Willy Messerschmitt-Munich,Germany--November,1960-by Ken Leish

As a boy,I had a general interest in technical things and the successes of the Count Zeppelin with his airships. Thus arose my interest in aeronautics,but the airship seemed too large to me at that time.

At the age of ten I started building airplane models, with rubber engines.

Q: When did you meet Herr Harth?

Messerschmitt: Around 1910 or 1911. He got acquainted with me through my model building,and he took me to his shop and his flying slope,where he made his glider tests. The construction of these simple airplanes he explained to me. At the age of 15 I made my first glide. From then I was quite enthusiastic,but later the technical side of flying interested me more and more. And these glider tests with Harth were later expanded to soaring tests,in 1921 and 22.

At that time I started with motor airplanes.First I equipped a soaring plane with a motorcycle engine and a propeller.Then I built my first motor airplane in 1923 or 24. And one of these first airplanes still exists, a small two-seater with a 30 horse-power engine.

Messerschmitt: In 1925,I built a six-seater airplane of sheet metal,a 120 horse power engine. In between,I made light planes and small commercial planes.

Q:Was there great interest in sport-flying at that time in Germany?

Messerschmitt: There was very little money,actually.It was more on the basis of enthusiasm at that time.

In 1929 and 1930 I won twice the Tour of Europe,the grand flight.The speed was about 150 ØØ ØØ or 160 kilometres an hour at that time.

The last pure,light sport-plane I built in ØØØØ1932 had a speed of 230 kilometres per hours. The next airplane was the Messerschmitt 108,a private plane which was perhaps the first kind of that kind,and all successive airplanes of that class are very similar.

Q:Could you perhaps discuss some of the major problems involved in the testing of the 108--accidents in testings and so forth?

Messerschmitt:This looked,of course,difficult at that time. But today it looks very easy--and it is.ØØØØ That is always the way.

That was the first light plane with a retractable landing gear and with very large flaps and slots and spoiler control. And it was the first of its kind to be constructed all of metal.

Q:How long did it take to develop the 108?

Messerschmitt: Development was very quick then.It was about five to six months between the first drawing and the first flight.

Q:Were there any accidents in testing the retractable landing gear?

Messerschmitt:The accidents were with the undercarriage because the pilots forget to extend the landing gear on landing in spite of all the warnings about this novel feature. This was the first airplane that was a commercial success. Several thousand of these airplanes have been built altogether.

Q:When the first ones were built,how much did they cost?

Messerscmitt:The price of the airplane,including the engine, was about 40,000 marks.

Q:And how fast could it go?

Messerschmitt: A little over 300 kilometres per hour,about the same spped as the single engine airplanes of today. There is still one of these in my factory.

Q:You said that at first,the 108 seemed very difficult. What seemed so very difficult about it?

Messerschmitt:It was a design done very carefully and with very much attention paid to the weight of the airplane and it was for its pay-load and for its number of passengers a very small airplane.

Q:And it was a big success commercially?

Messerschmitt: And due to this technical success that was first apparent we were awarded the contract to develop a fighter airplane.And this was the well-known Messerschmitt 109 of which about 30,000 have been built altogether.

And the 109 turned out to be a prototype for many fighter planes that have beeb bu lt all over the world. This technical success also led to another contract also being awarded to me--that is a twin-engined fighter,the Messerschmitt 110.

Q:Was it the 109 that made a world speed record?

Messerschmitt:The 109 was of course developed further and made more powerful engines and especially prepared plane with an gained the world's speed record in 1939.That world record still stands for that class of airplanes,with propeller engines---officially no higher speed has been gained.

My ambition was to gain top performances in altitude,speed and range.Amd noting the difficulties and limitations that were imposed by the propeller,I began very soon to think of the application of jets.

Q:When did you first begin to work on jets?

