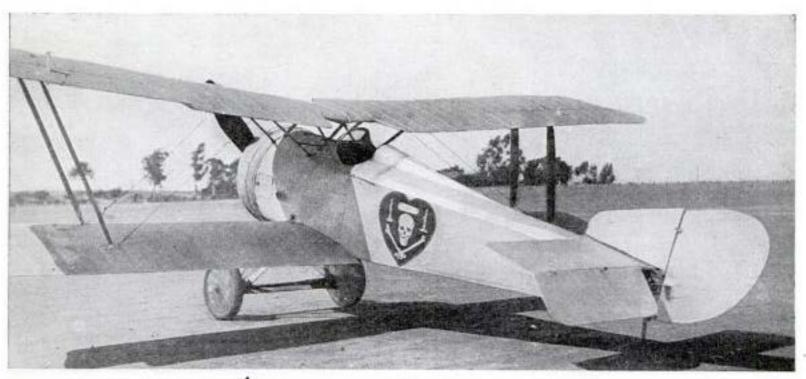
## Nungesser's Hanriot in U.S.A.

by FRED L. WESTLAKE

Not many genuine old wartime planes exist in the United States, particularly ships that are in flying condition, but the Nungesser plane is still in excellent shape and is still flyable.



This Hanriot biplane is the original plane used in combat by Captain Charles Nungesser of the French Air Service and bears the original insignia used by the French ace during the war. It is now located in California.

THERE are very few authentic wartime crates left in this country that are in flying condition. Jimmy Granger, Clover Field, Santa Monica, California, however is the proud owner of a plane used in actual combat by Captain Charles Nungesser of the French Air Service.

When Nungesser was in California, he made Clover Field his headquarters and the mechanics at this field did most of his repair work. When Nungesser made his ill-fated attempt to fly from France to America, he left his war plane with Jim Granger.

Finally, when all hope of ever finding the well-known French flyer was given up, Mrs. Nungesser presented the Hanriot to Mr. Granger as a tribute of friendship between the two men. The new owner has kept the plane in condition and has flown it many times.

For a while it was on exhibition but the vicious souvenir hunters become so obnoxious that the plane had to be put in a roped-off area in the hangar. It may still be seen if Mr. Granger can be assured that you will not tear fabric off the wings or steal the prop.

If other owners of wartime ships were as careful of their planes, we would still have a good many of these interesting relics of pioneer war flying. Unfortunately, most of the ships of this type belonging to private owners have been allowed to deteriorate until they are mere tattered skeletons. A good many have been cracked-up or

completely "washed-out" while being flown for motion picture work.

An outstanding example of the latter is furnished by the Gotha that was used so effectively in a number of war pictures. The plane was not deliberately cracked-up as is sometimes the case. But one day, while doing aerial maneuvers for a war movie shot, the plane was thrown into a spin. The pilot, failing to bring her out of it, took to his chute while the mechanic for some unknown reason failed to bail out and was killed.

The plane, of course, was a complete "washout." I mention this merely to indicate one of the reasons why war service planes of 1914 are all but extinct with the exception of those in the museums. The next fad for war movies will probably finish up the few that are left.

The Nungesser plane is of particular interest because he is perhaps the best known French ace in America. It is true, that Rene Fonck with seventy-five German planes to his credit, and George Guynemer with fifty-three accredited victories, outrank him as an ace, for Nungesser brought down but forty-five

Captain Nungesser, however, had more personal contact with Americans due to his tour in America. His pleasing personality and lecture appearances contributed to his popularity in the United States. Added to this, of course, was his spectacular martyrdom as a victim of the exceedingly hazardous East-West flight across the Atlantic.

In spite of the fact that the Clover Field hangars house modern commercial planes, trim racers and a freak flying gadget called the "Whatsit," which everyone has seen in the newsreels, the Nungesser relic is easily the most interesting ship in the hangars.

The ensignia on the fuselage is unusual enough to attract immediate attention. According to the story, the Huns placed a bounty of fifty thousand dollars on Nungesser's head. The French ace responded by painting a coffin and candles on his ship. The coffin was a flaunting challenge to put him in it if they could. Later the skull was added.

Every time Nungesser suffered a head injury as the result of a crackup he added a line or two in accordance with the markings shown on the 
X-ray pictures. Later, when the intrepid flyer injured his legs, the shinbones were added to the skull decoration. The fractures shown on the 
X-ray were also duplicated on the shinbone ensignia.

In this manner, the Heines were supposed to know just what progress they were making toward putting the Frenchman in the casket. Nungesser is probably the only allied aviator that kept such an emblematic and ironic score card for the benefit of the enemy, or perhaps he intended it for a personal diary. The significant part of the whole thing is that, while this was

and the best of the same

going on, he was constantly bringing down enemy planes.

Nungesser had some twenty crackups in all. The word suino (swine) is written on both sides of the fuselage. This was his greeting to the enemy. It's quite evident that he didn't like the Bosche flyers any more than they liked him.

