

MS-365

The P.H. Richardson-Wright Field Photograph Collection

Wright State University
Special Collections & Archives

Processed by Aaron Buczkowski
July, 2008

Biographical Sketch

Richardson was employed to take aviation photos and took the photos of Wright Field's Armed Forces Day celebration in October of 1945. Also, it appears that Richardson was employed by Fairchild Aviation to document their aircraft and engines.

Scope and Content

The P.H. Richardson Wright Field Photograph Collection features numerous black and white photos of aircraft and aircraft engines that were featured on display for the Armed Forces Day Celebration at Wright Field in October, 1945. All of the photos of the display contain hand written notes about the subject on the back of the print. Though not part of the Armed Forces Day display, this collection contains several detailed photos of the only Fairchild Ranger powered XAT-6 E built. These photos were most likely taken at Fairchild's Maryland plant. As well, many of the photos in the collection pertain to Luftwaffe aircraft that were captured in Operation Lusty and brought to Wright Field for testing. The collection is divided into five series. A finding aid is included.

Series I, Photographic Record

Series I contains the official report P. H. Richardson typed regarding the photos. The report does feature hand written corrections.

Series II, American Aircraft

Series II documents the American aircraft featured in the collection. Not only are there conventional aircraft but also there are examples of early guided missiles. The photos are arranged alphabetically by manufacturer. It is worthwhile to mention that multiple aircraft are often visible in each shot.

Series III, Luftwaffe Aircraft

Series III documents the German Luftwaffe aircraft and missiles captured in Operation Lusty that were brought to Wright Field for flight testing. As well, there are photos of the Imperial Japanese Ohka (also referred to as a Baka) manned rocket bomb. The photos are arranged alphabetically by manufacturer. It is worthwhile to mention that multiple aircraft are often visible in each shot.

Series IV, Piston Engines

Series IV documents the piston powered engines that were on display at the Armed Forces Day celebration. The majority of the engines featured are of American manufacture, from such companies as Allison, Chrysler, Continental, Fairchild, General Electric, General Motors, Lycoming, Pratt & Whitney, and Wright. However, there are also photos of a German BMW 803, Daimler Benz, and a Japanese Nakajima 21 Homare. The photos are arranged alphabetically by manufacturer. Those engines without a known manufacturer follow and are listed alphabetically by Richardson's notes.

Series V, Jet Engines

Series V documents early jet engine technology. There are photos of General Electric's Type 1A and J 31 engines. As well, there is a photograph of a display detailing the pulse jet engine used by the German V-1/American JB-2 Loon.

Container Listing

SERIES I: PHOTOGRAPHIC RECORD

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
1	1	Official index of photos taken by P. H. Richardson at Wright Field's Armed Forces Day display on October 19, 1945. This four page index is type-written with hand-written corrections.	1945

SERIES II: AMERICAN AIRCRAFT

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
		Bell YP-59	
	2	¾ View, Right Hand Side, A/C 45-108783	1945
		Bell XP-77	
	3	Profile, Left Hand Side, A/C 43-34915	1945
	4	Profile, Left Hand Side	1945
	5	¾ View, Front, Left Hand Side	1945
	6	¾ View, Front, Left Hand Side	1945
	7	¾ View, Front, Left Hand Side	1945
	8	¾ View, Rear, Left Hand Side	1945
	9	Profile, Left Hand Side (Pilot Identified)	n.d.
	10	Profile, Left Hand Side (Pilot Identified)	n.d.
		Douglas A-26 C Invader with Fairchild XBQ-3 Guided Bombs	
	11	Profile, Left Hand Side	1945

12	Profile, Left Hand Side (wider angle)	1945
	Douglas VB-9 Radar Guided Bomb (ROC)	
13	¾ View, Front, Right	1945
	Douglas VB-10 Radar Guided Bomb (ROC)	
14	¾ View, Front, Left	1945
	Fairchild PT-26 FA Cornell	
15	¾ View, In-Flight, Above and Left, A/C 42-83335	n.d.
16	¾ View, In-Flight, Below and Left	n.d.
	Fairchild AT-21 FA Gunner	
17	Promotional Leaflet, ¾ View, In-Flight, Below and Left, A/C 42-11679	n.d.
18	¾ View, In-Flight, Below and Left, A/C 42-11679	n.d.
19	¾ View, Right Hand Side, Front	n.d.
20	¾ View, Right Hand Side, Front	n.d.
	Fairchild UC-61 K Argus	
21	Promotional Leaflet, Profile, Left Hand Side, Take Off	n.d.
22	Profile, Left Hand Side, Take Off	n.d.
	Grumman J4F-1 Widgeon	
23	Profile, Right Hand Side, A/C V-197	n.d.
24	Profile, Left Hand Side, In-Flight, 3 Widgeons over unidentified warship	n.d.
	Lockheed P-80 Shooting Star “Squirt”	
25	¾ View, Left Hand Side, Front	1945
	North American Aviation XAT-6 E (Fairchild Ranger Powered Model)	
26	Artist’s Rendering, Profile, Right Hand Side, In-Flight	n.d.
27	Profile, Left Hand Side, In-Flight, A/C 42-84241	n.d.
28	Profile, Left Hand Side, Forward Section, Under Construction	n.d.

29	Profile, Right Hand Side, Forward Section, Under Construction	n.d.
30	Full Rear View	n.d.
31	¾ Rear View, Right Hand Side	n.d.
32	Front View, Showing Cowl Flaps Open	n.d.
33	Front View, Showing Cowl Flaps Open	n.d.
34	Profile, Right Hand Side	n.d.
35	Profile, Right Hand Side	n.d.
36	Profile, Left Hand Side	n.d.
37	¾ View, Cowling Removed, Detail of Ranger Engine, Left Hand Side	n.d.
38	Profile, Cowling Removed, Detail of Ranger Engine, Left Hand Side	n.d.
39	Profile, Cowling Removed, Detail of Ranger Engine, Right Hand Side	n.d.
40	Profile, Cowling Removed, Detail of Ranger Engine, Right Hand Side	n.d.
41	Top View, Cowling Removed, Detail of Ranger Engine	n.d.
42	Bottom View, Cowling Removed, Detail of Ranger Engine	n.d.
43	Promotional Leaflet, ¾ View, Front, Right Hand Side	n.d.

Republic Aviation JB-2 Loon (American Made V-1)

44	Profile, Left Hand Side, Rear, #1691	1945
45	Profile, Left Hand Side, Rear, Farther Aft, #1691	1945
46	Profile, Left Hand Side, Rear, Farther Aft, #1691 (Wide Angle)	1945
47	Profile, Left Hand Side, Forward of the Wing Root, #1691	1945
48	Profile, Left Hand Side, On Launch Ramp, “Japanese Sandman”	1945
49	Profile, Left Hand Side, On Launch Ramp, “Japanese Sandman”	1945

Wright Field Equipment Laboratory GB-4

50	¾ View, Right Hand Side, Front	1945
----	--------------------------------	------

SERIES III: LUFTWAFFE AIRCRAFT

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
		Arado Ar 234 Blitz	
51		¾ View, Front, Left Hand Side	1945
		Bachem Ba 349 Natter	
52		¾ View, Front, Left Hand Side	1945
53		¾ View, Front, Right Hand Side	1945
54		¾ View, Front, Right Hand Side (Close Up)	1945
		Feiseler Fi 103 (V-1 Buzz Bomb)	
55		¾ View, Front, Left Hand Side	1945
		Focke-Wulf Fw 190 G-3	
56		Profile, Left Hand Side, A/C EB-104 (In American Markings)	1945
		Heinkel He 162 Salamander	
57		Profile, Right Hand Side (Wide Angle)	1945
58		Profile, Right Hand Side	1945
		Henschel Hs 293 Radio-Guided Anti-Shipping Missile	
59		Profile, Right Hand Side	1945
60		Profile, Right Hand Side (Wide Angle)	1945
		Junkers Ju 290 "Alles Kaputt" A/C FE-3400	
61		Profile, Left Hand Side, Forward of the Wing	1945
62		Profile, Left Hand Side, Forward of the Wing (Note the Japanese Ohka)	1945
63		Profile, Left Hand Side, Forward of the Wing (Note the Japanese Ohka)	1945
64		¾ View, Left Hand Side, Forward Section	1945
65		Left Wing Engine Nacelles	1945