Messerschmitt:The first work was in 1938. But this airplane flew first with a propeller engine since the engines were not available yet--but it was built for jet engines, and flew first in 1939. This airplane already had many of the signs of the modern high speed airplanes. It had a symetrical air foil; it had a relatively thin air foil for the standards that were then applicable, and it did have some wing sweep which is needed to fly close to the speed of sound

Q:Is it true that there was a faction in the government at that time which did not want work on to be continued?

Messerschmitt:Before the war, it was supported by the government, but during the war, or at the beginning of the war, the government stopped further development of it. But we continued the work secretly, but not with the effort that was really needed.

Q:Did you try to convince the government that jets would be of great importance?

Messerschmitt:I had a very sharp disagreement with the government officials and I tried to convince them at least to build a small series of airplanes in order to get more experimental flying and to train pilots on this type of airplane.

But only in the fall of 1943,General Gallante recognized the importance of this development and could convince the government to place the contract for it. But it is well known how long it takes to get an airplane into production and with the difficulties of the second half of the war it was of course more difficult than in normal times. So only in the second half of 1944,a small number of the planes were delivered to the troops. Today we know that the airplane could have been given to the fighting units two or three years earlier if the government hadn't hesitated.

Q:There was full government cooperation,however,on the 109, which was the most successful fighter of the war. Could you perhaps tell some anecdotes of the troubles in testing and building the 109?

Messerschmitt:The development of the 109 started somewhat strangely since the government had already given contracts for the development of a modern fighter to three companies in Germany. My company was not of the important companies, and therefore we were not given any contract for this development at first. But one day,the head of the development section of the government wrote a letter asking why I was working on foreign contracts when we had very important work to do for the government. I said,"If I have no government

contract,I cannot do government work."

After that,I became--the general requirements for a fighter airplane,I studied closely with my engineers and when we studied the requirements we noticed that it was not up to date-it asked for less than could be done.

I made a counter-proposal for a fast bombing-airplane that was technically feasible but could not be intercepted by the fighter airplane made to these specifications. And I told the development staff of the government that I did not think that it was a right thing to develop an airplane according to the old specifications. On that,I got a free hand to develop a plane as I wished.

And when later the four airplanes that were developed for the specifications were test flown, my airplane had much superior performance and was actually selected as the standard fighter for the air force.

The development was,of course,very exciting,because I turned to very high,at that time very high,landing speeds in order to make the airplane small. The wing-loading was over 100 kilograms per square meter which was extraordinary high for that time,and before the first flight of the airplane, we moved everything from it that was not absolutely needed in order to get approach speed. The airplane weighed on its first flight about 1600 kilograms. At the end of the war,the same plane with more powerful motors and more equipment weighed exactly twice as much.

Of course,the air frame was reinforced all the time during this development to stand up to the higher air loads.

Q:Were there many ideas that had to be changed during the testing period?

Messerschmitt:The first trouble was that the flutter calculation showed that the airplane would have a limiting speed for wing flutter of 600 kilometres per hour. We were,of course,quite despaired at this result,but we had avery brave test pilot, Dr. W , and said after that nobdoy could help,not the research institute nor anyone else.So he said that he was willing to fly closer and closer to this calculated limit. So he started doing longer and longer dives and was pretty soon over this calculated limit,600 kilometres,and up to the original 900 kilometres per hour.

The fact that this airplane had very much higher flutter speeds than the calculations indicated originated a much more refined approach-than the internal dampingof the structure and the problem was not considered as a plane problem but as a three dimensional flutter problem--it led to a refinement of the art of flutter caluculation.

But real serious difficulties of flying qualities were not experienced.

Q:Could you give me a similar background of the 260?

Messerscmitt: The 262 was of course developed for much higher speeds than the 109,a much more slender airplane with air foil with a mather sharp nose for that time. The flying qualities did not give rise to serious problems.The difficulty was only to match the control effectiveness over such a great range of speds. At that time,power controls were not admitted by the administration--it had to be all by manual control.

