

Aviation Training Schools  
MS – 64

Wright State University  
Department of Special Collections and Archives

Container Listing  
American School of Aviation  
Description

<u>Box</u>	<u>File</u>		<u>Description</u>
1	1	Lessons 1-5:	(1) The Invention of Lighter-Than-Air Machines (2) Early Types of Heavier-Than-Air Machines (3) The Development of the Airplane (4) The Air In Which We Fly (5) Gravity and the Part It Plays In Aeronautics
	2	Lessons 6-10:	(6) Various Types of Flying Machines (7) How the Airplane Flies (8) How the Resistance of the Air Affects Flat Surfaces (9) The Different Pressures which Cause an Airplane Wing to the Left (10) Why Curved Surfaces are Used for Aeroplane Wings
	3	Lessons 11-15:	(11) The Characteristics of an Airplane (12) Airplane Wings (13) Wing Designing (14) How to Calculate Horsepower for Airplanes (15) The Necessary Qualities of an Airplane
	4	Lessons 16-20:	(16) What to Use in Airplane Construction (17) The Construction of Ribs for Airplane Wings (18) Airplane Wing Construction (19) How to Construct the Controlling Surfaces (20) How to Make the Body and Landing Gear
	5	Lesson 21-25:	(21) How to Cover Airplane Wings and Control Surfaces (22) How to Design and Build Propellers (23) Motors Which May be Used in Airplanes (24) How to Assemble an Airplane (25) The Upkeep and Repairing of Airplanes
	6	Lectures:	The Study of Aviation The Story of the Heavens The Story of the Zeppelin How to Build and Operate Balloons Principles of Airplane Design
	7	Lectures:	The Art of Flying Aeronautical Wireless Telegraphy Our Modern Airplanes Airplanes in the Great War by Tom W. Bencist The Law of the Air

<u>Box</u>	<u>File</u>	<u>Description</u>
1	8	<p>Data Sheets for Various Wing Covers</p> <p><u>General Review</u> by Ernest L. Jones, Editor “Aeronautics”</p> <p>Dictionary of Aeronautical Terms and Phrases, prepared for the exclusive service of the students in the American School of Aviation as a part of its course in Practical Aeronauticals</p> <p>Original application for enrollment in the American School of Aviation</p> <p>Two catalogs of “Practical Electrical and Automobile Books for Home Study” issued by the school</p> <p>Broadside titled Do You Want to Make Money – soliciting people to act as agents for the school</p> <p>Announcement for a flying model airplane – Lawrence Military Tractor</p> <p>The American School of Aviation Bulletin, Vol. II, No. 1</p>
9		<p>22 letters, consisting of 30 pp., 14 of the letters are signed by the officers of the school. Letters date from August 14, 1918 to November 15, 1919. These are letters in response to questions by the students and letters with comments on the exams and happenings at school. Most are form letters.</p>
10		<p>Examination Papers 1-25, the last three exams are not completed by the student, Lawrence M. Blakely.</p> <p><u>BLUEPRINTS PLACES IN OVERSIZED DRAWER OF AVIATION MATERIAL</u></p> <ol style="list-style-type: none"> <li>1. Conventional type of Biplane and conventional type of Monoplane, 1918</li> <li>2. Set of 4 blueprints with 12 figures illustrating forces of wind resistance on various bodies and wing configurations.</li> <li>3. Movement of center of pressure. Wing curve-Eiffel, No. 35, 1918.</li> <li>4. Wing characteristics. Shows four different types: R.A.F. #6, Curtiss-Wright, Eiffel #32, and Eiffel #35, 1918.</li> <li>5. Fuselages and Details, 1918.</li> <li>6. Resistance encountered by three types of fuselages, 1918</li> <li>7. Blueprint outlining various types of landing gear, 1918</li> </ol>

<u>Box</u>	<u>File</u>	<u>Description</u>
1	10	8. Details of Rib Press, 1918
		9. Blueprint detailing various types of ribs, 1918
		10. Aeroplane Tail, 1918
		11. Ailerons, 1918
		12. Cross Section of Struts, 1918
		13. Continuous Elevator Tail and Split Elevator Tail, 1918
		14. Plain Strut-Spruce, Wrapped Strut-Steel and Wood Strut, 1918
		15. Fitting Wings to Fuselage-lower-Strut Sucket. Upper-Strut Sucket
		16. Drum Turnbuckle. Spoke Turnbuckle. Soldering of Steel Cable. Pulley-Holder-Bracket. Hinge, 1918
		17. Biplane Upper Wing, 1918
		18. Biplane Lower Wing, 1918
		19. Monoplane Wing, 1918
		20. Blueprint for Propeller design, 1918
		21. Blueprint showing wire supports for biplanes, 1918

## National Aero Institute-Mechanics of Aviation

<u>Box</u>	<u>File</u>	<u>Description</u>
2	1	Forward – A personal word from the Chief Instructor of the National Aero Institute
		Lessons 1-5: (1) The Study of Air (2) The Balance of the Airplane (3) Controls and Power Plant (4) Definitions of Aeronautical Terms (5) Early History of Aeronautics
	2	Lessons 6-10: (6) Development of Aeronautics (7) Successful Flying (8) Types of Aircraft (9) “Lighter than Air Machines” (10) Graphs
	3	Lessons 11-15: (11) Primary Principles of the Gas Engine (12) Multiple Cylinder Engines (13) Types of Cylinders and Valve Arrangements (14) Revolving Cylinder Engine (15) Ignition and Carburetion
	4	Lessons 16-20: (16) Engine Mounting (17) Early Air-craft Engines (18) Development of Aircraft Engines (19) “American Aircraft Engines” (20) European Air Craft Engines
	5	Lessons 21-25: (21) Lubrication and Cooling of Air Craft Engines (22) “Dynamics of the Gas Engine” (23) Properties of the Air (24) Aerodynamics No. 1 (25) Aerodynamics No. 2
	6	Lessons 26-30: (26) “Resistance of Bodies” (27) “Aerofoil Curves No. 1” (28) “Aerofoil Curves No. 2” (29) “Aerofoil Curves No. 3” (30) Airplane Forces and Balance by Harlan D. Fowler
	7	Lessons 31-35: (31) Performance Calculation No. 1 (32) Performance Calculation No. 2 (33) Wing Design by Bud Morris (34) Control Surfaces by Harlan D. Fowler (35) Body Design by Harlan D. Fowler

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2	8	Lessons 36-40: (36) Landing Gear by Harlan D. Fowler (37) Simple Stresses by Christopher Crowell (38) Wing Stresses by Christopher Crowell (39) Body and Landing Gear Stressed by Christopher Crowell (40) Propeller Design by Raoul Hofmann
	9	Lessons 41-45: (41) Stability by Harlan D. Fowler (42) Stabilizing Devices (43) Operation of Controls (44) "Materials of Construction No. 1" (45) Materials of Construction No. 2
	10	Lessons 46-53 (46) Wing Construction No. 1 by Raoul Hofmann (47) Wing Construction No. 2 by Raoul Hofmann (48) Body Construction No. 1 by Raoul Hofmann (49) Body Construction No. 2 by Raoul Hofmann (50) Landing Gear Construction (51) Control Construction (52) Instruments (53) Late Developments in Aviation by John A. Tenney