66	Profile, Exhaust Nozzles	1945
67	Rear View, Exhaust Nozzles	1945
68	Rear View, Exhaust Nozzles	1945
69	Profile, Exhaust Nozzles	1945
70	Cowl Detail	1945
Junkers Ju 388		
71	Profile, Right Hand Side, A/C FE-4010	1945
Messerschmidt Me 163 Komet		
72	¾ View, Left Hand Side, A/C 191-301	1945
73	¾ View, Left Hand Side (Wide Angle)	1945
Messerschmidt Me 262 Schwalbe		
74	¾ View, Left Hand Side, A/c FE-111	1945
Mittelwerk GmbH Aggregat-4 (V-2 Rocket)		
75	Erect, (Note Engine to the Side)	1945
76	Erect, (Note Engine to the Side)	1945

SERIES IV: PISTON ENGINES

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
Allison V-3420 B-5			
77		Bevel Drive and Extension Shafting (ATC Program)	1945
78		Pair of Engines Hooked to One Gearbox and Counter-rotating Props	1945
Bavarian Motor Works BMW 803			
79		¾ View, Front, Right Hand Side	1945
80		Profile, Left Hand Side	1945

81	Detail, Carburetor Intakes, Left Hand Side	1945
82	Detail, Carburetor Intakes, Right Hand Side	1945
	Chrysler XI-2220-II	
83	Profile, Left Hand Side	1945
84	$\frac{3}{4}$ View, Front, Left Hand Side	1945
85	Full Front View	1945
86	Detail, Shaft, Left Hand Side	1945
	Continental X-1430-25	
87	$\frac{3}{4}$ View, Front, Right Hand Side	1945
88	Top View, Cambox	1945
89	Top View, Cambox	1945
	Daimler Benz DB-610	
90	Profile, Right Hand Side	1945
91	$\frac{3}{4}$ View, Rear, Right Hand Side	1945
	Fairchild Caminez	
92	$\frac{3}{4}$ View, Front, Left Hand Side	1945
93	Full Front View	1945
	General Electric XT-31 "Prop Jet"	
94	Profile, Left Hand Side	1945
95	Profile, Right Hand Side, Rigged for Testing	1945
	General Motors X-250	
96	$\frac{3}{4}$ View, Front, Left Hand Side	1945
97	Profile, Left Hand Side	1945
98	Full Front View	1945
99	Full Front View (Detail)	1945

100	Full Front View (Wide Angle)	1945
101	Profile, Right Hand Side	1945
102	Top View, Cylinder Detail	1945
103	Top View, Cylinder Detail	1945
104	Detail, Carburetor Cut-Away	1945
	Lawrence 2 Cylinder Engine	
105	Full Front View	1945
	Liberty 4 Cylinder	
106	Profile, Right Hand Side	1945
	Lycoming R-680	
107	Cut-Away Cylinder Detail	1945
	Lycoming XR-7755	
108	$\frac{3}{4}$ View, Front, Left Hand Side	1945
109	$\frac{3}{4}$ View, Rear, Right Hand Side	1945
110	$\frac{3}{4}$ View, Rear, Left Hand Side	1945
	Nakajima 21 "Homare" (Honor)	
111	Profile, Left Hand Side	1945
112	Cylinder Detail	1945
113	Cylinder Detail	1945
114	Cylinder Detail	1945
115	Cylinder Detail	1945
	Pratt & Whitney R-2800 "Double Wasp"	
116	Full Front View, On Test Bed	1945
	Pratt & Whitney R-4360 "Major"	
117	$\frac{3}{4}$ View, Front, Right Hand Side	1945

