



The author and his Russian fighter. Note bullet hole patch in the 6. A close one!

I FOUGHT

We take pride in presenting this popular treatise on the men and airplanes flying in the Spanish Civil War. This marks the first time an authoritative article on this particular subject has been written for an American publication. The author returned from Spain not long ago after serving as a fighting pilot for more than a year.

AFTER recent publication of various aerial experiences in the Spanish Civil War, I was surprised at the amount of interest taken, by pilots, in the planes we used. Also in the planes used against us. Of course, accurate description of some of the enemies' planes is impossible—as I only saw them in the air. However, I believe that I can give fairly accurate description of our own planes and will try to supplement descriptions of the enemies' planes with descriptions of their aerial characteristics. This combination should give a fairly good idea of their general attitude in the air.

When I first arrived in Spain we were assigned to the biplane fighters of the Boeing P-12 type. However, they had been developed by the Russians quite a bit. The most important development consisted of the Vee in the upper wing, of the gull type (affording better visibility); a more powerful motor; and four machine-guns. These machine-guns were all synchronized through the propeller. If I remember right, American planes of that type had only two guns.

Our standard squadrons consisted of 12 planes—in patrols of four planes apiece—but we very seldom had that number of planes ready for action. In fact, on several occasions we went out with as few as only four or five planes,



Because of strict censorship this is a rare picture. Three mechanics posed behind famed "Whitey" Dahl (still a Franco prisoner), Chang Selles and Tinker (left to right).

others being temporarily out of action. When we were working on any particular front we would have anywhere from two to five or six squadrons or fighters. At least two of the squadrons would be monoplane fighters (of the low-wing type—developments of our Boeing P-26). They had neither struts nor flying wires, were equipped with a more powerful motor and had retractable landing gear. They carried two automatic machine-guns which fired outside of the propeller radius at a combined rate of fire of about 3,600 bullets per minute.

The fighters used by the Rebels at that time were Italian Fiats and German Heinkels. They were very similar in type—both having water-cooled motors—and

were very heavy. They were biplanes and their speed was approximately the same as that of our own biplanes on the straightaway. However, their weight and streamlining enabled them to outdive our biplanes with at least a 50 per cent greater acceleration. Our planes, though, could both out-climb and out-maneuver them. The Fiats were better fighting planes than the Heinkels—being both shorter and wider—but their pilots were lacking in intestinal fortitude. Whenever we recognized enemy planes as Fiats, we would merely head in their direction and open fire with all four guns—they would almost invariably dive away and go home. When we tried those tactics on the Heinkel boys, though, they would open

So closely guarded that it was almost impossible to photograph them, these Russian-built biplane fighters are being used in Spain and China. These ships are developments of the American Boeing P-12.

Photograph from Lyman Voelgel

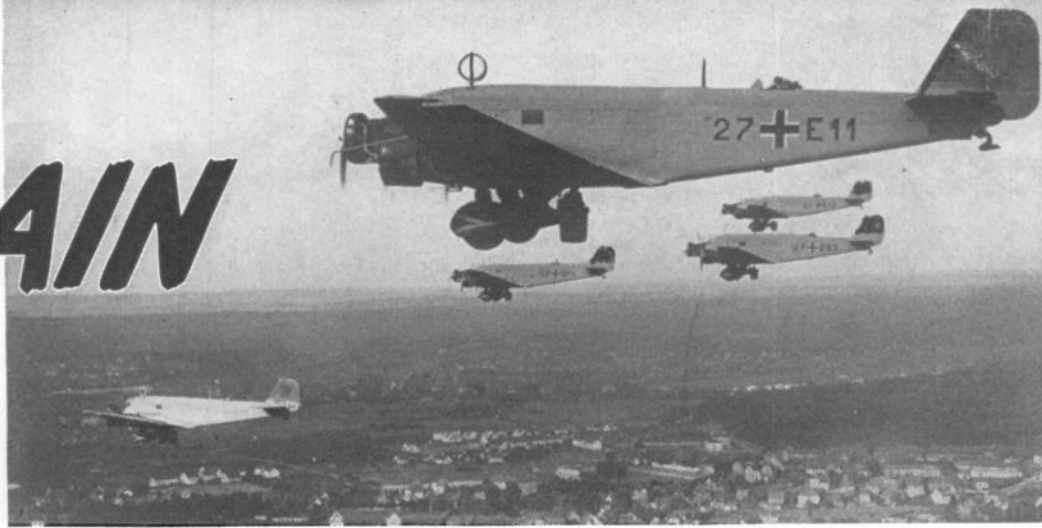


IN SPAIN

by

FRANK G. TINKER, Jr.

Former U. S. Army airman who recently returned from Spain; author "Some Still Live."



"The first bombers we went up against were tri-motored Junkers. However, their center motor gave them a blind spot forward. Franco retired them from daytime operations.



The Russian fighters' powerful engines had to be started by the above device.

up and fire right back at us.

