



Smithsonian Institution

Smithsonian National Air and Space Museum Archives

Thomas DeWitt Milling Collection - Early Flying Experiences by T. DeWitt Milling

Extracted on Apr-16-2024 02:47:03

The Smithsonian Institution thanks all digital volunteers that transcribed and reviewed this material. Your work enriches Smithsonian collections, making them available to anyone with an interest in using them.

The Smithsonian Institution (the "Smithsonian") provides the content on this website (transcription.si.edu), other Smithsonian websites, and third-party sites on which it maintains a presence ("SI Websites") in support of its mission for the "increase and diffusion of knowledge." The Smithsonian invites visitors to use its online content for personal, educational and other non-commercial purposes. By using this website, you accept and agree to abide by the [following terms](#).

- If sharing the material in personal and educational contexts, please cite the Smithsonian National Air and Space Museum Archives as source of the content and the project title as provided at the top of the document. Include the accession number or collection name; when possible, link to the Smithsonian National Air and Space Museum Archives website.
- If you wish to use this material in a for-profit publication, exhibition, or online project, please contact Smithsonian National Air and Space Museum Archives or transcribe@si.edu

For more information on this project and related material, contact the Smithsonian National Air and Space Museum Archives. [See this project](#) and other collections in the Smithsonian Transcription Center.

pioneers in aviation. Having seen one of Wilbur Wright's early exhibition flights, he left a position as president of a highly successful business to enter upon a career in the aviation industry that was to continue until his retirement in the thirties. His contribution to the growth of the industry was of inestimable value to both military and civilian aviation.

At the factory were also assembled the flying instructions, Al Welch and Cliff Turpin, and all of the men receiving flying training, both military and civilian. The military consisted of Arnold, myself and Lieutenant John Rodgers of the Navy, -the first naval officer to learn to fly a Wright airplane. The civilian group comprised Calbraith Rodgers, a cousin of John, Oscar Brindley, Howard Gill, and Leonard Bonney. Rodgers, later that year, made the first transcontinental flight from New York to Pasadena, California; due to excessive delays in repairs, this flight took forty-nine days to complete. Brindley later became a flying instructor for the Army; Gill flew mainly for sport; and Bonney joined up with the Wright flying team. With the exception of Arnold, Turpin and myself, all were later killed in airplane accidents. Within a few weeks we were joined by Harry Atwood who made a number of record breaking cross-country flights before the year had ended.

I soon found out that more was required in learning to fly an airplane than the mere manipulation of the controls of the plane in the air. Assigned as my instructor was Cliff Turpin who was to give me my preliminary flying lessons leading to solo flying. He took me back in the factory and outlined a course of work to be followed for several days before flying lessons could begin. I studied the construction and maintenance of the airplane and motor, then learned to assemble the motor and operate it.

To obtain practice on the ground in the use of the warping lever control, and old plane without landing gear or tail assembly was balanced on a sawhorse and mounted in the same position as that of a plane in the air. The warping lever was connected by control wires running to a movable block which was mounted on the right wing tip in the manner of a moving belt running over a pulley. A backward pull would lift the left wing while a forward motion would reverse the action. This produced an action similar to that which would be experienced when the warping lever was used in actual flight. I assiduously practiced with this warping lever and it repaid me when I started my instruction in the air.

At the time each type of airplane, foreign and domestic, had its own individual method of control, the Wright, I believe, being the most difficult for the student since the lateral balance was not obtained through natural movement of the hands or body. To climb or descend, however, was natural as the elevator was operated by an upright stick which reacted naturally to a forward or backward motion.

On boarding the plane one climbed between two cross wires running from the upper to the lower plane between the struts. He sat on one of two hard seats mounted side by side on the leading edge of the lower plane where a footrest was provided by a bar mounted in front of the wing. The four cylinder motor was secured to the lower plane, just adjoining the right seat. Its speed was controlled by advancing and retarding the magneto with a wire control leading from a foot pedal in place when the magneto was retarded. While flying full speed the pedal was allowed to come all the way back so that the toe could be removed. To stop the motor it was necessary to release the cylinder pressure by opening the valves located on the top of each cylinder. A cam control

plane in aviation. Having seen one of Wilbur Wright's early exhibition flights, he left a position as president of a highly successful business to enter upon a career in the aviation industry that was to continue until his retirement in the thirties. His contribution to the growth of the industry was of inestimable value to both military and civilian aviation.