The main difficulties were the engines themselves. At first(this ~~was~~ is a twin-engine airplane)-it was planned to make a very neat wing-installation of the engines like the English Canberra and The Gloucester Meteor, but the engine company kept changing the engine all the time,so I decided to make an under-slung engine part installation,under the wing.

I told you before that the airplane was long finished before the first jet engine was available. There it was advantageous that the engines were about in the center of gravity,and the nose of the airplane held the armament section. So we decided to install,instead of the armament, a piston engine with a propeller in order to get the plane into the air. And when the first jet engines were installed, at the end of 1939,we did the first test flying keeping the piston engine and propeller in the nose of the airplane,and just mounting the jets under the wing.

And this proved to be a very good measure, because these jet engines gave us a lot of trouble and we always had the spare propeller engine to get the plane back in case of trouble.

Q:What were the problems involved in the Komet, the 163?

Messerschmitt:The 163 was actually mainly a proposal of the famous Doctor Lippisch. I was very interested in his work and I could take him into my factory. He improved the state of the art of the tailess airplane considerably. It was initially only thoughtto be an experimental airplane for the development of tailess planes.

One day, the now famous Wernher Von Braun came to me and told me of his rocket developments and proposed that I develop an airplane especially for a rocket engine. Thinking about this a while, I told him that I was not very enthusiastic about developing a new airplane for a new engine and having two problems together. It could have been thought to install the rocket in a 109 or a 110, but the rocket has to be installed in the tail of the airplane. So I proposed to him that he send us the smallest rocket ~~airplane~~ engine he had available and that we would install it in a tailess 163 in a practically unmodified airplane.

These tests proved quite successful, so more powerful engines were installed and the air frame was beefed up, and this is how the short-range interceptor, the 163, was developed.

This airplane achieved, by 1942, a speed of almost 1100 kilometres per hour. There was actually enough power to fly it faster, but we experienced then for the frist time the previously unknown phenomenon that when approaching the speed of sound the plane became very nose heavy and the pilot thought it was wise to pull the airplane up and reduce speed.

One must not forget that at that time the 262 was flying already 870 kilometres per hour as a normal production airplane. There was absolutely no wind tunnel experience at this faster speed range. We made all the wind tunnel tests long after the airplanes were flying. There were of course difficulties and worries that were considerable.

Q: A group of 262's scored quite an impressive triumph over Westphalia in 1945. Do you remember that?

Messerschmitt: According to the statistics of the German Air Force, the effectiveness of the plane was about 40 times the effectiveness of a propeller airplane. The improvement in airplane armament also helped considerably of course-- especially the rockets that were mounted under the wings. The airplane in the museum here does have the rockets mounted under the wings. They were of course too little to be ~~#####~~ of great importance in the war.

Q:Do you recall other incidents of disagreement between yourself and government officials other than on the jets?

Messerschmitt:In general,I worked very satisfactorally with the development staff of the government.It was not the technical people that delayed the progress of the 262,it was the higher level of command. With the engineers,with the technical officers,and with Udet,I had very good relations.

Q: Your relations with Milch were not very good,however?

Messerschmitt:I quarreled a lot with Milch,but then again we were in agreement. It is very difficult in development to always agree.

I recall a story about the famous General Udet, with whom I was on very good terms.When we did the 109,he was the chief of fighter squadrons.One time he came to me and said,well,I heard about your development of a new fighter airplane,how about letting me see it. That was in 1935,a few days before the first flight of the airplane.So I took Udet into my shop,and he looked at the airplane,shaking his head,and climbed up the ladder to the cockpit,which was open.He climbed in,and I must say that he was one of the most famous World War one pilots,flying biplanes and these

open planes. So he climbed into the cockpit and the mechanic closed the canopy and he didn't look enthusiastic at all and we were quite down-hearted. So when he got out, he patted me on the back and said,"Messerscmitt,this will never be a fighting airplane.The pilot needs an open cockpit.He has to feel the air to know the speed of the airplane.And then you'd better put another wing on top,and put a few wires and braces on,and then you'll have a real fighting airplane." So I was quite depressed,when we had lunch in the cafeteria. He told all his jokes,and was quite a humorous man,but he couldn't amuse us then.

I am of course,mostly known for my small airplanes and fighters,but I have built some rather large airplanes and airplanes of very great range.I should name the 323 troop transport with six engines and a take-off weight of 50 tons.It could transport the largest tank of the German Army then,with a weight of 21 tons.And then the long-range torpedo airplane,the 264,which was going into production at the end of the war.

Q:What are your activities now,sir?

Messerschmitt:After the war,we had a long period when it was not possible to build airplanes.I was offfered a very nice possibility in Spain,and I developed two training airplanes there with a Spanish company.One with a propeller,the

other with a small jet engine.And these are being built in Spain for the Spainish Air Force. We are working on a very light fighter airplane for the Spaniards. What we are doing in Germany,we cannot say.

Q:Thank you very much,sir.

Walther U. Stromeyer München 8 Perfallstrasse 6

Mr.
Kenneth Leish
Book Division
American Heritage
551 Fifth Avenue
New York 17, N.Y.
U.S.A.

12. Juni 1962

Sehr geehrter Mr. Leish,

Herr Professor Messerschmitt hat mich, sein Stiefsohn, mit der Beantwortung Ihres letzten Schreiben und des Briefes von Frau Gertrudis Feliu vom 25.4.62 beauftragt.

Herr Professor Messerschmitt hat gegen die Veröffentlichung des Auszuges aus Ihrem Interviewtext nichts einzuwenden. Der letzte Satz heisst in unserer deutschen Aufzeichnung und dann "sollten Sie noch einen zusätzlichen Blick aufsetzen und noch ein paar Dinge und Strehen erhringen". Würde das nicht richtiger "and add a few wires and struts" übersetzt?

Angelegentlich der Durchsicht des seinerzeitigen Interview hat Professor Messerschmitt im deutschen Text noch zwei Irrtümer beziehungsweise Unvollkommenheiten entdeckt, auf die ich den Ordnung halber hinweisen möchte. Es heisst dort von der Me 163 "Dieses Flugzeug erreichte 1942 eine Geschwindigkeit von fast 1100 Stundenkilometern. Es hätte mehr auch sehr viel fliegen können, aber wir beobachteten damals zum ersten Mal, was bisher unbekannt war, dass nämlich das Flugzeug bei schallnaher Geschwindigkeit sehr konfliktig wurde." An späterer Stelle ist dann General Udet erwähnt. Dort muss es heissen "als wir die 100 hatten war er Inspekteur der Jagdfliegerei". Ich hoffe, Ihnen gedient zu haben und bin

mit freundlichen Grüssen
Ihr

IRIS Public Record

Key Information

Main: COLUMBIA UNIVERSITY

Document Type:
Call Number: **K146.34-68**
IRIS Number: **00471805**
Accessions Notes:
Old Accession Nbr: **5-4410-94**
Title:
Beginning Date:
End Date:
Publication Date: **1960/11/01**
Classification ***UNCLAS***

Media	Roll #: **11914**	First Frame: **281**	Last Frame: **296**	Linear Feet: **0**
	Old MFlm Roll # **K1215**			Audio Rec:

NUMPAGE **0**

Title Extensions:

Abstract

Descriptive Notes: CONTAINS INTERVIEW.

Title Added Entries WILLY MESSERSCHMITT (FLIGHT INTERVIEW)

Author: KENNETH LEISH

Subject: EARLY FLIGHT EXPERIENCES SPORT FLYING

Major Command:

Rcvd:	Rel **1992/07/28**
Indexer ID: **51**	Entered Date:
QC ID:	QC'd Date::
Scanner ID:	Scanned Date:
Acc ID	Acc Date:

Administrative Markings

No Administrative Markings Listed

Security Review Information: