

The Art of Drawing Airplanes

Fokker Triplane Workbook

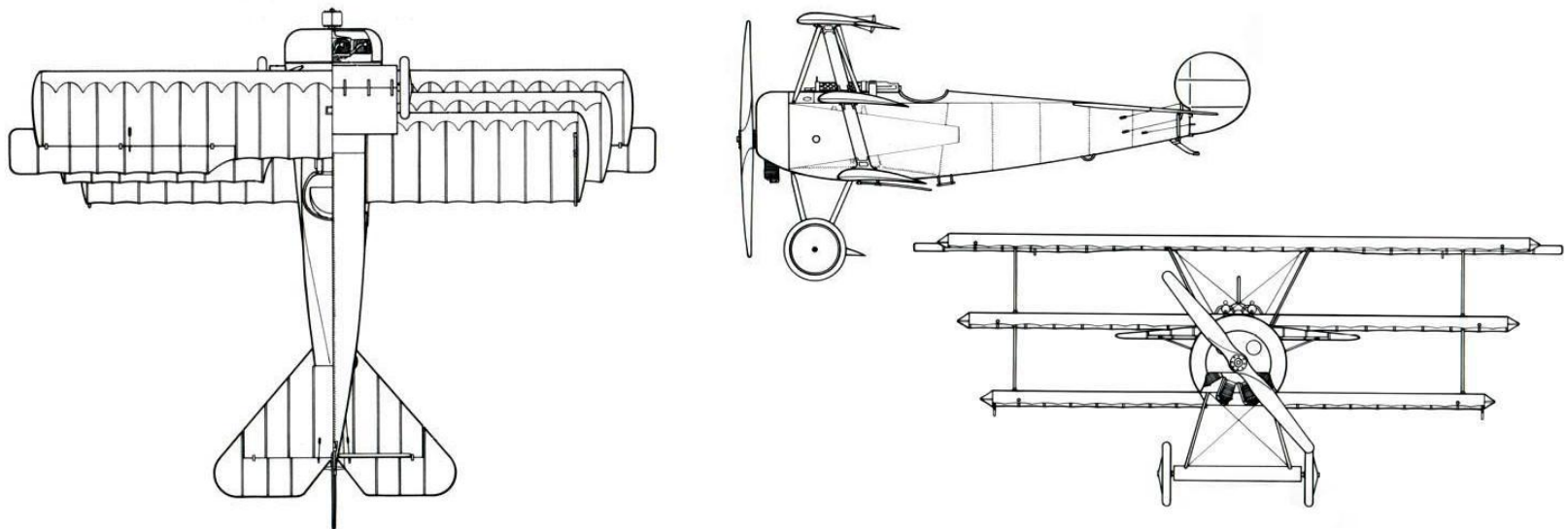


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THE FOKKER DR.I TRIPLANE

In early 1917 the Sopwith triplane was deployed on the Western Front. It quickly proved its superiority over German fighters like the Albatross. To counter this threat, Fokker designed a triplane of its own. It had a tubular steel frame and cantilevered wings with no dihedral. The two leading German aces, Richthofen and Voss, were both impressed by the maneuverability of this new fighter design. It had an excellent rate of climb and was very aerobatic. Though not as fast as other fighters of the day, in the right hands, it proved to be a capable adversary to Allied fighters from the spring of 1917 to the summer of 1918.

The Dr.I was powered by a 110 hp rotary engine and it was equipped with twin Spandau machine guns that were synchronized to fire through the propeller arc. Unfortunately the Dr.I suffered from wing failures which were often fatal for the pilot. Part of the problem was poor quality control during manufacturing. Despite efforts to correct these problems, wing failures continued. These structural problems and the development of the Fokker D.VII led to the withdrawal of the Dr.I by the summer of 1918.



This 3-view is available from: <http://richard.ferriere.free.fr/index.html>

WERNER VOSS

The Fokker Triplane is perhaps most famous as the plane of Manfred Von Richthofen, the Red Baron. For that reason, an all red triplane has become *the* most iconic airplane of the first world war. Sketching an all red triplane, however, is a little bland looking, so I decided to use the markings of Werner Voss' triplane.

Voss was one of the great fighter aces of WWI. He was only 19 years old when he joined Jagdstaffel 2 in November of 1916 . By April of 1917 he had 24 victories to his name and by September he had 46 - making him the second leading ace behind Richthofen.

In the summer of 1917, he was a test pilot for the new Fokker triplane, and he quickly came to appreciate its flying qualities. After returning to combat, he flew one of the prototypes (F.I 103/17). On September 23, 1917, he was killed in action while flying this triplane. On his final mission, he single handedly took on six British aces of 56 Squadron. Despite having several opportunities to withdraw from a fight where the odds were clearly against him, he continued to engage the British aces. He had been a fighter pilot for only 10 months and was just 20 years old. Below are photos of Werner Voss and his F.I prototype.