118	Full Front View	1945
119	Cylinder Detail	1945
120	Exhaust Detail	1945
121	Right Rear Detail	1945
Pratt & Whitney Cylinders		
122	Overview of Entire Cylinder Display	1945
123	Overview Facing the Left Hand Side of the Display	1945
124	R-985 Cylinder	1945
125	R-985 Two Cycle Fuel Injection Cylinder with Piston	1945
126	R-1340 Early Production Cylinder	1945
127	R-1340 Present Production Cylinder (1945)	1945
128	R-1340 "L" Cylinder for Small Engine Diameter	1945
129	R-1690 Fine Fin Bolted Head	1945
130	R-1690 Early Coarse Fin Cylinder	1945
131	R-1690 Bolted on Head Early Coarse Fin	1945
132	R-1690 Present Production Cylinder (1945)	1945
133	R-1830 Interchangeable Front or Rear Rows Interconnected Intake Ports	1945
134	R-1830 Production Type C-4 Cylinder	1945
135	R-1830 Present Production Type C-9 Cylinder (1945)	1945
136	R-1860 Early Fine Fin Cylinder	1945
137	R-2000 Cylinder with Cast on Aluminum Barrel Muff	1945
138	R-2000 Present Type Cylinder (1945)	1945
139	R-2150 Cylinder with Maximum Obtainable Cast Finning	1945
140	R-2800 Latest Production "B" Type Cylinder (1945)	1945
141	R-2800 Early "C" Type Cylinder	1945

142	R-2800 Present Production “C” Type Cylinder (1945)	1945
143	R-2800 Copper Spined Barrel Cooling Surfaces	1945
144	R-2800 “D” Type Cylinder for Pusher Engines Reverse Intake Ports	1945
145	R-4360 Semi-Production Cylinder	1945
146	R-4360 Present Production Cylinder (1945)	1945
147	R-4360 Early Type Cylinder	1945
148	R-4360 An Attempt to Improve Cooling by Interfin Turbulence	1945
149	R-4360 Alternate Cut Fins Batter Cooling at Rear Light Weight	1945
150	R-4360 Thin Fin Cylinder More Fins for Same Weight	1945
	Wright Flyer Engine	
151	Profile, Right Hand Side	1945
	Wright J-4 “Whirlwind”	
152	Full Front View	1945
	Wright R-1820 “Cyclone”	
153	Full Front View	1945
	Wright R-2160 “Tornado”	
154	¾ View, Left Hand Side	1945
155	Detail, Shaft	1945
156	Detail, Top	1945
157	¾ View, Rear, Left Hand Side	1945
	Wright R-2600 “Twin Cyclone”	
158	Profile, Right Hand Side (Cut-Away)	1945
	Wright R-3350 “Duplex Cyclone”	
159	Full Front View	1945
160	Profile, Right Hand Side, on Test Bed	1945

161	¾ View, Rear, Right Hand Side, on Test Bed	1945
162	Cut-Away Detail	1945
163	Cut-Away Detail	1945
164	¾ View, Rear, Right Hand Side	1945
Helicopter Blade Mechanism		
165	Shot from Below	1945

SERIES V: JET ENGINES

<u>Box</u>	<u>File</u>	<u>Description</u>	<u>Date</u>
General Electric Type 1A (Whittle Clone)			
166		Profile, Right Hand Side	1945
167		Profile, Left Hand Side, Rigged for Testing (Wide Angle)	1945
168		Profile, Left Hand Side, Rigged for Testing	1945
General Electric J-31			
169		Profile, Left Hand Side, Rigged for Testing	1945
General Electric J-35			
170		Profile, Left Hand Side, Rigged for Testing	1945
German Pulse Jet (V-1 Engine)			
171		Profile, Left Hand Side (Detail of Display)	1945
Turbine Rotor Assemble			
172		¾ View, Rear, Right Hand Side	1945