At the factory were also assembled the flying instructors, Al Welch and Cliff Turpin, and all of the men receiving flying training, both military and civilian. The military consisted of Arnold, myself and Lieutenant John Rodgers of the Navy, -the first naval officer to learn to fly a Wright airplane. The civilian group comprised Calbraith Rodgers, a cousin of John, Oscar Brindley, Howard Gill, and Leonard Bonney. Rodgers, later that year, made the first transcontinental flight from New York to Pasadena, California; due to excessive delays in repairs, this flight took forty-nine days to complete. Brindley later became a flying instructor for the Army; Gill flew mainly for sport; and Bonney joined up with the Wright flying team. With the exception of Arnold, Turpin and myself, all were later killed in airplane accidents. Within a few weeks we were joined by Harry Atwood who made a number of record breaking cross-country flights before the year had ended.

I soon found out that more was required in learning to fly an airplane than the mere manipulation of the controls of the plane in the air. Assigned as my instructor was Cliff Turpin who was to give me my preliminary flying lessons leading to solo flying. He took me back in the factory and outlined a course of work to be followed for several days before flying lessons could begin. I studied the construction and maintenance of the airplane and motor, then learned to assemble the motor and operate it.

To obtain practice on the ground in the use of the warping lever control, an old plane without landing gear or tail assembly was balanced on a sawhorse and mounted in the same position as that of a plane in the air. The warping lever was connected by control wires running to a movable block which was mounted on the right wing tip in the manner of a moving belt running over a pulley. A backward pull would lift the left wing while a forward motion would reverse the action. This produced an action similar to that which would be experienced when the warping lever was used in actual flight. I assiduously practiced with this warping lever and it repaid me when I started my instruction in the air.

At that time each type of airplane, foreign and domestic, had its own individual method of control, the Wright, I believe, being the most difficult for the student since the lateral balance was not obtained through natural movement of the hands or body. To climb or descend, however, was natural as the elevator was operated by an upright stick which reacted naturally to a forward or backward motion.

On boarding the plane one climbed between two cross wires running from the upper to the lower plane between the struts. He sat on one of two hard seats mounted side by side on the leading edge of the lower plane where a footrest was provided by a bar mounted in front of the wing. The four cylinder motor was secured to the lower plane, just adjoining the right seat. Its speed was controlled by advancing and retarding the magneto with a wire control leading from a foot pedal on the footrest. A reebot mounted alongside of the footrest would hold the pedal in place when the magneto was retarded. While flying full speed the pedal was allowed to come all the way back so that the toe could be removed. To stop the motor it was necessary to release the cylinder pressure by opening the valves located on the top of each cylinder. A cam control was installed for this purpose. From the cam lever a string was attached to the two struts over the head of the pilot. This string was pulled when it was desired to stop the engine.

was installed for this purpose. From the cam lever a string was attached to the two struts over the head of the pilot. This string was pulled when it was desired to stop the engine.

95

Thomas DeWitt Milling Collection - Early Flying Experiences by T. DeWitt
Milling
Transcribed and Reviewed by Digital Volunteers
Extracted Apr-16-2024 02:47:03



Smithsonian Institution

Smithsonian National Air and Space Museum Archives

The mission of the Smithsonian is the increase and diffusion of knowledge - shaping the future by preserving our heritage, discovering new knowledge, and sharing our resources with the world. Founded in 1846, the Smithsonian is the world's largest museum and research complex, consisting of 19 museums and galleries, the National Zoological Park, and nine research facilities. Become an active part of our mission through the Transcription Center. Together, we are discovering secrets hidden deep inside our collections that illuminate our history and our world.

Join us!

The Transcription Center: <https://transcription.si.edu>

On Facebook: <https://www.facebook.com/SmithsonianTranscriptionCenter>

On Twitter: [@TranscribeSI](https://twitter.com/TranscribeSI)

Connect with the Smithsonian

Smithsonian Institution: www.si.edu

On Facebook: <https://www.facebook.com/Smithsonian>

On Twitter: [@smithsonian](https://twitter.com/smithsonian)