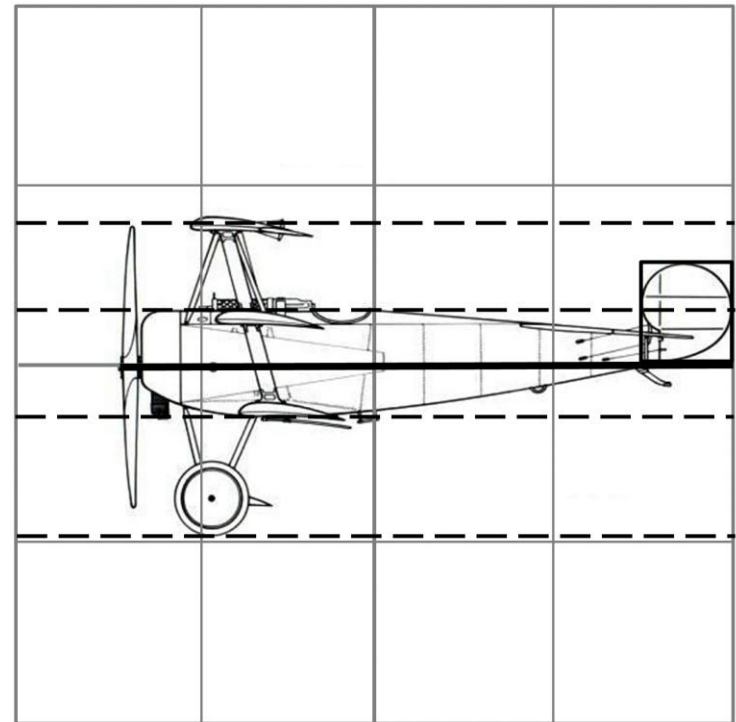
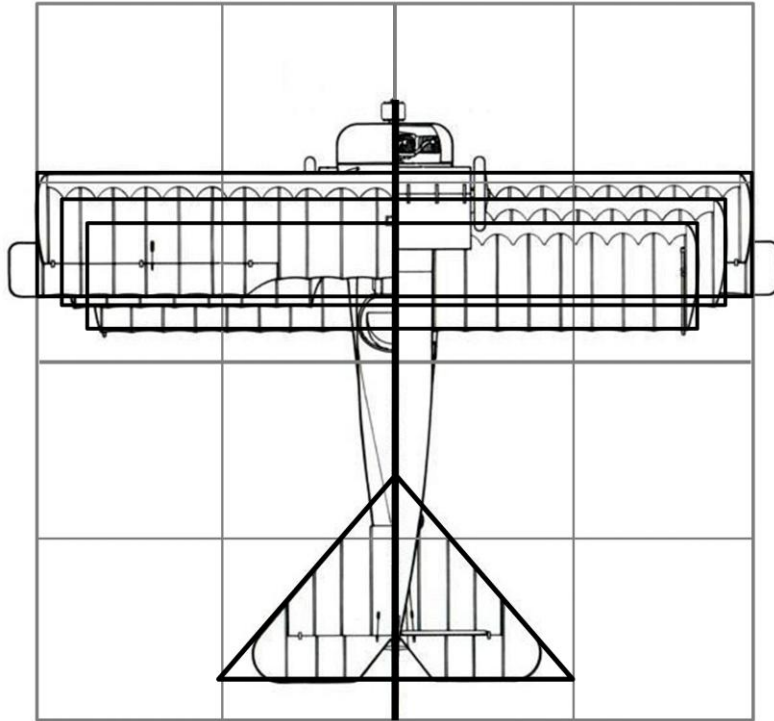
HOW TO USE THIS WORKBOOK:

FIRST, WATCH THE THREE VIDEOS TO GAIN AN UNDERSTANDING OF THE SEVEN STEPS I USE TO DRAW AIRPLANES. NEXT, PRINT THE FOLLOWING PAGES AND FOLLOW THE DIRECTIONS. THESE WILL WALK YOU THROUGH KEY STEPS FOR DRAWING THE FOKKER TRIPLANE.

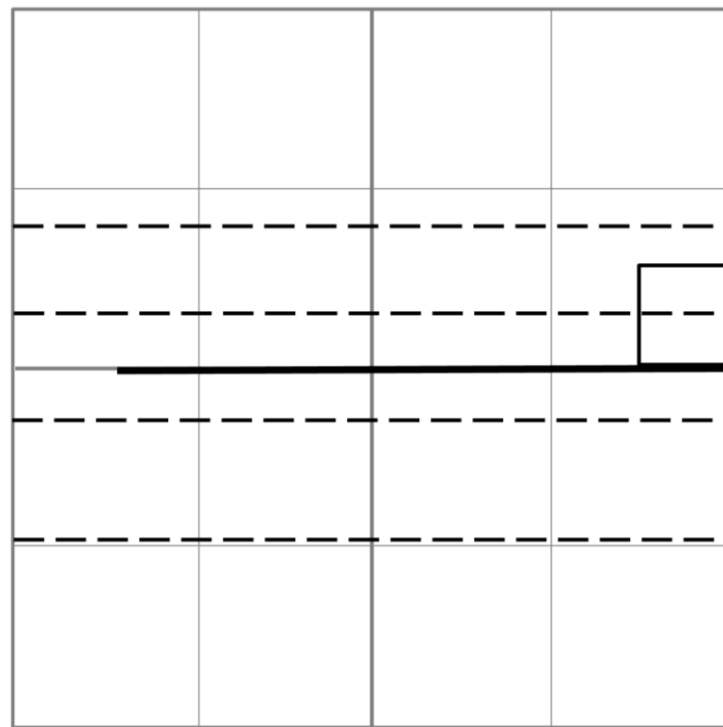
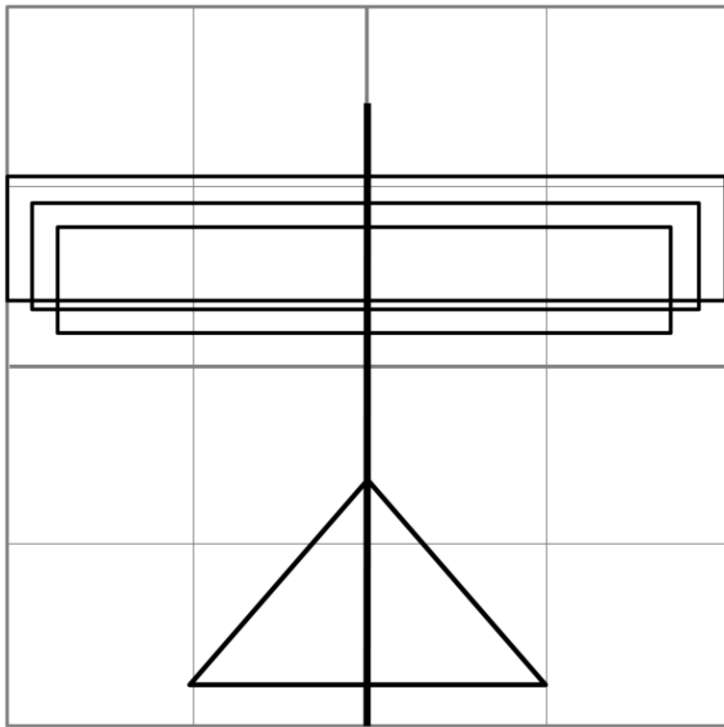
REVIEW OF THE SEVEN STEP PROCESS

