# Anthony H. G. Fokker



The Fokker D-7 was the outstanding enemy plane of the World War and had about everything that a pursuit ship should have during that period.

THREE paragraphs express vividly the most significant phases in the life of Anthony Herman Gerard Fokker, the Flying Dutchman from Holland.

Quoting Fokker himself: "First, I offered my ship to England. I was turned down. Then to Russia and Italy did I go, yes, and even my own Holland, but was again disappointed. I was a neutral. I should have preferred the Allies to have my ship. But they said 'No' to me, so I went to Germany. It was accepted."

Tony Fokker said these words to this reporter. The second phase can be shown by a paragraph culled from one of the inexhaustible stories of world

war aerial combat:

"...the R.F.C. pilot looked over his shoulder as his ship trembled under a rain of bullets. There, roaring down out of the sun, fire-red noses spouting flame, rode three Fokkers. In another minute..."

These words briefly describe a drama that was enacted on countless occasions on whatever front Fokker planes were used during the war. Peace came and with it such newspaper reports as:

"Charles Kingsford-Smith and associates embarked on the first leg of their round-the-world journey today. Flying a giant Fokker powered with three motors, the party expects to. . . ."

Auspicious? Yes. But life really began for Tony Fokker when he was thrown out of school as a dunce!

Born in the jungle village of Kediri, Dutch-owned Java, on April 6, 1890, Tony Fokker was living the life of a barefooted little Tarzan of the forest primeval when other boys were learning their ABC's. He never had a pair of shoes on his feet until his father returned to Holland. Tony was then 6.

Whoever "invented" readin', writin' and spellin' must have seemed a fiend

to young Fokker. Multiplication tables, when he finally got around to them in the neat little red schoolhouse in Haarlem, were about the only part of the curriculum that made any sense to him. He was early an adept in arithmetic and later, in mathematics. He could always remember figures and work with them—as long as they were on paper. It is that way even yet. He can do most anything with them that way but he can't even remember telephone numbers.

He became so alarmingly unproficient in the three R's that an exasperated teacher, after marking him as the classroom dunce, finally fired him.

His education, curiously enough, was finished with the highest marks given out. The amazement of his learned but somewhat obtuse instructors came to an end when Tony, on graduation, explained that he had bored a hole in his desk, inserted discs containing all the desired information and passed his exams with flying colors! It was too late to do anything about it. Tony had his education—even if most of it were on paper.

It was the first manifestation of his inventive genius that brought him to

fame and fortune.

Wilbur Wright came to France and made a 31-minute flight. The event astonished Europe. Tony didn't see the flight but he heard about it. What a man, he thought. And what a field in which to work. Aviation would be his stamping ground. He had never seen a flying machine in the air but he set out to build one. He reasoned that the Wrights had been similarly handicapped, but they were flying. For the first time in his life he took to serious study-of machines and winds and physics-things he could understandif he could reduce them to mathematical expressions on paper.

by

JAMES FARBER

Special correspondent
for POPULAR AVIATION

He built an airplane and it flew. It wasn't a very good machine, technically speaking. But it did do the thing it was built for, hence it was a success.

His skeptical Dutch neighbors gathered with shaking heads to watch the "crazy Fokker" fly his "bicycle egg-crate." As in countless cases through ageless time, the scoffers remained to cheer.

In those early days, Tony had two memorable accidents that preluded his role as a darling of Fame. On one occasion his lumbering craft was shivered by the explosion of its gas tank. He had to think fast-he could do it when he had to-to get out of that predicament. But he did. Another time while sailing over Johannisthal airport at Berlin, in 1911, a wing buckled and Tony and his passenger were injured, the latter fatally. Memory of that played the determining role in a drama in which he became involved that might have blasted his career.

Tony Fokker knew, when Germany invaded Belgium and when England declared war on Germany, that the time had come when airplanes would be put to the acid test. It would be his time, too, he believed. All the theories of the military and commercial value of airplanes; all the fanciful conceptions of the role of aeronautics in civilization were about to get their baptism of fire—and blood.

Wild with enthusiasm, Tony went to England. Austere war lords at the war office listened politely to his story and gravely turned him down. Somewhat chastened, Tony went to Russia, then to Italy and finally to his native land. A less determined Dutchman would have given up in despair and disgust. Fokker, instead, resolved to try Germany. Shrewd military visionaries in that country gave him the chance he needed.

Established in his tiny factory at Schwerin, in Mecklenburg, 250 miles from Berlin near the Baltic sea, Fokker began making his contribution to German arms. His planes were regarded as exceptionally airworthy and maneuverable. They were durable and fast. The young inventor began to acquire a reputation.

