

RESTRICTED
HEADQUARTERS EIGHTH AIR FORCE

AAF STATION 101

APO 634

Date 27 June 1944

File No. 383

SUBJECT: Publicity in Connection with Evaders

Fill in each column, initial action, and draw a line across the sheet just below initials. Number each entry consecutively in first column. Use entire width of sheet for long memoranda. Use both sides of paper. Do not use extraneous pieces of paper in commenting upon matter under consideration. Write it on this backslip.

No.	FROM	TO	DATE	REMARKS
1	A-2 P/W	A-2 Admin.	27/6/44	For forwarding. <i>P.M.S.H.</i>
2	A-2	A.G.	28 June	For processing. <i>P.P.Mc.</i> <i>P.P.Mc.</i>
2	A-2 <i>Adm</i>	A-2 <i>P/W</i>	28 JUN 1944	<i>Agree this should be called to attention of higher echelon but believe better method would be informally at a meeting or sometime when you are there in person. Lt. Col. Edmundson agree. P.P.Mc.</i>

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HEADQUARTERS EIGHTH AIR FORCE
AAF STATION 101
APO 634

(D-G-13)

SUBJECT: Publicity in Connection with Evaders

TO : Commanding General, USSTAF, APO 633 ✓

1. Attention is invited to article entitled "Underground Escape" by Jim Douglas, appearing in Boeing News, June 1944, inclosed herewith.

2. Publicity of this sort makes it difficult to persuade evaders of the importance of complete security in regard to their evasion or escape.

3. Reference is made to W.D. directive, dated 6 August, 1943, file AG 383.6(31 Jul 43)OB-S-B-M.

1 Incl.

As stated above.

RESTRICTED

Memo to Col Holt:

1. The three American airmen whose escape story is told in the BOEING NEWS, Volume XIV, Number 6, published in Seattle, Washington, are identified as Sgt Ardell H BOLLINGER, Sgt, 13097189, S/Sgt Leonard J KELLY, 39173397, and Joseph M KALAS, S/Sgt, 33361307, all of the 546 Bomb Squadron, 384 Bomb Group.

They were MIA 23 September 1943 and arrived in UK 23 January 1944.

These men were interrogated by Capt White.

The BOEING NEWS escape story agrees in all essential details with their evasion story as published by PW and X Detachment as E & E Reports Nos 335-6-7.

The narrator of the BOEING NEWS story is identified by Capt White as Sgt KALAS for this reason.

Boeing

NEWS

JUNE 1944



FIVE GRAND

Boeing NEWS

VOLUME XIV • NUMBER 6

SEATTLE, WASHINGTON

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The Briefing

Not Tired Yet

"Sorry," said the Renton Division personnel interviewer to a slight, gray man of five feet-four. "We can't use you. We need physically active people."

"Look, young feller," said Arthur Flattes from the other side of the desk. "I'm going to be 76 next month, but I feel like 40. I can get around like a young guy. Let me tell you about me."



Arthur Flattes entertains the girls.

He pulled up his chair, filled his pipe and made his 119 pounds comfortable.

"I ran away from home at ten," he said. "That was after I beat up the teacher because he was going to lick me for trouncing the school bully."

"I started out working in a hotel, and then I got into jockeying. Win? Listen, I wouldn't get onto a horse unless he was a winner."

"Along the way I'd picked up a few tricks at clogging, the horizontal bar and tumbling, so I got a job with Al Ringling's circus. I was mostly a clown at first. Then the trapeze man broke his neck in a fall and I got his job."

"Two girls and I worked at forty feet with no net. Once I landed in the bleachers, but the Ringlings took good care of me while I was in the hospital."

"After fifteen years I went with Barnum's for a year, and then toured state fairs for two years with my own company. I almost forgot to tell you I

boxed with the circus, too. Kid McCoy was one of the guys who tried to knock me out and couldn't.

"I ran a 200-acre farm in Iowa, then homesteaded in Colorado. Then I did a lot more traveling, like riding a horse down into Mexico and gold hunting in Alaska."

"After that I settled down. I've been in an Iowa factory for 21 years. It's about time I got out of the rut, and besides I've got a daughter-in-law and a grandson here at Boeing."

"Now, what was that about 'physically active people'?"

So you'll find Arthur Flattes in the Renton electric shop today. He's quite an attraction there, too . . .

* * *

Men of Mystery

The most mysterious organization in the world is Europe's underground. Everything about it is cloaked in mystery—its membership, its deeds, the incredible ways in which it operates.

One of the most tangible pieces of evidence we have that the Underground actually exists is the stream of shutdown airmen whom it has helped to escape from the continent. Several of these flyers have shown up at Boeing. The story of one of them, a Flying Fortress gunner, is told in "Underground Escape," on page 3 of this magazine.

If his story could be printed in full, it would amaze you. Even as it stands, the airman's adventures are a rare insight into the marvelous daring and efficiency of the Underground. But the Office of Censorship has carefully blue-penciled names, places, and all details that might aid the Nazis in learning how the Underground functions, in tracing the airman's escape route or in retaliating against his helpers. Meanwhile, the Underground will remain a mystery to the enemy.

ON OUR COVER—Everybody's airplane, the *Five Grand*, swings in a steep bank on its Army acceptance flight, with Maj. Harold Hanson at the controls. The *5000th Fortress* was accepted just four days after it came off the production line. The photo is by Stewart Love. For more photos and story on the *Five Grand*, see pages 10 and 11.

CONTRIBUTOR CREDITS—Photos: *Air Forces* (page 9); Don McQuade (10,11).



UNDERGROUND ESCAPE

By JIM DOUGLAS

The hero of this story is called Sgt. Joe Morgan. That is not his name. His real name must remain a military secret. Apart from the use of fictitious names for Morgan and his crewmates, this story of the sergeant's adventures in the Underground has been altered only with respect to details which might conceivably aid the Nazis in establishing the identity of his plane or the vicinity in which it was shot down.

THEY were going to walk back from this raid. The crew knew it even before the pilot's cool command came over the B-17's intercom: "Prepare to abandon ship!"

With the number three engine afire and number four running away, the Fortress was going down. Nazi fighters knew the ship was doomed, too. They broke

off the fight and went streaking after the rest of the Forts that were heading for targets in *Festung Europa*.

Aboard the crippled bomber, the guns grew quiet. The engineer gave up trying to put out the fire that was already eating into the wing. The bombardier released his bombs on a barren field. That way they couldn't kill innocent farm folk.

Crew members hurriedly worked their way toward the escape hatches, trying to get out before the bomber exploded. Sharp questions were flashing through their minds.

If they survived the bailout would the Nazis be waiting for them, or would the natives be on hand to help them get away? Would they be in a mood to help? After all, they were being bombed by Americans. Tech. Sgt. Joe Morgan was thinking of that as he stood awaiting his turn to jump.

When the bomber was at 18,000 feet, the first men dove out into the blue. Over the intercom Morgan could hear the navigator and bombardier helping the wounded co-pilot out. He saw the chutes open below. Then it was his turn to find the answers to his questions. He jumped.

There were no Nazi planes overhead. Just the blazing Fortress and swaying chutes in the air. He watched the bomber racing away, then heard an explosion. The plane had blown up within half a minute after the last crewmen escaped.

The Americans felt cold sweat standing out on their foreheads. Why didn't someone speak. Then the old man broke the silence. "You are Americans? Airmen?"

Morgan bumped to earth in a plowed field. Men came running toward him, from nowhere, it seemed. He had a moment's indecision, then he started for some nearby woods. There was no time to ask questions, just make a get-away.

As he raced over the broken field he stumbled momentarily. He regained his balance, and saw more men—directly in front of him. The men shouted at him—in a strange tongue. They waved their arms, gesturing frantically. They were, he soon perceived, just farmers and villagers.

The men pointed out where the radio man, Sgt. Harry Foss, and the ball turret man, Staff Sgt. Mike Sweeney, had come down a couple hundred yards away from Morgan. He hid his chute and ran over to join them.

WOUNDED CO-PILOT

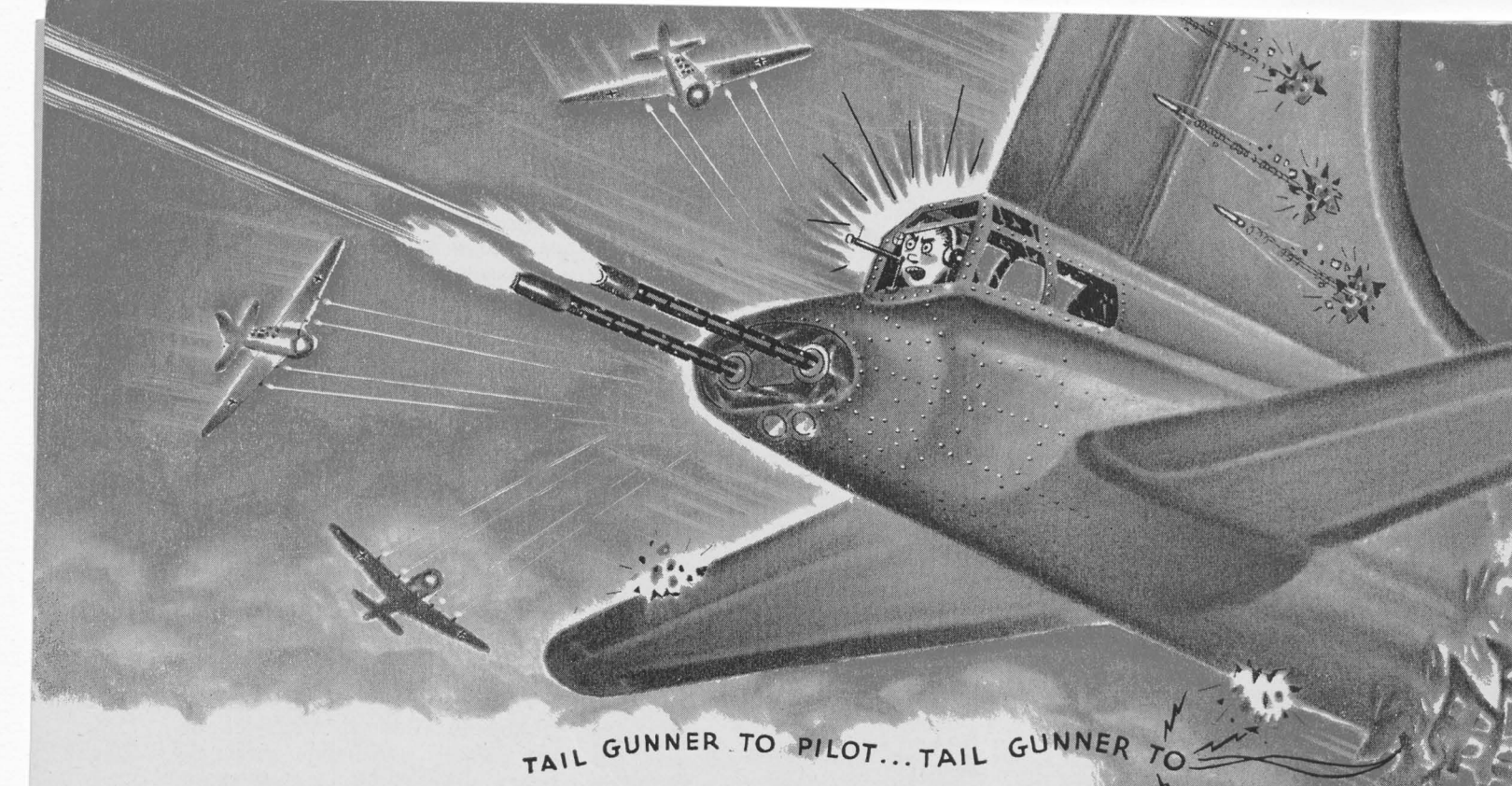
The three airmen stood in the middle of the field, bewildered. A score of peasants gathered around them, staring and talking excitedly. One villager stepped forward. Speaking in English, he told the three another crew member was in a nearby field, badly wounded. They knew it was the co-pilot.

When they reached the co-pilot they found him too dazed even to notice them. It was evident he must be put under a doctor's care immediately. The villagers assured the flyers they would see that a doctor was called, and advised them to hide in a hollow in the field.

As they started for the hollow, the
(Continued on Page 16)

ILLUSTRATED BY CARTER H. LUCAS





TAIL GUNNER TO PILOT... TAIL GUNNER TO

FUNNY THINGS HAPPEN

In the Air Forces you've got to laugh, no matter how thick the flak and the Focke-Wulfs. If you don't, you might as well trade your seat in a B-17 for one in the nearest nut factory.

SOME of the funniest things happen at the same time you're scared stiff," said T/Sgt. Ellis "Johnny" Savo, a top turret veteran of twenty-eight bombing missions over Germany, as he lay in his barracks bunk at the Flying Fortress school.

"That's right," chimed in S/Sgt. Bill Sippel, who served in the same overseas squadron as Johnny as a ball turret gunner. "When the going is the roughest, you'll get your best laughs. If a guy can't see the funny side when he's up there, he'll never stand the gaff. He'll fold in a few missions."

WHAT'S SO FUNNY?

The private, who had never been on a mission, looked at the two vets. "What's so funny about being shot at?" he asked curiously.

Savo, whose nickname "Johnny" comes from a little ditty, "Johnny From Rapid City," grinned at Bill. "Do you remember the radio operator I was telling you about, who went out with my crew on its fourth mission?"

"We are all scared and tense on that

raid," he continued, "and the Jerry is really driving home the attack. Our Fortress, 'Rum Boogie,' is getting hit hard and often, with nice holes popping up all along the fuselage.

"All our guns are blazing at the Jerries—all but the radio man's. We think he must've been hit, but there's no time



to check. All of a sudden we hear Mike, the radio man, cursing over the intercom. He's forgotten to throw the radio switch.

MEAN ARGUMENT

"Come on up, you damned yellow-bellied coward, and fight," he's shouting.

"I'm no coward."

"Oh, yes you are, you — —! You're too yellow to get up here and fight like a man."

"Like hell I am."

"After a while one of the waist gunners has to see what is up, so he takes a quick look. And there is Mike, his

head under the table, trying to hide from the Nazi flak and shells. The argument is going on, full blast, with Mike cursing and screaming at himself.

THE KID HAD GUTS

"Pretty soon, the kid talked himself into getting back to his gun, too. That took guts. And he didn't lose any of our respect, because we all knew what he was going through. Best of all though, it was funnier'n the devil. It gave us a terrific laugh that eased everyone's tension."

Sippel lit a cigarette and said, "Yeh, but don't think for a minute the Yanks are the only ones who get scared.

"Remember that Nazi guy, that Herman, who was one of the flyers with Goering's Abbeyville Kids? Every time we'd get near the Kids' base and their yellow-nose fighters would come roaring up, we'd tune into their radio frequency, because several of our boys could understand German. And every time the Nazi squadron leader would be blaring out to this one fighter pilot, 'Herman, where iss you? Herman, where iss you?'"

HERMAN HAD AN ANSWER

"Herman would answer back from some distant cloud, 'Ach, der guns iss jammed,' or 'Someting iss wrong mit mine engine—I tink it iss der gas line, yet.'

"Either Herman drew an awful me-

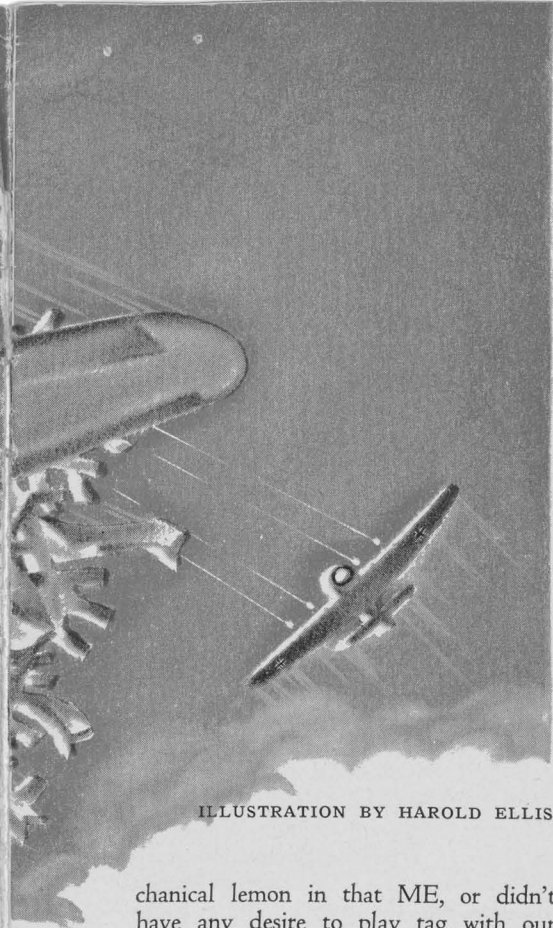


ILLUSTRATION BY HAROLD ELLIS

chanical lemon in that ME, or didn't have any desire to play tag with our B-17s."



"Speaking of laughs," remembered Johnny, "our crew had a good one once when our Fort wasn't handling just right. On two missions the pilot complains about the tail being loggy, and says the ship just seems to mush along. After we get back to base the second time, we decide to find the cause of the trouble.

"We discover our tail gunner has packed twelve pieces of armor plating into his turret. He isn't afraid—just cautious. We let him keep four of the plates."

"You could have used a little armor plate once, too, Johnny," Bill laughed.

"Yeh," Johnny said, "we were raiding Huls that day. I've just shot all the ammunition in my top turret. I bend down to pick up some more and wham!—there is a terrific explosion. My oxygen mask is torn right off my face. I crouch there a moment, dazed.

"When my head clears, I stick my head back into the top turret, but the

turret isn't there anymore. An 80-mm. shell has ripped the whole thing off. Guns and all are missing. From then on, I just sit back and enjoy the fight.

"So finally we arrive at our English base and the grease monkeys see the top turret gone. Their faces light up like a searchlight beam. They've always complained about how we ruined their ships, but kept our own hide whole. They think I'm a goner this time—but when I step out of the plane, you should have seen their faces fall."

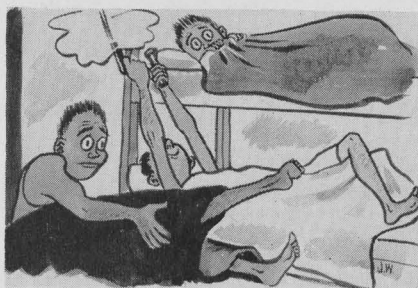
Bill said, "I remember one night in the barracks. A gunner called Eddie unwrapped a box from his wife. He found a large, awfully heavy cake, with mouldy, mildewed icing.

"It was a foul-looking sight and the rest of us didn't mind telling Eddie so. It was strictly barracks talk as we decided just what to do with the cake—give it to the C. O. or drop it on Berlin. The wife's reputation as a cook was run into the ground, and Eddie was a sad-looking GI.

SWEET CAMOUFLAGE

"Finally Eddie grabbed up a knife and tried to cut the cake. The knife went down only an inch or so and then stopped. Eddie tried hard to drive the knife down, but it refused to go, so then he started prying the darn cake apart—and uncovered a bottle of bourbon! If you know how scarce that stuff is in England, you'll know how much we thought of the wife. She was the heroine of the barracks."

"One night in our barracks," Johnny said, "when the lights have been off for an hour or so and the men are sound asleep, the place suddenly goes alive with gun fire. We jump out of the blankets, not knowing if it is Jerry paratroopers or some old man with a shot gun, trying to find a son-in-law.



"Then we see the cause of the rumpus. Lying there on a bottom bunk, this sergeant is holding a smoking .45 in one hand and a flashlight in the other. He motions toward the ceiling with the light, to where a spider has been serenely spinning its web.

"See," he says, "I'm an anti-aircraft battery—searchlight and all."

"The poor guy just couldn't sleep. A lot of fellows are troubled that way after a raid."

"We had a gunner in our barracks," said Bill, "who always dreamed he was at his turret with swarms of Jerries closing in on him. He'd hold his arms rigidly in front and swing them back and forth like he would the twin .50 calibers of his turret. He'd be giving out with a ra-a-a of a machine gun.



"Someone would yell at him, 'Put some kerosene on those guns, Harry—they're frozen!' Harry would reach back into his bunk real quick and come up with an imaginary oil can. Still holding his left arm out in front of him, he'd go through the motions of squirting oil on the 'gun.' We never could get him to oil the right gun, though."

The private listening, shook his head doubtfully. "Sure, a GI can always get a laugh in the barracks," he said, "but to get a laugh on a mission when fellows are going down—I can't see that."

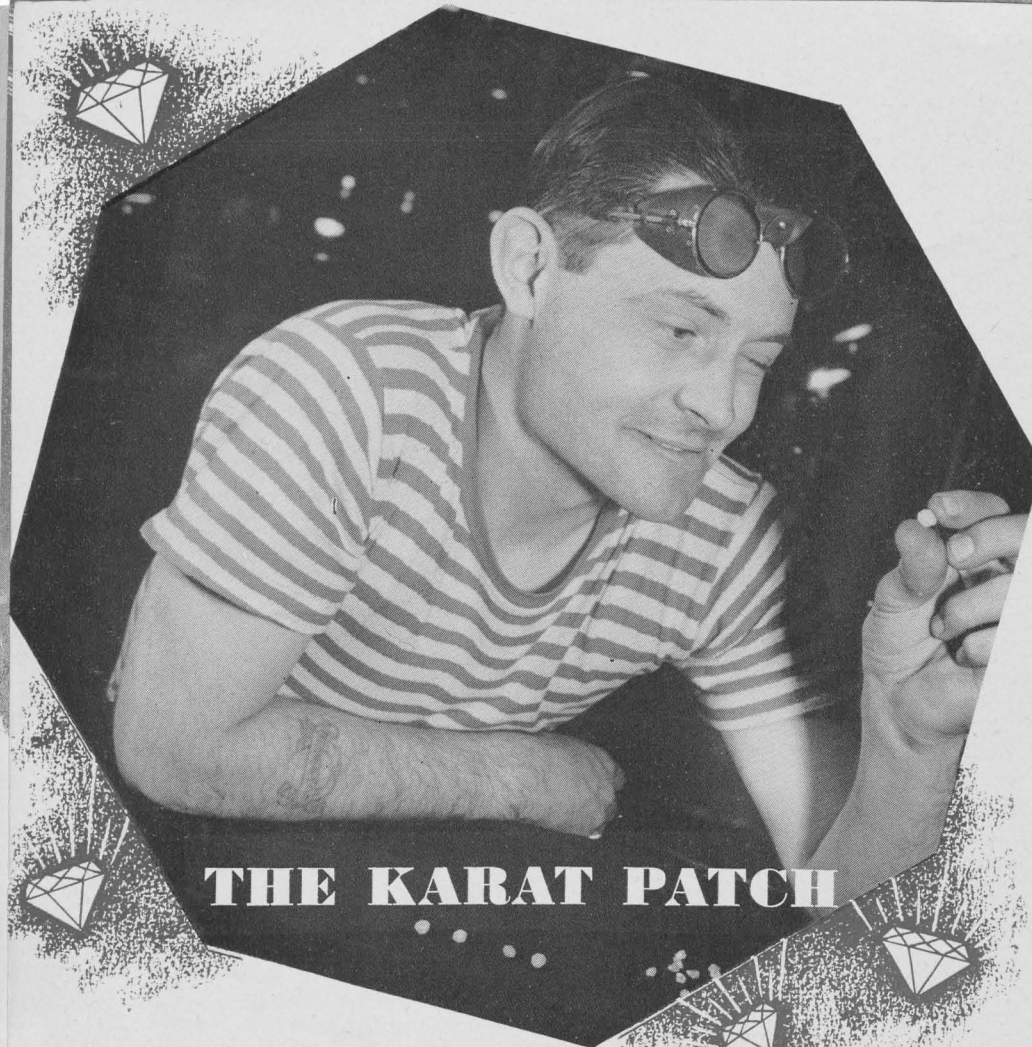
HUMOR IN TRAGEDY

"You'll see it when you get over there," Johnny said. "When we saw a Fort in our formation break in two one day it gave us and a lot of other people a good laugh. We told the situation to an artist and he made a cartoon of it.

"It's on a Hanover raid. This Fortress is hit by an ack-ack shell just back of the waist guns. The tail and the rest of the bomber part company right there.

"The tail section, complete with rudder and stabilizers, goes floating along. The tail gunner stays at his guns, blazing away. The Nazi fighters come diving in for him from all sides. It is a good excuse for them to get rid of their ammo. If they got a closeup picture of that part of the ship, they would get credit for a kill. So that tail turret goes sailing right along, with the Nazis swarming in around it like it was a full-grown Fortress with Prime Minister Churchill aboard. That gunner sits in there and keeps on shooting.

"We keep watching the tail go down until the tail gunner bails out. Poor guy, he must of run out of ammunition."



THE KARAT PATCH

"HAVE you got a good diamond I could have?" asked the machinist, leaning over the tool room counter. The clerk in 432 turned to a supply vault and brought out a couple from the Boeing \$4000 diamond stock.

Please do not get excited at this point, because this is not a new service which Boeing runs for prospective bridegrooms. It is all a part of the process of building Fortresses, and you do not have to sign any contract to obtain one of these "certified perfect" gems.

Where you find an industry dealing with metals—particularly hard, durable

metals—you'll find diamonds have their niche in the manufacturing program. Besides being the world's most famous piece of jewelry, the diamond is the hardest material known. Nothing will cut it except another diamond.

At Boeing, the jewels are used in the rough to cut—or "true up"—emery wheels that in turn cut the toughest steel used in the Flying Fortress and in the tools that make it.

These unfinished, commercial diamonds—known as "industrial" diamonds—are used in sizes from five karats to dust. They're bought also in the form

of diamond wheels: tiny diamond chips cemented to a grinding wheel. A diamond wheel can bite into anything.

The cut and polished diamond also has its place in industry. A dead ringer for the sparklers in engagement rings, it's used to examine and test the hardness of metals.

There are several techniques for testing metals: (1) bounce a diamond off a piece of metal; (2) push a diamond into steel to see how deep a hole it will dig; (3) check a piece of metal by noting how wide, instead of how deep, a notch the diamond will punch in it.

The bounce machine (1) is called a scleroscope. The diamond is mounted on the end of a steel rod. The rod falls, diamond point down, against a piece of metal. The machine's job is to catch the rod on the rebound and measure how high it jumped.

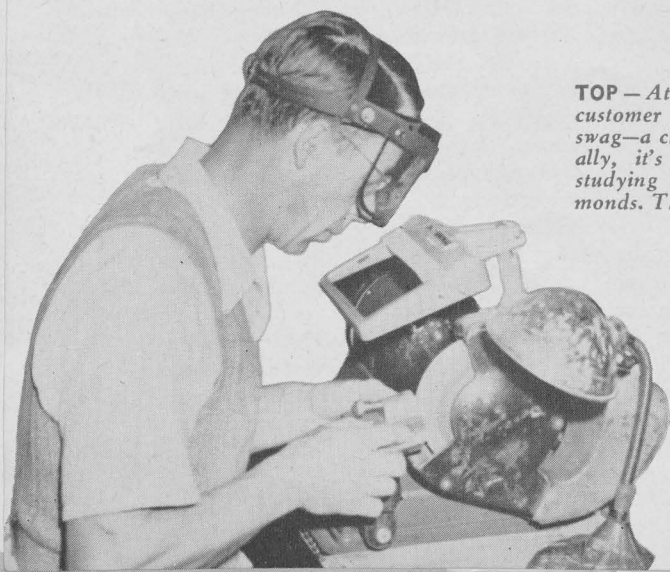
METAL SKIN GAME

The hole-digging apparatus (2) is the Rockwell testing machine, which sinks a cone-shaped diamond into a small piece of metal. The diamond point crunches into the metal's hide. A gauge lets you know how far, which in turn tells you how hard the metal is.

The Vickers hardness tester operates on the third, or displacement, principle. Its diamond head measures hardness by squeezing out the metal around it.

Keeper of the Boeing diamonds is Ervin Remlinger, assistant foreman of the machine shop. He's worked in shop 111 for fifteen years, and for twelve of them has been an expert on diamonds as tools. He does all the diamond buying for the entire plant, picking out 250 to 300 karats at a time and paying \$6 to \$40 a karat.

"Our cache of diamonds is worth a little dough, all right," he admits. "But after all, a lot of the machines they're used on are worth more."



TOP—At first glance you might think this customer was gloating over a bit of the swag—a chunk of hot ice, to be precise. Actually, it's Ralph Hayes of the tool room studying one of Boeing's industrial diamonds. They're more important than jewelry.

LEFT—Halger Hansen of the tool room "trues up" a grinding wheel with a diamond point.

RIGHT—June Lorenz tests the hardness of a cog under the diamond of a Rockwell machine.





MODEL BOYS

When a new airplane is designed at Boeing, these are the boys who build the first one. They've turned an educational hobby into a skilled profession.

By HELEN CALL

ONE of Boeing's airplane production lines turns out aircraft in nothing but doll-sizes. They are built to fly, too—in the wind tunnel. This particular production line is conducted by shop 29, which specializes in building model airplanes that are used for aerodynamic research.

In their shop on the first floor of the wind tunnel building, the model men put the ideas of designers into wood and metal. Then the engineers try them out in the wind tunnel's simulated flight conditions. Not only does the shop build replicas of Boeing planes for these tests, but it constructs a lot of the gadgets that do the testing.

MINIATURE TO MAMMOTH

Since 1928 the shop has made models of all Boeing planes, ranging in size from the tiny two-foot wing span of the Boeing 66 to the 37½-foot spread of the model of the Boeing XB-15. The XB-15 model was tried out in the huge NACA

wind tunnel which can test regular full-scale airplanes. It took a chamber big enough for life-size fighter planes to hold just the model of the XB-15—one of the biggest airplanes ever designed.

KIDS, BUT NO KIDDING

The model shop's business is entirely scientific, and important in the developing of tomorrow's airplane designs. Its start, however, was neither on a scientific basis nor the least bit auspicious in nature. In the beginning it seemed almost like kid stuff, but the kid involved turned out to have all the merit and diligence of a Horatio Alger hero.

It was in May 1927, when this kid, lean and 19, stepped off a boat on the Seattle waterfront and started the chain of events that eventually created the Boeing model shop. His name was Phil Dickert and he was just emerging from a year in the wilds of British Columbia, where he had been a gold miner.

Young Dickert had been out of touch with most of civilization for a good while. He got off the boat to find a newspaper headline staring him in the face. Another kid, named Lindbergh, had lately flown an airplane across an ocean. This indication of the swift ad-

(Continued on Page 8)

ABOVE—These are all model boys. All of them have trophies and medals to prove they are champion model airplane builders. General Foreman Phil Dickert (far left) compares an elderly model of a Boeing TB-1, early torpedo bomber, with wind tunnel version of B-17C. Other model boys, left to right: Gordon Cheney, Robert Schmoker, Kenneth Betzina, Ralph Johnson, Junior Baichtal, Jim Savage.

BELOW—Ben Spaulding prepares to put the finishing touch on a mini-propeller.



vance of civilization during his absence struck Dickert with a tremendous impact. Aviation, he decided, was the thing for him.

He started by taking a correspondence school course in aeronautics. Then he decided to enter a model airplane contest, sponsored by the *Seattle Times*. Building model planes, he figured, might open a path into the field of building big, full-size ones.

FAME AND FORTUNE

Dickert had been making models of boats since he was six years old, but this was his first crack at model airplanes. He carefully carved two little biplanes out of odd pieces of wood, with a little glass and glue added. Evidently it's not the materials, but the way they are put together that counts, because Dickert's planes made him a winner. He carried off not one prize, but the two first prizes.

A few weeks later, Boeing representatives, who had noted Dickert's staggering success in the model contest, interviewed him for a job.

"This is what I've been trying for," Dickert said. "A job building transports."

"Transports?" The Boeing men chuckled. "Kid, you're going to keep right on making models."

This was a surprise, but it suited Dickert even better than shop work. He teamed up with Claude Hill, now superintendent of Plant 1, to launch the company's new idea of building models. Later Louis Proctor, who had won the Amateur Model League Association's 1929 national contest and a trip to Europe, joined Dickert as a model builder.

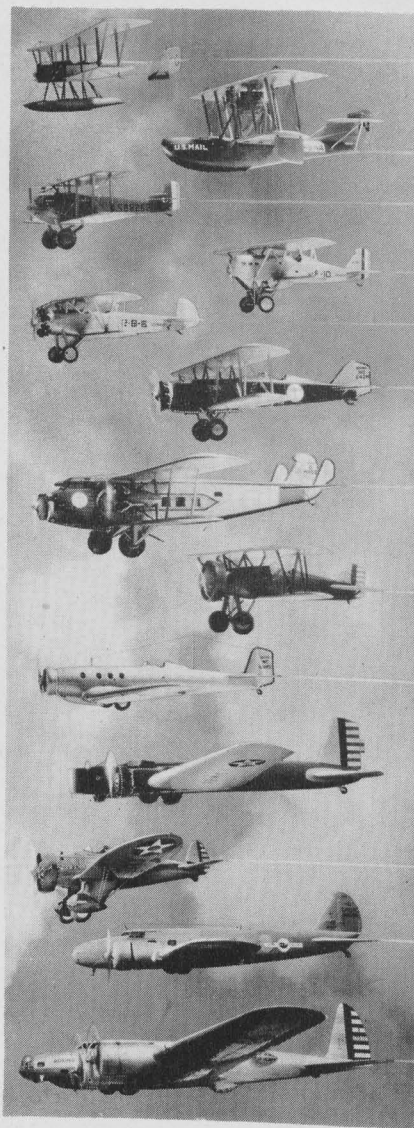
FIRST MODELS WERE SAMPLES

Most of the miniature Boeing planes they made were for display use. Prospective airplane purchasers could then see what they were about to buy. And in 1929 the mini-plane makers branched out to build their first model for wind tunnel testing.

Dickert's model "shop" was at first a bench in the wood shop. As it gathered additional members, the shop graduated from place to place until on April 12, 1943, the whole model crew of 49 moved into their present quarters in the new wind tunnel. Now, thoroughly expanded—along with its partner, the Boeing aerodynamics research department—shop 29 has become one of America's outstanding model labs.

SPECIALIZES IN SMALL SIZES

Experiment and research is the backbone of the model shop. Its members are equipped mechanically and as craftsmen, to build practically anything in the



Set against a cloud background and looking real as the actual planes in flight are these Boeing-built models of thirteen Boeing planes. From top to bottom they are: B and W Navy trainer, B-1 flying boat, MB-3A Army fighter, FB-5 Navy fighter, F3B-1 Navy fighter, 40B-4 transport and mail plane, 80-A transport, P-12C Army fighter, Monomail transport, YB-9A Army twin-engine bomber, P-26 Army fighter, Model 247 transport, and a YB-17, one of the earliest production versions of the famous Flying Fortress.

line of try-out planes—specializing in the wind tunnel's junior sizes.

The men are of necessity experts at wood work, machine practice, sheet metal, metal forming, carving, welding and painting as well as assembling models.

Not content with spending their working hours building models, a good many of the men have a shop at home where they enjoy a postman's holiday. Dickert had one home order for thirty Pan American Clippers that he built for

PAA in his basement shop. He carved these models at one-fortieth Clipper size.

While Dickert, with sixteen years at Boeing behind him, has the undisputed title of dean of the model contest winners who made good, there are now six model boys in the shop who traveled the same road to success. They are Robert Schmoker, Ralph Johnson, Junior Baichtal, Gordon Cheney, Jim Savage and Kenneth Betzina.

TESTING GROUND

The experimental models and equipment built in shop 29's new laboratory are one of the most important links between the design of a plane and the completed aircraft.

"A new airplane can be designed from past experience," Dickert said. "But you can't tell exactly what performance you'll get from a design until it gets into the air. A lot of advance flight information can be discovered in a wind tunnel."

Every type of plane that is tested in a wind tunnel can have several testing outfits which, like suits, are changed for varying test occasions. The simplest is the block model, a duplicate of the outside shape of the plane. It is used in low-speed wind tunnels to check the flying characteristics of the design. This model is made of laminated mahogany or maple.

A second type of testing plane is the "dynamic" model, built with its weight distribution proportionately the same as that of a normal-size plane. From this model engineers can discover the exact center of gravity and how well the ship is balanced for flight.

BUILT TO TAKE IT

The most complicated of all the experimental models is the high-speed number. It is generally made of solid metal, and is built to withstand the terrific strains that a 700 mile-an-hour gale exerts upon it.

To test the air ducts in a plane, a specialized type, or cooling model, is used. It is complete with all air intakes, and is tried out and checked for coolability.

Then there's a special rig, for testing just wing sections, that is made by the model shop for use in the tunnel. It is the equivalent of a second set of walls pushed up against the ends of the airfoil section.

With so many kinds of work handed to them, the model shop men face a constant challenge to their ingenuity and craftsmanship. But that's why they like their jobs.



Raedeke's B-17, most of its tail smashed away, back home after the loop.

ROLLER-COASTER OVER GERMANY

Some engineers will tell you a Fortress can do an inside loop. Impossible, say others. Here's the story of a Fort that *did* one—and with most of its tail gone.

By LIEUT. JOHN W. RAEDEKE
U. S. ARMY 8TH AIR FORCE

WE were flying "Tail-end Charlie" as our Fort turned off the target. So when the Kraut fighters began their attack from positions between 5 and 7 o'clock, our crew was in on the show right from the opening curtain.

In the two-hour approach to the target nothing more than occasional puffs of bursting flak had marked our mission. But eight minutes after we dropped our bombs on Halberstadt we felt the sting of the Hun fighter swarm.

As I looked back and saw that thin line of yellow-snouted fighters nosing up to our formation, I could sense the contrast of the race home with the uneventful flight to the target. Those Huns were going to make us pay for the havoc we made with Halberstadt.

They did.

Little puffs showed themselves before the wings of the lead fighter as a piece ripped out of the wing on my side of

our B-17. Our ship shuddered to the recoil of its ball-turret and tail-turret guns and the lead German fighter belied up and veered off to the left, falling ahead of a black smoke trail.

"Get the first man out," we used to say in baseball. Well, we got him out.

But the interphone was telling us of more enemy fighters coming in from 3 and 9 o'clock. And then the planes from below were darting ahead to turn in on us.

Now the Luftwaffe was attacking us from all positions on the clock, in Messerschmitt 109's and 210's, Focke-Wulf 190's and even Junkers 88 dive bombers. Their fighters would sift through our formation from dead ahead, in groups of from 20 to 40—and all shooting.

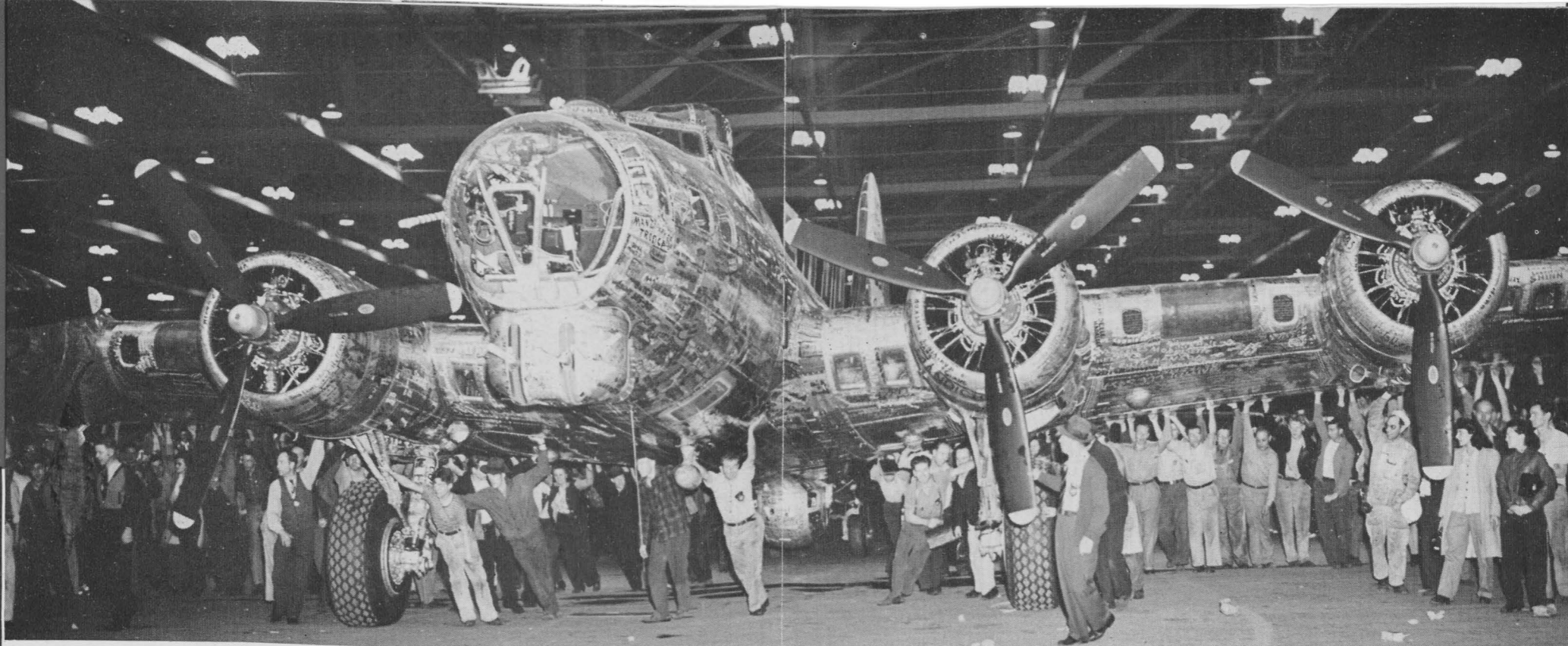
These Jerries were filtering through our squadron by the dozen. Guns were blazing and I'll swear their attacks often brought them within 50 feet of our ship before they veered away—or before our gunners sent them earthward in sheets of orange flame. Our gunners told me afterward they shot down nine and believed they had damaged ten more. That, I'll say for them, is some shooting!

Our ships were getting it, too. I saw

(Continued on Page 17)



THE **5000TH**
BOEING BUILT
Flying Fortress
 SINCE PEARL HARBOR



AT DUSK on May 12, Boeing Plant 2 swing-shifters practically hoisted a newly finished Flying Fortress to their shoulders and bore it out of the final assembly area (see cut above). The very special launching was for a very special Fortress—the five-thousandth B-17 built by Boeing since Pearl Harbor.

Appropriately named *Five Grand*, the big ship was undoubtedly the dirtiest warplane ever accepted by the U. S. Army. Virtually every square

inch of its aluminum hide was covered with the painted autographs of the people who had built it. Gaudy as a surrealist's nightmare in its coat of colored signatures, the *Five Grand* was an important enough airplane to cause the Army to lower its time-honored standards of scrupulous spick-and-spanness in accepted aircraft.

In a wire to Boeing employees, read to a tremendous crowd at the ship's official christening May 13, Brig. Gen. Charles Branshaw, chief of

the Army Air Forces Materiel Command, promised that *Five Grand* would fly into combat bearing the thousands of names that had become as much a part of it as its rivets.

Perhaps as important as the production record it marks, was the fact that the *Five Grand* is an outstanding indication of the spirit of American workers. The endorsing of the *Five Grand* did not start out as a publicity stunt. It began spontaneously, and gained momentum like a prairie fire.

The snowball that grew into the *Five Grand* began clear back in the subassembly shops and in the branch plants, where "5000th Boeing-built Flying Fortress" tags appeared on small parts destined for incorporation in the history-making B-17. The whole process was an outstanding demonstration of the manner in which the flow of thousands of parts is made to arrive at the right place at the right time.

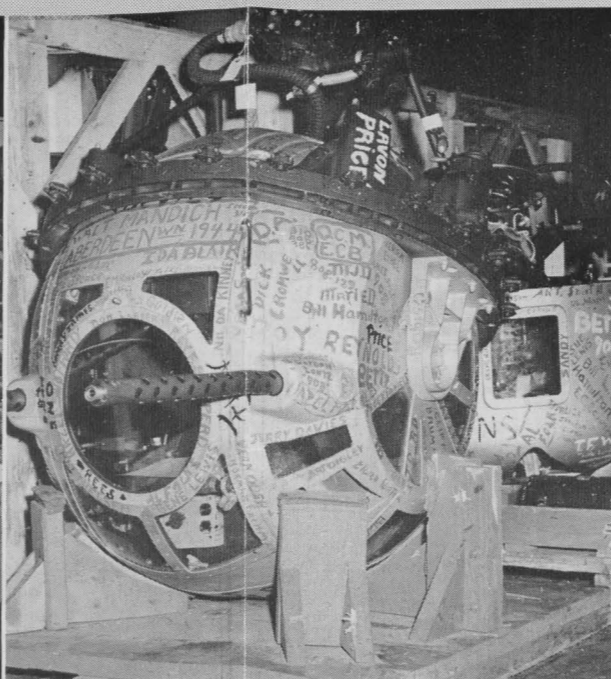
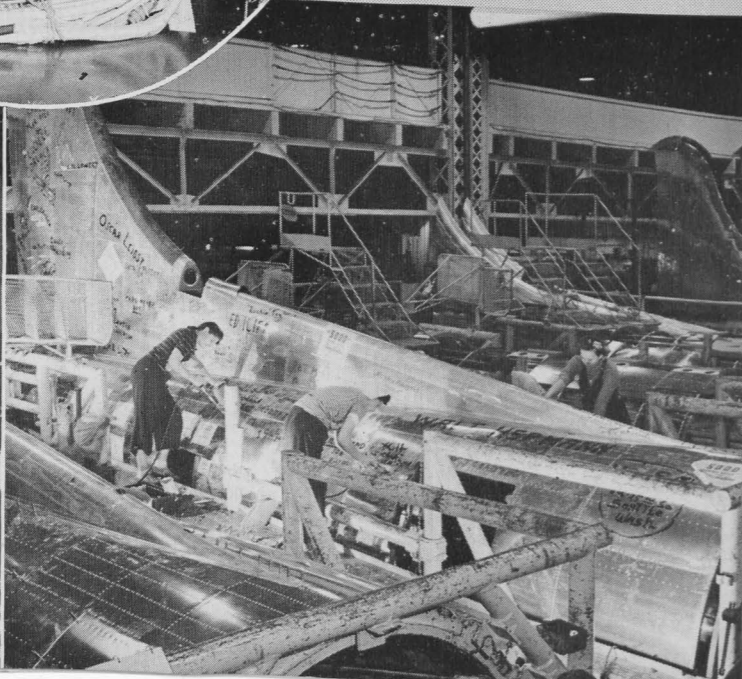
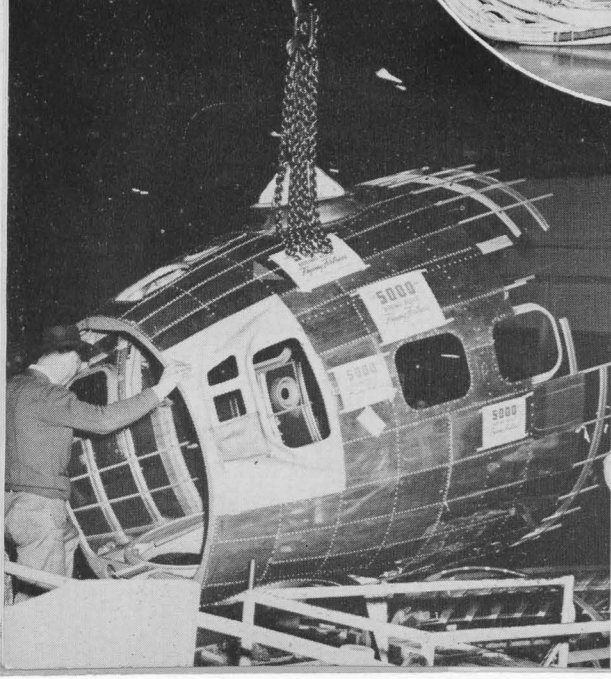
Fairing for the *Five Grand* is being riveted, in the photo at left center of opposite page, by Bob Ganley (left) and H. G. Stoll in shop 206. Inset photo shows Edna Spandel, shop 208, holding some of the many yards of electric wiring that was soon to join the big ship.

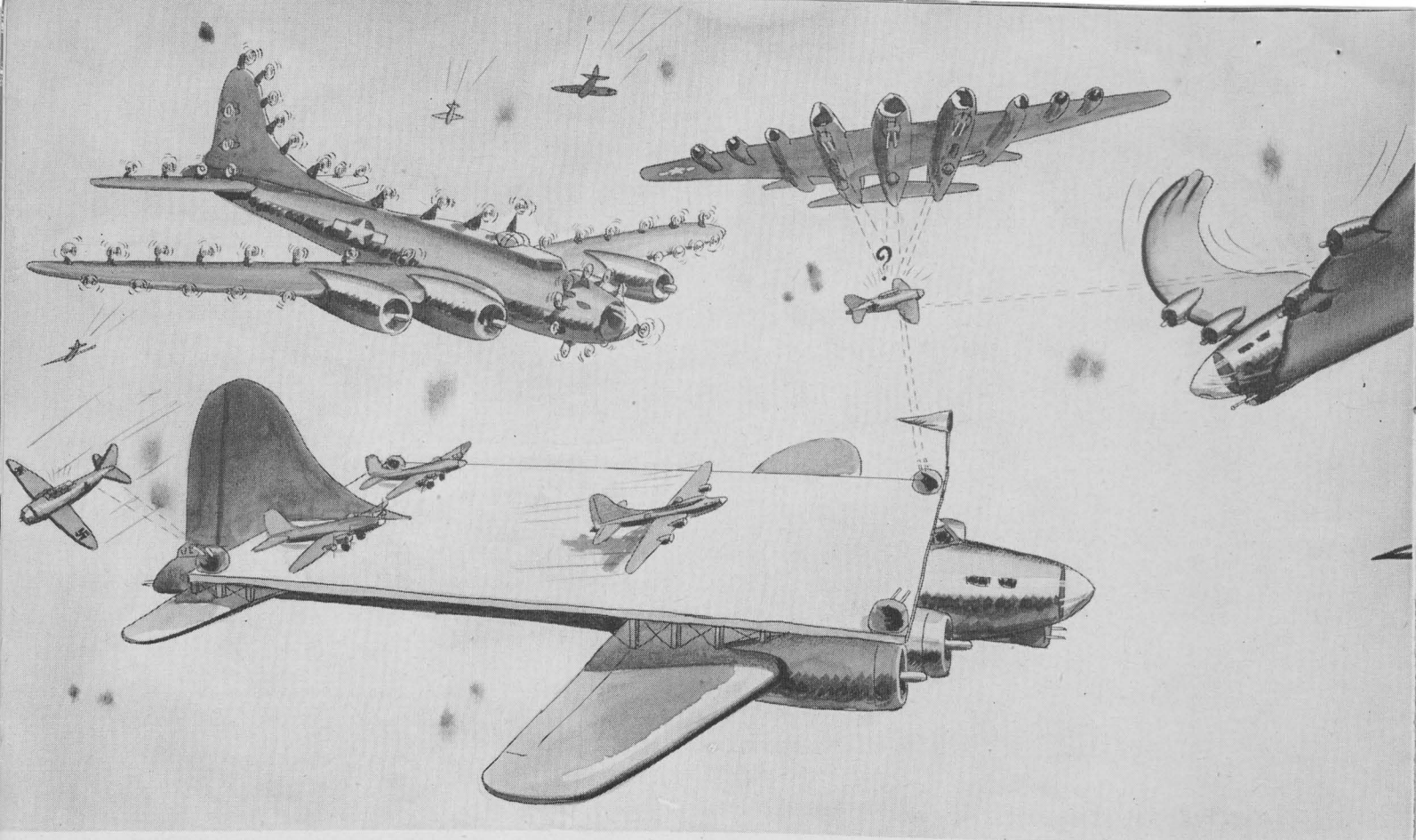
Some of the many small parts, each bearing its "5000th" tag, came together to form the nose section, being lowered by crane into its jig in shop 301 (lower left photo). Thus, as the fuselage began to take shape, it illustrated vividly for people in the "make" shops and sub-assembly the part their work plays in building the completed bomber.

In the jigs of shop 309 (second photo from left), names already had begun to appear on the aluminum skin of the tail section, as fast as it was riveted into place.

Throughout the plant workers caught the spirit of it. On every metal section of the plane they painted their names, brightly-colored proof that they had had a part in its building. Even the turrets being readied in the gun shop (second photo from right) were covered with autographs.

Below, the *Five Grand*, brilliantly colored as a great Easter egg, sits on the final assembly floor, awaiting its turn to move out the door, while final installations are being made and controls adjusted. The production climax came at dusk (top photo), when hundreds of men and women wheeled their big baby from the plant.





"I Got an Idea—"

By MARGARET YOUNG

ILLUSTRATED BY JAMES WANDESFORDE

Here is a digest of some of the Boeing planes that have never been built. But we are sure if they had been they would have shocked the enemy to death—and aerodynamicists as well.

OVER in Montana a man sat down at his typewriter and stared at it thoughtfully. He had a wonderful idea, if he could just get it on paper. Laboriously, pecking it out a letter at a time, he wrote: "dear sir. boeing air-craft coporation.

"I have a little interesting airOplane. this travels by electric controled compass. this controls or operat the lateral for the alevation, so the plane will go up. this work every ten minute. The clock controls the tail through the winding of wiring coils for the passage of electric for the mikeing the magnetic to work the equipment for the tail. And this pull the lateral for the alevation longitudinal balance.

"by seting the clock and controing compass, to go without man, to Control the plane. can be set for one hours

or 36 hours. this plane is filled up with pouer-ful explosive. Or Niterogliceryne. the body of the plane is 20 inch wide. And 12 foot long. the wings is 6 foot long."

FATHER OF DEATH RAY

To prove he was no fly-by-night in the inventing field, the gentleman from Montana revealed himself also as the father of another weapon, a fearsome device called the "Electric Calf."

"this is a war gun," he explained. "this will kill instant and will kill thousands of people at one time. this work at a sped of fif-teen-hundred shot per-minute. discharging verey rapidity. It work automatically. and delivere a quick hot-spark at a speed of 186,000 miles per-second.

"This," he pointed out, "is bolt-lightning."

The man from Montana is not unique. He differs only grammatically from a good many other would-be inventors who write to Boeing. For the most part their ideas and their aircraft designs are, if not fantastic, at least impractical. Most of them fail to grasp

the principles and the problems of physics and aerodynamics, but they're right in there trying.

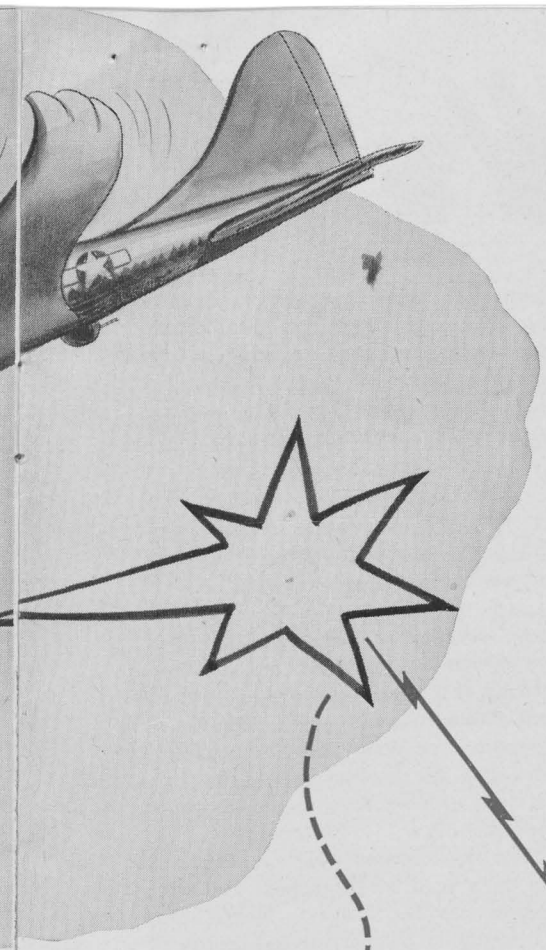
All over America people are lying awake nights trying to think of ways to end the war sooner. They see a whole squadron of planes flying with their wing tips welded together so that if one plane is "shot up" or the engines fail, the others will carry it home. They make plans for silencing airplane engines completely as the plane nears its target, and for installing aerial torpedoes in the wings.

NOCTURNAL PROBLEM

These people, in addressing their letters to Boeing, are sincerely and conscientiously trying to contribute to winning the war.

"Perhaps it's a foolish idea," wrote one man, of his particular brain-child. "But I can't sleep a full night through on account of it and until someone can prove to me it is out of the question, I'll be bothered."

Since Pearl Harbor these letters have been arriving at an average of one a day from places all over the U. S., Canada,



been carried successfully, pick-a-back, by larger ones.

Other "radical" airplane designs offered the company by obscure but earnest inventors also often involve features that already have been experimented with by engineers. Designs in which the wings are parallel to the centerline of the fuselage instead of at right angles to it as in the conventional design; wings that curve back like the wings of a bird in flight; wings that slide forward when the plane is taking-off and then go back to a normal position when the plane is airborne; even an extra pair of wings placed behind the usual pair of wings, propellers placed on the aft end of the fuselage back of the conventional fin and rudder arrangement, all have been tried. Most of these innovations have been found to present further mechanical difficulties, or to have no particular advantage.

BARGAIN INVENTION

Such an invention was the one described in this brief letter: "I have a surprize for you. I have a drawing of your airplane with moving wings on, as well as a parachute. All I ask is for you to send me railroad ticket to Seattle." The author neglected to explain what the parachute was for.

Other ideas, while seeming simple to their originators, actually involve some of the most complicated principles of aerodynamics and physics. It would be difficult, therefore, to explain in a non-technical way to one "inventor" why his scheme wouldn't be practical. He urged that Boeing "build small propellers over every inch of the plane, that can be driven by the wind, the same as a windmill on a farm. On a farm, power generated by wind mills is used in various ways. Use this same principle, multiplied, to furnish power to turn centrifugal fans which in turn can furnish power to generate electricity to turn large propellers, which furnish power to move the plane." This is only one of several ways suggested for an airplane to take energy from the air through which it passes.

Some of the most interesting correspondence in regard to inventions has come from a man in New Jersey. A prolific and enterprising inventor, he offered an amazing number of wings, bodies, and engines in more combina-

With a few of the suggested adaptations of the Flying Fortress, shown in vivid battle action at top of the page, and Black Herman to cast his spells at enemy aircraft, our air force would be a cinch to win any battle that came along. Who said we didn't have any secret weapons?

tions than you could raise on a slot machine. One, just for an example, had three large bodies, two small bodies, and two engines on each wing, plus one engine on each of the three large bodies.

Impatient as he was prolific, the New Jersian sent a second letter close on the heels of his first, saying: "I add a more complete description of my inventions. I wrote you first of these about last St. Patrick's Day. I have just finished a 400-page book, the 'Black Hyena,' while awaiting your decision."