- 1. CREATE A SCAFFOLD FROM A 3-VIEW DRAWING*
- 2. DRAW A FORESHORTENED REFERENCE GRID (FRG)*
- 3. TRANSFER THE SCAFFOLD TO THE FRG*
- 4. PROJECT THE WINGS AND TAIL TO THEIR CORRECT POSITIONS*
- 5. OUTLINE AND SHAPE THE FUSELAGE*
- 6. OUTLINE AND SHAPE THE WINGS AND TAIL*
- 7. CLEAN-UP AND FINAL DETAILS*

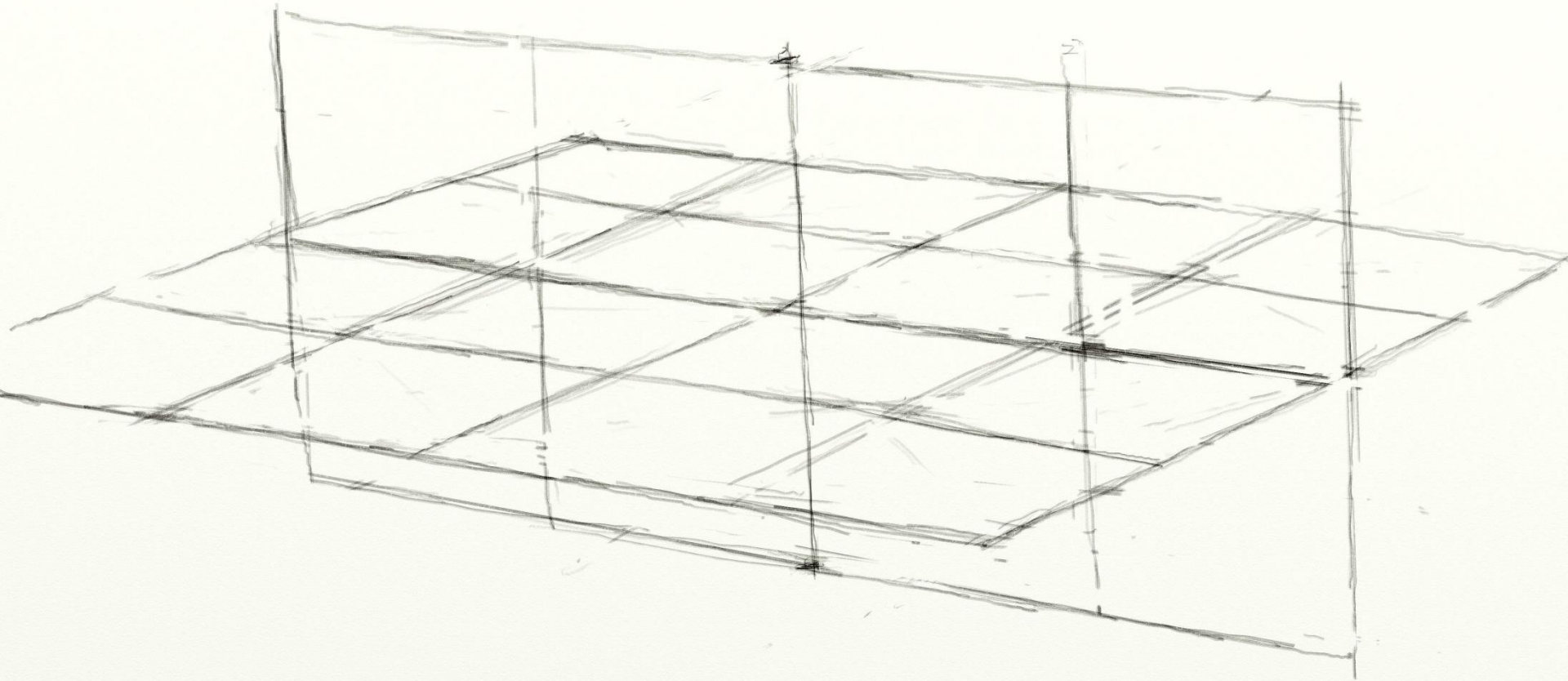
BELOW ARE THE SIDE AND TOP VIEW SCAFFOLDS FOR REFERENCE



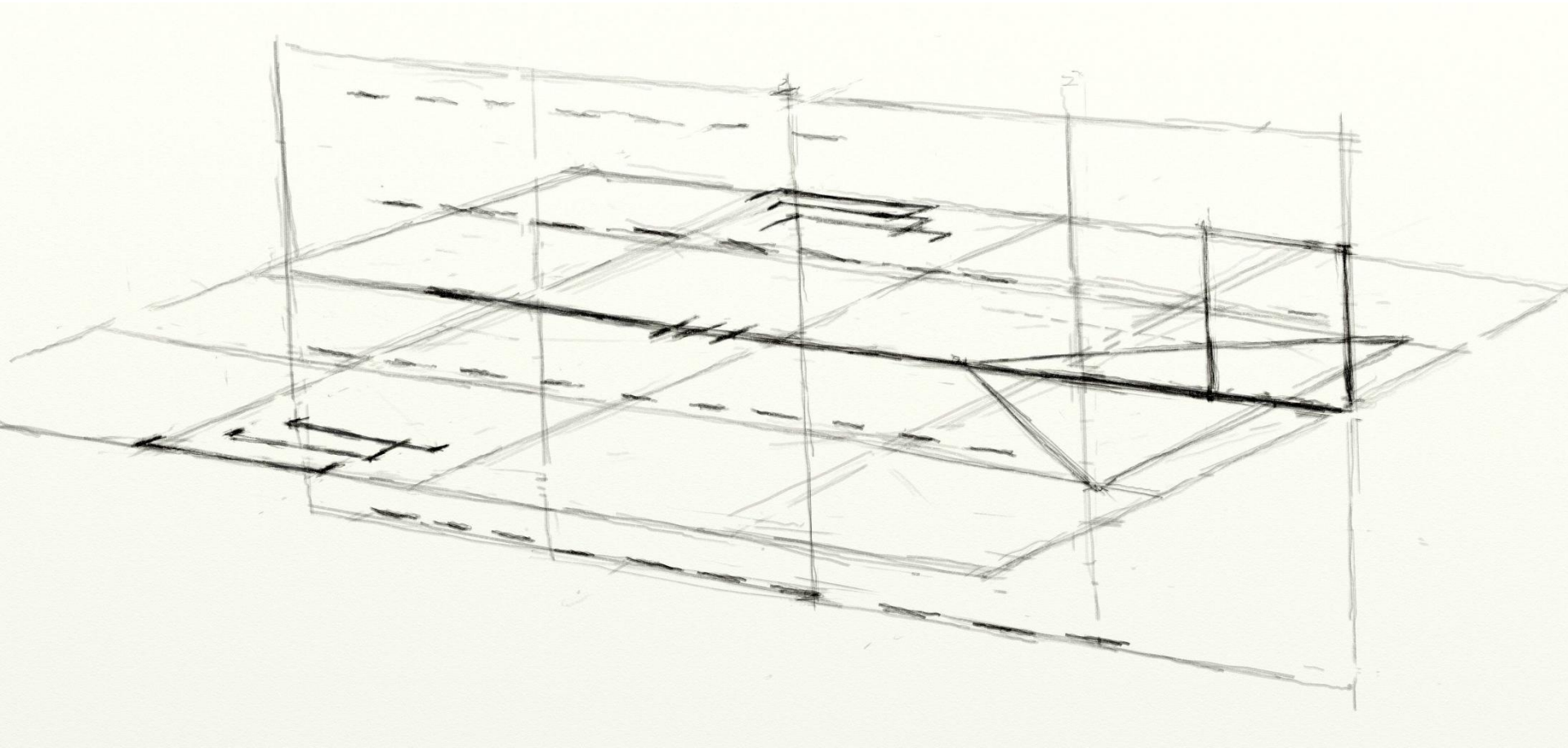
BELOW ARE THE SCAFFOLDS WITHOUT THE DRAWINGS.



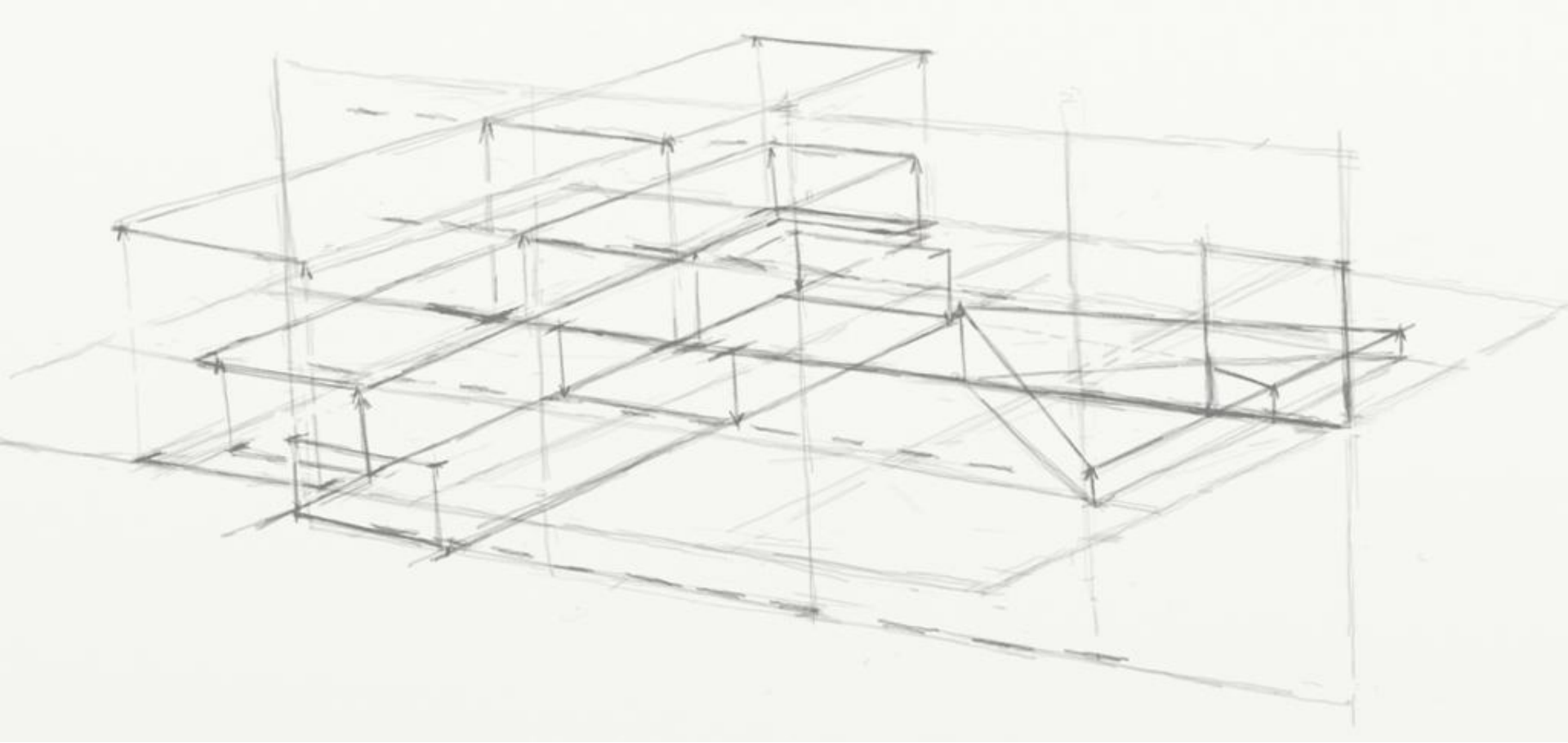
BELOW IS THE FRG. PRACTICE TRANSFERRING THE SCAFFOLD TO THIS FRG. FOR A CHALLENGE, TRY DRAWING IT HEADING TO THE RIGHT SIDE OF THE PAGE.

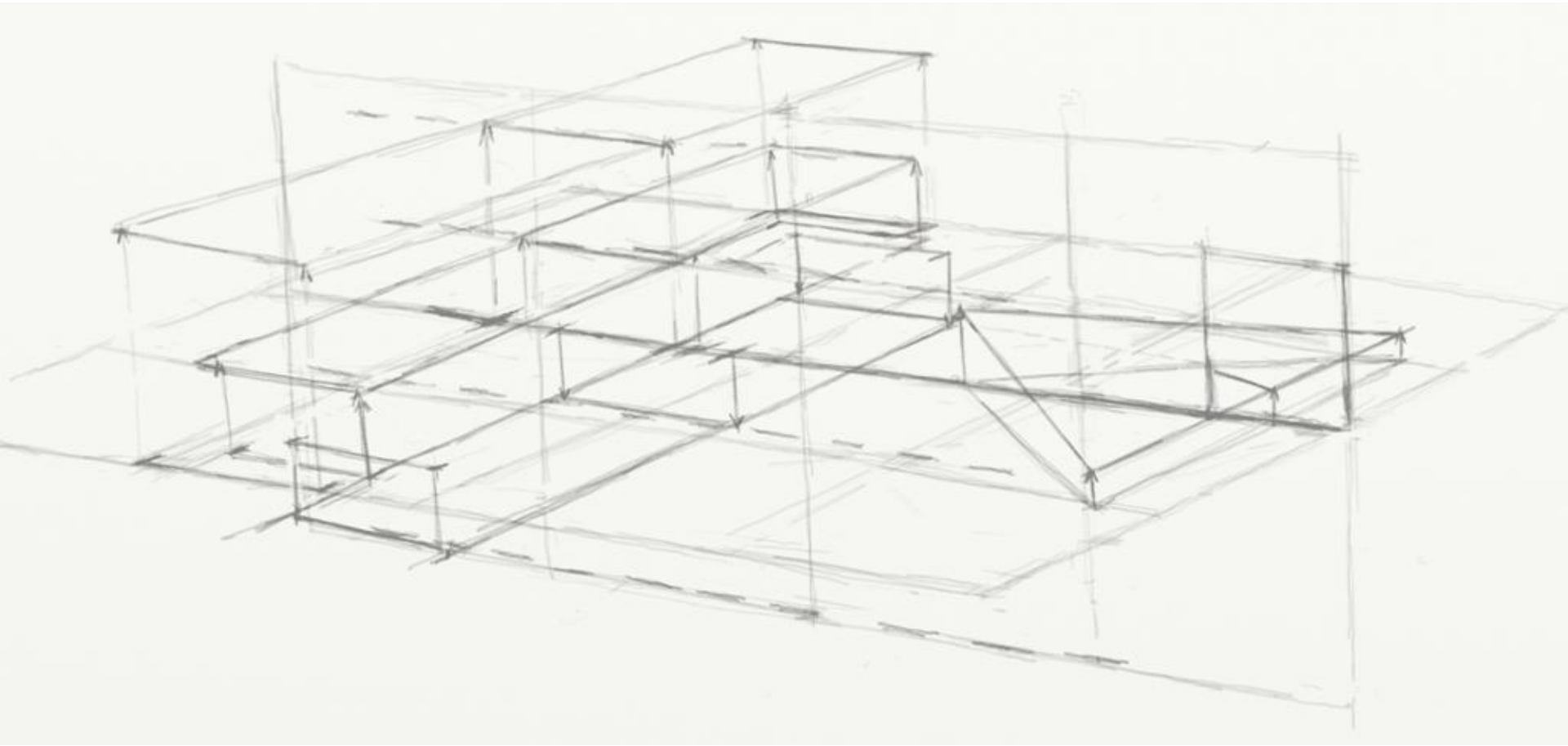


BELOW IS THE TRANSFERRED SCAFFOLD. PRACTICE PROJECTING THE WINGS AND TAIL INTO POSITION

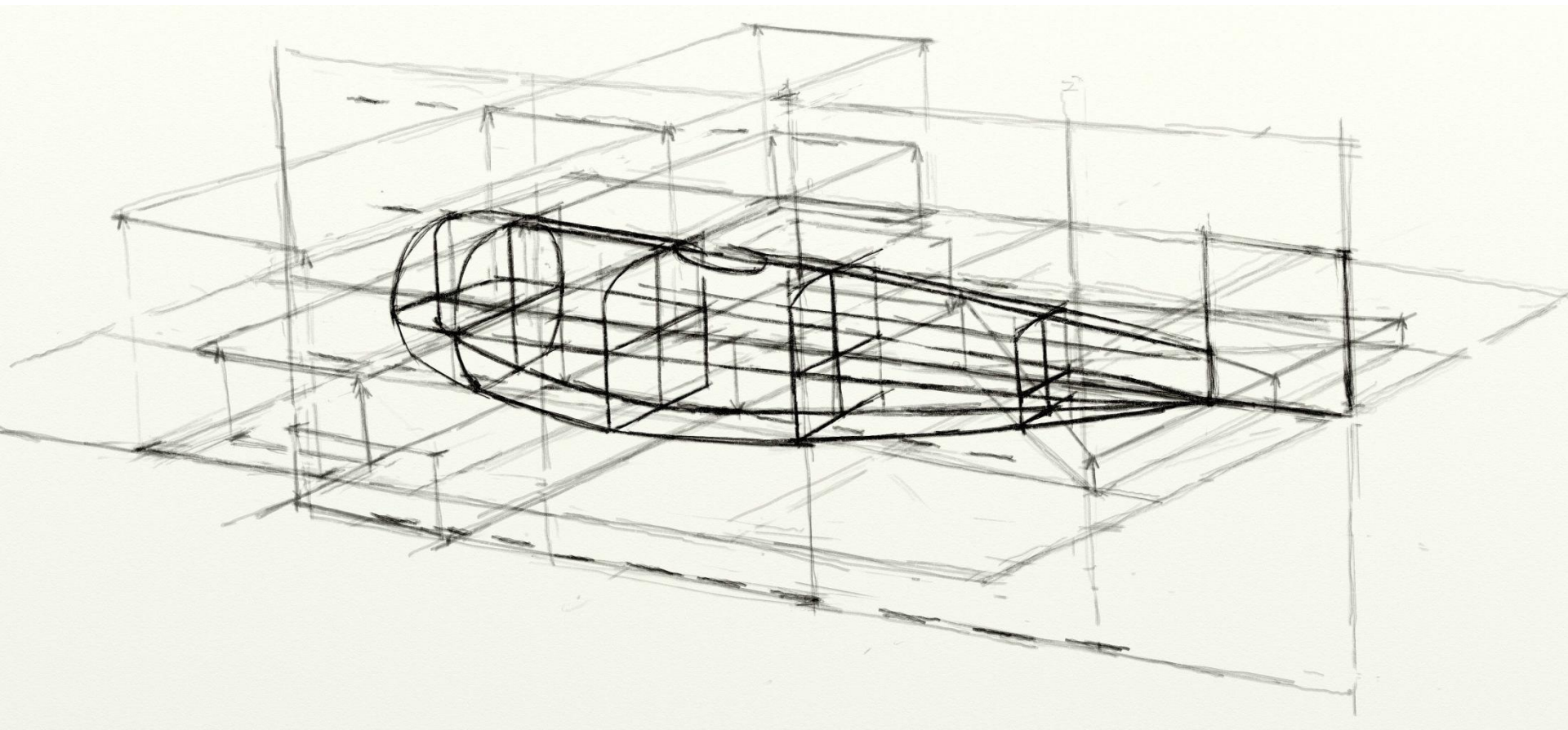


***BELOW IS THE COMPLETED SCAFFOLD. PRACTICE SHAPING THE FUSELAGE AND WINGS.
USE THE NEXT PAGE FOR ADDITIONAL PRACTICE.***

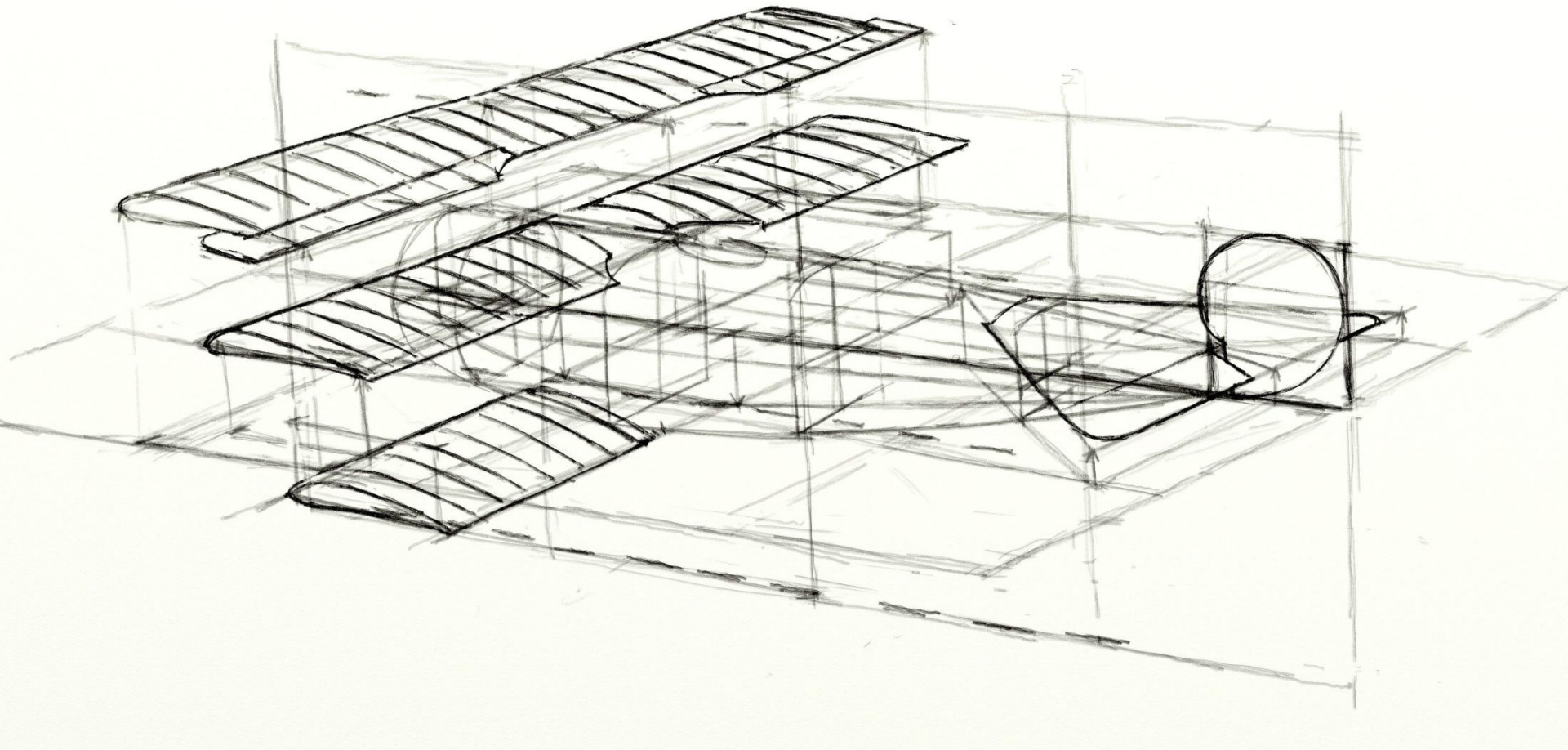




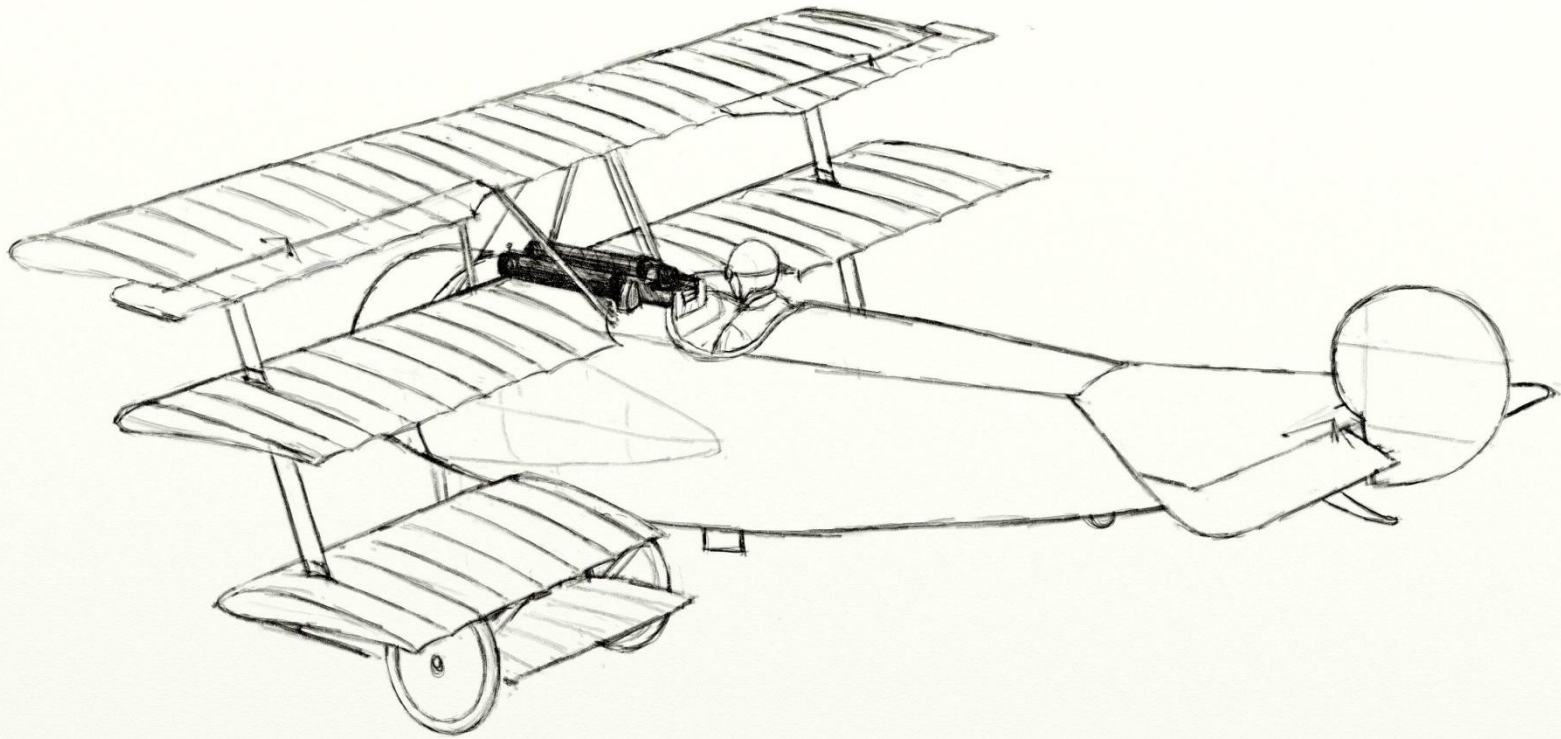
BELOW IS THE SHAPED FUSELAGE. USE THIS AS A REFERENCE FOR YOUR WORK.