Then came a series of deadly blows aimed at the Imperial flying corps.

An unidentified Frenchman was stalking through the skies spreading death and destruction among any

## the Flying-Dutchman

TAKE heart, you inventors, designers and builders of home made aircraft. The road is rocky and the dawn seems many hours away. But profit by the story of the world's best known designer and builder of planes. Be encouraged after reading of the difficulties that beset his path and would have disheartened many a brave soul. Study this review of the career of the inventor of the famed Fokker aircraft.

groups of German planes he chanced to meet. In those days, planes were used chiefly for espionage over the German lines. Scouting and artillery control rounded off the list of functions of the air corps. When two planes met they were swung wildly at each other while the pilots engaged themselves in blazing away at each other with shotguns filled with bolts and scrap iron. Very few planes were lost in this clumsy fashion,

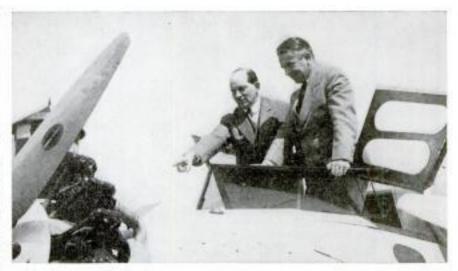
The stalking French terror of the skies, however, not only shot down his victims with a machine gun, but fired through his propeller blade as it

whipped the air!

The Imperial Staff was incredulous, then angry, then frantic. The Frenchman must be captured. He was. But only because he was forced down in a fog one day back of the German lines. German infantrymen seized him before he could burn his plane. The secret would be a secret no longer. The pilot proved to be Roland Garros who had barnstormed the United States in 1911 with the Moisant troupe of flyers.

Knowing his inventive genius, Berlin military graybeards summoned Fokker to army headquarters. Here was the contrivance, they told him. What did he make of it? Fokker asked for time and the use of the captured gun. He rushed home with it and in 48 hours returned with a new device that was perfection itself, mechanically.

Like many strokes of genius it was simple. Fokker arranged his prop so that in revolving, a knob on one of the



Anthony H. G. Fokker (left) is explaining an outstanding point in the design of a late Fokker transport.

blades hooked up by a rod and knee lever to the trigger of the gun discharged the gun after the blade was past the bullet's path. Simple? Fokker says the solution came to him in a flash—in a split second.

Forgetting sleep and every other consideration except the revolutionary triumph he had achieved, Fokker tirelessly hitched a plane on the back of his automobile—with a machine gun mounted and synchronized on its nose—and burned up the roads between Schwerin and Berlin. He arrived excited and enthusiastic at Johannisthal airport and summoned members of the general staff for the tests.

He took his ship into the air, dove on the ground targets, shot holes through some and obliterated others, then came down for the verdict. The staff officers informed him that it was all very well done but there must be some trick to it. The only practical test, they stated, was to shoot down an enemy. If Herr Fokker would do that, the invention might be approved and used in quantities.

Fokker was staggered. What more proof did these military dunderheads require than that just provided? Angry beyond words, Fokker said he'd show them. Cold and suspicious, the officers told him to go ahead and provided him with a uniform and identification card lest he be captured and summarily shot as a neutral civilian not minding his own business. The card read:—

#### "Lt. A. H. G. Fokker Born April 6, 1890."

Then the inventor started on his man hunt. He had not far to go before he spied a two-seater French observation plane peacefully cruising over German territory. Fokker, in the sun, banked his plane and let forward his control stick for the downward plunge. It would be all too easy.

Then into the mind of Tony Fokker there flashed a picture of that bitter day when he had carried a helpless passenger to his death. After all, what right had he, a neutral, to shoot down to their deaths two more helpless men? If those dunce military experts required this much proof he, Tony Fokker, would chuck the whole business and they could invent a synchronizer themselves.

He left the Frenchmen unsuspecting and unmolested. At Johannisthal he told the militarists in no uncertain terms that under the prescribed conditions he was through. The ultimatum was countered with an order forbidding him to leave the country although a concession would be made. Lieut. Oswald von Boeleke, crack pilot, would take Fokker's plane over the lines for the desired test. If successful, Fokker would be given the contracts.

Von Boelcke put it over. The little factory at Schwerin became a beehive of activity. It was enlarged to include



The Fokker tri-motor left a profound effect upon transport plane design. It is still used extensively in Europe.

an old military prison, new machinery was installed and more men came to work to turn out the miracle machines of military aviation. From a pay roll of 160, the number jumped to 1600.