The first bombers we went up against were tri-motored Junkers. However, their center motor gave them a blind spot forward and, after losing many of them, Franco retired them from daylight operation and used them only for night bombardment. They usually came over in formations of either three, six, or 12 planes—with an escort of anywhere from 50 to 80 Heinkels above them. Our monoplanes usually took care of the escort while our biplanes were working on the bombers. The Junkers were very slow so we seldom had any trouble getting into position for a frontal attack. Just before the assault our squadron would go into an echelon of echelons and

the planes would go in and down individually, with all four guns hammering away. Each plane would fire as long as possible, then go into a half-roll and dive away. The speed gathered in the dive would enable us to get into position for a second, and sometimes a third, firing dive.

After the tri-motors were retired from daylight service, the Junkers people brought out a bi-motored bomber which was very efficient. It was almost as fast as our biplane fighters so they were usually able to get away with any surprise bombardments they cared to pull off. Our monoplanes, though—when they were available—were fast enough to take care of them. These new Junkers had a double tail and our usual tactics were to get above and behind them, then dive down in line with one of the tails trying to get the rear gunners. After getting them the rest was easy, as they were defenseless from the rear without their services. However, we certainly appreciated having those big motors in front of us to deflect the bullets before we got the gunners. They were using twin .50 caliber guns, mounted on a bracket, and about every third bullet was of the explosive type. A formation of anywhere from three to 12 of those planes could really put out a volume of fire from their rear guns.

The Italians tried out one type of fighting plane about which there is still much controversy—a two-seater. I never did find out exactly what make it was, but it bore such a close resemblance to the regular Fiat fighters that I suspect it was put out by one of their factories. It was a colossal failure, though, and I

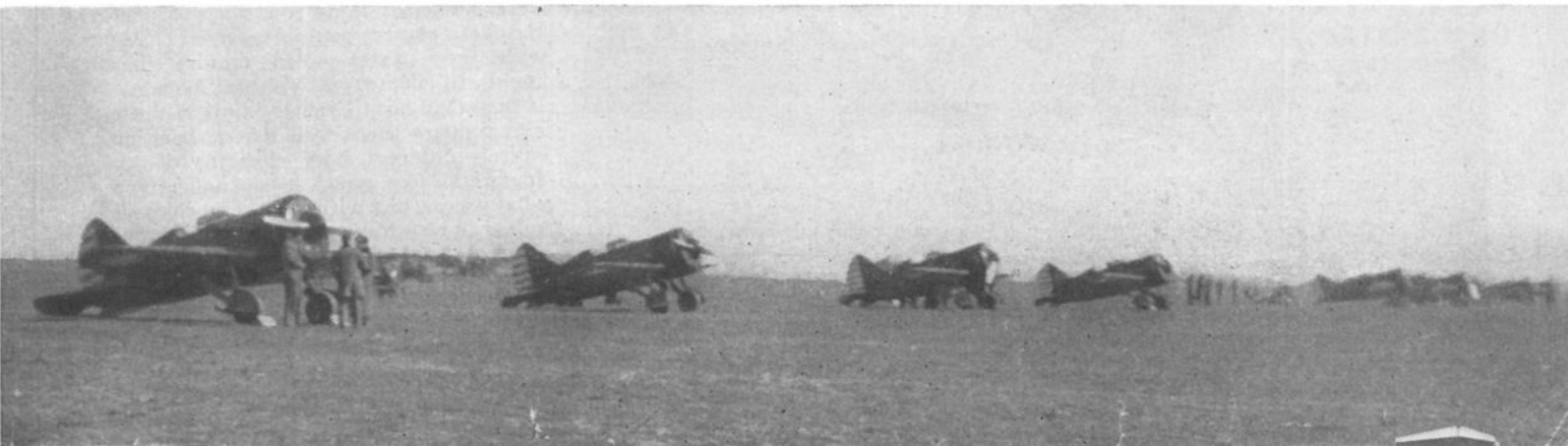
saw it in action on only one occasion. It might have made a better showing if Mussolini's pilots had been as efficient as the Germans, but they were too panicky. As soon as we discovered that we were up against fighting planes with rear guns, we lured them into a series of violent maneuvers and their own pilots did the rest. In the resulting confusion they forgot all about their unfortunate rear gunners and went into evolutions which were so violent that the centrifugal force flattened the poor fellows against the bottoms of their cockpits. This rendered their rear guns useless and the extra weight of both gunners and guns made them too heavy to even hope to try to maneuver with our own planes. As mentioned before, we saw them but once, and they were the laughing stock of the war for some time afterwards.

Toward the last the Italians brought out a bomber very similar to the Junkers bi-motored job. It was known as the Romeo and was very fast—possibly even faster than the Junkers. Their usual tactics were to cross the lines at extremely high altitudes, then throttle back and glide over our fields with as little noise as possible. Fortunately, high altitude bombing is very inaccurate so that their principal effect was upon the morale of our pilots and ground crews.

For instance, one morning we went out to our field at Campo Real and a couple of Romeos caught us by surprise. We had started our motors and warmed them up as per usual and tried out our machine guns. The noise of those operations made our ears ring and we were unable to hear the prowlers as soon as was customary. About five minutes after

The enemy dreaded the low-wing Russian monoplane fighters. Developments of the Boeing P-26, they had neither struts or flying wires, had a retractable undercarriage and two machine guns.

Photograph from Lyman Voelpel



I Fought in Spain

(Continued from page 12)

volunteers fighting for the government, and they were credited with some of the most outstanding work of the whole war, so we at least knew that there were some Italians who could fight.

Many questions have been asked about the methods of observation used in the Spanish war, also about the types of planes used in such work. The general trend of my answers to those questions will undoubtedly be rather disappointing to those who happen to believe in the use of planes designed solely for observation purposes.

When I first arrived at the Madrid front the enemy was using a plane so designed, but it wasn't very successful. It was a single-motored Heinkel known as the *Paloma Blanca* (White Dove on account of its color) and carried a crew of three men: pilot, rear gunner, and a combination observer and cameraman. They did fairly well as long as there was a solid layer of clouds in which they could seek shelter if attacked, but as soon as the clouds thinned out and finally disappeared altogether, they were useless. Our monoplanes could catch up with them long before they could reach the security of their own territory. We never saw a single one of them after about the first of April. They were used a little bit over the front lines but they never ventured very far back in our territory. After the first of April the enemy used bi-motored bombers for their interior observations.

We used a sort of a double method in our own observation flights. For observation of areas within about 15 or 20 miles of the front lines we used our bi-plane fighters—for anything beyond that we used our fast bi-motored bombers (Katiuskas).

The advantage of this system was that the enemy anti-aircraft batteries were usually more or less concentrated in areas close to the front lines and our fighters could get much closer to the ground than the Katiuskas and still manage to keep clear of their fire. On several reconnaissance flights we actually flew under 500 feet and still returned with our reports. At that altitude the A. A. guns were practically useless—the gunners seemed to have trouble setting their fuses for such short distances—and the A. A. machine-guns (.50 caliber) fired such heavy streams of tracer that they could actually be seen in time to evade them (that was where our maneuverability came in handy). Camouflage was usually better near the front, too, but at that altitude we could make out anything of importance. We could also take time out to machine-gun any enemy convoys we happened to run across.

Our biplane bombers had a cruising range wide enough to fly to any part of Franco's territory and return with gasoline to spare. They usually covered the enemy's heavy bomber fields, which were usually located far back of the lines. They also kept their eyes peeled for any signs of supply depots or munition

dumps. They carried radios so that even if they were shot down they could still get their information back to headquarters up until the last moment.

Another subject about which many questions have been asked is that of ground strafing. Here, again, the answers will prove to be disappointing to the supporters of attack planes. We had planes (Rasantes) which were equipped with ground strafing guns, but they were primarily light bombers. They were very slow and flew at too high an altitude.

All effective work of that sort was done by our fighters. We could come down in a dive and, at the bottom, have sufficient speed to maneuver around and dodge anti-aircraft fire. Fifty caliber anti-aircraft machine-gun fire would almost certainly be effective against low and straight-flying attack planes. Our present-day Army attack planes are entirely too large to do any maneuvering. We could maneuver a patrol of *three* of our biplane fighters better than one of them could hope to do.

The last subject on the list concerns the effectiveness of anti-aircraft gunfire. As far as I could see—and that was the general consensus of opinion of my fellow pilots—its principal effect was to demoralize new front-line pilots. In all of the time I spent over there I saw only two planes brought down by anti-aircraft fire. Both of those were brought down by direct hits—which seems to prove that the archie gunners still have to depend on luck for their victories. Of course, time after time we returned with shrapnel holes in our planes and pilots—but we still *returned*. Which proves that modern archie shells still have plenty of room for improvement. In most of those latter cases a few minutes' work by a mechanic with glue and patches—or by a doctor—would be sufficient.

During the Brunete offensive directly in front of Madrid, the Fascists were using the latest types of German rapid-fire guns against us. They were very similar to the "secret" British pom-pom. We made several flights every day for about two weeks and were fired upon every time we crossed the lines. Yet, they managed to bring down only one plane—and that was a direct hit upon one of our monoplane fighters which was making about 300 m.p.h. at the time. All in all, I would say that anti-aircraft fire is not nearly as effective as our United States anti-aircraft advocates would have us believe. The best defense against enemy planes still seems to be to "old-fashioned" fighting planes—especially when they are of American types.

In closing, I might say that if American plane manufacturers uphold their present standards, we need never fear invasion by foreign aircraft. The only country in the world which has planes which can even hope to compare with ours is Russia—and their planes are merely copies (and, in some cases, developments) of our planes. In fact, from conversations which I have had with Russian political representatives in Spain, I have good reason to believe that we have a secret military agreement with the Soviet Union.

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