This ship was flown by the owner, Jim Granger, during the filming of "Hell's Angels." Incidentally Mr. Granger had a rather nerve-racking experience while flying this ship. One day, as he was flying over Hollywood, the Gnome Monosoupape motor on the Hanriot, for no reason at all, conked out. Granger pulled everything on the dash in a frantic effort to revive the dead powerplant but without success.

Of course, this type of ship loses altitude very fast with a dead prop and he was just about to plunge into a reservoir when the motor suddenly took hold and saved him from a very wet forced landing which would probably have been the end of another wartime relic as well as Mr. Granger.

However, Mr. Granger usually flies with a 'chute when piloting this ship. He doesn't distrust the Hanriot, but it's just in case! Those who have had experience with the single-valve type of engine of the war era, no doubt understand and agree with the owner's foresight.

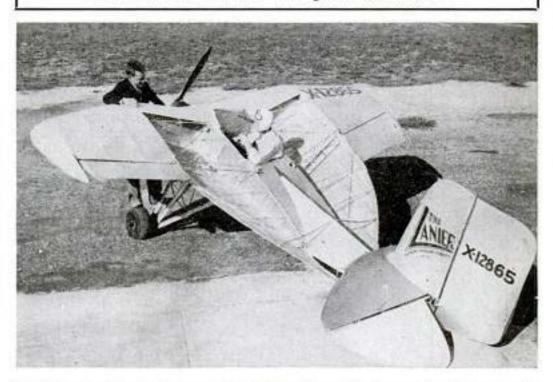
An interesting feature of this plane is the unusually small tail assembly. Mr. Granger informed me that one aviator, after a brief try-out, refused to fly the Hanriot because he insisted that the small area of the tail surfaces made the plane cranky. The owner, however, has experienced no particular difficulty in flying this pioneer crate which has survived the "dog-fights" of the World War and the sometimes equally hazardous sham battles of Hollywood.

Captain Nungesser managed very well in spite of the abbreviated tail surfaces, for ten of his forty-five victories were scored with this ship. The size of the rudder was of interest to me because I know that imitation Fokkers are sometimes made for motion picture purposes by enlarging the tail assembly of an ordinary Travelair. A Hisso motor and a few changes in the cowling do the rest. The result is an obvious fake that is quite readily detected by any aviator who has a knowledge of the two types of planes, but the general public is none the wiser.

A knowledge of some of the fakes put over in pictures, however, adds to the interest in knowing that occasionally real war planes are used.

Very clever reproductions have been made from time to time by the producers of war films and the construction of such ships has reached a fine point. Two Spads, recently rebuilt from "Tommies" are the last thing in accurate faking. So far as interest goes, little is actually lost by the use of faked planes.

## The Latest Lanier Vacuplane Successful



The Lanier Vacuplane showing the peculiar chambers between the wings and body that produce lift.

FROM TIME to time, POPULAR AVIATION has published data on the development of the Lanier Vacuplane during the course of its development, and we are now in possession of data on the latest of these ships tested at Troy, N. Y.

This development, by Edward H. Lanier, began in 1908 in Cincinnati, Ohio This was a monoplane with an open concave cell in the center section. Later, three other models were built and flown. The present Vacuplane gives satisfactory take-off and climb and is exceptionally stable in flight. It is driven by a 36 h.p. Aeronca engine.

• It is claimed that the Vacuplane does not slip nor dive in a stall and that the concave cell acts as a parachute when it is settling down.

## Airworthiness Requirements Questioned

HIS protest, from a prominent aeronautical engineer was received at our office. It is representative of several on the same subject.

DEPARTMENT of Commerce Officials. Under your present policy of changing the airworthiness requirements every two weeks, how is it possible for one ever to complete an analysis for approval—or is it part of your plan that no one is to be able to do so?

In order to show the reason for these questions, let us for the moment review the events of the past year in regard to the airworthiness requirements. Until that time it had been the custom for changes in the requirements to go into effect on January 1 of each year, with advance copies of the new bulletin ready by the first of October. That happened in the fall of 1933 as usual, and while the requirements were drastically changed, the industry felt that the change was a step in the right direction, and adapted itself to the new requirements. Late last March came another revised bulletin, containing several minor changes, which was to be effective on July 1. A meeting of the manufacturers was called for late in May to discuss the changes. As a result of the meeting, several more minor changes were made, and the date of effectiveness set forward a month.

Before that date, still more changes were made, and the date set forward, again. In August a memorandum was sent out which announced that the new requirements would go into effect on October 1, with nothing said about changes of major importance.

That was the end of the story, until about November 1, when the requirements which had become effective a month earlier were finally released. It is easy to imagine the feelings of the industry, when it was found that in these new requirements the definitions of the basic load conditions, and consequently the entire procedure in an analysis.

As if that had not been enough, the industry then had to wait two weeks more until Bulletin 26, the companion to the requirements, was released.

That seemed to be the end of the changes, and the industry tried to adjust itself to the lost six weeks, and get started over again.

But you, Department officials, did not seem satisfied even then. On November 24, ten days after Bulletin 26 had finally been distributed, you issued a memorandum revising it. You issued the memorandum under that date, yes, but you did not send the memoran-

(Concluded on page 262)