It is no exaggeration to state that Fokker personally revolutionized air fighting. He introduced the personal element into aerial combat. Garros' machine gun was a crude means to a deadly end. Fokker's invention made the lethal process mechanically perfect.

With his device the German flying corps reduced its enemies to abject helplessness in the air. No French machine could withstand the assault of a Fokker plane with a nose spouting lead and flame. The skies were dominated by the Black Cross of Germany. The circular tricolor of France was blasted from the heavens and the Germans spied at leisure and at will on enemy troop movements with their supporting air forces utterly defenceless.

These statements are not overestimates. There are official records aplenty to show the horrible losses sustained by the French air service during the year 1915. Probably Fokker would never have considered leaving Germany had he not been suddenly ordered to stop manufacturing his own planes and start in on Albatrosses.

Once more he was amazed at the crass actions of his Berlin superiors. In view of his recent triumph with the synchronized guns, the matter demanded an explanation. About to ask it, he was further confounded by a military order creating him a German citizen and forbidding him to discontinue the manufacture of airplanes unless he preferred being sent to the front lines as a common soldier.

The illegal citizenship order didn't worry Fokker so much as the insult to his creative genius and his celebrated planes. He accordingly raced to the front line airdromes where he had many friends and asked them to "lobby" in Berlin for an army order giving pilots the right to choose their own ships. Since most flyers preferred Fokker planes, it was a foregone conclusion that Fokker would win.

The war office ordered a contest to be held to determine the best battle plane. Fokker entered an entirely new model, won the contest hands down, was re-awarded his contracts and saw his commercial rivals ordered to make Fokker planes. And that was the birth of the famed Fokker D-VII.

The inventor eventually learned the true reason for the drastic steps taken to keep him in Germany. German spies in England learned that the British government, anxious to obtain the services of the man whose plane was officially credited with fifty percent. of Allied aerial casualties, was about to approach him secretly with an offer of 2,000,000 pounds (about \$9,500,000) to make planes for the side that spurned him. Fokker never received this offer. But the German government knew it (Concluded on page 54)

### This "Fleet" Is the Macon's Elevator and Tender

by D. F. MacLACHLAN



Who'd know this little 2-place Fleet biplane all equipped for hooking on the Macon? This is a new idea employed by the U. S. Navy.

SELDOM seen on the ground except at Moffat Field, Sunnyvale, Calif., and therefore seldom photographed because of the ban on pictures at the lighter-than-air base, this little Flect biplane serves as a ferry from the ground to the dirigible Macon while she is in flight. It used to drop and pick up passengers and small supplies. The hook for contacting the big Macon is plainly shown over the top wing, and hooking on is now accomplished with ease at any time and under most conditions. This calls for good climbing ability and low landing speed.

#### The First American Seaplane With Airbrakes

THE first seaplane manufactured in the United States equipped with wing trailing edge flaps, commonly known as "airbrakes", is now undergoing final flight tests before delivery to the Scadta Airlines of Colombia, South America, where it will fly on regular schedule over the Magdalena River, carrying passengers, mail and express.

This unusually clean transport airplane is a product of the General Aviation Manufacturing Corporation, Dundalk, Maryland, which is a subsidiary of North American Aviation, Inc., affiliated with the General Motors Corporation.

It is equipped with a Pratt & Whitney engine of 700 h.p. which drives an all-metal controllable pitch propeller. It has a twin float arrangement with specially designed bracing to meet operating conditions of the Scadta Airlines, and has a maximum speed of over 165 m.p.h. It lands at approximately 60 m.p.h. with the airbrakes, or flaps, in extended position.



Here's the new General Aviation semplane, the first to be equipped with airbrakes,

### Tony Fokker

(Continued from page 8)

was to be made and took firm steps.

The story of the birth of the D-VII is an important chapter in aviation history, since it proved to be the most terrifying Juggernaut hurled through the skies at an already sorely harassed enemy.

Fokker took this model to Johannisthal for the contest. Taking it upstairs on a trial flight he was amazed to find the plane a "natural" in the spin. So "natural", in fact, that a pilot from the front unused to its controls would most surely crash to his death on his first flight.

The night before the contest, Fokker moved into his hangar with several trusted workmen. They cut the fusclage in halves with a blow torch, welded in additional rigging making it longer from wing to tail, and then covered over their work with skilfully sewed canvas. Thus, the D-VII, perfect from an engineering standpoint, won the contest and took its place as master of the skies.

It was not long after this—sometime in 1916—that Tony invented and perfected the now famous triplane that bore his name. It was commonly called the "tripe" by all flyers on the Western front. Not long after its appearance it was known far and wide as the arch terror of single and dog-fight combat. In the space of a single year Tony Fokker wrote a blazing new history in aerial warfare with his D-VII and his "tripe."

