM R., 42-G, Air Medal.
FLYNN, ROBERT K., 42-F, Oak Leaf Cluster to Air Medal.

HARVEY, JULIAN A., 42-C, Air Medal.

HILL, WILLIAM E., 42-G, Oak Leaf Cluster to Air Medal.

HOPKINS, JAMES E., 42-F, Oak Leaf Cluster to Air Medal.

HOUSTON, ROWLAND B., 42-G, Oak Leaf Cluster to Air Medal.

HOYT, OTIS A., 42-E, Oak Leaf Cluster to Air Medal.

MELTZER, GEORGE F., 42-E, Air Medal.

SMITH, SANFORD T., JR., Oak Leaf Cluster to Air Medal.

Others reported decorated in the past 30 days were:

ABRAMS, JAMES R., 42-G, Oak Leaf Cluster to Air Medal, for exceptional aerial performance in the Tunisian campaign.

DALY, RAYMOND FRANCIS, 42-H, Air Medal, on completion of nine months combat duty with the "Head Hunters" squadron of P-38 fighters in New Guinea.

FELTZ, MAURICE STEPHEN, 42-D, Distinguished Flying Cross, "for outstanding achievement in aerial flights in Western Aleutian area of the Alaskan Defense Command." Award of the Air Medal to him was reported in last month's Thunderbird.

LEHTI, ROBERT W., 41-L, Air Medal, for more than 200 hours as pilot of a Sea-Search Attack Group conducting anti-submarine patrols. The citation: "Accomplishments of many of these missions was made when unfavorable weather conditions made flying hazardous. All members of the crew exhibited untiring energy and meticulous care while flying. Possibility of encountering enemy ships of fighter type or anti-aircraft fire added to the hazards of the missions."

STONE, ELMER JACKSON, 42-D, Distinguished Flying Cross, "for outstanding achievement on aerial flights in the Western Aleutians."

WALKER, DONALD G., 42-F, Air Medal, "for outstanding achievement in aerial flights in the Western Aleutians." Reported killed in action, April 15, 1943.

WALKER, MYNEER, 42-G, Air Medal, "for valor in the conquest of Attu" as member of the Alaska Defense Command.

HEAT FAGGED?

Dispensers of salt tablets have appeared with the first hot summer weather at company operations.

SKY HARBOR EXPANDED

BY

Page Sewell

Director of Technical Training, Sky Harbor

When Southwest's first and oldest operation, its former Civilian Pilot Training program at Sky Harbor, recently became part of the War Training Service, it also underwent extensive changes in curriculum and classification of students.

Formerly it taught a five-point program: primary, secondary, Link instrument, cross-country and instructor courses. But with the closing of small schools in this region and the designation of the larger ones for specific training, Sky Harbor eliminated elementary, secondary and instructor courses from its curriculum.

Where formerly it trained both Army and Navy Reserves, it now teaches only Army Reserves. Today students arrive with approximately 85 to 100 logged air hours, having successfully completed primary and secondary courses elsewhere. They are ready for the third and fourth laps of their training — cross country and Link instrument. When they have graduated, they will go to Carson City, Nevada, for their secondary instructor course; from there, to Randolph Field, Texas, where a certain number will be chosen for the Air Transport Command, and the rest assigned to Army contract schools as instructors.

Specialization in cross-country and Link instrument courses called for increased classroom space, instructors and ships at the harbor. Number of students enrolling every eight weeks is, of course, a military secret. Suffice it to say that the new standardization program increased Sky Harbor's enrollment 100 per cent. Number of ships likewise has been doubled.

And now for some information on courses as they are given:

Cross-country, often called visual instrument flying, is divided equally

between ground school and flight.

Ground school courses, designed to prepare the student on the ground for what he may encounter in the air, include navigation, meteorology, radio procedure, course plotting, flight planning and instrument analysis.

The night before a flight is to be made, three alternate flight plans are prepared in detail. Using average wind and weather conditions, a group of students can map-plot their cross-country trip to show time and place of expected departure, compass heading, fuel consumption, and time of expected arrival at destination, etc.

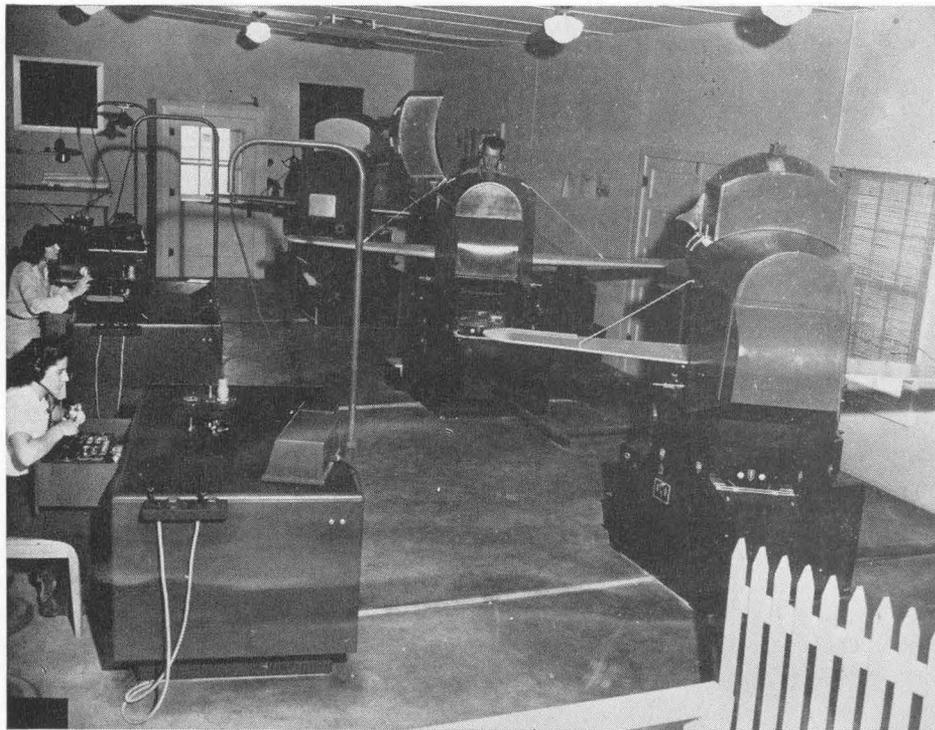
In the morning, after flight plans have been filed with the CAA, the group is ready to leave. They climb into a Stinson, instructor on the left, student pilot on the right, two student observers in the rear. After an hour of flying, the pilot changes

places with one of the back-seat navigators; another hour and the third student takes over the ship. In this way a student receives one hour of actual flying to two hours of observation.

During the first four weeks of Link instrument, students fly 15 hours in the Link. The second four weeks, they spend 25 hours blind flying in the air.

The Link which has reduced by more than 50 per cent the flying time necessary for a pilot to become qualified on instruments, consists of a fuselage with wings and empennage, mounted on a universal joint in such a manner as to permit movement in bank and pitch in excess of maneuvers normally done on instruments.

Learning to fly on instruments has been compared to learning a new language. It takes a long time and much practice. Before Link instruments were developed and manufactured, as much as 25 to 50 hours of practice under the hood in the air was required of pilots before they could be efficient instrument fliers. The Link cuts this time in half.



NEW LINK ROOM at Sky Harbor, where students learn to fly "on instruments." Note women instructors.

EX-CADETS WIN WAR LAURELS

Former Thunderbirds, flying ships of all types in that hot spot of global warfare, the Mediterranean, stole the spot-light last month, but their comrades in Australia, India and the Aleutians added their bit also to the downfall of the Axis.

A Flying Fortress, co-piloted by John W. Wylie, 42-H, shot down seven planes over Messina, a new record in that theatre, before belly-landing on a Tunisian airfield minus rudder, ailerons and control cables and with two engines shot out of action by a pack of 20 Messerschmidts who sought to down it.

Pantelleria, the Italian island which couldn't take it and finally surrendered, received part of its drubbing from William C. Brown, and Jack L. Massie, both 42-G. Massie got the honor of leading a group of B-26's after completing 29 combat missions.

His Fortress' fuel virtually gone, and the ground obscured by night and a dense overcast, Pilot Edward P. McLaughlin, 42-G, spotted the lights of a North African town and parachuted to safety with his crew.

Although the sky was full of Messerschmidts which sought to intercept attacking Mitchell bombers, John S. Garbett, 42-J, flying a P-38, bagged a ME-109, continued with the attacking force to Sardinia, and returned to his base.

William W. Whalen, 42-I, another Lightning pilot, also knocked down a 109 over southern Sicily.

The Fortress, "Dangerous Dan," co-piloted by Floyd H. Jamerson, 42-K, intercepted and disabled by Nazi fighters over Germany, shot down seven of 20 Nazi planes and finally got back to England. Wayne J. Hendricks, 42-H, co-pilot of still another Fortress, in a raid on Bremen and Kiel, went through flak "so thick you could almost walk on it."

In the same area are John W. Bersinger, 43-A, who was badly injured by flak and owes his life to a gunnery sergeant who flew his Fortress home, and Erle T. DeWolf, 42-G, who



FROM GERMANY CAME this card to "Swede" Hougland, Thunderbird group commander, sent by Curt Buttorff, a cadet in the field's second class, 41-I. On the reverse was this message: "I'm a P.O.W. in Germany now, shot down March 31. Got a bullet in the leg but getting along okeh. Made a good jump but landed in the wrong place. Got that one for you that you wanted. Takes 5 months to get a return letter." Just one month before, Buttorff had been awarded the Air Medal with two Oak Leaf clusters for "participating in 20 fighter sorties against the enemy in North Africa."

saw the Fort carrying Brig. Gen. Nathan Bedford Forrest fall out of formation following an attack on Kiel. The plane is listed as "missing." A classmate, Edward A. Fletcher, has completed 30 combat missions from a North African bomber base.

Previously reported killed in action, Carrol T. Harris, Jr., 43-A, hero of a bomber which fought off 30 ME-109's and delivered its bombs, now is said to be safe in London.

Raymond C. Rote, 41-I, was one of the members of the 10th Air Force in India who were cited "for outstanding performance of duty in action during the period January 14 to March 1, 1943."

Enemy shipping in the Bay of Bengal would get more of a plastering if Arel Van Zandt, 42-F, and his Liberator-flying teammates could get better weather. Monsoons reportedly are proving more of a handicap than Zeros.

WELL DONE!

Cargo Division books and records received a thorough checking recently when U. S. Army auditors visited Thunderbird Bookkeeping.

Winners

Squadron 7 won top honors in Thunderbird II's first cadet class safety competition, and were banqueted early this month by company officials in recognition of their outstanding record. Ten flight instructors responsible for the high safety mark were honored guests.

Competition, on Class 43-J in this instance, was for the least number of accidents, including wing scrapes, ground loops and taxiing accidents. The squadron posting the best safety mark on each succeeding class will be similarly honored, according to Mike DesMarais, director of training.

Marshall Christensen was commander of Squadron 7's winning combination, and John Severson his assistant. Others participating in the award were: Bill Jones, Bob Hanna, Dick King, Adrian Brix, George Goforth, Yale Feniger, Bud Haberl and William Rosecrans.

NEW RECORD SET

The present cadet roster at Thunderbird II is the largest in that field's history. Sorry, the exact number in training can't be told for reasons of military security, but it's plenty.

QUESTIONS BIG PROBLEM OF RIGGERS

BY *Julius C. Gold*

Parachute Rigger, Thunderbird II

do it on purpose," and an instructor's: "I was sittin' there when all of a sudden it happened."

But as aforementioned, accidental popping is just one of a rigger's worries. Just about our biggest one is to convince cadets that this complicated piece of silk will let them down slowly enough to save their lives.

We attempt to overcome that fear by lecturing each new class at Thunderbird II, before its members have their first ride in a Stearman. Lecturing these groups of dubious men is no easy task—at least not for me. I must convince them—with facts. And I've got to answer their questions.

The one they ask most frequently is: "How high up do you have to be to jump safely?" This is hard to answer, because lives have been saved from altitudes as low as 100 and 125 feet. We'd recommend a jump from a little higher up.

The old theory of counting to three after you leap, always precedes this one: "How far shall I count before pulling the ripcord?" The important thing to remember in making an emergency parachute jump is to make sure you've cleared the ship (a headlong dive is best) before pulling the ripcord. Counting is not necessary.