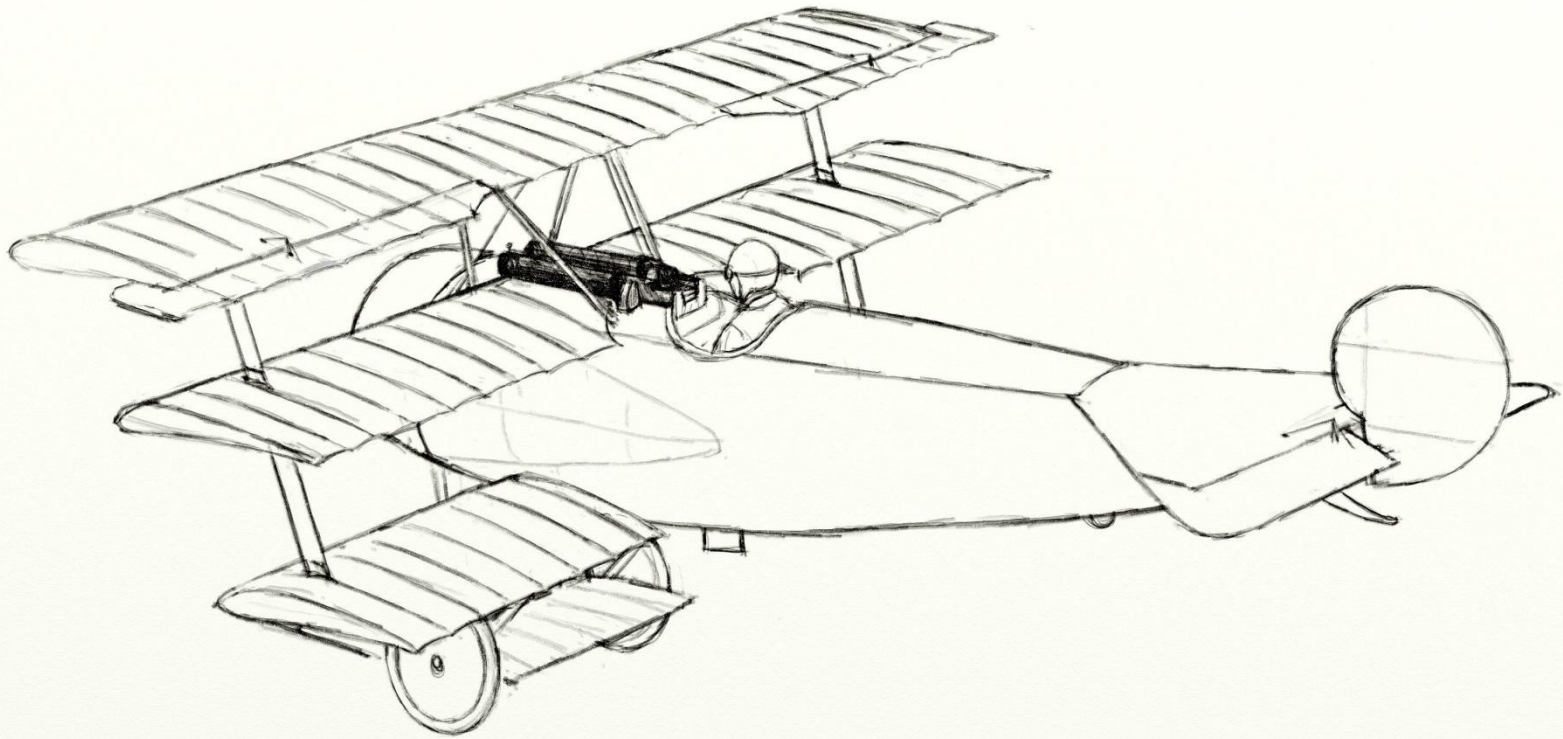


BELOW ARE THE SHAPED WINGS AND TAIL. USE THIS AS A REFERENCE FOR YOUR DRAWING.



BELOW IS THE TRIPLANE DRAWING. ADD SHADING AND MARKINGS AND BACKGROUND. USE THE NEXT PAGE FOR ADDITIONAL PRACTICE.





BELOW IS THE SHADED TRIPLANE FOR REFERENCE.



Goodwin '16

BELOW IS THE FINISHED DRAWING FOR REFERENCE.



Goodwin '16