Then the war ended. Sailors at Kiel mutinied. Soldiers at the front line turned to march on Berlin. The Reds shouted from soap boxes and the Reichstag was in upheaval. The revolution was on! Franz Ebert, a saddlemaker, was made president. Imperial Germany became a republic and the Kaiser fled.

Bands of revolutionists held Schwerin in a vise-like grip. A delegation called on Tony Fokker at his factory. Would he ransom himself? Yes, Tony said, he most certainly would. What value his millions of marks if he were a dead man? Most certainly he would ransom himself. Give him a few hours, he said.

That was all he needed. He slipped through their cordons and went into hiding until it all blew over. The revolution did blow over, but war hates did not. The Treaty of Versailles demanded the destruction of most of Germany's war equipment. It specifically ordered all Fokker planes and machinery destroyed,

It was at this time that what will probably go down in history as one of the world's most daring and brazen smuggling plots was executed. Tony didn't intend to lose either his planes or his machinery. The only answer was to try to smuggle what he could into a neutral country. What better one than his own?

Organizing a gang of trustworthy henchmen he began operations. From one end of the railway to the other—Schwerin to Holland—guards, trackmen, brakemen, firemen, engineers, customs agents and signal men were shamelessly bribed. Then, one dark night, six long freight trains steamed slowly out of Schwerin loaded to the rods with airplanes, engines and machinery. There were 250 planes and 400 motors on those six sections!

And they all got through!

Meanwhile, Tony put all his cash into bags and made for the border. He carried only immediate travel needs on his person. His agents were transferring his fortune. One, a cook from a certain foreign embassy, carried a dilapidated satchel containing \$400,000 in bills over the line and delivered it safely to its owner.

In Holland Tony built a new laboratory and sent his steady stream of ideas to his adjoining factory to be tried out and perfected. In 1925 he brought to America a trimotor monoplane. The industry was astonished but it was quick to see that Fokker had a great idea. Meanwhile, a stunt flight put him over.

Comm. R. E. Byrd was looking for a suitable plane. He approached Fokker. Fokker said no. He had only this one

trimotor for exhibition in this country and had no desire to sell. Byrd asked him at what price, all things considered, he would part with his ship. Fokker said \$40,000, jacking up the price. To his surprise the check was written immediately. Fokker denies that he intended to sell it, which is not unlikely since it was the only one of its kind. But then Tony Fokker is nobody's fool.

Fokker's single-engined monoplanes had already made a name for themselves. The name Fokker first became associated in a big way with American aviation when the United States Army air corps placed an order with the Hollander, Lieuts. Oakley G. Kelly and John A. Macready of McCook Field flew a Fokker monoplane powered with a single 400 h.p. motor on the first non-stop transcontinental hop. That was in May, 1923.

Several other of the famous Dutch inventor's planes were the "Josephine Ford" (Byrd to the North Pole), the "America" (Byrd across the Atlantic) and the "Southern Cross' (Kingsford-Smith around the world).

The inventor says he made about 30,000,000 marks during the war. He has already filled contracts with the U.S. Army air corps totalling \$750,000. He says he lost most of the German rewards and spikes the story that he flew his millions out of the country. He was entirely too closely guarded to get away with that, he says.

Tony Fokker, citizen of the world, still pursues his experiments in whatever laboratories are at his disposal in case he has just sold one of his companies to some high bidder. He does plenty of flying but it has lost its zip for him, he says. Test-piloting his own ships is a duty in his opinion, and he never shirks it.

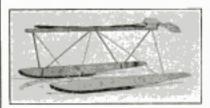
Some of his personal traits are the result of long years spent within the restricted confines of his laboratories.

But, there is one marked characteristic possessed by Tony Fokker that none can deny. He is a demon for publicity and attains publicity and the limelight as easily and simply as May West. Anything that Fokker does is front page news. It was this way during the war and has been ever since. He doesn't court publicity—it comes to him without effort. Just as an example, few of us know who designed the Spad, the Nieuport or the Camel, but all of us know the genial designer of the D-VII!

He despises walking, but is very fond of swimming and yachting. He usually manages to live in a locality where it is convenient to maintain a boat. He plays no card games and can't stand tobacco although the habit in others doesn't disturb him. He uses no liquor and can go several days without sleep. He is partial to sugar mixed in water which he finds very stimulating. And he simply can't remember figures—even telephone numbers!

He speaks Dutch, French, German and English and has taken out his first citizenship papers in this country.

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