"How hard shall I pull the ripcord?" The harder, the better. A vigorous jerk (from 6 to 10 pounds pressure) will pull the chute right out of its housing.

"How fast will a chute open?" usually is the next one. Average opening time of a parachute is about 1½ to 2 seconds, depending upon the falling speed of the jumper and how recently the chute has been packed.

"How do I get out if the plane is in a spin?" Jump on the inside of the spin. If your plane is spinning to the right, get out on the right, and vice versa.

"What if the parachute tears?"



BROTHER DAVE

Parachutes are pretty much in the news at Southwest these days. At Thunderbird, Brother Dave's "Junior Caterpillar Club" recently has gained space in two national magazines—COLLIER'S and LIBERTY.

Dave and I designed this club to get even with those we "hate the mostest"—the unfortunate, flustered and often irate, who accidentally pop their parachutes while on the ground. These chaps are just one of the many problems of a parachute rigger, even though you might think they were our biggest problem, to read the dedication on the Club's honor roll:

"Below find listed on a field of virgin white, the names of those dodos and instructors who, through curiosity, carelessness and plain, ordinary jack-assness, have applied upon their ripcords an uncalled for pull, causing parachutes to pop their contents of silk lines and canopy upon some dirty floor, tarry apron or greasy airplane, resulting in unnecessary work for the department."

We also took pains to preserve for posterity the first words spoken by each offender upon entering our room. These ranged all the way from a cadet's: "Gosh! It opened, didn't it?", to a Lieutenant's: "I didn't



BROTHER JULIUS

Shroud lines on an Army parachute have a minimum tensile strength of 450 pounds each. It's not likely they will tear.

"Can a parachute be steered?" Yes, to some degree, by pulling the lines down a few inches in the direction you wish to go. This is dangerous under 500 feet, because pulling causes air to spill out the sides of the chute, and accelerates your downward speed.

Last, but not least, "How shall I land?" Before making a landing, make sure you are facing the direction of your drift. If you aren't, you can turn your body in the desired direction by pulling down on two diagonally opposite liftwebs. Just before hitting the ground, place yourself well forward in your harness, knees partly flexed, and body entirely relaxed.

These are a few of the questions we try to answer in every lecture, and the statements which we depend upon to convince even the most skeptical. They should indicate to you the one major point we always try to put over in a discussion on parachutes: You can depend on them!

NEW INCOME TAX EXPLAINED

If you've been confused over the new pay-as-you-go income tax plan which went into effect July 1, Jim Roberts, payroll head, says the following questions and answers, issued by the Treasury Department, should help you.

Q.—Is the "withholding tax" a new tax or an additional tax?

A.—Neither. It is a new "pay-as-you-go" method of collecting the Federal income and Victory tax. The amount withheld goes toward paying your regular income tax, including the Victory tax.

Q.—Why is it called a withholding tax?

A.—Because it is deducted and withheld by the employer from the wages paid to employees.

Q.—Does this include my Victory tax payment, or is that extra?

A.—The amount withheld includes the Victory tax.

Q.—Does it include employment taxes, formerly called social security taxes?

A.—The amount withheld does not include social security taxes.

Q.—Does the withholding mean that 20 per cent of my pay check will be taken out each pay day?

A.—No. Exemptions bring the amount considerably lower, even for the single person with no dependents. For instance, in the case of a married man with two dependents drawing \$50 per week, the weekly percentage of withholding amounts to less than 6 per cent. In other words this man pays approximately \$2.80 per week.

Q.—In case of a change in marital status or dependency, what should I do?

A.—A new exemption certificate must be filled out and furnished to your employer not later than 10 days after such change occurs. (See Mr. Roberts.)

Q.—Last March I paid one-quarter of the income tax levied against 1942 income, \$15.80, what happens to that?

A.—The first quarter of the income tax levied for 1942 and paid in March, 1943, will be treated as part payment of income tax for 1943.

Q.—How about the June 15 installment?

A.—The June 15 installment will also be treated as part payment of the 1943 tax.

Q.—How can I maintain my regular purchase of War Bonds through the pay-roll savings plan and at the same time pay out the addition withholding tax?

A.—It should be as easy under the withholding tax system as at present, since this is not an additional tax but merely an installment or pay-as-you-go method of paying your regular annual income tax.

CONGRATS

To Southwest from Henry Morgenthau, Jr., Secretary of the Treasury, came this card recently: "In sincere appreciation for advertising support rendered the United States Treasury Department in conjunction with the Second War Loan."

"MY FIRST SOLO"

Here's another of those humorous cadet efforts at poetry which W. J. Kneubuhler, Thunderbird flight instructor, inherits from time to time:

Come all ye jolly washouts, and listen while I sing—
I'll tell you of my ground loop, a very gruesome thing.

It was down at dear old Thunderbird on the 25th of May,
And the thermals were a-risin' in the good old-fashioned way.

My Stearman was all ready out in front of Hangar Two—
Beside it was the ambulance, and eager-looking crew.

The engine started quickly, and its tune was mighty fine,
And little did I know my danger, as I taxied to the line.

I pushed the throttle forward and hit the stick a lick,
And the old crate bounded forward like a drunk on a pago stick.

I tried to make my take-off on a Pattern Number Four—
At a hundred feet I'd hit them all, and looked around for more.

I made my first turn quickly, sorta skidded through the air,
While down by the tee on bended knee instructors knelt in prayer.

I started my climb, and in d—n short time I had her in a stall,
So I said to myself, "You'd better land now, if you plan to land at all."

I started my glide with a beautiful ride, a sort of a cork-screw twist—
The ground came up with amazing speed, and I thought of the tail I'd missed.

The landing was three-point, believe me, no finer ever could be made—
They all hit the ground at the very same time—the prop, left wing, and me.

I finally came to, but they washed me out; and this is true by damn—
The Board decreed I could fly all right, but I flunked my physics exam!

Our Namesake

An Arizona gunnery sergeant was responsible for naming a Flying Fortress, "The Thunderbird," which hung up a record by shooting down eight of 25 German planes attacking her over the Mediterranean.

Although none of the crew members took flight training at Thunderbird, all of them agreed with the sergeant that the name he selected was a good one for a fighting ship. The plane, after fighting off Nazi attacks as it struggled to keep to the air just above water, made a safe landing at newly-captured Panteliera.

Stories Appear

Southwest recently took another bow in the publicity limelight when Vice-President James G. Ray's article on the future of feeder airlines appeared in the June issue of WESTERN FLYING.

"Mass Production Overhaul" is the title of an article by John H. Connelly, President, in the June issue of AVIATION.

Among other magazine highlights this month: July FLYING, a story on the training of U. S. pilots the British way at Falcon; August AIR-AGE, "The Dragon Grows Wings," an illustrated story of the training of Chin-ese at Thunderbird.

HOW NOT TO GET THAT RAISE

We think you'll get a chuckle, too, out of these eight ways an Overhaul Worker Malcolm Moss recommends as being a sure-fire way **not** to get a raise.

1. Punch in about 20 minutes late a couple of times a week. You don't have to wait in line at the time clock, and besides, the payroll clerk might overlook your card anyway.

2. Don't leap recklessly into your work as soon as you arrive in the morning. Spend 10 or 15 minutes in the rest room, get a coke on the way out, and bother your neighbor for a while by discussing the economic situation with him. If they fire you for loafing, they'll have to fire him too, and you will have made a life-long friend.

3. Ask your superior a lot of damn-fool questions, or better still, go over his head and ask somebody higher up. You will create quite an impression.

4. Don't pay any attention to the bulletin board. Then if you don't know what the score is, they can't blame you—much.

5. If your supervisor tells you something, pay him no mind. He's only been on the job for years, and with the modern teaching methods, you'll probably know more than he does inside of 30 days.

6. Don't worry about how much your being AWOL may slow up production. If the Axis wins, you'll probably get an Iron Cross.

7. Instructions in Technical Orders and Handbooks are only for the use of ignorant persons. Of course, the pilot may be irritated if the ship fails in flight, but what the heck, he's got a parachute, ain't he?

8. At the close of day, make a smart, snappy sprint for the time clock. This should be done about 5 seconds before the whistle blows, so that you will not injure so many persons by trampling them. This also keeps you in better shape to go back to the farm.



BEST SAFETY RECORD for Thunderbird II's Class 43-J was compiled by these ten flight instructors, in the first of regular intra-field safety competition. Left to right: front row, Assistant Squadron Commander John Severson, Bill Jones, Squadron Commander Marshall Christensen, Bob Hanna and Dick King; back row, George Goforth, Adrian Brix, Yale Feniger, Bud Haberl and William Rosecrans.

Jinx Or Help?

"Sergeant," a squawking parrot who rode the sky lanes with the crew of a B-26 Marauder bomber piloted by Robert W. Swigart, Thunderbird 42-G, got the credit for helping lift the plane off the ground when it developed engine trouble, and the boot for bringing bad luck.

Lumbering down the runway at an advanced base in North Africa, the bomber had extreme difficulty getting into the air when one of its motors failed. Too late to stop, Swigart "horsed" the plane over a road and bounced the ship on the ground until it finally got up enough speed to take the air.

Swigart gave the parrot, who flew against the top of the ship and flapped its wings, credit for helping lift the plane, but other members of the crew called "Sergeant" a jinx, and read him out of the force.

If you'd rather spend than save—then spend the War Savings way—buy a Bond or Stamp today!

New Equipment

A large oven capable of holding painted parts of three disassembled engines at one time, and an immense machine for regrinding worn cylinders, were the most important Overhaul Division equipment additions of the month.

The huge oven's top temperature of 1,000° F., quickly dries the freshly painted parts and gives them a fine, smooth, professional finish. It speeds up production by several hours.

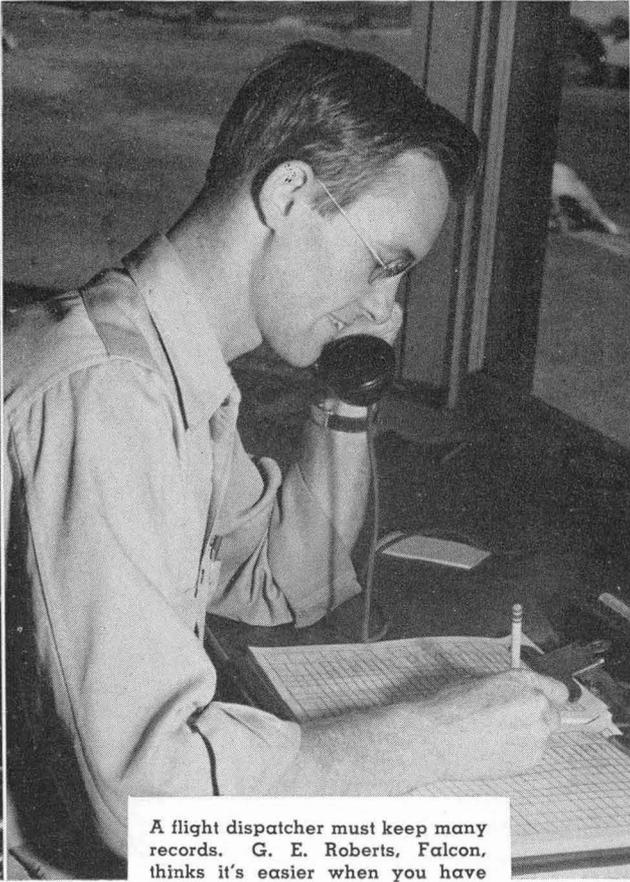
The grinding machine likewise has eliminated a bottleneck in the production line.

BAGS FIRST ZERO

Confident Japs about to attack newly U. S.-invaded Amchitka Island, 70 miles from Jap-held Kiska, got the surprise of their lives when from the clouds above hurtled eight American P-40s. One was piloted by Elmer Jackson Stone, Thunderbird, 42-D, whose blazing guns accounted for the first Zero shot down over the island.



Gwendolyn Crouch, Thunderbird mimeograph and multigraph operator, collects \$2.50 in War Stamps for this shot.



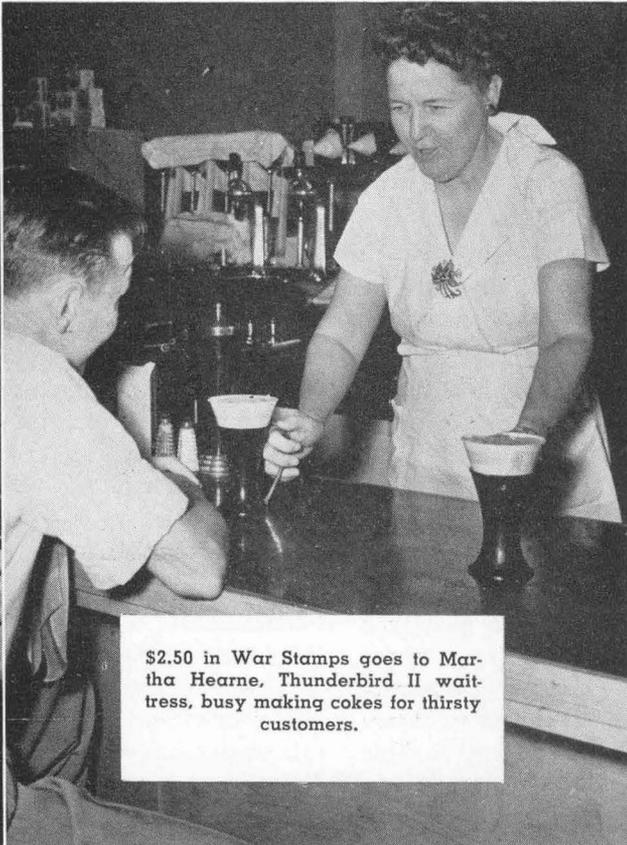
A flight dispatcher must keep many records. G. E. Roberts, Falcon, thinks it's easier when you have a system.



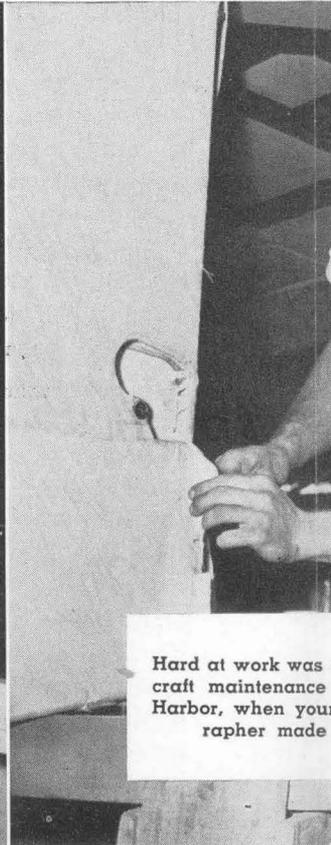
Checking a student's flight plan. Morris Wilson, cross country instructor at Sky Harbor.



Delilah Romine, Falcon switchboard operator, taking down a message for the long-distance operator. "Sorry, the circuits are busy."



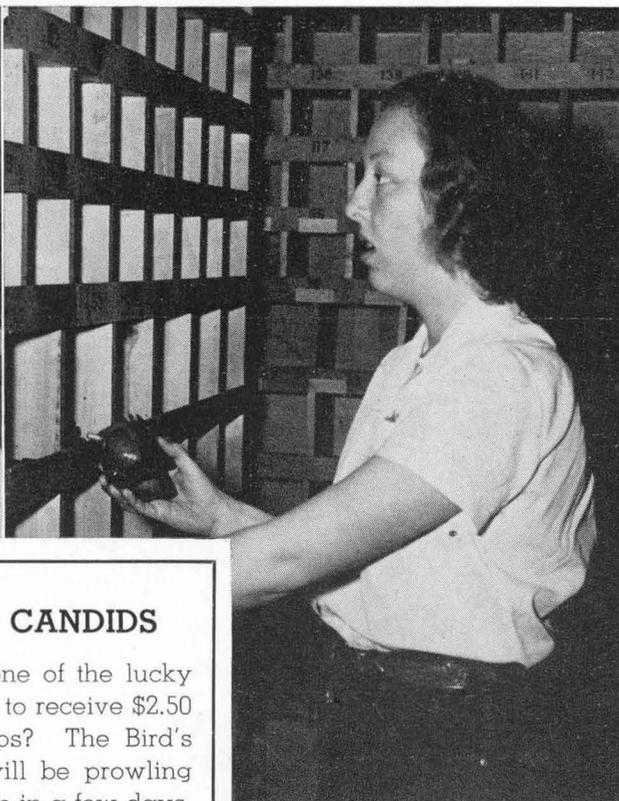
\$2.50 in War Stamps goes to Martha Hearne, Thunderbird II waitress, busy making cokes for thirsty customers.



Hard at work was C... craft maintenance Harbor, when your rapher made



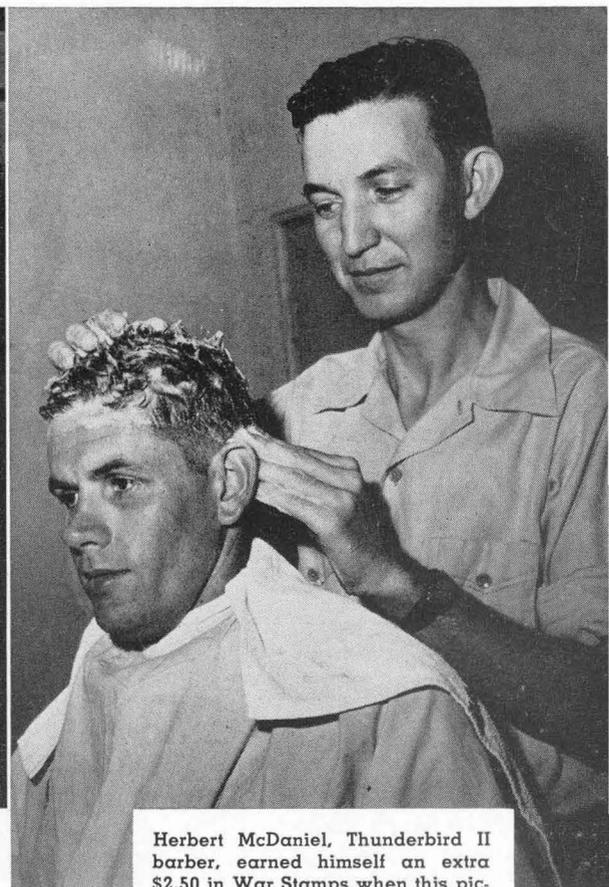
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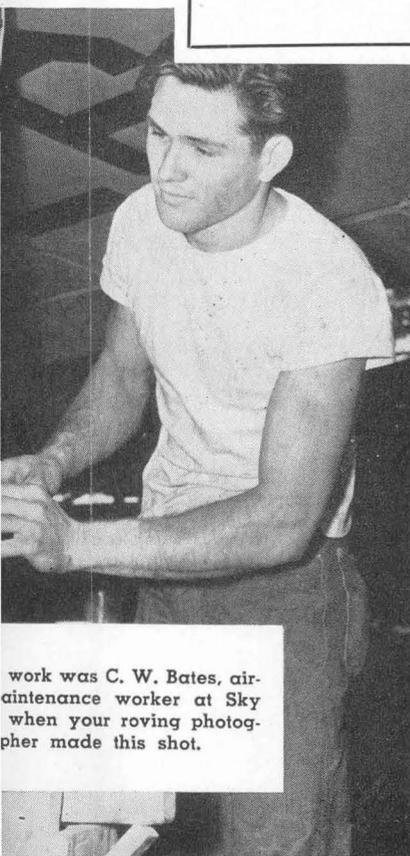
CAMPUS CANDIDS

Were you one of the lucky ten this month to receive \$2.50 in War Stamps? The Bird's cameraman will be prowling the fields again in a few days, so keep busy. Maybe you'll get rich next time. It's easy—all you have to do is stay on the job, work hard, and in a flash you'll be richer by 2½ bucks.

"A place for everything, and every-
thing in its place," says Cris Cris-
tenson, stockroom worker in the
Overhaul Division.



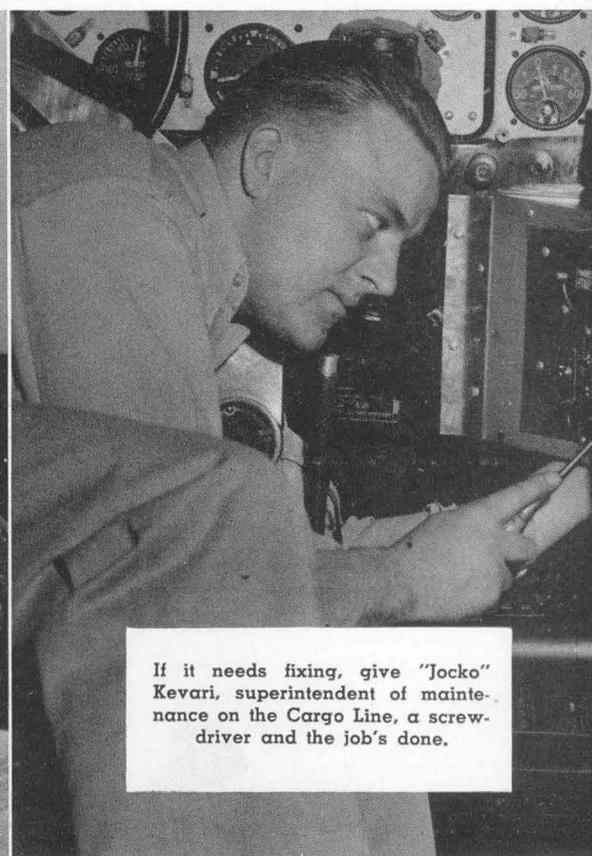
Herbert McDaniel, Thunderbird II
barber, earned himself an extra
\$2.50 in War Stamps when this pic-
ture was taken.



work was C. W. Bates, air-
aintenance worker at Sky
when your roving photog-
pher made this shot.



Busy Velma Lyall, job order clerk
for the Overhaul Division, earned
an extra \$2.50 in War Stamps
which will be mailed to her shortly.



If it needs fixing, give "Jocko"
Kevari, superintendent of mainte-
nance on the Cargo Line, a screw-
driver and the job's done.



Gossip and Hearsay

"A parachute is the only friend you can count on to let you down." This quickie from **Julius Gold**, T-2's rigger, when we asked him for that page 9 article on 'chutes . . . **Ted Hanna** reports his Falcon PT's are equipped with two-way gossport systems. So cadets can talk back, no doubt . . . Which reminds us of a conversation we heard the other day: "What is a fox?" "A fox is a wolf who sends flowers." . . .

Observations at T'Bird's swell Tempe Beach picnic: Wondering if **Harry Mauler** conveniently sprained his ankle to avoid a scheduled match race with **Jim Yerkes** who, incidentally, didn't look to us as though he'd been on a ten day fast, when he alternately galloped, gulped and skidded backwards fastest in the department head race . . . **Judd Minter** just couldn't wait to get into a bathing suit before taking his dip in the pool, and we understand at least one other person followed suitless . . . Wouldn't you say **Bob Fry** was in his second childhood when he advertises that he lost a "boy's" bathing suit? . . . Nomination for the best sport of the day, **Major Philip Meyer**, T'Bird's commanding officer, who took several mud baths in center field with a grin, trying to stop SWA's slugging softballers . . . Did **Curtis Jones** want to or have to, begin his vacation the day after the picnic? . . . How did the smelly fish relay race backfire so that department heads instead of the gals formed the opposition?

No trip to Falcon is complete these days without seeing **Al Storrs'** latest gift from Cargo Line admirers **Rudy Couk** and **Hank Potter**. Just ask for a glimpse of "He Was Fond of Gadgets." . . . **Bill Burns** has been doing

some fancy pinch-hitting these days, what with three members of his O'haul inspection department, **Juanita Schroeder**, **Oscar Burkett** and **Anne Rae**, on vacation the past month . . . Credit for the 11-2 trouncing T-2's softball team gave Florence was partly due to mechanic **Hal Beck's** swell pitching. (He allowed only two hits.) . . . In any Southwest golf tournament, **Silent John Bowers** would be a good bet to bring home top honors for T-2's flight department. He's one of the city's best . . .

Not to be outdone by the fabric crew, the paint and dope department of O'haul claim two workers with perfect attendance records for the past ten months: **Geraldine Lewis** and **Vaughn Riggins**. If **Mrs. Telitha Long** of T'Birds' ground maintenance crew ever needs a testimonial as to her honesty, **Charley Mathewson**, cashier, will be first in line. His wallet, containing valuable identification papers and gas rationing tickets, was lost for three weeks until she found it down behind his desk and returned it . . . The "bug" situation at Falcon is pretty bad. The C.O.'s secretary, **Lee Harris**, claimed she found nine crickets under her wastepaper basket, whereupon **Janet Johnson**, Bill Sim's secretary, piped up with, "That's nothing—I've got ants in my drawers!" . . .

To look at **Harry Mauler**, T'Bird Food Czar, you'd never guess he once set a Colorado state high school record for the quarter mile—53 seconds flat . . . We can't believe **Lee Wright** doesn't even know where Falcon is, as reported, but anyway, Lee packs 'chutes for T-2 and not Falcon, as erroneously reported here last month . . . Spurs that jingle-jan-

gle were silenced last week when cupid's darts brought forth two weddings in one night. O'haul employees involved: **Irene Riesgo** (now Mrs. W. B. Toft) and **W. A. Robinson**. Friends of **E. H. (Red) Jones**, former superintendent of plane maintenance at T'Bird, will be glad to hear of his recent promotion to Chief Petty Officer in the U. S. Navy. Red is stationed at the San Diego Air Base. . . .

Elsewhere in this month's issue is a story showing that cars entering T'Bird are only 50 per cent loaded. We don't doubt that this situation exists on other fields, so let's get together on more Share-the-Ride plans. . . . When your roving reporter at Falcon went to the warehouse for news, she asked **Doris Storey** and **Janice Taylor** if they knew any general gossip. They replied, "Sorry, we don't know any generals." . . .

Nomination for blessed event of the month: President **Jack Connelly's** off-hour and weekend project for over a year, biggest single-engine Beechcraft manufactured, made its maiden flight . . . When **Roy Rasmussen** and **Mike DesMarais** get together at T-2, you have the big and little of it. Roy admits only the Army's maximum, 6'4", but it's a fact that Mike can stand under his out-stretched arm . . . Excitement at S. H. ran high the day a Stinson Reliant caught fire and burned up. What we want to know is, "Why was radio technician **Edward P. Brown** seen running in the opposite direction from the fire, and what did he leave behind him that burned up with the ship?" . . .

Depend on T'Bird's chief ground school instructor, **John Neace**, to accomplish the impossible: in the first
(Continued on Page 18)

OUR POETS' CONTRIBUTIONS

This poem was written by a soldier on foreign service with the Army Air Forces, according to reports. It is said the men overseas prize it so highly, they hope it will be run by various war industry magazines in this country.

TIME IS SHORT

When you're lying in a fox-hole with a rifle at your cheek,
Then there ain't no time for thinking of a forty-four hour week,
For the tropic rains pour on you while your nose is in the mud
And your overtime is counted when they pay you off in blood.
You just grip your rifle tighter as you wade into the fight,
And there's no time off for gassing 'bout the date you had last night,
For you know it would be foolish, and you save your precious breath,
For the only date you're keeping is a rendezvous with death.

**And you feel the fevered silence
As the sun begins to sink,
Time is short and growing shorter,
It is later than you think.**

When you're home and working steady you have time to shoot the bull
For the boss ain't always looking and his hands are kinda' full,
You can grouse about your wages; you can sneak out for a smoke;
You can leave the drill press idle while you hear or tell a joke;
But the pay-off's coming later for the job you haven't done,
When the fighting isn't over and the battle isn't won.
For the forge that's lying idle forges chains you cannot see
Till you find a stricken nation in the bonds of slavery.

**And eternity will damn you
As your soul begins to shrink,
Time is short and growing shorter,
It is later than you think.**

Some are born to do the fighting, some must work and some must pray,
But there isn't one among us who can sit and rest today;
For the freedom that we cherish puts a levy on our soul,
And we may not shirk our duty till we reach that final goal.

**For the time is growing shorter
As we near destruction's brink,
And your job needs lots of doing,
IT IS LATER THAN YOU THINK!**

AN AMERICAN'S PRAYER

God in Heaven
Look down on me
Keep me loyal to America
The land of the free.

Guide my footsteps
On paths You have trod
May I ever be led
By the hand of God.

May I learn to take bitter
Along with the sweet
May I always worship
At Your dear feet.



TIME - SAVING, efficiency - improving devices a-plenty have been invented by Southwest's maintenance departments. Glen Sweeten illustrates Thunderbird's latest, for testing brake assemblies after they have been repaired but before they are mounted on landing gears. Previously, it was necessary to mount on the gear before testing the relined brake shoes or trued brake drums. See Guy Polston for details.

In the dark days ahead
May I see Your sweet face
In the battle that will follow
Give me courage and grace

And if you see fit
That my life should go
In defence of our country
Against an evil foe.

Make me strong
To go without fear
Let me know where I go
You will always be near.

May I remember Pearl Harbor
In the days to come
May I ever be worthy
Of Wake and of Guam.
—HOMER L. FAULKNER,
Thunderbird Flight Instructor.

HAVE YOU HEARD?

Have you heard of our gang in Hangar Two
Of the twenty-five girls in fabric crew?
We are doing our best from morn till night,
In the making of things that come out right.

There are twelve of our sons doing their bit
As we work and we sew, we cut and we fit.
We are fixing the parts so planes will fly
And we're doing our best—at least we try.

We all save to buy Bonds, of course you know,
The kind that will help defeat the foe.
We're doing our share, keeping planes in the air,
And we offer up prayers for our boys over there.

—CLARA PIERCE,
O'haul Fabric Crew.

IS THIS WHAT IT TAKES?

We always knew Southwest fields hired only the best pilots in the business as flight instructors, but we didn't appreciate just how tough the requirements actually were until the other day.

Revelation came from Mike DesMarais, Thunderbird II's capable director of training, in answer to our request for an article on "What Makes an Instructor?"

We think you'll get a chuckle, too, from Mike's answer. Here 'tis:

"Flight instructors at Thunderbird II represent at least 24 different trades, professions and occupations. We have fellows who were musicians, paperhangers, bulldozer operators, druggists, lumber workers, and so on, before joining the company.

"They are from 30 different states and four foreign countries, not including Oklahoma (editor's note: Ouch!). They vary in age from 21 to 44, and in size from 5'2" to 6'6".

"Not only are they possessed with exceptional ability as pilots, but also they have the patience of Job, the analytical ability of Plato, the drive of Alexander, and the propensity toward tall tales that Bunion had.

"The reason an instructor must have all these virtues is that his students may be from any imaginable walk of life and may have had any imaginable background. In teaching people to fly who are so different in their physical and mental make-ups, an instructor must be very careful in his analysis of the student, in order to train his reactions properly—hence, he must be a combination father, teacher, leader and linguist, as well as the above, all at one and the same time."

Okeh, Mike, we're convinced writing is our business.

MAT EXPANDED

Thunderbird II's newly-expanded landing mat is expected to be complete and in use by the end of July. Contractors have added three million square feet of paved area

THIRTY-ONE MILES IN 36 HOURS

Bill Walker, Falcon flight commander, is the kind of a guy who enjoys flying so much that he spent his recent between-class vacation in an airplane. Latest hop was to Alaska, but it also included 31 miles of hiking! But let Bill tell the story:

"I was supposed to fly from Fairbanks (Alaska) to Edmonton (Canada). Since I'd never flown this particular ship before—I'm not allowed to tell you what it was—we made a few practice takeoffs and landings, and started out. Besides myself, there was a co-pilot and an Army nurse on board.

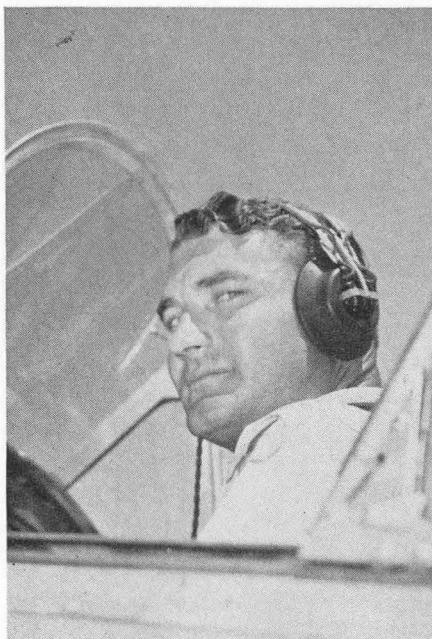
"We got weather clearance through to Edmonton, but we hadn't been out long before we encountered instrument weather. In two and a half hours the ice load on the plane was too heavy for us to maintain altitude. We called the nearest Department of Transport radio range station and asked for emergency landing instructions.

"They told us the nearest field was 50 miles away, and on a tabletop about 700 feet higher than the surrounding country. We were further advised that there was a ragged 35 to 50 foot ceiling—unsafe for instrument approach—and that we should locate the field, make a 90 degree turn off-course and let down out in the valley.

"We made the turn to the right and let down as instructed. Just as we reached the altitude where we should have been in the clear, pieces started flying in all directions—we'd already landed. Except for minor cuts and bruises received by the co-pilot, we were unhurt. The nurse fixed him up, then she and I started walking to where we thought the field should be.

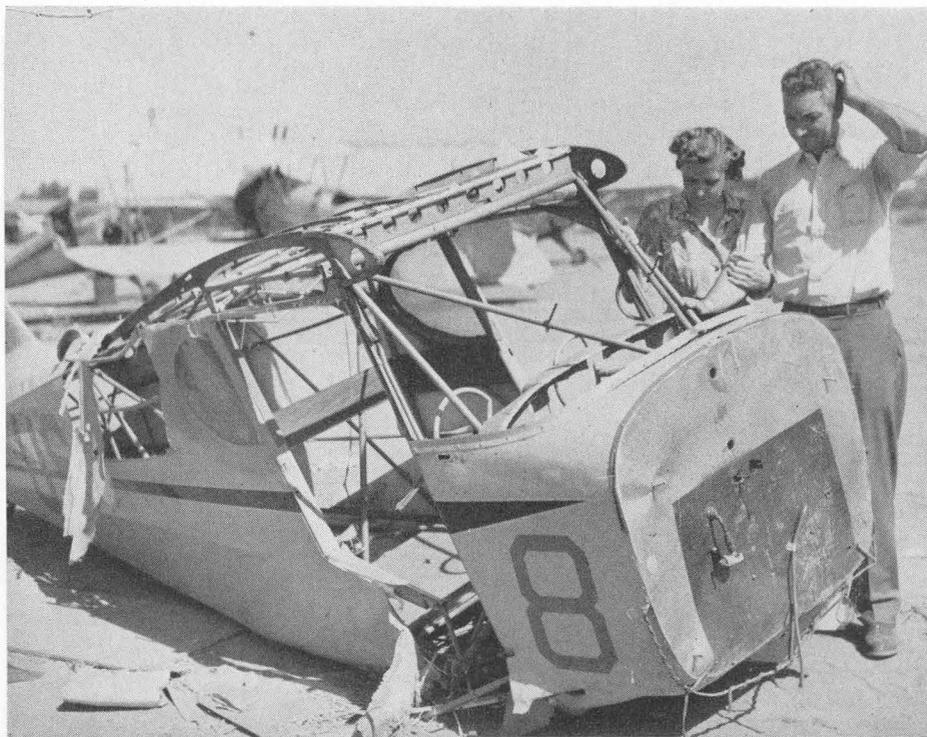
"At the end of the first mile the 'field' turned out to be a false cone, similar to the one we'd landed on. So we came back to the ship, took the compass out, removed the compensating magnets and started down the beam heading.

"After five hours we saw the field



BILL WALKER

beacons, but it took us 36 hours to walk the 31 miles across the swampy, treeless tundra to the airport. It rained all the way."



IN THREE WEEKS, L. C. Ponte, Sky Harbor's maintenance superintendent, and his wife, Lula, same department, rebuilt two wrecked Stinsons into one flyable ship. But you can tell by their expression that even this capable pair have given up hopes of utilizing what's left. Their newly-rebuilt job, worked upon only during off hours, is complete to two-way radio and poloroid flexiglass for night flying. Now, the non-flying Ponies are considering taking lessons.

STURM LENT TO ARMY

Paul J. Sturm, general manager of the Overhaul Division for the past nine months, recently was "lent" to the Army Air Forces by Company President Jack Connelly, to set up a repair and overhaul production line at the Spokane, Wash., Army Air Base.

Request for the "loan" of a company production man was made to Connelly by the War Manpower Commission, and Sturm given the assignment. Several members of the W. M. C. recently had inspected Overhaul and praised its efficient organization.

EASIER PUSHING

To facilitate the wheeling of completed parts from fabrication departments to assembly lines, Overhaul Division is paving a five-foot concrete runway between Hangars 2 and 3 at Thunderbird.

SOUTHWEST'S PAYROLL 24.7% WOMEN

Women have taken over 24.7 per cent of all Southwest Airways jobs, according to a study of personnel records completed recently by Judd Minter, company treasurer.

This figure shows that the total number of women employed has increased steadily each year since the start of operations in late 1940. Each of the company activities has had a share in building this ever-increasing feminine figure.

In August, 1941, the three activities then in operation employed so few women that only 3.7 per cent of the combined total payroll was in this category. The following year, with Thunderbird II and the Overhaul Division also in full swing, women constituted 12.2 per cent of SWA's payroll. By May 31st of this year, the percentage had increased to the aforementioned 24.7 per cent.

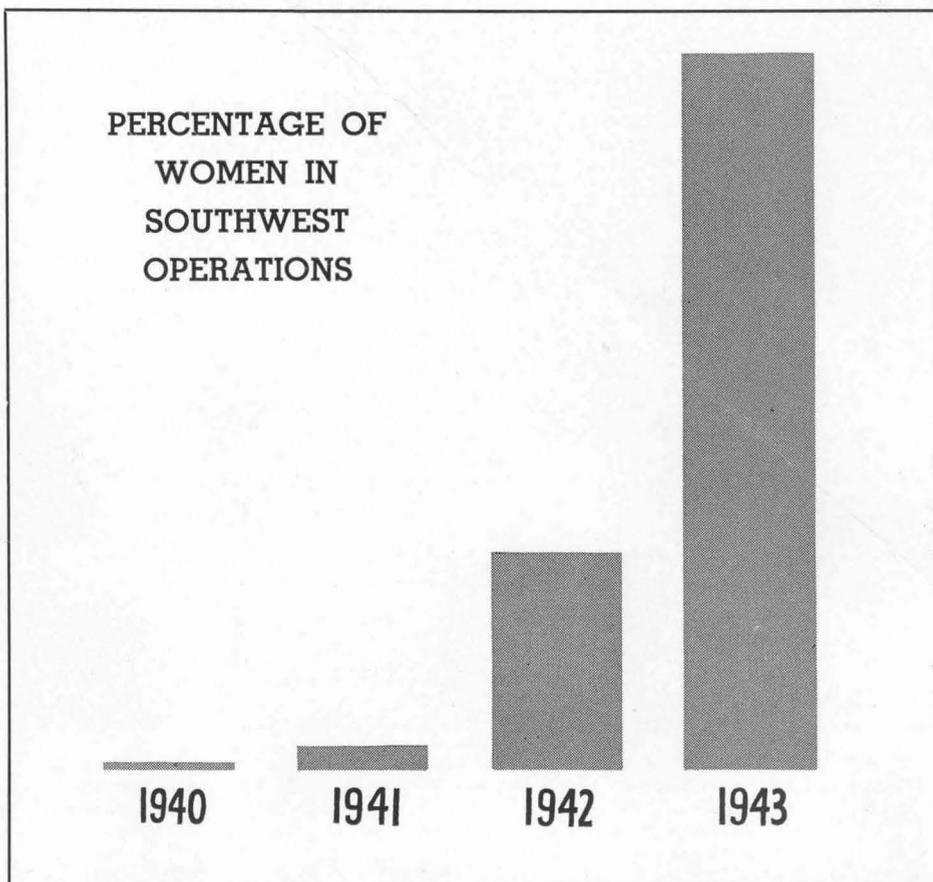
It also is notable that the number of women employed by Southwest has increased much more rapidly than has over-all employment. There are 3,053 per cent more women working at the various operations now than there were in mid-1941. Total employment for the same period is up only 373 per cent.

As might be expected, Overhaul employs the largest number of women, 44.8 per cent of its total payroll. Thunderbird lists 23.8 per cent of its total as women. Percentages for the other operations are: Sky Harbor, 20.2 per cent; Falcon 19.5; Cargo Division, 19.3, and Thunderbird II, 16.7.

In number of women employed during May, as compared to mid-1942, Thunderbird again shows the largest increase. Its feminine employment is up 297 per cent, compared to 220 per cent for Sky Harbor, and 209 per cent for Falcon. Thunderbird II has swelled its women ranks by 41 per cent in the past year.

As you become the proud owner of a Bond remember that with each day "something new has been added."

PERCENTAGE OF
WOMEN IN
SOUTHWEST
OPERATIONS



We Err

In last month's Thunderbird, Felix Kallis, new company chief aeronautical engineer, was credited with having spent three years in Russia as "one of the designing engineers on the huge Taganrog hydro-electric power plant."

Mr. Kallis takes us to task for having established a non-existent river in Taganrog, and also points out that he stayed but one year in Russia, "as an aircraft power plant design engineer for Consolidated Aircraft Corp, helping the Russians step up for PBV production. Our mistake; sorry.



SOME WALKED

First day of checking cars at Thunderbird for \$5 Federal Use Tax Stamps resulted in nearly 50 guys and gals thumbing rides in from the bridge. Since it's a military installation, Army requires that all federal laws be strictly enforced, Lt. Howard Edgar, Provost Marshal, explained.

Praise Training

"Tell the boys that when they get to basic school, just let their instructors know they're from Thunderbird. They'll be soloed right off, and won't have any worries."

Glen Reinbolt, Thunderbird flight instructor, thought one of his 43-H cadets was stretching it a bit when he wrote that letter from Gardner Field, basic school at Taft, Calif. Then Glen remembered he had heard several months earlier from another of his ex-cadets, that a group from Thunderbird was setting a Gardner record for least number of wash-outs.



PROFITABLE

To cut down time card errors in Falcon's maintenance department, Superintendent Joe Wischler began charging 10c a mistake. That was last December. To date there is over \$35 in the fund; errors have been reduced by approximately 95 per cent. Money will go for bonds, to be raffled off to employees.

WHAT'S WRONG HERE?



STEP UP, FLIERS, and let's see how many deliberate errors you can spot in this month's "boner" picture. Ted Hanna, Falcon's primary flight chief, says you should find at least the five he asked Instructor Bill Mitchell and an RAF cadet to make, in the interest of safer flying. If you can't, the answers are on page 22.

GOSSIP—(Cont'd)

cadet track meet, John shot himself in the hand with a blank cartridge . . . Seen passing cigars was **Les Ward**, Falcon's assistant superintendent of maintenance, proud father of baby Patricia . . . We've been hearing about the artistic ability of a certain young man in the T'Bird maintenance department who embroidered a Thunderbird on a pillow top as a going-away present for his girl friend . . . "As the Army takes the men, the women fill in" rhymes **W. A. Robinson**, O'haul division, and we're reminded that T-2's first woman crew chief is **Mrs. Evelyn Softley** . . .

They say **Wally Pankratz's** wife screamed when she first saw the reason why all the flight gang at T-2 now call him "Cue Ball." It hasn't even grown to G. I. proportions yet . . . If maintenance news is short at Falcon this month, it's because CAM exams are coming up and nobody has time for "gossip." . . . Seen signing up for more Bonds in O'haul: **Thelma Hall, Ethel Hoel, Shirley Hendrickson, Carol J. Emerson, Anna Belle Mason, Geneva D. Redding,**

Virginia Rolston, Juanita Schroeder, Ira Troyer, Myrtle M. Unger, and Dorothy Zimmerman . . . Here's one for the book. **Frankie Glasscock**, Falcon's air depot detachment, was married to Hope Fletcher (Frankie was the bride and Hope the groom.)

Despite all the ribbing **Ted Waters**, head of O'haul's paint and dope division, assures us he does not plan to give circus performance under his "big top." The awning permits a much-needed expansion . . . **V. D. "Tiny" Whatley**, Falcon radio mechanic, has joined the Sea Bees—240 lbs. of patriotism, no less. . . . To the Army have gone **Hubert Johnson**, T'Bird maintenance, **Stanley Dudzinski**, and **John Anderson**, T-2 mechanics . . . The Navy claimed **Eugene Taylor**, T'Bird maintenance, and **William Hogan** and **Roy Mills**, same department, T-2. . . .

Overheard in the T'Bird canteen: "They've got Navy beans on the menu. I thought this was an Army post!" . . . They're telling this one on **Delilah Romaine**, Falcon switchboard operator, who called a Phoenix laundry, and when they answered,

said: "Go ahead please—the laundry's on the line." . . . **Elmer Osenbaugh**, T'Bird gasoline department, was married last month . . . Have you seen that Falcon softball team in action? And did you notice those "curves" maintenance department's **Don Cross** was pitching over home plate? . . .

We have it on good authority that **Billie "Red" Bryant**, T'Bird's chief operator, once won a jitterbug contest and has a cup to prove it . . . There seems to be quite an argument going on between **Glen Ball** and **Murrel Penuel**, T'Bird maintenance, over who has the best make car, but what we're curious about is the connection between Penuel and the sign in the Glendale store which reads, "For Sale Cheap, One Zoot Suit." . . . Some of the vacations we know about: **Marguerite Lebert**, T'Bird purchasing, who flew to Tacoma, Washington; **Norma Holt**, Falcon purchasing, to San Diego and the Grand Canyon; **Elene Freestone**, Falcon Flight accounting, and **Leila Carpenter**, T'Bird maintenance, to the Coast . . . **George Frock**, T'Bird ground maintenance chief, claims he spent all his time back on the farm, a trifle contrary, we'd say, to the rumor about West Coast crystal clear swimming pools and tall, ice-cubed glasses. . . .

There are those who want to know why "**Sandy**" **Sanborn**, T'Bird's forewoman, doesn't like to go to the canteen. It has something to do with squadrons of marching cadets. . . . Does **Johnny Liori** really have a motor boat? Maybe that's why so many people have asked to take his picture . . . **Ted Hall**, ex-T'Bird maintenance, says he enjoys THE THUNDERBIRD very much and would like to say hello to all the gang. (He's at Sheppard Field.) . . . **E. A. Abbott**, advanced flight instructor at Falcon, has a mighty smart baby son. Said son, E. A. Abbott II, arrived just in time for papa to claim deductions on his income tax report. . . .

Don Prosser, Falcon flight instructor, practicing up for the draft, has been heard to say to his cadet pupil,

(Continued on Page 22)

HOW MANY CAN YOU ANSWER?

Thunderbird's chief ground school instructor, John Neace, says he'll bet any guy on the Post he can answer correctly all ten of the questions listed below. (He'd ought to—he made 'em up!) They're tricky, though, so watch out how you answer.

Score ten points for each correct answer—50, better luck next time; 70, fair to middlin'; 80, pretty sharp; 100, hats off to you! The answers are on page 22.

1. The altitude of Thunderbird Field is (a) 1,240 ft., (b) 1,236 ft., (c) 1,540 ft.
2. Thunderbird's oldest operation is (a) Thunderbird, (b) Falcon, (c) Sky Harbor.
3. SWA has trained pilots from _____ countries: (a) 26, (b) 27, (c) 29.
4. Falcon Field trains cadets from (a) England and America, (b) England only, (c) England and China.
6. Airplanes used by the Cargo Line are (a) Beechcrafts, (b) Wacos, (c) Stinsons.
7. Thunderbird II is (a) Southwest of Thunderbird, (b) East of Falcon, (c) North of Williams.
8. The training program at Falcon operates the following aircraft: (a) primary trainers only, (b) primary, basic and advanced, (c) primary and advanced.
9. The Cargo Line flies (a) civilian passengers, (b) for the Army Air Force, (c) 19,000 hours per month.
10. Southwest Airways Corporation overhauls and reconditions: (a) primary and basic trainers, (b) primary and advanced, (c) primary only.

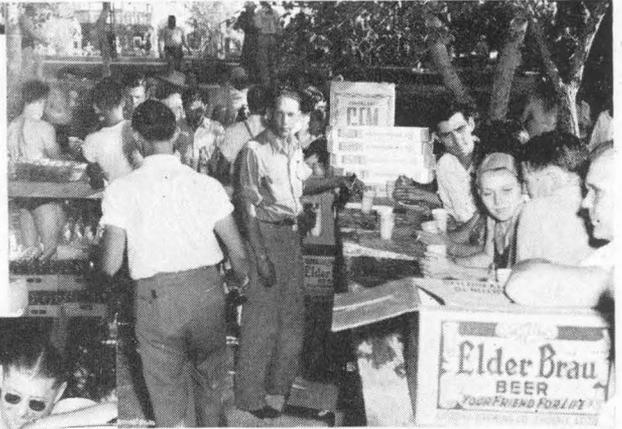
"WOTTA SIGHT!"

In a letter to John Neace, Thunderbird's chief ground school instructor, Lt. Carl Brink of 42-J, now stationed in England, says:

"Focke-Wulf 190s, the Krauts' A-1 ship of the day, are plenty tough—and good enough to do a slow roll series right through a whole formation of Forts. They do it, too. Wotta sight!"

THUNDERBIRD ALSO PICNICS

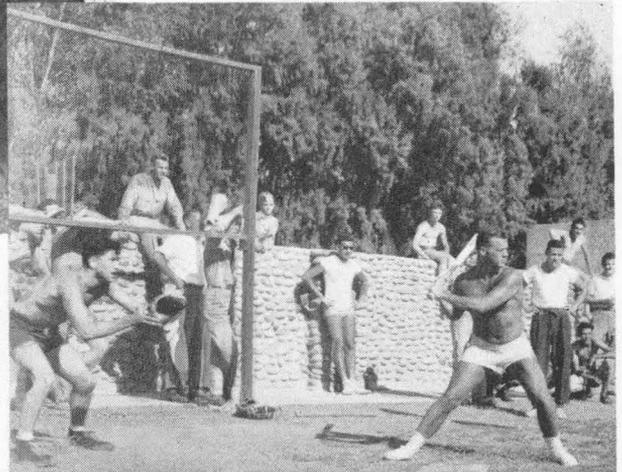
The refreshments never ran dry, as this late-day picture clearly indicates. Arizona Brewing Company can thank us for the plug with more of the same.



From Harry Mauler's admiring glance, you can tell he's glad that his match race with speedy Jim Yerkes, left, never came off. Jim's still thirsty, after winning the department head's bottle-drinking contest.



Action in the softball contest, in which Thunderbird's slugging ten walloped an all-Army team, 12 to 3. Duane Maley, who pitched the easy victory, is the hitter.



Action in the department head race, with, left to right, contestants Guy Polston, Judd Minter, Champ Jim Yerkes and Jim Roberts. A 20-yard race backwards followed this hasty gulping.



Helpful onlookers resuscitate Judd Minter following his unexpected dip in the Tempe pool. Question: Why didn't he wait until he got into his bathing suit?



IT'S A FACT THAT...

Behind a simple appearing financial report, which you can read at a glance, lies the work of 25 people—office workers who also are co-operating 100 per cent for the war effort.

First glance reveals a neatly-typed, perfectly arranged report, the result of **Anne Goggin's** and **Jean Cutbirth's** painstaking work.

"Cash on Hand" is the first item, which reminds us of **Charlie Mathewson**, cashier, and **Lance Lacey**, his assistant, taking their strong box of change over to the canteen to make collections from cadets for their board and room.

"Banks," of course, must be reconciled at the end of each month, and this is done by **Tom Nelson**, chief clerk. He also takes care of several other items on the balance sheet, such as accrued Workmen's Compensation Insurance, Federal Old Age Annuity, State and Federal Unemployment Insurance, etc.

"Accounts Receivable" is the next

item, the result of work done by **Faye Jones** and **Irma Dixon**. They keep a daily record of how many cadets sleep on the Post each night and the number of meals they eat. They record canteen transactions, too, and in their spare time take care of the supply room.

Opposite "Accounts Receivable" are "Accounts Payable." **Jim Yerkes**, purchasing agent, his office assistants, **Marguerite Lebert**, and **Billie Bagwell**, and **Earl Smith**, receiving clerk, are responsible for this figure. They also handle priorities so that we may purchase materials necessary to keep Southwest operating. In a day or two you'll see **Jo Buckelew** busy with her check book writing checks to pay the bills.

"Accrued Payrolls" is an item in which all of us are interested. Paymaster **Jim Roberts**, **Rex Boggs**, **Irma Gladden** and **Beverly Wood**, payroll clerks, figure time cards and compute the amounts each of us has coming on payday. Then **Millie**

Sutherlin and **Kathleen Dalton** type the checks.

Next there is listed "Employee's Group Insurance." All of us remember the day we started to work, and the group insurance plan explanation by **Marjorie Land**.

"Employees' Deposits for War Bonds," an account maintained by **Josephine Buckelew**, is of interest to almost everyone. She also has another little job—taking care of gas and tire rationing.

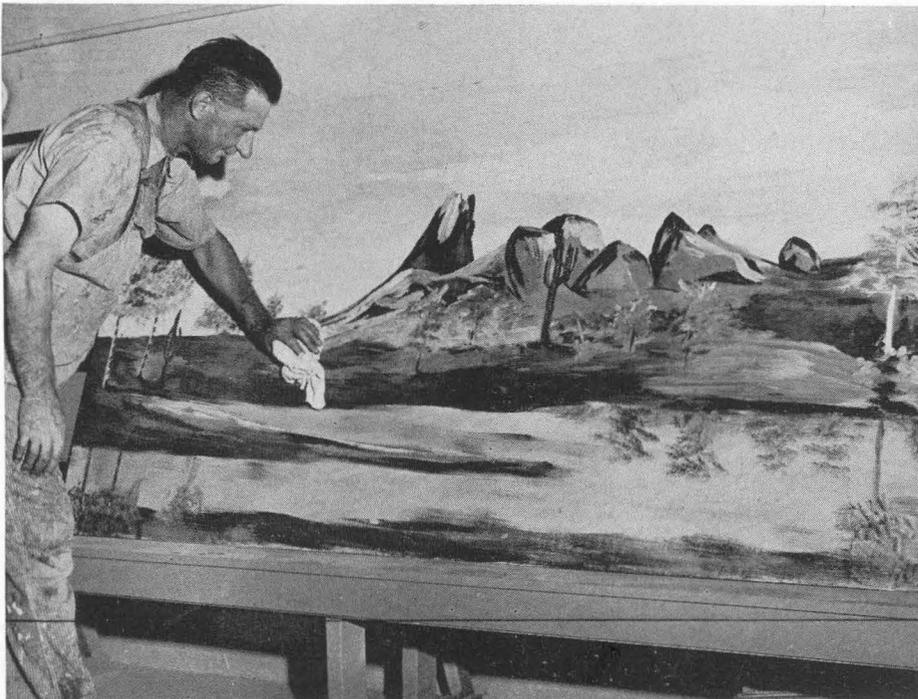
Then there's a little item called "Income Tax." We're all income tax conscious, especially **Judd Minter**, treasurer. Judd not only has to think about his personal tax, but care for Southwest's, too.

Down in the lower corner is the figure our executives are most interested in—"Profit and Loss," the final result of the entire accounting department.

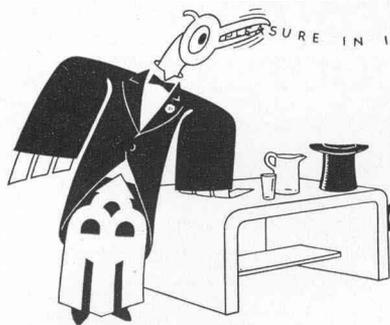
The detail of this last item is kept by Bookkeepers **Ralph Cahill**, **Ed Tabor** and **H. H. Head**. They've been busy all month preparing all vouchers and journals, then posting them to the general ledger and the detailed expense ledgers. After the month's work has been entered, they take a "Trial Balance" to prove they've done their work correctly. The "Trial Balance" is then turned over to our report statistician, **Harry Heflin**, to prepare the pencil copy from which the report is typed.

Key personnel in the administrative office, whose work is not reflected directly in the Balance Sheet, are **Billie Bryant**, chief telephone operator, and her crew: **Louise Lamb**, swing shift, and **Bobbie Plumb**, graveyard. **Barbara Summers** handles all incoming mail but, of course, she would have no mail to sort if it weren't for **Curtis Jones**, who drives the mail truck. **Sid Nabors** and **Blanche Hoye**, secretaries to **Jack Connelly** and **Judd Minter**, respectively, handle office correspondence and appointments. **Gwen Crouch** operates the mimeograph department out in Hangar Four.

Oh, yeah, there's also a guy named **Bob Fry**, office manager, who took a day off to supply this data.



THUNDERBIRD'S FLIGHT DEPARTMENT wanted two rough sketches so cadets in the anti-ground loop trainers could distinguish the horizon line. Omar Loucks of ground maintenance added a few extra brush strokes on his own—with the result shown above. No beginner in this line, Loucks has painted hundreds of pictures in water colors and ink. They have been exhibited in several Mid-Western cities, and sold for as much as \$200. Although still just a hobby, Loucks often spends hours in studying and drawing a single scene. One took him over 150 hours to complete.



ASSURE IN INTRODUCING ONE WHO NEEDS NO INTRODUCTION

Biographically Speaking



TED MITCHELL

It's no coincidence that almost every company exec is a flier of long experience, and Ted Mitchell, operations chief of the Cargo Division at San Bernardino, is far from being the exception.

Ted has spent nearly 4,000 hours in the air since 1927. As a matter of fact, with but two minor exceptions, he's been 100 per cent a flier. In one of these respites he owned and operated a Hollywood night club.

He started at Falcon in Sept., 1941, as a basic instructor, and quickly went up the ladder. In rapid succession he was assistant flight commander, flight commander and assistant chief pilot, remaining at the British school until called to head up the new military cargo line in November, 1942.

Vital statistics: 36 years old; born in Logan, Utah; married; two children, both boys.

The El Cortez, El Paso; Skirvin, Oklahoma City; Hilton chain; Town House, Hollywood Roosevelt, Alexandria and Biltmore, Los Angeles . . . Harry (Henry James) Mauler, Southwest's chief steward, knows 'em all from experience.

For 40-year-old Harry, this is his 20th year in the food business, in which he's been everything from a bus boy to grocery store owner to catering manager to efficiency expert, mentioning just a few. The exact list is too long to repeat completely; suffice it to say that Harry knows the business so well he served 2½ years as first vice-president of the international stewards and caterers association, and 7 years as a director of the Southern California restaurant association.

Two children, son James who just left to attend a Navy officer's course at a Missouri college, and a daughter, 13.



HARRY MAULER



JIM RAY

"Vice-President in charge of operations." That's been James G. Ray's title just about ever since he started in the aviation industry.

First it was for Pitcairn Aviation, when they were establishing some of the nation's first airmail routes on the East Coast; then for the Autogyro Company of America, where he flew a greater number and more models of rotative wing aircraft than any other person; later for all American Aviation, Inc., when he assisted in developing that organization's extensive feeder airline operations. He joined Southwest on Dec. 1, 1941, as—yep, you guessed it—Vice-President.

In charge of airline development for SWA, Jim's experience in aviation dates back to the first World War. Born in Floresville, Texas, he's 46.



HERE'S A FAMILY group we'll wager won't be equalled in many aviation companies—the three Bethancourts, all of whom are flight instructors at Sky Harbor. Left to right: Brother Bruce, Wife Bess and Husband Art. In between are Pug, Southwest's only flying canine, who already has some 200 hours to his credit, and Amigo, a newcomer to the Bethancourt family.

GOSSIP—(Cont'd)

"Please, sir, will you use a little more rudder?" . . . Our sympathy to **Jean and Red Johnson**, T-2 maintenance, called East because of the death of their father . . . Let nobody question the efficiency of Falcon Field guards, though we dare say Gate-man **Tidwell's** face must have been a bit red when he failed to recognize President **Jack Connelly** the other day . . . Back at work in the T'Bird ground school are **Clyde Smith**, still on crutches, and **Donna Langmade**, recovered from a tonsilectomy . . . Falcon's chief ground school instructor, **John Bonnell**, says the world is full of honest people. He lost his wallet downtown, C card and all, and had it returned. . . . Falcon's latest proud papa is Flight Commander **Bill Walker**, William, Jr., checked in the other day at nine-oh-four. . . . Add people we wouldn't like to be: Whoever poured oil on the trout pool at Falcon, killing all the fish, if **Bill Sims** and some of the gang, ever catch up with the culprit.

Boners

We'll bet you had just as much trouble in spotting all five of the errors in our "What's Wrong Here?" picture on page 18, as we did in thinking them up. But make no mistake, boners of this sort do happen! We'll start with the easy ones:

1. Our cadet model obviously is climbing into the ship wrong; some instructor neglected that part of his education.
2. He may remember to go back for his parachute, even yet, but we've heard about 'chutes on the stabilizer that were completely forgotten.
3. Of course Instructor Bill Mitchell knows better than to sit in the plane while it's being gassed—but do you?
4. And now it's getting a bit tougher to find the errors. How about that Form One out there on the wing? Catch that one?
5. We'd like to know how many of you honestly did spot this one: a look at that aileron in the foreground will tell you instantly that someone forgot to lock the controls on this plane. It happens!

SOME ARE NOT COOPERATING

Cars entering Thunderbird are only 57 per cent loaded, according to a recent check made at the bridge—which certainly isn't 100 per cent cooperation on our part with the national goal of making rubber last for the duration.

Persons driving five-passenger coupes were the worst offenders, the survey showed. They were only 42 per cent loaded, as compared to 68 per cent for three-passenger coupes and 58 per cent for sedans.

The average load per car is just 2.6 persons.

Cars entering the post between 8 a. m. and 4 p. m. are loaded the lightest, while the heaviest loads are carried by those arriving between midnight and 8 a. m.

OPA Administrator Prentiss Brown frequently has said: "Car sharing is the best conservation method for reducing car mileage and thus saving rubber, gasoline and automobiles."

If your five-passenger sedan is carrying only 2.89 people, or your five-passenger coupe is carrying only 2.07 people, or your three-passenger coupe is carrying only 2.02 people—you need more riders.

All you need do to get them is to see Josephine Buckelew at Thunderbird, Ina Scott at Sky Harbor, Marie Allinio at Thunderbird II, or Bill Sims, at Falcon.

Guess 'Em?

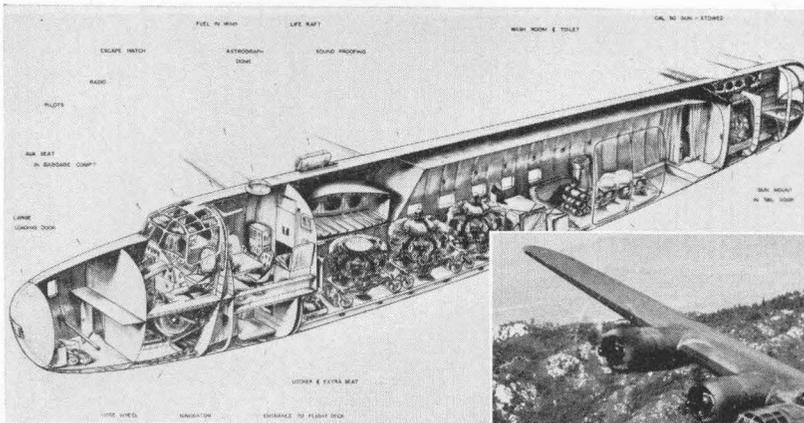
Here are the answers to the questions on company operations on page 19.

1. (b) 1,236 ft.
2. (c) Sky Harbor.
3. (c) 29 countries.
4. (a) England and America.
5. (a) More.
6. (b) Wacos.
7. (c) North of Williams.
8. (c) Primary and advanced.
9. (b) For the Army Air Force.
10. (c) Primary only.

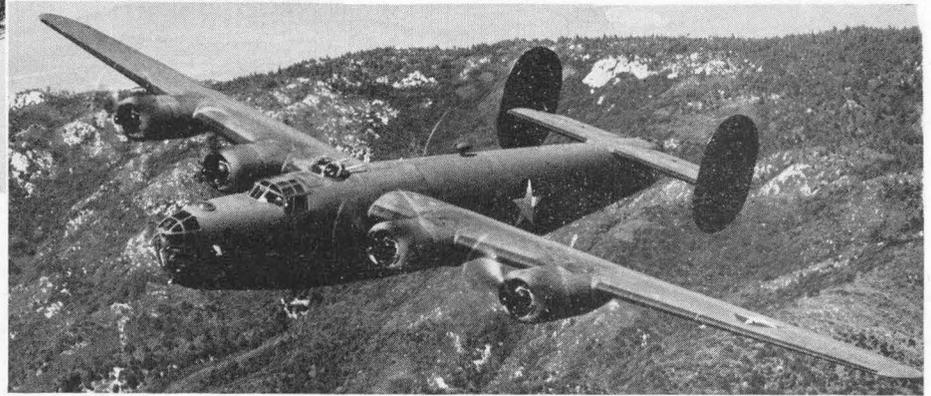
LIBERATOR--DEADLY WEAPON OF WAR

SPECIFICATIONS

Engines.....	1200-h.p.
Wing Span.....	110 feet
Length.....	66 feet, 4 inches
Height.....	18 feet
Gross Weight.....	Over 55,000 pounds
Empty Weight.....	34,330 pounds
Maximum speed.....	Over 300 m.p.h.
Cruising Speed.....	Over 200 m.p.h.
Range.....	Approximately 4,000 miles



SEEING ACTION everywhere there is a combat job to be done is the Liberator B-24, right, which many former Thunderbird cadets have been reported to be piloting in various war theatres. Above is a drawing of the C-87, cargo version of the Liberator, which assertedly "can carry the greatest cargo load (more than six tons) of any airplane now in mass production."



One of the deadliest and most devastating weapons to appear in this war, the Liberator B-24 is a heavy duty, long range, four-engined bomber that carries up to ten tons of death and destruction in her capacious bomb bays. With a range of more than 4,000 miles, a maximum speed of over 300 miles, and an unusually high ceiling for a plane of this type, the Liberator is today fighting magnificently on air fronts all over the world.

Offensively, she has blasted battle-ships in the Mediterranean, made one of the longest bombing raids on record for land-based planes by flying 2,000 miles to blast the Japs at Macassar, and is carrying her share of shattering devastation in the round-the-clock bombing of the vital war industries on the European continent.

Defensively, the rugged construction, heavy armament and high speed of the Liberator is making her the terror of Axis fighter pilots. Messerschmidt and Zero pilots who have survived attacks on the Liberator can best tell the dramatic story of her defensive firepower, but the lips of many others have been sealed by the hot lead pouring from her many guns.

The Liberator also holds the distinction of setting the speed record for crossing both the Pacific and the Atlantic. Her time between the United States and Australia is 33 hours and 27 minutes, between North America and England, 372 minutes.

That the Liberator is a complicated and sensitive mechanism as well as something of a fighting miracle, is easily understood when it is known that she contains 3,627 electrical and plumbing connections, 34,700 feet of electrical wiring, 4,100 of tubing for gas, oil, water and air, 957,000 rivets, 19,100 nuts, bolts, screws and washers in addition to 305,000 parts.

The fabrication and assembly of such a multitude of separate items into a fully integrated, smoothly functioning fighting machine is a story in itself. How it was designed and test flown in a matter of months instead of the customary years is one highlight of that story. How, for the first time in the production of a heavy bomber, assembly lines were engineered to speed the output is another.

The most important fact about the Liberator, however, is that it has proved itself so completely in battle that today not only Consolidated Vultee in its plants at both San Diego and Fort Worth is building these

ships, but also Douglas at Tulsa, North American at Dallas and Ford at Willow Run. Through a special wartime arrangement, Consolidated Vultee turned over all the plans and specifications to its former peacetime competitors, as well as revealing all the production methods that had been developed.

Recently, when the question of air transport became acute, the army again turned a speculative eye on the Liberator. What were the transport possibilities of this highly efficient bomber? One was modified for the carrying of war materials and personnel. The result? Fleets of these work-horse versions of the fighting Liberator are now winging their way around the world with cargoes for victory. They are called the Liberator Express.

Considering its gross weight, in excess of 50,000 pounds, with full bomb load, the Liberator bomber is a marvel of fleetness and maneuverability. A seasoned pilot once said of it: "Squat and lumbering on the ground, she would waddle up to the head of a runway like a duck out of water. But once off the ground, her ponderous landing gear tucked away, she was a creature transformed—maneuvering her big hulk with the lightness of a toe dancer."

SPORTRAITS



The big fists above have swung on Maxie Baer, one-time heavy-weight boxing champ, hundreds of times. But take it from Doug Kuhlman, Thunderbird flight instructor, Max was no one to be in the ring with when he was really mad.

Doug should know, for he joined Baer's camp in 1935, just after he had lost his title to Jim Braddock. For two years he barnstormed around the country with the big play-boy.

Along the way, Doug managed to get in 46 professional fights himself. He lost only two of these, both on a decision, but the one that really hurt was a draw with Pat McCurdy. Pat broke every rib on one side with one well-aimed punch, ending Doug's ring career.

At 28, Doug is only a couple of pounds over his former fighting weight of 195.

PASS EXAMS

Thirty primary flight instructors at Falcon recently completed a ten weeks' course in Royal Air Force navigation (the same curriculum cadets receive) by passing their final examinations with flying colors. Advanced instructors have swelled the ranks to 50 with the start of a new course in celestial navigation.

NEW PERSONNEL

THE THUNDERBIRD extends a hearty welcome to all new employees who joined Southwest Airways during the month of June. Glad to have you with us!

SKY HARBOR

Flight Office — Barbara M. Davis.
Flight Instructors — William L. Hussman.
Airplane Maintenance — Johnnie W. Durling, Sheldon O. Clark, Earl N. Miles, Robert J. Hatley.

THUNDERBIRD

Administrative — Wilma Jean Cutbirth.
Flight Office — Mae Ethel Sisk.
Flight Instructors — Reinhart O. Schnell, Willis C. Pace, Charles S. Barnes, Arthur F. Ryan, Neil S. Taylor, George U. Young, Jr., Robert D. Hutton, Maxim B. Shears, Mathew J. Reddy.

Ground School — David R. Verrill.
Airplane Maintenance — Arno B. Heard, Roert T. Endsley, Don F. Sheets, Dan L. Nelsen, Richard D. Michael, Theron W. Henderson, Willard L. Moore, J. Eugene Cook, Robert N. Hansen, Harry M. Wann, Joe L. Refsnes, Joseph W. Marks, Walter F. Cline, Donald G. Harris, Forney G. Oden, James W. Smithart, Albert D. Taylor.

Gasoline Dept. — Charles H. Oatman.
Stewards Dept. — Roy J. Sullivan, Ella Davidson, LaVerte Taylor, Juanita Montgomery, Mary C. Moore, J. B. Dabney, James F. Ryan, Erma J. Jarnigan, Nannie Lue Bickhum.
Ground Maintenance — Les Shaw, Joe Williams, Harvey C. Simpkins, Howard D. Snively, James C. Hunt.

Janitors — Edna Taylor, Jesse Schultz, Juanita G. Armer.
Guards — Walker L. Merriott, David J. Holmes, Cora W. McDonald.

FALCON

Flight Dispatcher — Wanda Gertje.
Flight Instructors — John L. Barrett, James L. Moses.

Airplane Maintenance — Madge Shipley, Earl Hickman, Larry Bergin, Lyman Jackson, Philip Newlin, David Ratcliff, Jeffie Alexander, Dennis Daley, David Harmon, James C. Johnson, Floyd Stillwell, Richard Cauble, Alfred Avalos, W. R. Brantley, Billie McClain, Albert Saiz, Harvey Schurz, Rex Swanner, Joseph Crandall, Bobby J. Allen, Duke Cross, Frisca Pesis, Glanda Schurz, Cecilia Senick, Mary Thomas, Billie Jo Langford, Donald Harter, Alvern Lisonbee, Alvirn Lisonbee, Naomi Stewart, Hildred Peters, Susan Anaya, Esther Duenas.

Gasoline Dept. — John Bradley, Robert Gardner, Charles Hadlock, Elmer Langford, Robert R. Taylor, John Stewart, John J. Hamblin.

Steward's Dept. — Mary Dunnuck, Johnny Keefer, Eva Mahoney, Dorothy Martin, A. J. Petrie, Jr., Georgia E. Wood, Eileen Gugeler, Virginia McCoy, Jewell Futscha, Margaret Wlaschin, Dwayne Brimhall.

Janitors — Pauline Carter, Esther Matus, Carmen Navarro, Wanell Futscha, Nicaloza Medina, Maria Orduño.

HOSTS TO YOUTHS

Both Thunderbird and Thunderbird II were hosts to 17-year-olds of Phoenix and surrounding area on July 4, as part of the Army Air Forces' program to acquaint youths with the training received by an aviation cadet.

Ground Maintenance — C. R. Griffin, B. W. Grojean, Jack Holt, Angel Portillo.

THUNDERBIRD II

Administrative — Wanda Shoeman.
Flight Office — Minnie J. Langmade.
Flight Instructors — S. W. Lowell, G. A. Wood, Jr., W. H. Hyde, Zeb. C. Pruner, J. W. McKnab, R. E. Walters, G. H. Oppenheimer, J. J. Vick, A. S. Kininmonth, George Bowman.
Flight Dispatchers — Lois H. Anderson, Mary E. Trott, Nadine L. Stauffer, Marion Donovan, Winifred Kent.

Airplane Maintenance — C. R. Vest, H. C. Juan, Dave Roby, A. J. Clark, Lela Hill, V. D. Hoover, E. J. Lambert, H. L. Conkle, E. K. Svenkerud, H. H. Beck, W. E. Harper, Mary F. Chicago, Annie Enas, Amy M. Lewis, A. S. Brayer, Ida M. Howard, Mary L. Jauregui, M. E. Juan, Emma G. Martinez, Josie Ortega, Ann Walker, R. E. Behling, H. F. Lockhart, H. E. Wharton, Jr., L. R. Smith, Annie M. Anson, Vivian C. Clark, R. N. Sealy, Evelyn Leonard.

Gasoline Dept. — C. C. Creighton, D. R. Davis, N. D. Myers, H. O. Holzboog.

Steward's Dept. — Thelma H. Brunner, Waunita Huff, Ruby L. Wesson, Mable Tyra, Mary Sconce.

Janitors — Bonnie L. Tripp.
Ground Maintenance — R. A. Carter.

OVERHAUL

Aircraft Division — Betty M. Bauer, Cumi E. Antley, Curtis C. Glasgow, Thelma E. Hall, Robert J. Henry, Ethel E. Hoel, Hewlett L. King, Hallie B. McGinnis, Robert E. Perry, Rixie F. Quick, Ira M. Rhodes, Hazel P. Rosenberg, Lee D. Spencer, Norma D. Turley, Myrtle M. Unger, Emma A. Vickers, John F. Westfall, Margie C. Cordell, Andrew J. Stafford, Jesse C. Ames, Geneva D. Redding, Anna B. Mason, Alma L. Lewis, Phillip N. Keeler, James F. Loftis, Esther L. Lindley.

Engine Dept. — Ralph Walker, Martin Witter, Koyene Bates, Rhoda V. Dobbs, Joel Giddens, Hazel J. Hedgpath, William Johnson, Marjorie J. Mace, Amanda O. Minor, Herman C. Moses, Virginia R. Ralston, Edgar D. Smith, Jenna V. Sutter, Clyde Witter, Marjorie E. Jones, Alice M. Cox, Jennie K. Olinger, Jennie W. Mullins, Lula E. Meritt, William E. Berry Sr., William E. Berry, Jr., M. E. Williams, Edsel M. Lowe, William H. Barry, Edna V. Mayfield, James B. Hennessy, Hortense H. Luna.

CARGO

Administrative — Alice Gardner, Margaret Smith.

Communications — Constance Miller.
Airplane Maintenance — Alton Preston, Rudy Lay, Norman Madsen, Daniel Thompson, George Tucker, Walter Slize, Wilbur Thompson, Philo Mellor.

THE THUNDERBIRD STAFF

Editor . . . Bernadine Wurzbacher
 Photographer . . . J. Robert Burns

STAFF ASSOCIATES:

Lee Harris	Genevieve Buckles
Jean Johnson	Marie Allinio
Helen Lear	Mary Ruth Castle
Ina Scott	Ernie Ruehlen

★★ VISITORS OF THE MONTH ★★

THEY ALSO STOPPED BY

Thunderbird and Thunderbird II: Lieutenant Byron M. Holmes, assistant director of ground school training, West Coast Training Center: "I'm pleased with the results here."

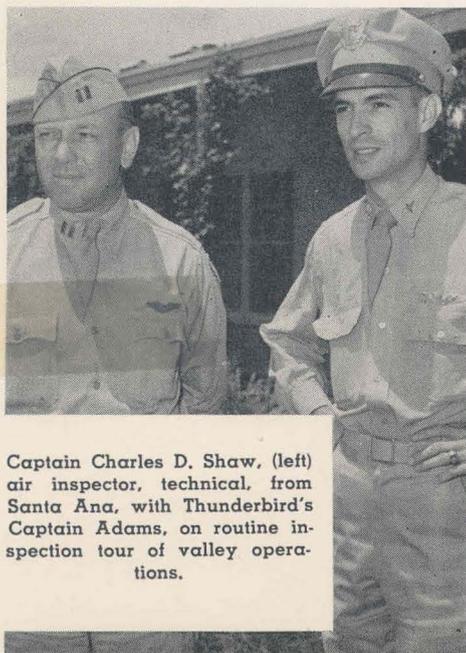
Overhaul: General Beau, Colonels Kroon and Archer, Majors Gaines, Delaney and Dech, Captain McCollum and Lieutenants Wiley and Gantzer, among the military personnel from San Bernardino Air Depot who inspected Overhaul activities and toured the post.



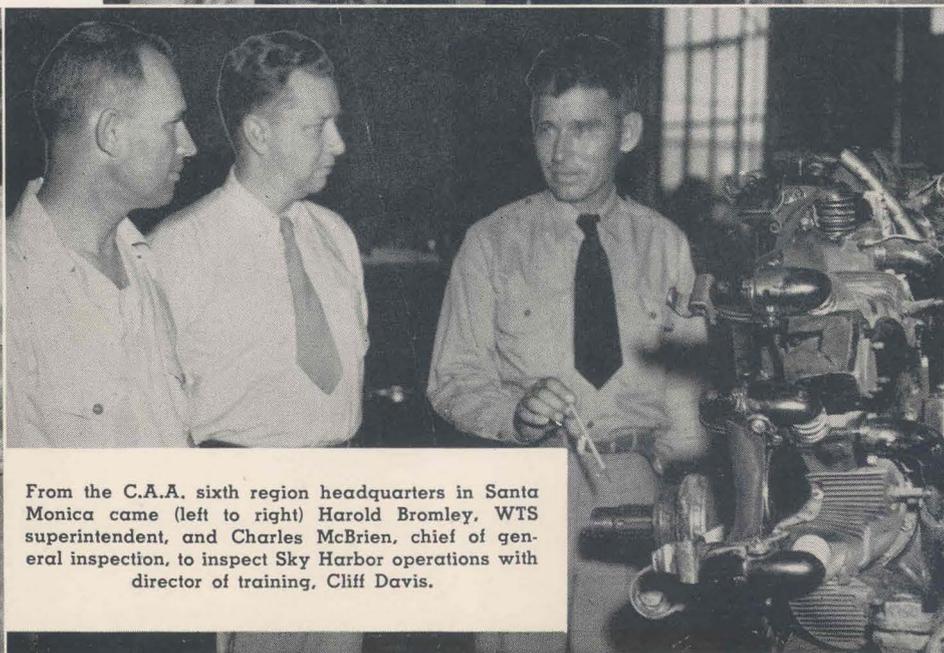
Captain Robert Flaherty, (right) Marine flier, visits his brother, (center) A/C Tom Flaherty, and chats with Captain Julian Adams. Stationed with Marine Squadron 212 on Guadalcanal, Captain Flaherty has three Jap Zeros to his credit; wears the Solomons campaign ribbon and the Purple Heart.



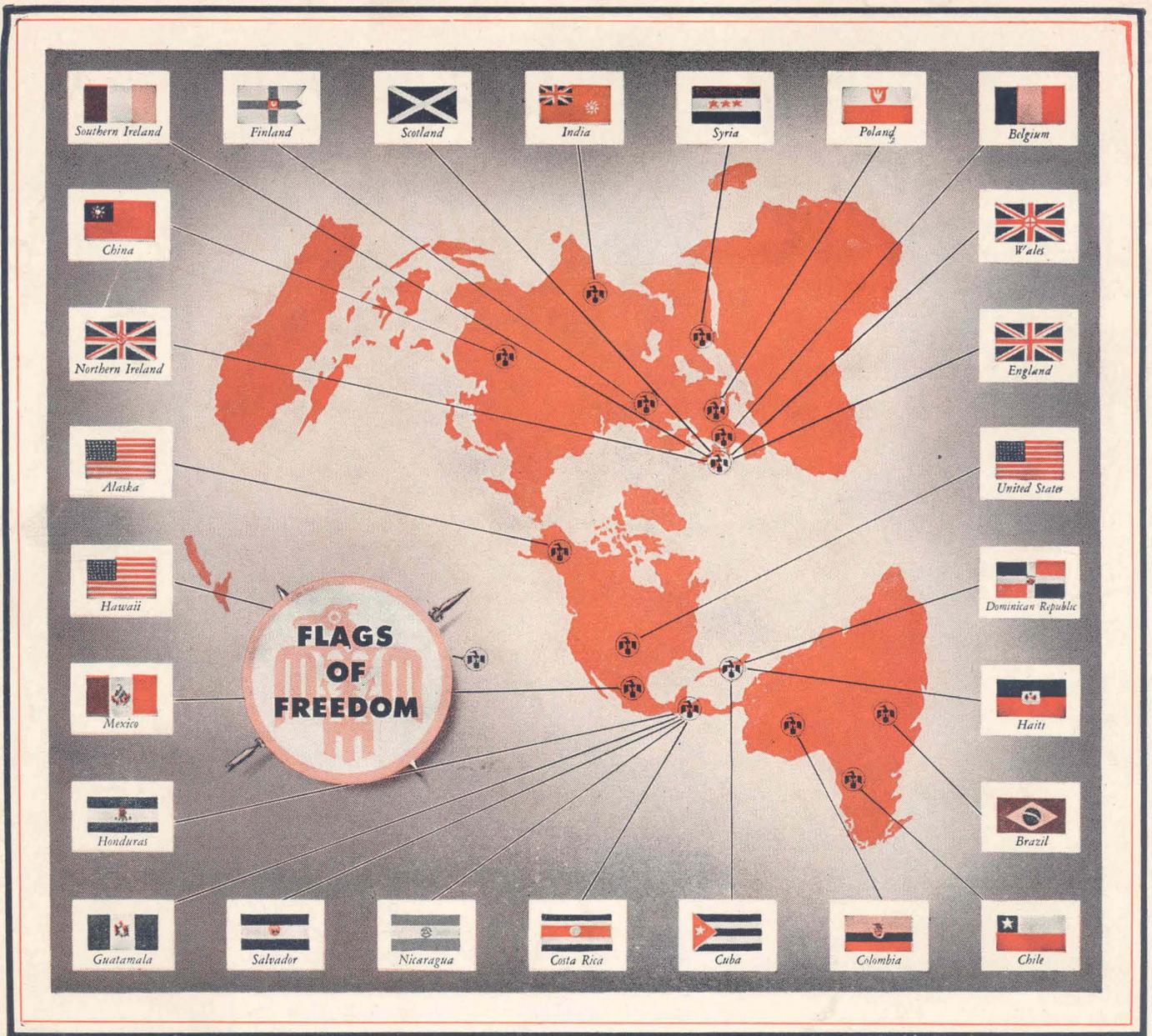
(Left to right) Major Philip C. Meyer, Leland Hayward, Charles Potter, Aubrey Keif and Jack Connelly. Keif is manager of Texas Company's aviation division, and Potter from his Los Angeles office. The two Texaco gas people inspected all company operations in the valley.



Captain Charles D. Shaw, (left) air inspector, technical, from Santa Ana, with Thunderbird's Captain Adams, on routine inspection tour of valley operations.



From the C.A.A. sixth region headquarters in Santa Monica came (left to right) Harold Bromley, WTS superintendent, and Charles McBrien, chief of general inspection, to inspect Sky Harbor operations with director of training, Cliff Davis.



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have learned is more than just the many citations and decorations earned in combat on every fighting front. It is the hundreds of other planes which fly today in every corner of the world, too — transports, trainers, cargo liners — all with men at the controls who earned their wings with the Thunderbird. ★ In learning to fight and fly together, they also are learning to keep the peace together, uniting still further the nations of the world for the peace-time understanding which is to come.

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