FLYING ELEVATOR

Also versatile was the revolutionary airplane offered to Boeing by an inventor who announces it will "go straight up in the air and come down the same way. This airship will go up in the stratosphere with engines running safely and the manpower comfortable. Will go forwards and backwards; stand still in mid-air, and can look around for the enemy. Also can be made submergable, and what more do we need now than such a boat in existence? It can be built faster and cheaper. Also," he added, "it is wingless and wheelless."

Another man, a citizen of Great Britain and a sceptic of American aircraft, thought that we needed some assistance.

"I have read a lot about your bombers," he wrote. "About them not being able to carry enough bombs, and also being poorly defended. I decided to try designing a plane and sending it to you."

ALLIED DESIGN

His plane was indeed prepared for defense, carrying an imposing array of artillery, plus an interesting combination of features from various British and American ships. All was offered in the spirit of reverse lend lease, too, for the man asked nothing in return for his design.

And there are people right at home who don't ask much for their inventions. There was, for instance, the man who sent a sketch of his "Inertia Propellor."

(Continued on Page 18)

England, and Australia, offering the company ideas for new plane designs and making suggestions for the redesign of the Fortress.

One woman, who ended her letter, "Just an idea offered by a good Ameri-



can citizen," wrote: "Your heavy bomber, Boeing B-17, could possibly be redesigned to carry a landing platform from which small 'baby' bombers could re-fuel and re-load."

AHEAD OF THEIR TIME

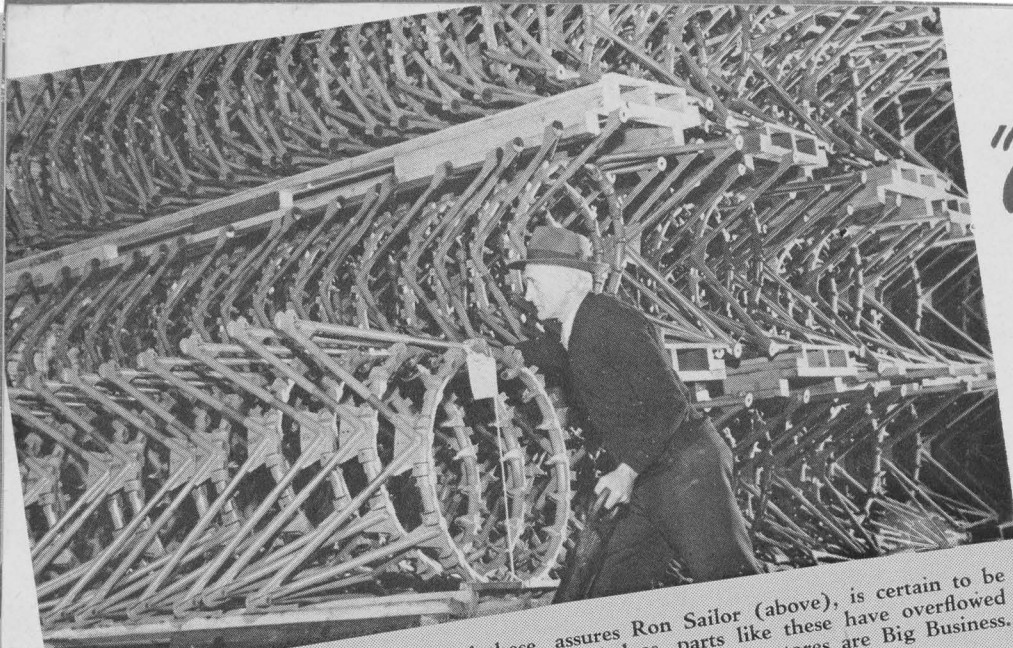
Other duties, too, have been advanced for the Fortress. One man came up with this: "A bomber is built to take it, so I am certain clamps could be mounted on each wing and one on the tail in order to take three fighter planes in tow."

It may be that sometime in the future this and some of the other ideas suggested can be adopted to practical use, but for now design engineers can see no practical way to accomplish these things. Such things as an aerial aircraft carrier have, however, been studied by aeronautical experts. Small planes have



"WE DEE"

Visitors to the plant almost invariably comment that the astonishing part about aircraft production is how the parts all get to the right place at the right time. Here are the jugglers who manage the neat trick.



ARTISTIC ENGINE MOUNTS—One of these, assures Ron Sailor (above), is certain to be just the mount for your engine. Too bulky for shelves, parts like these have overflowed into six warehouses. With a three-quarter billion dollar stock, the stores are Big Business.

"JOHNSON, we've done 73 million dollars worth of business, and we haven't collected a cent."

Such a statement as this wouldn't worry Boeing's Ken Johnson, chief of one of the world's most unusual store systems. He runs his business without benefit of a collection agency. He has no advertising program and no month-end sales. But the Boeing stores don't have the least trouble moving the goods off the shelves.

The stock behind their counters is all the parts used in Fortresses. The storekeepers are the factory's middle men. Their job, as part of the production department, is to distribute parts from one shop to another.

The department 520 stores, like gas stations, are located at advantageous corners near their customers. Store 670 markets parts for sub-assembly to balcony shops. Store 662 serves the final assembly area with parts ready for their last round up. The government stores hand out Army parts and fittings.

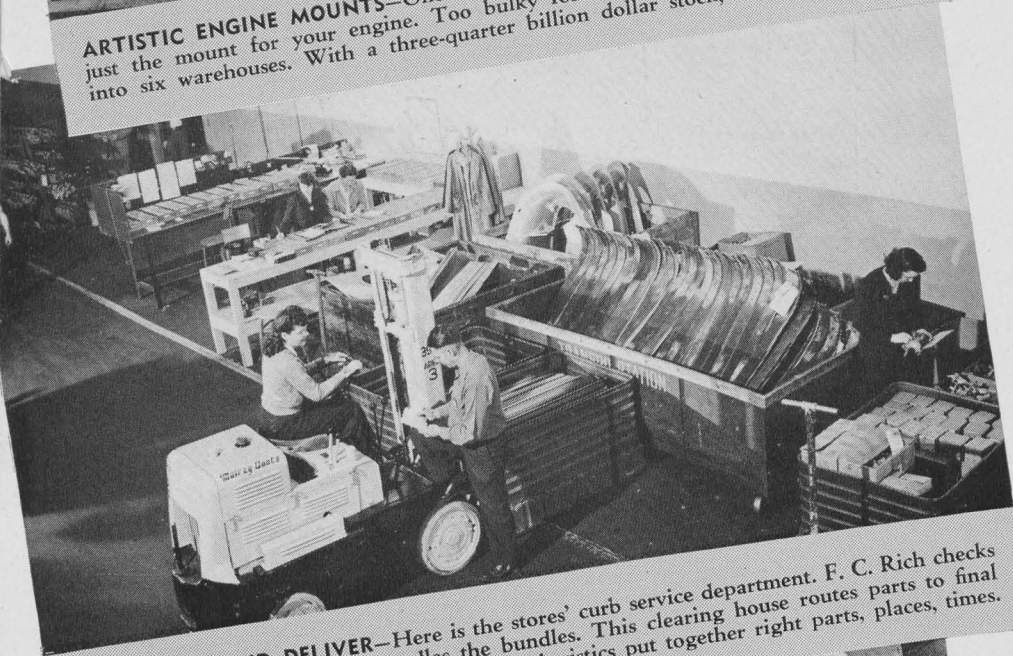
KEEP THE BALL ROLLING

The stores system is the hand behind the scenes that guides millions of parts through the labyrinth of shops where one part is tacked to another, a third added until, like a growing snowball, it reaches the proportions of a major assembly and finally a completed bomber.

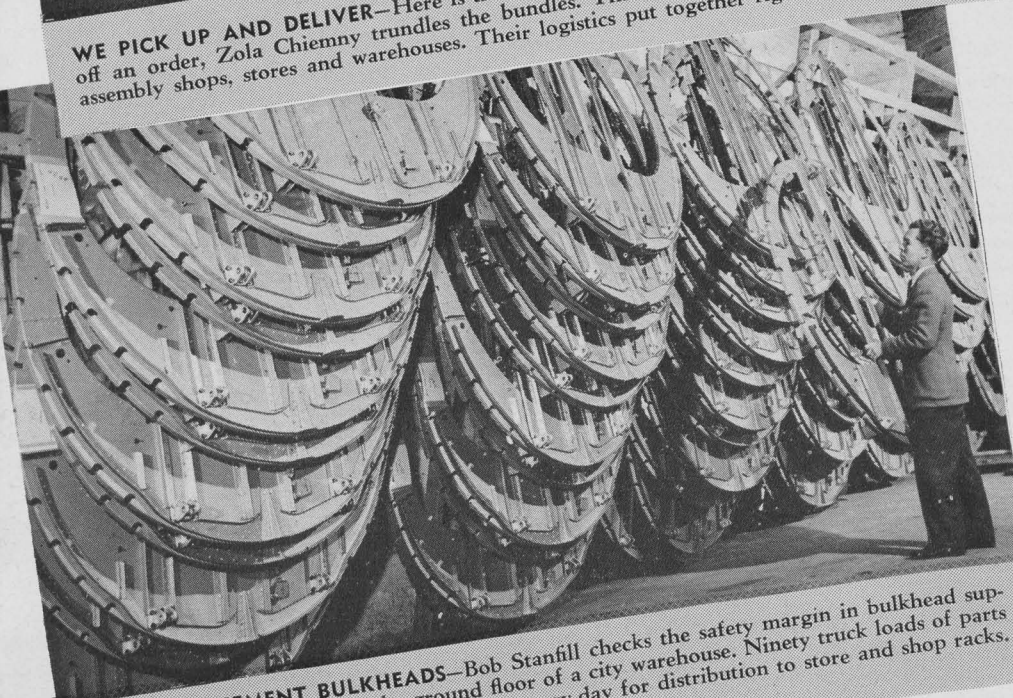
The stores mother the parts along through each of these steps. They are under the watchful eyes of assistant superintendents Ray Coleman, Bob Stanfill, Orville Moellendorf and Leo Miller. Along with Boeing-produced sections, they take care of parts shipped in from sub-contractors all over the U. S.

B-17 RATIONING

Now the stores men are rolling up their sleeves to shift from B-17 stock to B-29. They can't solve this conversion problem by staging a fire sale. On the contrary, the remainder of the B-17 parts are put on the ration list. They're doled out to keep pace with the tapering-down production of Fortresses.



WE PICK UP AND DELIVER—Here is the stores' curb service department. F. C. Rich checks off an order, Zola Chiemny trundles the bundles. This clearing house routes parts to final assembly shops, stores and warehouses. Their logistics put together right parts, places, times.



BARGAIN BASEMENT BULKHEADS—Bob Stanfill checks the safety margin in bulkhead supply. These are on display on the ground floor of a city warehouse. Ninety truck loads of parts from all Boeing warehouses arrive at Plant 2 every day for distribution to store and shop racks.

LIVER"

B-29 storage is being grafted on the present stores routine slowly, so that by the time Plant 2 is fabricating the Superfortress exclusively, the stores will have parts on hand for them to work with.

The stores' plans for problems peculiar to the B-29 will include a plant-wide system of monorails to handle the heavier Superfortress parts. To keep track of the mountains of parts, IBM machines will maintain an automatic and continuous inventory.

Storage space is a key element in accounting for Boeing's record-breaking plane production. An area of 560,000 square feet houses the huge rotating stock pile necessary as a supply cushion.

FULLER BRUSH TECHNIQUE

At Plant 2, storage bins are chock full of parts and two warehouses bulge around their stacks of stock. Nacelles and some parts that are not affected by weather are ranged in phalanxes on the apron south of the plant. With these storing areas filled, six huge downtown warehouses are rented to take up the slack. They now house more parts than do Plant 2's storage areas.

Following the law of supply and demand, the stores keep a finger on the status of the shop's supply of parts and maintain a constant flow of supplies from their own stock and from the warehouses. In some cases the shop transacts business right over the counter. But generally the storemen use the Fuller brush technique and give the shops door-to-door service.

On the balcony for instance, shops are dotted with supply racks that store 670 has filled with parts. The stores adapt their merchandising service to fit the shop. Shop 304 has parts racks that travel with their crews up and down the



REMEMBER— A PHONE CALL WILL BRING YOUR ORDER!

line of inboard wings. To suit this arrangement store 662 loads up long trains of dollies with parts, runs them out to the shop and fills up the carriers.

In shop 303 workers once had to climb down three tiers in the wing jigs to get parts. So the stores built a platform over the well between jigs and stocked it with parts, putting them easily within the mechanics' reach.

In shop 310, where the supply situation is a little different, the stores people spend the graveyard shift lining up ducts right under the airplanes' wings for the first shift mechanics to pick up.

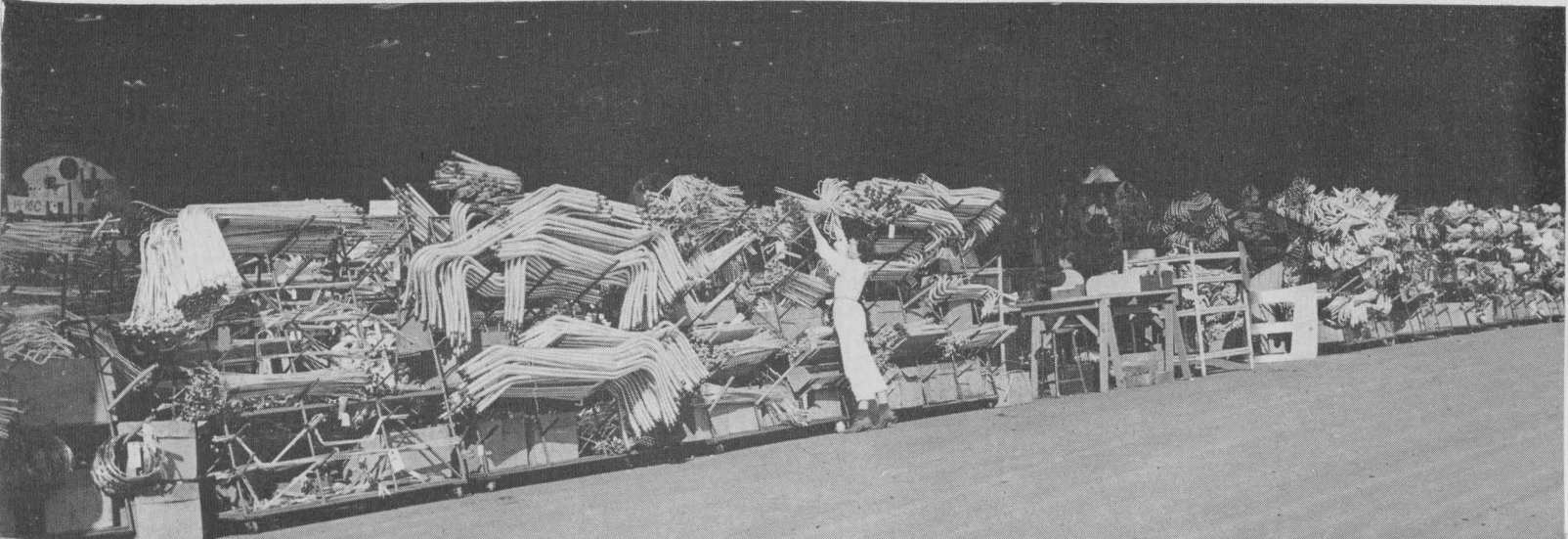
These are only a few of the special handling methods developed by the production stores to get the goods "direct from producer to consumer."

"We figure that all a mechanic should have to do is turn around to put his hands on a part," said Ken Johnson. "Our job is keeping a stock of parts at his elbow."



TWENTY CARLOADS JUST ARRIVED!—Lew McKean is engineer on government store's daily milk run to the "900" shops with radios, instruments—all the million-dollar equipment that Orvie Johnson's government store takes care of and distributes for the army. They "buy" from the army everything from Blue Oxes to machine gun bullets, return all the equipment to Uncle Sam in Flying Fortresses.

BELOW—The stores maintain branches at locations handiest for customers. Store 662 keeps up this tubing dispensary in shop 304. Moselle Stoecker helps herself.



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Underground Escape

(Continued from Page 3)

English-speaking villager stepped forward again and pleaded with the flyers to turn themselves over to the Nazis.

"The war will be over in three weeks," he said, "so why endanger the lives of all of us? If you escape we will be killed as hostages, and you will gain only a few weeks' freedom."

The others seemed to understand and they growled their disapproval at the speaker. It was certain they didn't agree with the man. They led the flyers through the falling twilight to the hollow, not bothering to argue.



"Wait up, you guys," Foss called as Morgan and Sweeney walked on ahead. "I got a piece of flak in the heel and it's slowing me down."

Morgan and Sweeney stopped and waited for Foss. They hadn't noticed his limp before.

HIDE AND PLAN

They stripped off the shoe and sock. The flesh was cut and bruised, but the wound wasn't deep. The men knew it was going to be slow going; but when Foss suggested they leave him, they said, "Nuts."

They lay in the warm darkness of the night, watching a full moon creep across the sky, and made their plans for an escape to neutral territory. It would be necessary for them to leave this particular area quickly, for the Nazi troops were thick here, and in the habit of stopping civilians to examine passports.

About midnight some of the farmers came out to the hiding place with civilian clothes and food. In broken English they told the flyers the best path of escape.

Just before dawn Morgan crept from the hollow to some nearby woods and cut a forked stick for Foss to use as a crutch. The wounded foot was bothering him.

As the first traces of sunlight came in the eastern sky, they started out, keeping well off the roads. As they crossed fields they watched the farmers harvesting their crops. Occasionally they stopped to steal fruit from trees, or drink from a stream.

For nine days the men kept up their never-ending hike, always working their way in the general direction of neutral territory. Some nights they slept on farms, sometimes they were turned away.

QUIZ SESSION

The days went by. They were getting a little desperate now. At last, at one farm house they stopped and asked for aid. They were met by English-speaking natives who asked them in.

Morgan, Foss and Sweeney stepped into the drab room. The grizzled old man who seemed in charge thrust his head into another room and spoke lowly to someone unseen. Then he returned to the men and sat down at a rough-hewn table. Two younger men came from the adjoining room and looked the flyers over critically.

The Americans felt cold sweat standing out on their foreheads. Why didn't someone speak?

The old man broke the silence. "You are Americans?"

"Yes," Morgan replied cautiously.

"You're airmen? Where was your plane shot down?"

"We landed over a week ago," Morgan said.

"What squadron were you in? What was your base?"

The questioning continued for nearly an hour. Morgan knew the old man was trying to trick him into a wrong answer. The other farmers seemed to be making a mental note of all the flyers said.

Morgan nudged Foss, who was standing beside him. The two edged toward the door.

The old man smiled then. "It's all right, lads," he said. "You have just stumbled into the Underground."

IN FRIENDLY HANDS

The younger men smiled warmly and then disappeared into the next room, to reappear with food and wine. The flyers sat at the table and relaxed for the first time in nine days.

They were able to do a lot more relaxing, for their stay at the farm home stretched out into days. During the stay, the men could never go outside in daylight. Even the persons on adjoining farms didn't know their neighbors were members of the Underground. Morgan

and the others had to sit inside, reading English books and playing cards. It wasn't until night that they could walk out and stretch their legs.

So thoroughly was the Underground working that it had means of checking the flyers' records. There were no chances taken here.

Days later the men were given travel orders. They were seeing Nazis now. They walked on the same streets with them. After a few brushes with them, the flyers realized the Nazis seldom speak to civilians.

Always the flyers were told where to go. Sometimes they stopped in little villages, other times in cities. They ate and slept in the homes of the rich and poor alike. Young and old—all kinds were in the Underground.

YANKS—HOT GOODS

For months the slow process of working to a neutral country kept on. Sometimes the men sat at a house for days, waiting for the next move to be plotted. If the going was hot in some spot, they were abruptly rerouted.



After months of travel, the men were safely outside enemy territory. From there they went to England, arriving in mid-winter.

Upon reaching England, the men were sent back to the States. They will not be allowed to return to the European theater for action again. They know too much about those who helped them, to risk being recaptured and forced to talk in Nazi torture chambers. And according to international law, if they are grounded in enemy territory a second time the men could be shot as spies.

Morgan and his companions learned this in their travels of Europe: the Underground is ready to rise up and fight the Germans when the first invasion troops are put ashore. If they are as efficient as Morgan found them to be, Europe will be very unhealthy for Nazis.

Roller-Coaster

(Continued from Page 9)

four men 'chute from the bomb bay of a B-17 whose cockpit was in flames. Then the big plane rolled over and fell from sight. A Fort was going down on an average of every 15 minutes.

We moved into Number 3 position, replacing a Fort that was streaking a fiery path to earth.

Then a new gang of Jerries came at us from straight ahead. There must have been 40 of them, but how that many planes could have stormed through the bomber group ahead of us I don't know. They were right on our level and two of them almost crashed into us.

PENDING DISASTER

A FW 190 came hurtling in, but our turret gunner nailed him. The Kraut ship nosed up sharply and slipped off to the side out of control. It smashed into the B-17 flying Number 2 position of the second element on our right.

That Fortress burst aflame. Its nose lifted in the start of a loop. Abruptly it slipped off on its left wing, falling. I couldn't take my eyes off it—and suddenly I knew what would happen. It was diving right toward us.

I tried desperately to pull away, but there was a terrific crash as the dying Fort loomed outside my window like a great shadow. It fell across our tail. The controls went crazy in my hands.

Then it bumped clear of us and, nose upward, we started a sweeping climb. As it turned out, it was probably the wildest ride a heavy bomber has ever lived through.

PREPARE TO JUMP

Don Urban, the co-pilot, and I struggled with the manual controls. At the same time I called to the crew to prepare to bail out. The response was fast and the calm proficiency with which the men worked was indeed a miracle.

I applied full power with the throttle. The rudder control was gone; you couldn't move the rudder pedals. In another instant, the ship wasn't climbing anymore. It was over on its back, and I felt as though the whole world had gone topsy-turvy.

ROOM FOR WORRY

I realized then that we were at the top of what would be, if we ever completed it, an inside loop. I didn't think the heavy bomber had ever been made that could hang together through a loop.

I would have been even more worried if I had known that the crash against our tail had sheared off almost the whole vertical stabilizer and rudder, and a third

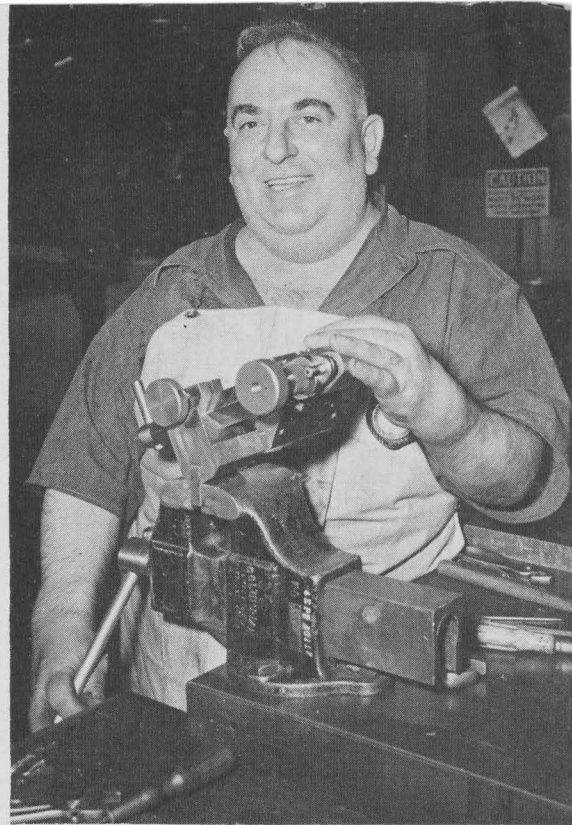
Meet the Mayor

Quite probably it will create no national stir when Tom Gibson starts his second term as mayor of Issaquah this month. But His Honor is, as you can see from the photo at the right, no small potatoes in Issaquah; and besides, he is just about our favorite politician. He is practically the only politician we know who has never made a campaign speech or an election promise.

"Of course, maybe that's because I can't afford to do any campaigning," he admits. "The job only pays thirty-six dollars a year."

So far as we have been able to find out, there is only one plank in the Gibson platform. Mayor Gibson has taken a firm stand for the abolishment of neckties.

Gibson came to the Boeing Seattle Division over two years ago as a bench machinist in shop 702, when lack of priorities closed his fix-it shop. However, he isn't the only mayor at Boeing. His 812 constituents in the dairy capital of Issaquah give him exactly the same size town to run as that bossed by Mayor John Walkup of Tukwila, who is an assistant foreman at Boeing-Renton.



of the left horizontal stabilizer and elevator were gone. Luckily, the cables were okay.

CREWMEN THROWN

I learned later, too, that our bombardier, Sid Melshenker, was pinned to his seat during that loop by nothing but centrifugal force. Ed Zimmerly, the navigator, stuck to the ceiling and fell on his head when the plane swung back to normal. The waist-gunner was thrown about and suffered a broken leg—but he stuck to his guns afterward until there no longer was a chance of an enemy attack.

Actually, we were off the top of the loop in just a moment. But I lived a long time in that moment.

Now we were spinning dizzily toward the ground. As if that weren't enough, someone yelled on the intercom: "There's five Jerries trailin' us down!"

I ordered the crew to stand by a little longer. I applied full inside throttle, retarded the other two. I used only aileron control, and applied it in full opposite position—rolled the elevator trim tab fully forward. Don and I applied full forward position on the control column, plus full opposite aileron.

DIVING AT 400 M.P.H.

For another moment, we pulled her partly out of the dive—long enough to make three circle turns. Then we swept into a clean dive at an angle of about forty-five degrees from level. The altimeter had dropped now from 19,000 to 12,000 feet.

Below was a solid undercast, so we nosed down and powered for cloud-cover, with the airspeed indicator reading 400 miles an hour. We were eighty degrees from level.

At 6,000 feet we began levelling out, still at 400 m.p.h., and there the wings took a beating. But they didn't flop, and at 4,000 we were flying level again. We flew in our cloud-cover until all enemy planes had cleared away. Then we rode the top of the clouds out over the North Sea.

LANDING TROUBLES

And that wasn't the end of our trouble. Reaching the English coast, the weather had closed in and the ceiling was lowering. We were forced to fly at tree-top height in order to stay out of the clouds. It began to rain, and we decided to land at the first field we found.

I directed the crew to prepare for a crash landing. But Navigator Zimmerly volunteered to remain in the nose of the ship to direct us in our approach to the field and in landing. With the aid of his directions, we made a low approach to the runway, correcting for drift by keeping the windward wing low and holding it straight by jockeying the throttles. We made a perfect landing.

That's the story. We know now from experience that a B-17 will loop, spin, pull out of a dive when indicating 400 m.p.h., fly without a rudder and very little horizontal stabilizer, and will land normally without a rudder, too. Not to mention a flat tire . . .

"I Got an Idea—"

(Continued from Page 13)

He just wanted a job. "You patent it, and all I want is a \$300.00 a month job."

This propellor suggestion also will interest Fortress builders: "Motor turns worm gear. Apparent forward motion of threads on worm gear pushes plane forward." The inventor added one condition: "Works best in a vacuum."

A unique solution to the very real problem of protecting a plane with armorplate, without making it too heavy to fly, was offered by another idea man.

"Having in the past been quite a gun fan," he wrote, "I have to offer for plane protection, a one inch layer of plain yellow soap. It is equal to $\frac{3}{8}$ inch rail steel as armor at 50 yards. At 50 yards a 30-06 bullet will stick in a bar of soap. A layer of soap inside a plane would save a number of pilots."

In spite of the weight advantages of this idea, however, Boeing was forced to tell its inventor, in a nice way of course, "No soap."

While armorplate is a problem in the

design of military aircraft, many letters coming to the company contain contributions somewhat outside the Boeing field of research. This one, for instance:

"In a book entitled 'The Secret of Black Herman' is a chapter entitled 'How to cast a spell at anyone no matter where they are.' I suggest that the government ask the writer of that book if he could send spells at the crews of enemy airplanes high up in the air in such a way to render all those crews powerless to manage their various craft, and drop their bombs, as well as fire their guns."

Black Herman certainly could get a technical sergeant's rating in anti-aircraft.

PASSING THEM ON

The authors of most inventions that are out of the Boeing line are referred by Boeing to the National Inventors Council in Washington. All invention letters are read with interest by the company's patent engineer, Glenn Orlob, and carefully answered.

It is unfortunate, Orlob explains, that while some of the people who write the company have useful suggestions to

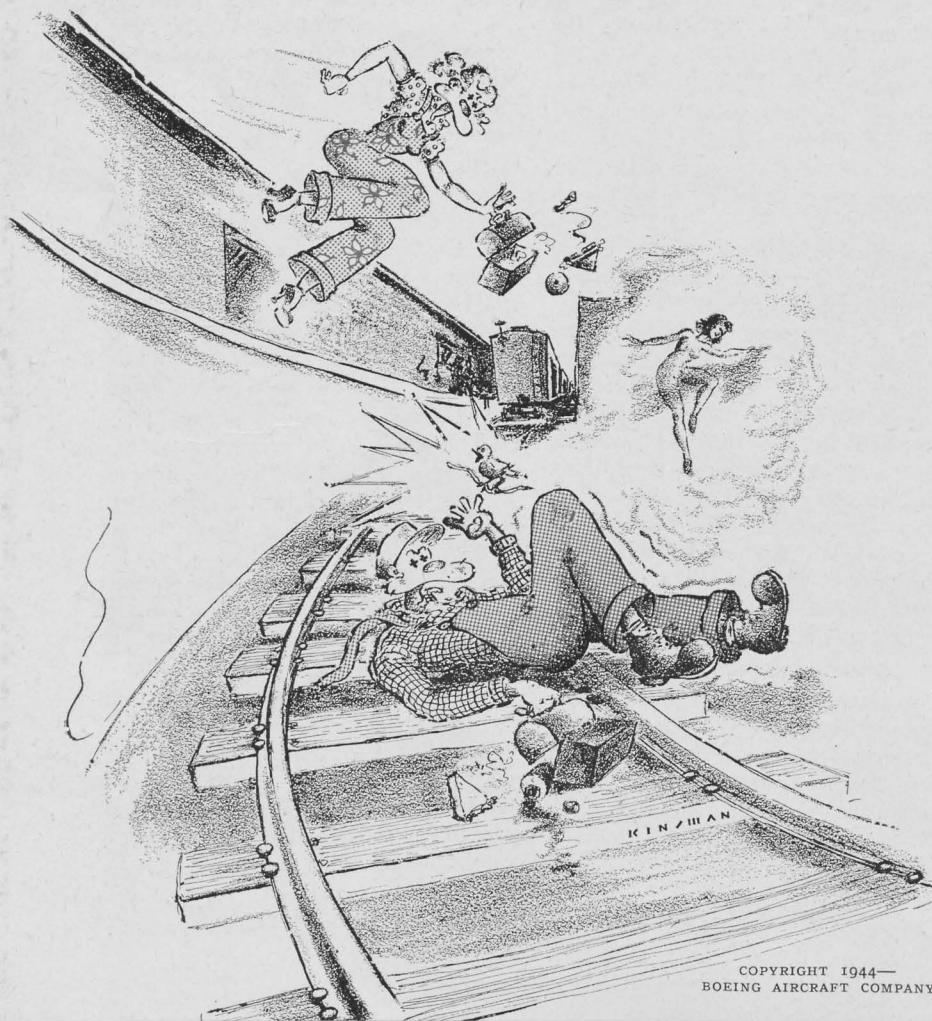
make, others do not understand that an invention is a mechanism that meets a particular need or solves a problem.

The difficulty with many of the airplane inventions received from outsiders is that these people do not understand the problems involved in aircraft design. They picture an airplane that is "different" without considering whether the difference presents an advantage, or they suggest astounding things in the way of performance and bomb-carrying capacity without explaining how such things are to be accomplished in metal.

The people whose ideas are likely to be of merit, so far as Boeing is concerned, are the people who have been producing useful ideas right along—through such channels as the Boeing suggestion system and the invention incentive plan.

But not even they are very likely soon to come up with a whole new airplane design of value. It's been a long while since one man designed a whole airplane by himself. It would have taken one man, working twenty-four hours each day, a hundred years to design a Flying Fortress.

OXNARD AND LUNA FUMBLETHUMB



● Leapin' Luna, like all girls, should look first. But Luna Fumblethumb goes right into her spring dance—or at least her spring—in the manner of a horde of engineers off to lunch.

She didn't pause in her dash off the loading platform long enough to notice brother Oxnard Fumblethumb sprawled nonchalantly on the railroad tracks below. Oxie had just given what he thought was going to be a commendo performance but, as usual, he's on the wrong track for any place but the medical unit. The nut got such a jolt he turned delirious.

"I've been railroaded," cried Oxie as he bounced on the roadbed.

And Oxie was by no means the first person to hit the roadbed beside the Engineering Building's truck-and-train loading platform. If the platform had been intended for a jumping-off place, the contractors wouldn't have built steps there.

According to reports from the medical unit, hopping from platforms, high jigs—any altitude jumps without parachute—account for a good many of their cases of Sloan's liniment, not to mention treatment for more serious injuries.

"Every time I take a short cut," sobbed Oxie to the nurse, "the doc has to sew me up."

XB-ROCHESTER



1—Rochester confers with aerodynamicist Jack Harshman. "I want to break the 125 m.p.h. speed record at a contest in Los Angeles in June," he confided. "How'll I do it?" Examining the model, Harshman told him the prop was the important problem.

ROCHESTER is known to most people as a radio and screen comedian. But to amateur builders of model airplanes, Rochester is a dark horse threat at California model races.

Last month when the Jack Benny company was touring the Northwest, Rochester strutted his stuff for Boeing employees. Afterward, Boeing aerodynamicists strutted their stuff for Rochester's benefit.

The Negro comedian had sent them a wing from his new racing model and asked for their professional criticism. When, in reply, they suggested a conference, Rochester packed his model airplane in a suitcase and hurried out to the Boeing aeronautical laboratories. Out of the conference Rochester gained suggestions on decreasing drag and specifications for a new propeller he hopes will help him win the title at this month's meet in Los Angeles.

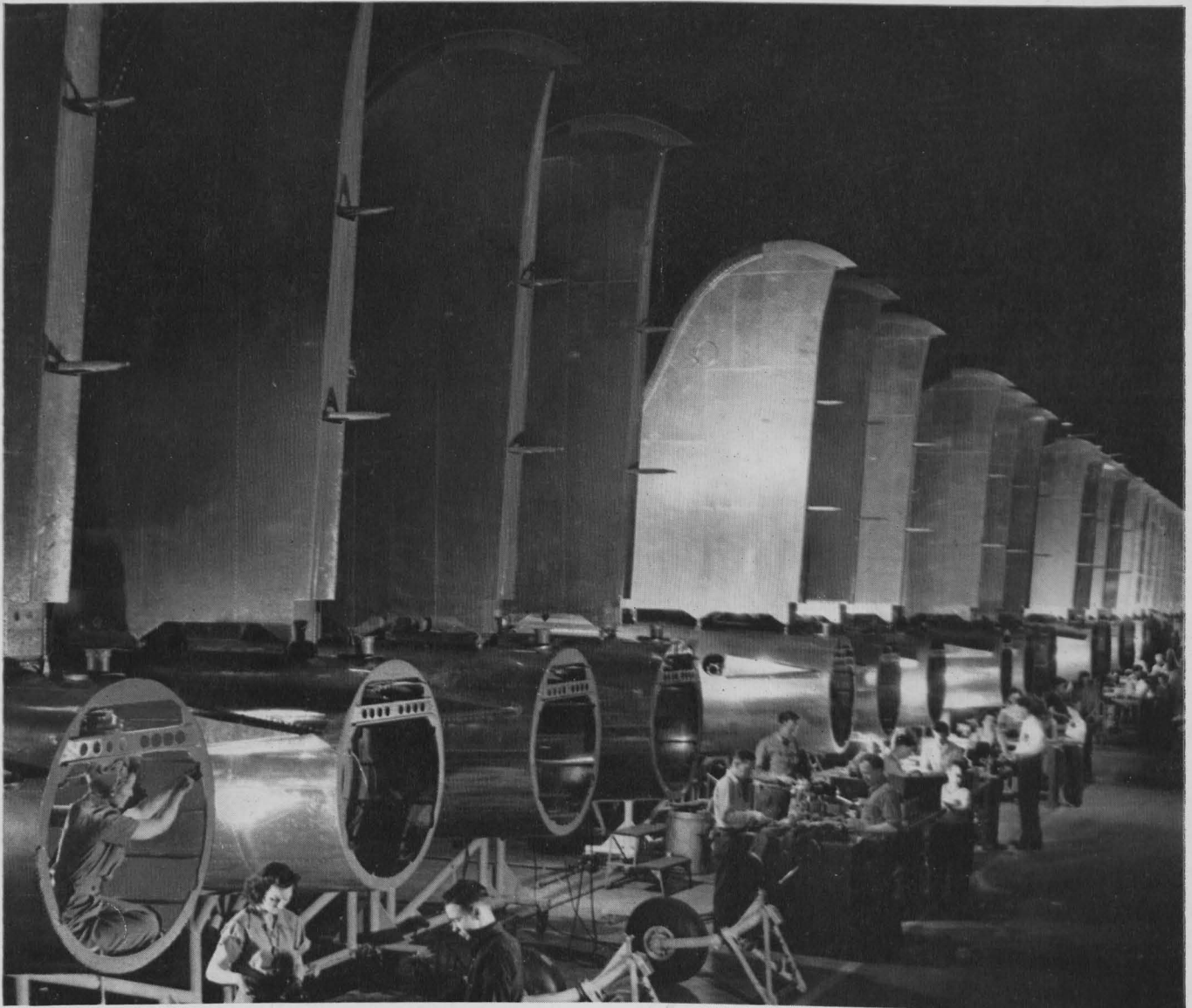
2—Jack Harshman, Bruce Alfson, Rochester and Phil Dickert discuss the secrets of prop design. The Rochester motor develops 15,000 r.p.m. at 1/2 h.p., and with this information Harshman figured out the best possible propeller for his high-speed model.



The test section being in use by another model of military secrecy, Rochester had to hold his own in the wind tunnel. (While his conference was entirely serious, Rochester couldn't escape without *one* gag shot. A comedian must always be funny, you know.)



3—While they were about it, Verl Nelson and Phil Dickert gave Rochester other aerodynamic hints. Rochester was quite enthusiastic about the model—he collects them. Said the Boeing men: "He knows his stuff."



Buy War Bonds — to Have and to Hold

Cutting the cost of victory

How much will victory cost? No one dares hazard a guess, but of this you can be sure—every day, every hour, every minute by which this war can be shortened will aid in reducing its cost by millions of dollars and thousands of lives.

Boeing is helping reduce the cost of war by producing more Flying Fortresses than was ever thought possible—bombers that are blasting the enemy out of his strongholds, sapping his will to fight. Boeing's total production of Flying Fortresses in 1943 was almost twice as great as in 1942.

Furthermore, on each of the four contracts since Pearl Harbor, the price quotation to the government has been substantially lowered. Yet the Boeing Flying Fortress is now a better airplane than ever—constantly improved to meet changing combat needs.

How has it been done? By the Boeing system of utilizing every man, every machine, every bit of space to the highest capacity; by introducing production shortcuts, advancements in tool design, and new manufacturing methods. For the year 1943, Boeing production ranked highest of all aircraft builders in pounds

of completed airplanes per square foot of floor area, and pounds of airplane per man-hour.

Boeing's complete engineering and production information has also been made available to the Douglas and Lockheed companies so that even more Boeing Flying Fortresses can be produced by these additional facilities.

When Victory is won, peacetime products will again have the benefit of Boeing skills in research, design, engineering and manufacturing. You can be certain of this . . . if it's "Built by Boeing" it's bound to be good.

DESIGNERS OF THE FLYING FORTRESS • THE NEW B-29 SUPERFORTRESS • THE STRATOLINER • TRANSOCEAN CLIPPERS

BOEING

(3)

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
P/W and X Detachment
Military Intelligence Service

E & E REPORT NO. 335
EVASION IN FRANCE

1/24/44
(Date)

BOLLINGER ARDELL H. SGT. 13097189
(Name) (Rank) (ASN)

546
(Squadron)

384
(Group)

MIA: SEPT 23/43
Arrived in Spain:

AGE: 21
LENGTH OF SERVICE: 19 MONTH
HOME ADDRESS: 3202 B MARSHALL RD.
DREXEL HILL, PA.

Arrived in Gibraltar:

Arrived in UK:

MEMBERS OF CREW: (This information checked with PWIB)

PILOT HIGDON - head in eye hands; not org -

CO-PILOT RITT -

NAVIGATOR BAGAB -

BOMBARDIER JOHNSTON - FRENCH SAID DIED IN HOSPITAL AT

RADIO OPERATOR BOLLINGER LOUDEAC (seen on ground; hit 3 times in leg - leg bad
right hand; in stomach -)

TOP TURRET GUNNER JETT -

BALL TURRET GUNNER KAIAS

WAIST GUNNER KELLY

WAIST GUNNER CROWIN -

TAIL GUNNER HUMPREY -

Were you wounded?

YES

Official
Disposition

Narrators
Disposition

He said we should turn in to Gerry & that we would be all right - was over in 3 mos -
he was scared - we said no ~~to that~~ he had nothing more to say about car - we didn't
understand his change of attitude - he left - another Frenchman came up - one
who worked in Paris - at 7 pm he said - more coming who would guide us to village -
we would stay at man's house until my foot better - he left to stand with man's
shoe hands - man said would return at 9 pm - crowd who had been with us night
before came back - they asked plans - told them leaving that evening - they
scared - that bad French - we described man who was helping - they knew him -
said all right - then said they knew just where we were to stay - they
that it fine - we wait til 7 - nothing happened - time it started to rain - had to get out -
Kelly on scouting tour - for haystack - stand - they carried me to it - haystack
for night - at daybreak - crawled out - I having chills - decided to go to farmhouse
for coffee and warmth - farmer out in yard - I not finally saw how miserable we
were - took us into fire - got coffee - dry - they nervous (talking about Gerry - in and out of
house all time) - we left - asked for map - (Kelly had opened his AB - had a map, to vague) saw
one in almanac - said no ferry in Langest, next village; 2 kms from farm - gave
us map - thanked him - cut over fields - he watched us out of sight - about 1 km came to
road - had cars - Kelly need to we slipped across - into fields - up hill - sat down to eat
dried bread - they spotting me - difficult going - walked to outskirts of Langest to farm
young girl making cider in yard - told boy I was going to get help - they would to go
on - I went up there anyway - talked to her - she said she would help us - we
went in - fed - foot washed - took it easy - man came in - excited - stayed talking
to him - he left & got mayor of Langest - wine - supper later - decided we could spend
nite - next day - next mile - they nervous - said I could stay but not others - would
me to stay til well - foot better - we didn't want to separate - mayor came in to say
that he would take us to next village, Plasale, next day - talking with man he knew - I
decided to go - mayor back several hrs later - had lost his nerve - he left us - we
decided to go on - planned going at daybreak so to get in 2 hrs on road - in those
2 hrs we had he could go as far on road as we had during day - starting out
gave woman 300 francs apiece - I had clothes given us - walked fifteen
mins + all dogs in neighborhood barking - just getting light - walked til
6 am - came to fork in road - one road led us to estate - saw car at big house -
so got up fields & didn't go near house - walked all day dodging farmers -
circled farms - using compass - at 4 pm - saw church steeple in distance -
walked for it - outside village saw peasant - Kelly spoke to him - asked for Gerry's - yes
along road - not in village - decided wait til dark before entering village

5:30 pm landfall - escort 2 mins later - 7 mins later - 4 Fw's down
immediately - none - #3 engine fire - in Room - order to 30 give
action happened in 20 seconds - n w f was trying to salvo 300 - I helped to
got it away - Kelly helped Kalas out of Ball & with chute - TB out waist
1st - n w f then I, Kelly, Kalas - alt around 22000 ft - all chutes
opened immediately - cutd seven chutes - think 2 chutes unaccounted
for were pilot & TB - 1/2 level flight & smoking - a/c then exploded - all
chutes swinging - I had control this by holding shoulder lines out -
spilled chute & started drifting toward other chutes - 18 minutes in air -
thought of Brown who had gone back in 11 days - shot of jumping up with
another boy & hiding for 24 hrs - was thinking of landing so would
break lines - over large forest near bendead - lot of farms - at 10000
feet saw some people in a farmyard - landed in a pasture & as
soon as hit - a girl ran up before chute - mother & father behind her -
they must not care for chute - had in direction of Kelly - knew nearest
town was at least 4 kms away - Kelly had hit few seconds before me - saw it -
over fence & hopping in that direction - 200 yds - another girl ran up & noticed
that a comrade had broken his leg - went with her & I had Bombdr -
Kelly pinned me & Kalas also - Kalas had been 2 kms away & people told him where to
run to get to us - In ten mins all together - saw him badly off - about 50
Frenchmen were with Bombdr - the trench tried to send us in diff directions to get
us to undress - didn't - they had no clothes to offer - girl & 1 priest & some
kids took us in a half circle to hiding place - for night - 4 or 5 were things
Bombdr to hospital - priest said near Blondenast - & Jerry all around - we
hidden in field - laid down - said about midnight - laid there til 10 talking
about what happened - saw 2 Fw's returning to their Base - at 10 pm. a
dozen people came - schteln who spoke some English - girl - food - 1st civilian
clothes & shoes - all flying clothes hidden by us - we asked what we should do - told
to stay there & a lady would come for us in car next day & say - next am. food brought us by
a woman - left us - no car - but at 3 pm. schteln back - he had talked to Lt. Higdon &
he intimated that all crew was hidden in different places - we three - two - three
& pilot alone - then said one had been captured & that Bombdr died in hospital -
said Jerry patrol had searched all day - 10 men - they had said that in 6 hrs
we would all be caught - bluff - the schteln changed his story -

1738-
1510

asked best way to get south around flds - walked along talking to us -
took us to a farm to get food - he in first - one at time in shed - Fr. boy out -
24 - escaped from Stuttgart - food - postman started us on way - walked all
day - in flds - afternoon - village - saw nurse - asked them for help - fed -
Then told to go - walked thru village - on road - avoid staff car -
at 8 pm - found farm house - about 10 young boys around - slept in house
that night - good natured people - fed - asked next am. if I'd shave -
had 1st shave - haircut - asked for beads - me - in flds again - asked for
nothing all day - nothing to eat all day - stayed in farmhouse - old couple -
given silent treat - cluster of farmhouses - taken to neighbour's hayrack -
farmer came out - saw us - flashed light - came out with five men -
told him who we were - said del right - offered food - sd we'd have
left next am. - did & he told us to leave - we walked hour or so -
went to farm - said am - given food - he bought eggs - left &
lady who had come in to buy eggs while there was outside with other
people talking about us - on down road to into flds & saw

Gerry truck of soldiers passing - crossed village & kept to flds - still
walking - came to house - double house - man there - tried to buy
shoes - my flying boots too heavy & hot - wooden shoes - clean
socks - I walking in wooden shoes - f boots discarded - came to road to
Reunnes - 18 kms - cross cautiously - another house, two old men in
it - poor looking house - food - left looking for place to stay - cut over fld
& came to lane - farmhouse - lady - hot soup - she said knew a man who
wd take us to Reunnes & from Reunnes to Nantes & to Spain by boat - poor
farmhouse - quiet wife - all next day - next night - a Frenchman came to see us 1st day
& asked about ourselves - base in England - ship - pilot's name - etc - we wrote in
separate papers & were compared - he said friend wd come in car for us
~~at 4~~ at 4 car hit there - drunk man came - said we must go - our helper caught -
must go next am. - at 7:30 friend in car came - Sug of - he said drunk man
story not true - we tried to pay people - not allowed - (near Reunnes highway & Reunnes)
man sd we wd go to Reunnes in immediately to another house - to a chateau 18 kms
from Reunnes - ~~3 other~~ 3 other cars had stoyd there - woman owned chateau
Pollack escapee there - woman's mother there - 4 maids & 1 French in kitchen -

while lay on road saw 10th Series - 2 on cycle - + 2 Gery officers in staff car -
cycle stopped in village but heard it leave - brief pause with peasant ^{at St Gilles}
driving cows - wldnt approach while with someone - at dusk - in village -
to church - back entrance - knocked at door - guest out - told him who were -
inside guide - said had been friend then - but your man - gunshot - one at a
time to this house - fed - large maps - few Eng. words - showed direction to
again - he pulled out ~~maps~~ ^{maps} not to enter into - Kelly had decided best for us to go
intend out of ~~castl~~ ^{castl} defense area - gunshot said stay in fields + off main
highway - priest said good friend in nearby village - gunshot would take us to him
next day for another night there - next am. started off - with food - walking -
gunshot wld with us - all day - we did not to stop at village but push on -
reason was that it was backtracking - gunshot agreed with us - he left us ^{at 2 p.m.} in a forest & told us
to walk at night thru that area - we walked some more in day - So east -
find farmer before dark - at 4 pm - approached him as returning to house in
wagon - told him Amer - asked about Gery - said Gery in Merdrignac -
asked us for food - told us about town who had large chateau in that
neighborhood - Kates that it balcony - Kelly + I wntd to chance it - started for the
place - getting late - dark - mixed up - came out on main highway into Merdrignac -
in spot - wntd to ask way to chateau - didnt know how - approached young boy
& girl standing in road - asked + got directions - girl said to us - walked longer -
still didnt see it - were in lane - peasants around - looking us over - asked
again - man we asked was Belgian refugee - he took us to his house - food - went to
chateau himself - he came back with Am's son - spoke Eng - boy in with girl -
came in + said nothing - waiting for us to talk - we did - he spoke to us - said he didnt
help - asked him if he could get us - gave us a job - said he wld almost 100 - all he
could do - we lost as to what to do - a girl came in to talk with her house near -
this main highway to Merdrignac - "Beau Soleil" is chateau name - girl brought map + cigs from
boy at chateau - ~~girl~~ told girl when we would leave next am. - slept in house -
she saw where we were - started So east - added village - 114 Germans in Merdrignac -
passed chateau then - stayed in fields all day til 4 - came on road Brignac -
came across boy - horse + cart - Kelly asked about Gery ahead - boy
didnt understand - Kelly manually arms to boy - boy said 'no' - walked
til dark + find hay bch for night - started 4 am. 29th 9th day -
set of food - decided to look for farmhouse & buy eggs - find one - said Am -
asked in - coffee + bread - given 12 eggs - gave 100 francs + our having money helped -
walked on - 1 1/2 hr - ate eggs - in later - postman, man on cycle -

Stayed 6 days - young man from Rennes to take picture - he had I.C. Cards - young man: 5'5", dark hair, heavy beard, sharp features - seemed sort of around here in Org - into Rennes in fish truck - with chauffeur - this on 5 Oct - Rennes: climbed out of truck in front of ferry - flood 3 blocks to go 3 to girls + flood me across Rennes - to Schlitz's house - spent night + next day - Kelly sick - Dr - came man who had taken us from farm to chateau - came - took me + Kalash to another house - another girl - + another girl - who'd cross Rennes to a room over a saloon - black market - stayed 5 days - while there

2^d day Wayne Bogard + 2 of crew TG + RO + RAF boy come up to eat - in Sept 3^d St. from 37th - build Gen. Padgett - + navigator + copilot - 23^d Sept - pilot had broken cable - 9 here - for dinner - Org broke up while we were here during 5 days - girl told us that Pierre + 2 friends at bar + truck in Gestapo plea gun ~~was~~ pilot someone turn in Org - * while Kelly at schlitz's a tail gunner 96th "Harry Willom" Bogdolz was in crew - 29 may Rennes - last known way to Messac - with Lt. Pilot - we find Kelly - girl who was taking care of us was called Maintain - she took us on 5th day to (photographer had Kelly in Bl market) + outskirts of Rennes where he closed truck picked up - photographer in truck - he left us there - Lt. Cook ^{with 16th Sept} _{with 379}

St. Brokrowski down on 16th Sept were in the truck - went back to chateau - there a lady (name ^{we called her} Bunetta) she said leave by dc - General Messac (General from Messac) came + took Lt. Cook + Brokrowski with him to Messac - we were there 20 days til 5 Nov - in me with ^{red hair + white teeth} clashes came every Sunday + brot Marie Therese (spoke Eng): nice looking ^{5'4"} convert of visitation chubby - 22 - a. black - ^{and} Sister Marie Jeanne, Harrowson-Hill, Middlesex - wanted to know about brother - at chateau one day spent in

5 Nov - truck came with Marie T. + 2 men, one was Guimain, - in truck - would meet Cook + find again - went to LIZIO near VANNES to farm - there 26 days; LOUIS BOULVIS; wife; 2 children; mother - mechanic - SIMON came to see us from Plougenast; is in Fr. Army of Resistance - he had said he was going to get a boat - find as thru Louis - Louis was going to take us to PARIS to find Org - boat deal off of Pyrenees deal on - 38 am in neighborhood of Vannes ^(L.N.W.)

Remain took us on 1 Dec. to St. Servant because
of Louis' plan - stayed with St. Jean Bernard - I said he
was going to move us to Paris in 5-6 days - never saw him
again - On 20th Louis came to see us after locating us for
an day member - said he was coming back several days
to take us to dinner - said Simon had had boat to
leave on Xmas eve - on 23rd to St. Servant & Mel Frencher

Jean Richard - ^{at} MARTIGNE-Fenchard + then ^{met} Louis also -
walked 20 km to Pluzunerec to house of Simon - wife there -
at 0500 by truck 24th for Vannes - Louis Simon Richard +
Tah drive - to RR station in Vannes - train to Quimper - all
but Tah driver - were to change at ~~for~~ Douarnenez -

Very soldier asked Kelly Cerechin on platform of Louis' command when
Kelly tapped him & said "Come?" - that spotted on train -
got to D without trouble on train -

In Douarnenez went to Tree Book - with two young boys, ~~and~~
~~was~~ Klacken (short & heavy) who for RR at ~~Douarnenez~~ - stayed with
a Frenchman

Someone due with more guns - didn't arrive - due next
day - stayed that night & next day & next night at 11 went
down to boat - no gas -

Head of Org - teaches German - that by Gerry to be collaborator -
dark curly hair - sharp features - wavy rolled hair in back - 5'11" -
dark Ruddy complexion - took us (14) to his vacant house -
One Am left with a Frenchman - had later that family of Am
was captured - Glenn Blakemore?

That Am: tall, 6'2", slender, light complexion, l. brown hair, southern,
blue?, angular face, thin face - said pilot had pictures of Capillets grave

at 9am went into woods - 14 of us - ~~were~~ fr. comrades were
on way - Head of Org came for us - took us back to vacant house - there
til next night 27th

Two French women brought food -

Klacker + Ong head took 3 of us to a house
in Treboval - ^{Gabriel} M. Cloarec - he took us to UK in his boat - stayed
at his house 27th Dec - 22nd Jan

About 10 Jan Klacker said they were going to try to
leave from Audierne - 20 kms distance - would be 15 days -

About 4 days before leaving, Klacker came back
& said 900,000 francs was left at Audierne - He
was telling Doris this - Cloarec agreed to take his boat -
don't know why - his young brother had been
going to leave - Gabriel would not have left had we
not been in his house - another said -
he got notice day before leaving to report to work for
Dorcy -

On 21 Jan. we got in boat and at 0330
hours we floated with tide into harbor - 34 hrs
coming over - at way someone called halt but no attention
paid - see a strong light came on but off immediately -
think sabotage - over 23rd at 1:30 p.m.

Bollinger
Kelly
Kalas

The following information has been obtained from our interview with
..... (.....) who escaped after capture
by the enemy/evaded capture by the enemy after being in enemy/enemy occupied territory.

Further circulation of this information may be made, but when doing so it is important not
to divulge any particulars of source.

Statement of information covering period from

to.....

1. at Mendignac: anti % - (tray) 11x German troops here -
2. Concoet - air Base - had been Fr. mil. Base - large concentration of
troops - saw FW which had taken off from the field -
3. Rennes - heard that lot of A-% - heavy caliber - at station
4. ST Jacques - 3 km north of Rennes SW - gassed by fld -
only hangars - no 1st line fighters - repair & training -
5. Saw FW Kurier - in area of Rennes -
6. Jnr 88° & Nr 210° every few days in Rennes area -
7. SW of Rennes - 5/10 kms - ~~air field~~ new gun emplacements along a
main road - 12 or so along road for km - concrete - about foot off
ground incomplete - very built by French plw - African troops
in the vicinity - of Rennes - on main road from east -
8. In vicinity of Treboval French were digging holes for mines, but
they placing mines - along roads 5 kms from Douanenez -
this being done for a long time - lighthouses & bldgs along coast
mined -
searchlight on hill back of town -
on nearby hill - grenade throwers - heavy caliber mortars

RESTRICTED

WAR DEPARTMENT
The Adjutant General's Office
Washington

KLS/el-2B-939 Pentagon

AG 383.6 (31 Jul 43) OB-S-B-M

6 August 1943

SUBJECT: Amended Instructions Concerning Publicity in Connection with Escaped Prisoners of War, to Include Evaders of Capture in Enemy or Enemy-Occupied Territory and Internees in Neutral Countries.

TO: The Commanding Generals,
Army Ground;
Army Air Forces;
The Commander-in-Chief, Southwest Pacific Area;
The Commanding Generals,
Theaters of Operations;
Defense Commands;
Departments;
Base Commands;
The Commanding Officers,
Base Commands;
Director, Bureau of Public Relations.

1. Publication or communication to any unauthorized persons of experiences of escape or evasion from enemy-occupied territory, internment in a neutral country, or release from internment not only furnishes useful information to the enemy but also jeopardizes future escapes, evasions and releases.
2. Personnel will not, unless authorized by the Assistant Chief of Staff, G-2, War Department General Staff, publish in any form whatever or communicate either directly, or indirectly, to the press, radio or an unauthorized person any account of escape or evasion of capture from enemy or enemy-occupied territory, or internment in a neutral country either before or after repatriation. They will be held strictly responsible for all statements contained in communications to friends which may subsequently be published in the press or otherwise.
3. Evaders, escapees, or internees shall not be interrogated on the circumstances of their experiences in escape, evasion or internment except by the agency designated by the Assistant Chief of Staff, G-2, War Department General Staff, or the corresponding organization in overseas theaters of operations. In allied or neutral countries, American Military Attaches are authorized to interrogate on escape, evasion and internment matters.
4. Should the services of escaped prisoners of war, evaders, or internees be deemed necessary for lecturing and briefing, such services will be under the direct supervision of the agency designated by the Assistant Chief of Staff, G-2, War Department General Staff, or the corresponding organization in overseas theaters of operations.
5. Commanding Officers will be responsible for instructing all evaders, escapees, and internees in the provisions of this directive which supercedes letter, AG 383.6 (5 Nov 42) OB-S-B-M, 7 November 1942, subject: Instructions concerning Publicity in Connection with Escaped Prisoners of War and other previous instructions on this subject.

By order of the Secretary of War:

/s/ J. A. ULIO
J. A. ULIO
Major General,
The Adjutant General.

1. Information about your escape or your evasion from capture *would be useful to the enemy* and a danger to your friends. It is therefore **SECRET**.
2. a You must therefore not disclose, except to the first Military Attache to whom you report, or to an officer designated by the Commanding General of the Theater of Operations, or by A. C. of S., G-2, W. D.
 - (1) The names of those who helped you.
 - (2) The method by which you escaped or evaded.
 - (3) The route you followed.
 - (4) Any other facts concerning your experience.
- b You must be particularly on your guard with persons representing the press.
- c You must give no account of your experiences in books, newspapers, periodicals or in broadcasts or in lectures.
- d You must give no information to anyone, irrespective of nationality, in letters or in conversation, except as specifically directed in Par. 4.
- e No lectures or reports are to be given to any unit without the permission of A. C. of S., G-2, W. D., or corresponding organization in the theater.

CERTIFICATE

I have read the above and certify that I will comply with it.

I understand that any information concerning my *escape or evasion* from capture is **SECRET** and must not be disclosed to anyone other than the agency designated by A. C. of S., G-2, War Department, the corresponding organization in overseas theaters of operations, or to the Military Attache in a neutral country to whom I first report. I understand that disclosure to anyone else will make me liable to disciplinary action.

Name (Print) BOLLINGER AH
Rank SGT A. S. N. 13097/89
Unit 384 B. GP 546 Sgdn.

Signed Ardell H. Bollinger
Dated 1/24/44
Witness _____

RESTRICTED

(2)

SECRET - AMERICAN
MOST SECRET - BRITISH
MIS (X)

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
PW and X Detachment
Military Intelligence Service

QUESTIONNAIRE FOR SERVICE PERSONNEL
EVADING FROM ENEMY OCCUPIED COUNTRIES

1. Full Name, Rank and Serial No. *BOLLINGER A.H.*
2. Decorations. *AIR MEDAL*
3. Unit or Squadron. *546 Sqd.*
4. Division (Army) or Group. *384 B. GP.*
5. Date of Birth. *11/3/22*
6. Length of Service. *19 months*
7. Private Address. *3202 B. Marshall Rd. Laurel Hill, Pa.*
8. If in A.F., on what operation were you engaged? State place, date, and time of departure. Where and when did you come down?
Were Aircraft and all instruments and papers destroyed?
Wanted Sept 23, 43 15-45 15 miles after crossing the French coast. Yes - Plougenast 4 km North to east -
9. What was your position in aircraft? *Radio Operator*
10. Were you wounded? *yes*
11. Did you pay your guides? If so how much? *NO*
12. Do you speak French? Spanish? *LITTLE*
13. Did you have Identity Papers? *NO*
14. Have you been questioned before to-day on your escape or evasion? If so, where and by whom? Have you given anyone a written report on your experiences. Where and when? *NO*
15. Did you report on your operations? If so, where and to whom? *NO*
16. Did you sign a security certificate warning you against talking about your escape or evasion? If so, where and when? *YES LONDON 1/24/44*
17. Date of arrival in Spain.
18. Date of arrival at Gibraltar.
19. Place and date of departure for U.K. By sea or air. *1/22/44 DOLARNEZ*
20. Place and date of arrival in U.K. *FALMOUTH 1/23/44*

④

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
P/W and X Detachment
Military Intelligence Service

Stratched
E & E REPORT NO. 335-336-337
EVASION IN FRANCE

Bollinger Kelly Kalas

(Date)

BOLLINGER, ARDELL H. Sgt. 13097189
(Name) (Rank) (ASN)

546 384
(Squadron) (Group)

TARGET NANTES

MIA: 23 Sept 1943
Arrived in Spain:

Arrived in Gibraltar:

Arrived in UK:
23-1-44

AGE: _____
LENGTH OF SERVICE: _____
HOME ADDRESS: _____

MEMBERS OF CREW: (This information checked with PWIB)

			Official Disposition	Narrators Disposition
✓ PILOT (Higdon)	Philip E. Higdon	1st Lt	0-794662 MIA	
✓ CO-PILOT	Louis E. Ritt	2nd Lt	0-672429 MIA	
✓ NAVIGATOR	Meyer (NMI) Begab	2nd Lt	0-797239 MIA	
✓ BOMBARDIER	Lawrence E. Johnston	2nd Lt	0-735199 MIA	
✓ RADIO OPERATOR	ArdeLL H. Bollinger	Sgt	13097189 MIA	<i>narrator</i>
✓ TOP TURRET GUNNER	James L. Lett (JETT)	T/Sgt	18076248 MIA	
✓ BALL TURRET GUNNER	Joseph M. Kalas	S/Sgt	33361307 MIA	<i>narrator</i>
✓ WAIST GUNNER	Edward J. Humphrey	S/Sgt	12200713 MIA	
✓ WAIST GUNNER	Leonard J. Kelly	S/Sgt	39173397 MIA	<i>narrator</i>
✓ TAIL GUNNER	Willard J. Cronin	S/Sgt	11052822 MIA	

Were you wounded?

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
P/W and X Detachment
Military Intelligence Service

E & E REPORT NO. 337
EVASION IN FRANCE

June 24, 1944
(Date)

Kalas Joseph M. S/Lt. 33361307
(Name) (Rank) (ASN)

546th 384th
(Squadron) (Group)

AGE: 23
LENGTH OF SERVICE: 1 yr 5 mo.
HOME ADDRESS: 923 Spring Street
Bethlehem, Penna.

MIA: Sept. 23, 1943
Arrived in Spain:

Arrived in Gibraltar:

Arrived in UK: June 23, 1944

MEMBERS OF CREW: (This information checked with PWIB)

	Official Disposition	Narrators Disposition
PILOT <u>Higdon</u> French said he was leaving for Paris three days after we parachuted.		
CO-PILOT <u>Ritt</u>		
NAVIGATOR <u>Begab</u>		
BOMBARDIER <u>Johnstone</u> Badly wounded. French said he died in the hospital at Lourdes.		
RADIO OPERATOR <u>Bollinger</u>		
TOP TURRET GUNNER <u>Jett</u>		
BALL TURRET GUNNER <u>Kalas</u>		
WAIST GUNNER <u>Kelby</u>		
WAIST GUNNER <u>Cronin</u>		
TAIL GUNNER <u>Humphrey</u>		

Were you wounded?

no

HEADQUARTERS
EUROPEAN THEATER OF OPERATIONS
P/W and X Detachment
Military Intelligence Service

E & E REPORT NO. 336
EVASION IN FRANCE

24-1-44
(Date)

Kelly, Leonard J. 5/sgt 39173397
(Name) (Rank) (ASN)

546th Bomb 384th Bomb
(Squadron) (Group)

MTA: 23-9-43
Arrived in Spain:

AGE: 26
LENGTH OF SERVICE: 1 Yr - 10 Mo
HOME ADDRESS: R#3 - Bx 1261
Everett, Wash.

Arrived in Gibraltar:

Arrived in UK:

23-1-44

MEMBERS OF CREW: (This information checked with PWIB)

	Official Disposition	Narrators Disposition
PILOT	<u>Higdon</u>	
CO-PILOT	<u>Ritt</u>	
NAVIGATOR	<u>Begab</u>	
BOMBARDIER	<u>Johnston</u>	<u>Badly wounded - French said died in hospital at Loudeac</u>
RADIO OPERATOR	<u>Bollinger</u>	
TOP TURRET GUNNER	<u>Jett</u>	
BALL TURRET GUNNER	<u>Kalas</u>	
WAIST GUNNER	<u>Kelly</u>	
WAIST GUNNER	<u>Cronin</u>	
TAIL GUNNER	<u>Humphrey</u>	

Were you wounded? No

At 1730 hours we made landfall over FRANCE and picked up our escort two minutes later. Eight minutes later four FW 190's attacked, setting our number 3 engine on fire and starting ^{ed} a fire in the radio room. We left formation and the order to bale out was given. The action had not taken more than twenty seconds.

AIRCRAFT ON FIRE

The right waist gunner was trying to salvo the waist door. I went to help him and together we got it away. Sgt KELLY had gone to help Sgt KALAS ^{climb} ~~get~~ out of the ball-turret and put on his chute. The tail ^{gunner} jumped first, followed by the right waist gunner; ^{was next before} ~~was~~ Sgt KELLY and Sgt KALAS. We were out of the plane around 22,000 feet and each man opened his chute almost immediately. I counted seven chutes; looked around to find the plane and ~~xx~~ saw it once more, smoking, but in level flight and while I watched, it exploded in mid-air. ^{para} All the chutes were swinging violently. I found that I could control mine by holding the shroud ^t lines apart. ~~After that~~ I spilled air from the chute in an effort to get down more quickly. This caused me to drift nearer to the other chutes.

~~Before landing~~ I had about eighteen minutes in the air, most of which time was taken up with maneouvering the chute and trying to remember how to land without breaking ~~my~~ leg. I recalled ~~that~~ ^(E+E NO 52) ~~that~~ Sgt Brown ^{who} of my Group had returned after being shot down, and ^{remembered} ~~that~~ the first thing he had done was ^{to} join up with a crew member and go in hiding for a day. I was over a large forest but there were many farms in the vicinity of the woods. Around one thousand feet I saw farmers in their backyards watching me descend.

EIGHTEEN MINUTES IN SUMP

I landed in a pasture and before I could release the chute a girl ran up to me with her mother and father not far behind, ^{her.} They motioned that I should run quickly and from their gestures I

understood that they would take care of my chute. I left them and headed in the direction of Sgt Kelly who had landed not far away a few seconds before I ~~had gotten~~ ^{was} down. While I was hopping toward him on an injured leg another girl ran up to me and gestured that an injured comrade had fallen nearby. I went with her ~~to find~~ ^{and found} ~~that~~ ^{our} bombardier ~~was~~ ^{unconscious and} badly wounded. While I was trying to help him, Sgt KELLY and SGT KALAS joined me. In ten minutes after hitting the ground we were all together.

JOINS
CREW
MEMBERS

There were about fifty Frenchmen surrounding the four of us. They tried to send us all in different directions and some tried to remove flying clothing from us but none of them offered ~~us~~ civilian clothing ~~as~~ as a replacement. The bombardier was so seriously wounded ~~that~~ the French ~~carried~~ carried him off to a hospital while one of the Frenchmen motioned us to follow him. We were led, for some distance, to a hiding place on the edge of a ~~field~~ field, where we were to remain quietly until midnight when our helper would return. We learned the name of the nearest village ~~and~~ ^{of the fact} were mindful that our helper had said the area was infested with Germans. Except for a whispering discussion of our situation and what we had better do, we made no move until our helper returned with other Frenchmen ^{much} earlier than we expected. Civilian clothes and shoes were brought to us and all of our flying equipment was taken by the French to be hidden. We asked what we should do. One of our helpers said we were to stay hidden there and within the next few days a lady would come to take us away.

CIVILIAN
CLOTHES

SECOND DAY

The next morning a woman brought food. We thought, of course, that she was the woman who was to take us away, but she turned out to be a farmer's wife who, ^{having} heard of our plight, ~~was~~ ^{only} bringing ~~us~~ food. She had no idea of any other way to help. We waited, as instructed, and during mid-afternoon our helper returned in the company of other Frenchmen- all local people. He said that a German patrol had searched the area all day. It was composed of ten men who had told the French that they knew where all of us were and that we would be

caught in six hours. This was bluff, according to the Frenchman.

Very suddenly, while we were talking to our helper, he changed his story about the woman coming to help us. He told us that we should give ourselves up to the Germans and that we would be well-treated. He thought the war would be over in three months so what difference would it make? We could see that he had become badly frightened but could not understand the sudden change of attitude, and since his ~~French~~ English ~~was~~ consisted of only a few words it was difficult to question him further. He would say nothing more about the woman ~~and the~~ and did everything but deny that he had mentioned such a thing to us.

After he had ~~gone~~ ^{departed leaving us on our own again,} another Frenchman came to us. He said he didn't live in that particular locale but had been visiting there when we were shot down. If we would wait until evening he would arrange for another Frenchman to come for us ~~later~~ later and take us to a house in the village. He returned, an hour after telling us this, with a man who shook hands and said he would come to ~~take us away~~ ^{take us away} that night. We waited, ^{and} before dark some of the villagers who had brought food ^{on the first day} came to see us again. They were concerned when we told them about the man coming to take us away that night but after we described ^{him} ~~who he was~~ they seemed to know him and ^{assured us} ~~agreed~~ that it would be all right.

We waited beyond the hour at which the man had said he would come for us, and no one showed up. It started to rain. Before long we were soaking and knew we would have to find cover. Sgt Kelly scouted around the field and found a haystack which we crawled into for the night; Sgt Bollinger had to be carried to the haystack because his wounded leg would not support him.

By daybreak we were too cold and wet to stay any longer in the fields. Sgt Bollinger was having chills and we thought he was going to die. Supporting him, we walked to the nearest farmhouse to ask for coffee and a chance to dry our clothes. The farmer, ^{approached} ~~was~~ in the barnyard, ~~and~~ was not friendly at first but, seeing how miserable we were, ^{he} ~~we~~ relented and took us in. We got our coffee and dried our clothes. The people in the house were nervous and kept running from door to window watching for the Germans. After thirty or forty minutes we thanked them

ADVISED BY
FRIGHTENED HELPER
TO GIVE UP

FRENCHMEN IN AREA
OF JUMP TOO
FRIGHTENED TO
HELP

THIRD DAY

GIVEN FOOD -
DRY OUT
CLOTHES

SECURE
LOCAL
MAPS

asked for a map which they gave us by tearing it out of the almanac, and, walked ^{then we} in the direction of the next village where, according to the farmer, there were no Germans. We had asked for the map because ours, ~~was~~ which we had taken from the special Purse, was not detailed enough for the area we were in.

After leaving the farmer, we cut through the fields and noticed that he carefully watched us out of sight. After walking a kilometer we came to a main road. There was some traffic ~~on it~~, ^{so} ~~and while~~ we crept up to it, ^{after} Sgt Kelly ^{had gone} ahead to reconnoit^{er}. We slipped across the road, unseen, got back into the fields to walk along hedgerows and after ~~some~~ several hours, we stopped to rest and eat bread given us by the farmer. We were having a difficult time ^{making any} ~~with our~~ ^{and} ~~we~~ ^{progress} because of Sgt Bollinger's leg; he had to be supported all the way ~~we~~ knew, ~~that~~ in spite of our civilian clothes, we would attract attention even from a distance.

CARRY
INJURED
CREW
MEMBER

We walked ~~to~~ to the outskirts of a village. From the shelter of a hedgerow we watched a French girl, working in ^{the front} ~~the~~ yard. Sgt Bollinger decided that he was going to get help and, though we wanted to go on, he ^{approached} ~~went up to~~ the girl. After a few minutes she told him she would help all of us. We were fed and, while we were resting after having had baths, a man came in. He became excited when he heard who we were and told us to wait while he went for a friend. He returned with ~~xxxxxxxxxxxx~~ ^{his} friend, who brought wine and insisted on a gala celebration that night. It was decided that we could spend the night ^{there} and the time lengthened out until we actually stayed the following day and night.

4th day
SPEND TWO NIGHTS
AND DAY RESTING
IN FRENCH
HOME

By then the family was getting nervous. Sgt Bollinger's foot was getting better. ~~xxxxxxxxxxxx~~ The family said he could stay until his foot was well but that the other two of us should leave. They were insistent that Sgt Bollinger stay until he was well but we didn't want to separate, and after long arguments and explanations they agreed to move us to another village, south, where we could stay with some friends one more night before starting off on our own again. ~~It was~~ The friend who had been brought in on the first day ~~we~~ said he would guide ~~us~~ us to

the next village. When we ~~was~~ ^{were} ready to ~~go~~ ^{leave,} the friend lost his nerve and told us we would have to go on alone.

15th day

We left at daybreak to get in several hours on the road before we felt that we must get back in the fields. In ~~the~~ ^{to} two hours ^{on the road,} we thought we could go as far as we could during a day in the fields. Before starting out we were given extra clothes for which we left behind 300 francs apiece though~~x~~ the ~~French~~ ^{girl} tried to refuse. We almost gave up our idea of walking on the road because all the dogs in the neighborhood started barking but we kept at it and around 0600 hours we reached a fork in the road. The ~~way~~ ^{direction} we chose led us into a large estate and from a distance we could see a car parked in front of the ^{main} house. Because we had heard ~~that~~ ^{also} back at squadron and in France that cars usually meant Germans, we turned into the fields.

AVOID FARMS, FARMERS AND ROADS

All day we walked, circling villages, farms, farmers ^{and} using our compass to keep ~~a~~ ^a southern course, ~~and~~ ^{and} late in the afternoon we walked cautiously toward a church steeple rising from a distant hilltop. In the farmlands outside the village we watched a peasant until Sgt Kelly decided ^{it would be safe} to approach for help. When he asked if there were any Germans in the vicinity the peasant pointed to the road and nodded his head ^{affirmatively,} but, pointing to the village he shook his head in negative answer. We thought it best to wait until dark before entering the village.

We went into hiding along the edge of the road and it was here that we saw our first Germans. Two went by on a motorcycle and another two passed in a staff car. We heard the motorcycle stop in the village but a few minutes later we heard ~~the~~ it start up again and leave the village. ³ We watched a well-dressed man ^{priest} ~~walk~~ ^{in conversation with} along the road ~~talking to~~ ^{who was} a peasant, driving his cows in from the field. We thought of approaching ^{him} ~~this man~~ but didn't because he was not alone.

HEALED BY PRIEST

At dusk we went up to the church, ~~and~~ ^{the priest} found ~~him~~ ^{and} inside, ~~to whom we~~ ^{He told us to wait in the} appealed ^{to him} for help, saying that we were Americans. ~~He went after another man~~ ^{Church} ~~while he went off to get a young friend who would be~~ ^{who was the distinguished looking man we had seen on the road. They brought}

~~with them another young man who was very~~ eager to help us. The young man ^{arrived} ~~had~~ was pointed ^{his house} out to us, ^{telling us} ~~and we were told~~ to go there. We separated, ~~and~~ approached the house from different directions, and, after being fed, we got out our maps to ask ~~the~~ the young man ^{how we could get} ~~that we wanted~~ to Spain. He spoke a few words of English which made our conversation easier. The young man studied the maps with us, ~~pointing~~ ^{after} ~~the~~ out the dangerous villages and the ~~ones~~ ^{ones} ~~which would be safer~~. The ~~elder~~ ^{priest} friend wanted us to go on to another village and spend one night with a friend of his. We ~~did~~ decided to do this and, the next morning after we were rested and had been given food to carry with us, we started out with the young man ^{guiding us} ~~who was going to guide us~~. All of our walking this day with the young guide was in fields, along cowpaths and, occasionally, on secondary roads. Our guide pointed out that we should always stick to the fields and secondary roads.

During mid-morning we changed our minds about going to the village where we could have spent a night with ~~the priest's~~ ^{the priest's} friend because this village ~~was~~ ^{was} off our course and ~~would~~ ^{would} ~~only~~ have meant unnecessary walking since we did not expect any ^{other} help there ~~other~~ than a bed for the night. Our young ~~friend~~ ^{guide} agreed with us ⁱⁿ ~~his~~ ^{his} change of plan ~~but~~ continued with us until mid-afternoon before turning back. One of the last things he said was that we should walk at night through this area which was still in the coastal defense zone. We walked on a little further, ^{after our guide left,} looking for a farmer who would let us sleep in his barn. We ~~did not~~ ^{met} one returning to his home along a wood path. After telling him that we were Americans, we asked if there were any Germans in the neighborhood. He told us there were some in the next village but that we could come to his house for ~~xxxx~~ food. While we were eating the farmer told us that there was a wealthy man in the neighborhood who would help us. He showed us where this man lived and, although we were not in complete accord as to whether or not it was the thing to do, we left the farmer to go to the wealthy man's house.

This was at dusk and on the way we got lost. There being nothing to do but ask directions we approached a young boy and girl standing by a fence. After a few minutes they understood what we were talking about and pointed a direction

GUIDED ALL OF ONE DAY BY YOUNG FRENCHMAN

SIXTH DAY

for us to ~~walk~~ go. We walked on and soon realized that we had missed our destination again. This time we were on a lane, passing many peasants coming in from the fields, and they were all staring at us. We told one of them that we were Americans and were looking for a large house in that vicinity. This man told us to come to his house. He fed us ~~me~~ and then went off to the chateau himself to see if he could get help.

ADVISED TO GO TO CHATEAU FOR HELP BUT, AFTER CONTACT, HEAD REFUSED

~~We brought back a boy with a member of the family who lived in the large house. This boy spoke English and did not enter the Americans' room we were in with the peasant. He waited and strolled in later with another. The peasant returned alone.~~

~~While we were trying to find out from the peasant what he had learned at the house a boy and girl walked in. We paid little attention to them and continued our efforts to get some information from the peasant and while doing this we talked among ourselves. This was what the boy had been waiting for, and after listening to us talk he decided that we were Americans. He told us then, in excellent English, that he was from the big house but~~

~~He told us that he could not help us because he knew of no one to whom he could go for help. He gave us cigarettes and left.~~ ^{para.} We were at loss as to what

^{in the meantime} we could do next. Some people had come in to see us, out of curiosity more than anything ~~else~~ and, when they saw that no one ^{else could} was going to help, they invited us to their home for the night. Before we went to bed the boy ^{from the chateau} sent more

cigarettes and maps to us with a warning of which villages in that neighborhood we should avoid. ~~We told our host the time we wanted to leave the next morning and after ~~xxx~~ being given breakfast we started southeast.~~

Seventh Day

~~The next morning after breakfast we started out again, southeast.~~ We were in the fields all day - walking slowly and cautiously. Still avoiding farmers and villages during the early part of the day, we ⁴ changed our tactics ~~and~~ late in the afternoon ^{and looked} began looking for a farmer who would feed us and give us

STILL ENQUIRING AS TO WHEREABOUTS OF GERMANS AND AVOIDING THEM

a bed. We went back on the roads and the first person we met was a boy driving a horse and cart. Sgt Kelly went up to the boy to ask if there were any Germans in the next village but the boy could not understand who we were or what we wanted. To get the idea across, Kelly went through the German manual of arms with a stick and then pointed to the village. This scared the boy ~~badly~~ but he pointed to the village and said, "no Boche". It grew dark this night before we could find help so we slept in a haystack.

EIGHTH
DAY

BUY FOOD

The next morning (8th day) we started at 0400 hours. We were out of food and decided to try farmhouses to see ^{what} we could buy. At the first house we told the woman, who came to the door, that we were Americans, showed our money, and pointed to our mouths to let her know we were hungry. She asked us in and fed us bread and doffee. She gave us a dozen eggs which we carried in one of our waterbottles. ~~By~~ We left after giving her a 100-franc note. ~~By~~ Having money helped us in this case.

At intervals during the morning we stopped to rest and by noon we had eaten all of our eggs. While walking down a lane we passed a postman who ~~was staring~~ ^{stared curiously} at us. ~~some curiosity about us.~~ Because he looked friendly we spoke to him and enquired as to the best way to go south through the fields. He walked along with us and stopping at a farmhouse, he asked us to wait. He went in and ^{was back} in a few minutes, motioning us to go to a shed in the backyard. We were given a large lunch ^{here} before the postman started us on our way again. ^{para} For the rest of the day we kept ^{to} the fields, although several times ^{this brought us} ~~passed~~ near the outskirts of villages. On one such occasion we spoke to ^{some nuns} ~~a group of women~~ and were given food, though they seemed anxious that we continue our journey. After this village we walked along a road for a short distance, but, because we just managed to scramble out of sight ^{once} before a ^{German} staff car passed, we went back into the fields.

It was after dark before we found a farmhouse. We were passing ^{it} and saw a group of boys in the yard. After we spoke they asked us in and we ~~stayed~~ were permitted to sleep in the house that night. They were very good-natured people, gave us plenty to eat, and also furnished us with berets and equipment ^{with which} to have our first shaves.

Ninth day

STILL
AVOIDING FARMS
ROADS AND
VILLAGES

In the fields again the next day, we went back to our old tactics of avoiding all farms, roads, farmers and villages. We asked for nothing all day and consequently had nothing to eat all day. After dark we went to a small farmhouse close to several others and were given cider and bread by an elderly couple. When we got ready to leave, the old man took us into a field near another house and

pointed to a haystack where we could spend the night. The old man left us then and we must have made too much noise getting ourselves bedded down, for the farmer who owned the haystack came out with a flashlight and found us. He must have suspected thieves because he brought about five men out with him. We told him we were Americans and all we wanted was ~~to sleep~~ ^{to sleep} in his haystack. He offered ~~us~~ food and said that we could have breakfast the next morning.

TENTH DAY

We were awakened early, fed and told to be on our way. After several hours of walking we stopped at another farmhouse and were given more food. While we were eating, a farm lady came in to buy eggs and milk and that put the same idea in our head. Our host ~~was~~ ^{wanted} to get rid of the egg-buyer, who ~~stared~~ ^{stared} at us with much curiosity and ~~was~~ ^{tried} to get us in conversation. This woman finally left, but when we bought our eggs and got outside the house, we found a large crowd of French people standing on the road with the lady who had seen us in the house. They were ~~all~~ ⁱⁿ jabbering French and staring at us. We heard the word-American-several times but we pushed our way through the crowd and went on down the road. Later we got into the fields and not too quickly, for we saw a ~~large~~ truckload of German soldiers pass. However, there was no reason to connect ~~it~~ these soldiers with the egg-buying incident.

ATTRACT CROWD OF CURIOUS FRENCHMEN

We circled villages and avoided roads the rest of the day. In the afternoon we stopped at a house to try to get shoes for Sgt Bollinger, who was still wearing his flying boots which were too hot and heavy. He was given a pair of wooden shoes. At another house two old men gave us some food but did not want us to stay. We left, looking for a place that we could sleep that night. A woman answered our knock at the next house and while we were eating some hot soup which she had prepared, she said that if we would stay there several days she would find a way to help us. From there our journey was arranged.

JOURNEY ARRANGED

JOHN F WHITE, JR

Appendix B:

- a. AT MERDIGNAC there are some anti-aircraft batteries. Evaders were told that on 1 October there were 114 German troops stationed in this town.
- b. There is an air base at GONCOCRET. This had been a French military reservation and now there is a large concentration of German troops here. Evaders saw an FW190 take off from this field.
- c. Evaders heard that there was a ~~large~~ large concentration of heavy caliber anti-aircraft batteries in RENNES, particularly at the railway station.
- d. Evaders passed an airfield (St Jacques) three kilometers southwest of RENNES. In passing by the field they ^{saw} only hangars, no first-line fighters and thought the field appeared to be ^{used} for repair and training.
- e. Evaders saw ~~an~~ FW Kurier's flying over RENNES.
- f. In the RENNES area, evaders saw many Ju 88's and Me210's in flight.
- g. Five kilometers southwest of RENNES, along a main road, evaders saw new gun emplacements ~~being~~ under construction. They counted something like twelve EACH kilometer. They were of concrete construction and were about a foot high in completion on 5 November. The laborers were French prisoners, although Evaders were told that there were many African P/W's in this area.
- h. In the vicinity of TREBOUL evaders were told that the French were digging holes for mines but that the Germans were planting the mines. The French said that this mine-planting had been going on for some time (before January) and was done along roads extending at least five kilometers inland from DOUARNENEZ. Some lighthouses and buildings in this area were being mined according to the French. There is a searchlight or searchlights on a hill rising above ~~the~~ DOUARNENEZ and also some grenade throwers and heavy caliber mortars. JANUARY 1944

SECRET

APPENDIX "D" TO E AND E REPORT NO. 335

No., Rank, Name:- *BOLLINGER ARDELL H. SGT.*

Unit:- *384 B. GP. 546 Sqdn.*

Please answer carefully the questions below. Suggestions for improvement of escape equipment and training must come largely from those who make use of them. Your report and comments will help others to evade capture or to escape

1. AIDS BOX

- (a) Did you use your aids box? *YES*
- (b) If not, had you one on you? *YES*
- (c) If not, why had you no aids box?
- (d) If you used it, which of the following items did you use? Put a dash (-) against each item used and state briefly the circumstances, e.g., "Lying up for 2 nights," etc.

Horlicks tablets. -

Chocolate. -

Milk (tube). -

Benzadrine tablets (fatigue).

Halazone tablets (water purifier).

Matches. -

Adhesive tape. -

Chewing gum. -

Water bottle.

Compass. -

- (e) Did any of the above items prove unsatisfactory? If so, in what respect?

- (f) How did you finally dispose of the box? *by FIRE*

- (g) Can you suggest any way in which the contents of the aids box might be changed to make it of greater use, bearing in mind that the size of it cannot be larger?

2. PURSE

- (a) Did you carry a purse? *YES*
If so, state COLOR. *GREEN*
If NOT, State why not.

- (b) Did you use the purse? *YES*

- (c) If so, which of the following items in the purse did you use? Put a dash (-) against each item used and state briefly the circumstances.

Maps. Which ones?

Compass.

File (hacksaw).

Foreign currency. State countries and amounts.

How did you spend the money?

FRENCH. 2000 francs
FOR FOOD FROM PEASANTS

(d) How did you dispose of:-

Maps.

- FIRE

Compass.

= FIRE

File (hacksaw).

- FIRE

Surplus currency.

donated to FRENCH helpers

3. AIDS TO ESCAPE - (GADGETS+)

(+Issued separately from aids boxes and purses.)

(a) Did you carry or wear any of the following?

If you used any of them state briefly WHEN and WHERE.

Round compass.

- NO

Stud compass.

- NO

Swinger compass.

- NO

Fly-button compass.

- NO

Pencil clip compass.

- NO

Tunic button compass.

- NO

Pipe compass.

- NO

Pouch

- NO

Special flying boots (and knife).

- NO

(b) Were they satisfactory?

(c) Can you suggest any improvements, additions, or substitutions, which would improve the above equipment?

4. PASSPORT SIZE PHOTOGRAPHS

(a) Did you carry passport-size photographs?
If so, how many?

YES
Two

(b) Did you use them?
State how.

NO; looked too military + were too small

5. LECTURES

(a) Were you lectured on evasion and escape?
State WHERE, WHEN and by WHOM.

YES; 5-2 officers + evaders
GRAFTON-UNDERWOOD

(b) Did you find the lectures of value?

YES

RAF Sgt who escaped from
P/W camp -
Warning?

To hear south -

To stay in fields -

To ask help at isolated farms

To approach farmers when alone

To get good disguise

SECRET

APPENDIX "D" TO E AND E REPORT NO. 336

No., Rank, Name:-

Kelly

Unit:-

Please answer carefully the questions below. Suggestions for improvement of escape equipment and training must come largely from those who make use of them. Your report and comments will help others to evade capture or to escape

1. AIDS BOX

- (a) Did you use your aids box? *Yes*
- (b) If not, had you one on you?
- (c) If not, why had you no aids box?
- (d) If you used it, which of the following items did you use? Put a dash (-) against each item used and state briefly the circumstances, e.g., "Lying up for 2 nights," etc.
- Horlicks tablets. *When No other food available just 5 days -*
- Chocolate. *- - -*
- Milk (tube). *- - -*
- Benzadrine tablets (fatigue).
- Halazone tablets (water purifier).
- Matches. *For Smoking*
- Adhesive tape. *Bandaging Radio operator's food.*
- Chewing gum. *Used all*
- Water bottle.
- Compass. *We were walking in the fields for 10 days.*
- (e) Did any of the above items prove unsatisfactory? *No*
If so, in what respect?
- (f) How did you finally dispose of the box? *Buried*
- (g) Can you suggest any way in which the contents of the aids box might be changed to make it of greater use, bearing in mind that the size of it cannot be larger? *Have French phrases printed on silk like the maps.*

2. PURSE

- (a) Did you carry a purse? *Yes*
If so, state COLOR. *O.D. Red Straps*
In NOT, State why not.
- (b) Did you use the purse? *Yes*
- (c) If so, which of the following items in the purse did you use? Put a dash (-) against each item used and state briefly the circumstances.
- Maps. Which ones?
- Compass.

— File (hacksaw). *Fashioned Crotch for Radio Op.*
Foreign currency. State countries and amounts. *French - 2000 Fr.*
How did you spend the money? *For food - at Farms*

(d) How did you dispose of:-

Maps. *Left with French who had aided us.*

Compass. ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

File (hacksaw). ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

Surplus currency. ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

3. AIDS TO ESCAPE - (GADGETS+)

(+Issued separately from aids boxes and purses.)

Released

(a) Did you carry or wear any of the following?

If you used any of them state briefly WHEN and WHERE.

Round compass.

Stud compass.

Swinger compass.

Fly-button compass.

Pencil clip compass.

Tunic button compass.

Pipe compass.

Pouch

Special flying boots (and knife).

(b) Were they satisfactory?

(c) Can you suggest any improvements, additions, or substitutions, which would improve the above equipment?

4. PASSPORT SIZE PHOTOGRAPHS

(a) Did you carry passport-size photographs? *Yes.*

If so, how many? *Six*

(b) Did you use them? *NO!*

State how. *French said were not right size*

5. LECTURES

(a) Were you lectured on evasion and escape? *Yes during training*

State WHERE, WHEN and by WHOM. *in states by various J-2 officers. Also at base in England by escapees*

(b) Did you find the lectures of value? *Yes*

To approach people for help only when they are alone.

To use Aids Box sparingly -

No., Rank, Name:- *1/Lt. Joseph M. Kelas 33361307*Unit:- *384th.*

Please answer carefully the questions below. Suggestions for improvement of escape equipment and training must come largely from those who make use of them. Your report and comments will help others to evade capture or to escape

1. AIDS BOX

- (a) Did you use your aids box?
yes
- (b) If not, had you one on you?
- (c) If not, why had you no aids box?
- (d) If you used it, which of the following items did you use? Put a dash (-) against each item used and state briefly the circumstances, e.g., "Lying up for 2 nights," etc.

Horlicks tablets. - ~~No food at the time~~ Food while walking in fields for 5 daysChocolate. - ~~used~~

Milk (tube).

Benzadrine tablets (fatigue).

Halazone tablets (water purifier).

Matches. - *For smoking*Adhesive tape. - *For the radio operators foot*

Chewing gum.

Water bottle.

Compass. - *Walking in the fields for 10 days*

- (e) Did any of the above items prove unsatisfactory? If so, in what respect?

- (f) How did you finally dispose of the box?
Dug a small hole and buried it

- (g) Can you suggest any way in which the contents of the aids box might be changed to make it of greater use, bearing in mind that the size of it cannot be larger?

2. PURSE

- (a) Did you carry a purse? *yes*
If so, state COLOR. *Brown* *Red Strip*
In NOT, State why not.

- (b) Did you use the purse?
yes

- (c) If so, which of the following items in the purse did you use? Put a dash (-) against each item used and state briefly the circumstances.

Maps. Which ones?

-Compass. *Walking in the fields*

-File (hacksaw) *to Cut bread*
Foreign currency. State countries and amounts.
How did you spend the money?

- (d) How did you dispose of:- *French 2000 francs; given to French for food*
Maps. *Destroyed by French ^{help} as we had been taken*
Compass. *Given to a Frenchman*
File (hacksaw). *Taken by a Frenchman*
Surplus currency. *Given to a woman at our last stop before ~~leaving~~ given to last helper.*

3. AIDS TO ESCAPE - (GADGETS+)
(+Issued separately from aids boxes and purses.)

- (a) Did you carry or wear any of the following?
If you used any of them state briefly WHEN and WHERE.

-Round compass. *For the first nine days when we were in our
own and moving only thru the fields.*
Stud compass.

Swinger compass.

Fly-button compass.

Pencil clip compass.

Tunic button compass.

Pipe compass.

Pouch

Special flying boots (and knife).

- (b) Were they satisfactory? *yes*

- (c) Can you suggest any improvements, additions, or substitutions,
which would improve the above equipment?

4. PASSPORT SIZE PHOTOGRAPHS

- (a) Did you carry passport-size photographs?
If so, how many?

- (b) Did you use them? *yes, three*
State how. *no, French said they were no good.*

5. LECTURES

- (a) Were you lectured on evasion and escape?
State WHERE, WHEN and by WHOM.

- (b) Did you find the lectures of value? *yes in the States and in England. G.I. officers and men who
had evaded.*

Walk in fields & ask help at isolated farmhouses

REPORT FOR THE ADJUTANT GENERAL'S OFFICE.

Bollinger - Kelly - Kalas

SOURCE:

DATE:

UNIT:

MEMBERS OF CREW.

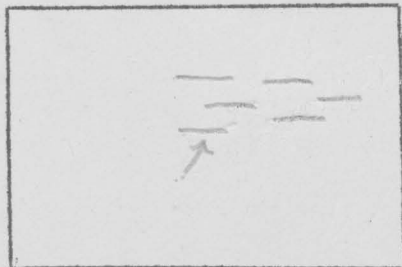
PILOT
CO PILOT
NAVIGATOR
BOMBARDIER
RADIO OPERATOR
TOP TURRET GUNNER
BALL TURRET GUNNER
WAIST GUNNER
WAIST GUNNER
TAIL GUNNER

KNOWN INFORMATION: Lt Johnston seen on ground by evaders. He was alive but unconscious, and was very seriously wounded.

HEARSAY INFORMATION: French source stated that Lt Johnston had died in hospital.
French source stated that ten men had parachuted safely.

NAME BOLLINGER ARDELL H. RANK SGT ASN 13097129 REPORT NO. _____

SQ 546 GROUP 384 A/C NO. 13097129 Letter F Load 10-500 Date 9/23/43



Position in formation.
Make Diagram

Observed results of Bombing:

Not dropped

Enemy Fighter Tactics:

CAME IN at 1 O'clock

Markings:

WTWS

Our Tactics:

Our Fighter Support:

R47 - HIGH SUPPORT

Flak

Time

Place

Quality

Technical Failures

Motors:

Armor:

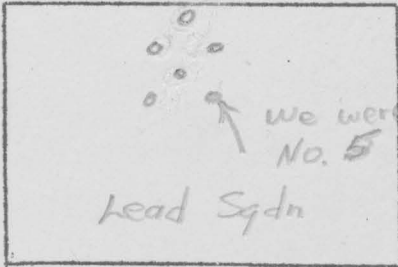
Armament:

Miscellaneous:

Comments and Suggestions on any of the above:

NAME Kelly, L.J. RANK 7sgt ASN 39173397 REPORT NO. _____

SQ 546 GROUP 384 A/C NO. 23459 Letter F Load 5000 Date 1-24-44



Position in formation.
Make Diagram

Observed results of Bombing: Did not Bomb

Enemy Fighter Tactics: Saw None
Markings:

Our Tactics: No evasive action

Our Fighter Support: P-47s

<u>Flak</u>	<u>Time</u>	<u>Place</u>	<u>Quality</u>
<u>No Flak</u>			

Technical Failures

Motors: None to my knowledge

Armor: None ✓ ✓ ✓

Armament: None ✓ ✓ ✓

Miscellaneous: ✓ ✓ ✓ ✓

Comments and Suggestions on any of the above: