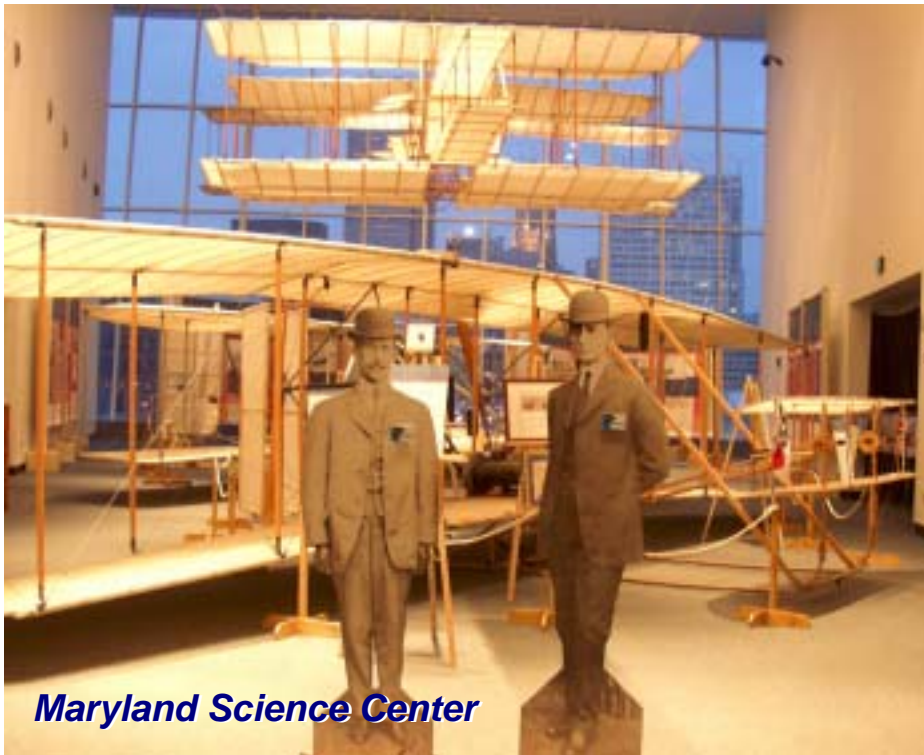




SAE Convention




Festival of Flight



Maryland Science Center



Dayton Air Show

THE  **WRIGHT**
STUFFER
*How to cram 10 pounds
of the Wright stuff in a
5-pound exhibition.*

The Wright Stuffer

Creating Your Own Wright Display

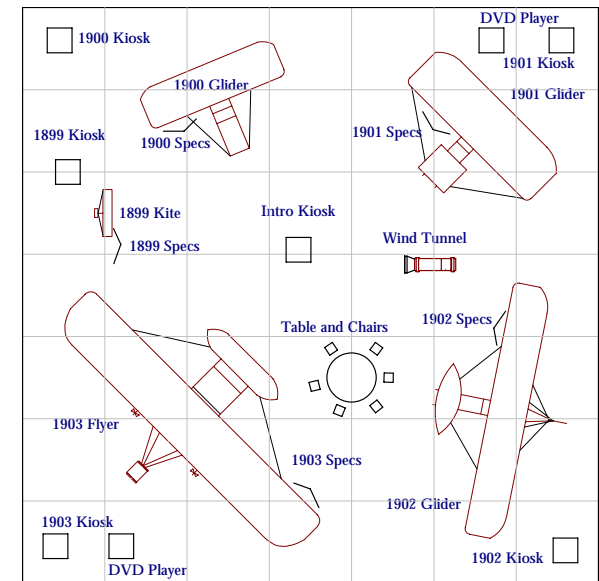
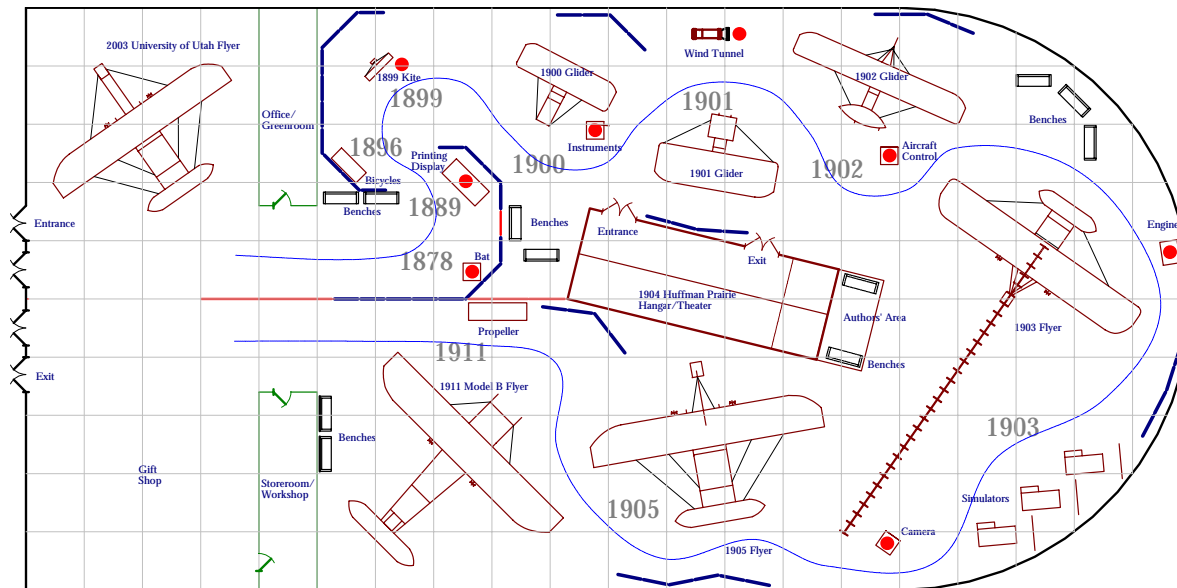
What airplanes, artifacts, and displays are available? How much space does a Wright aircraft take up? How many airplanes can be arranged in a given space? How much extra space is needed for the artifacts and interpretive displays?

To help you answer those questions, we've created a simple do-it-yourself display design aid. This lets you arrange our Wright stuff in the room or tent you have available. To use it:

1. Cut out the two-dimensional drawings of the airplanes, artifacts, and displays. In some case, you may have to photocopy the drawings to get extra pieces, such as a full compliment of timeline banners.

2. Mark the dimensions of your space on the grid. Each square is 10 feet by 10 feet.
3. Verify that we have proper access to get the pieces of our airplanes and artifacts into the space. The parts of the gliders will fit through an ordinary 36" door, but they are up to 17' long. The core sections of the Flyers are 6-1/2' x 7' x 16' and require wide double doors or a loading door. Most of our artifacts do *not* break down into components that are significantly smaller than what are shown.
4. Arrange the cut-outs on the grid.
5. Tape the cut-outs in place, photocopy the results, and send them to us so we can make suggestions and help you fine-tune your display.

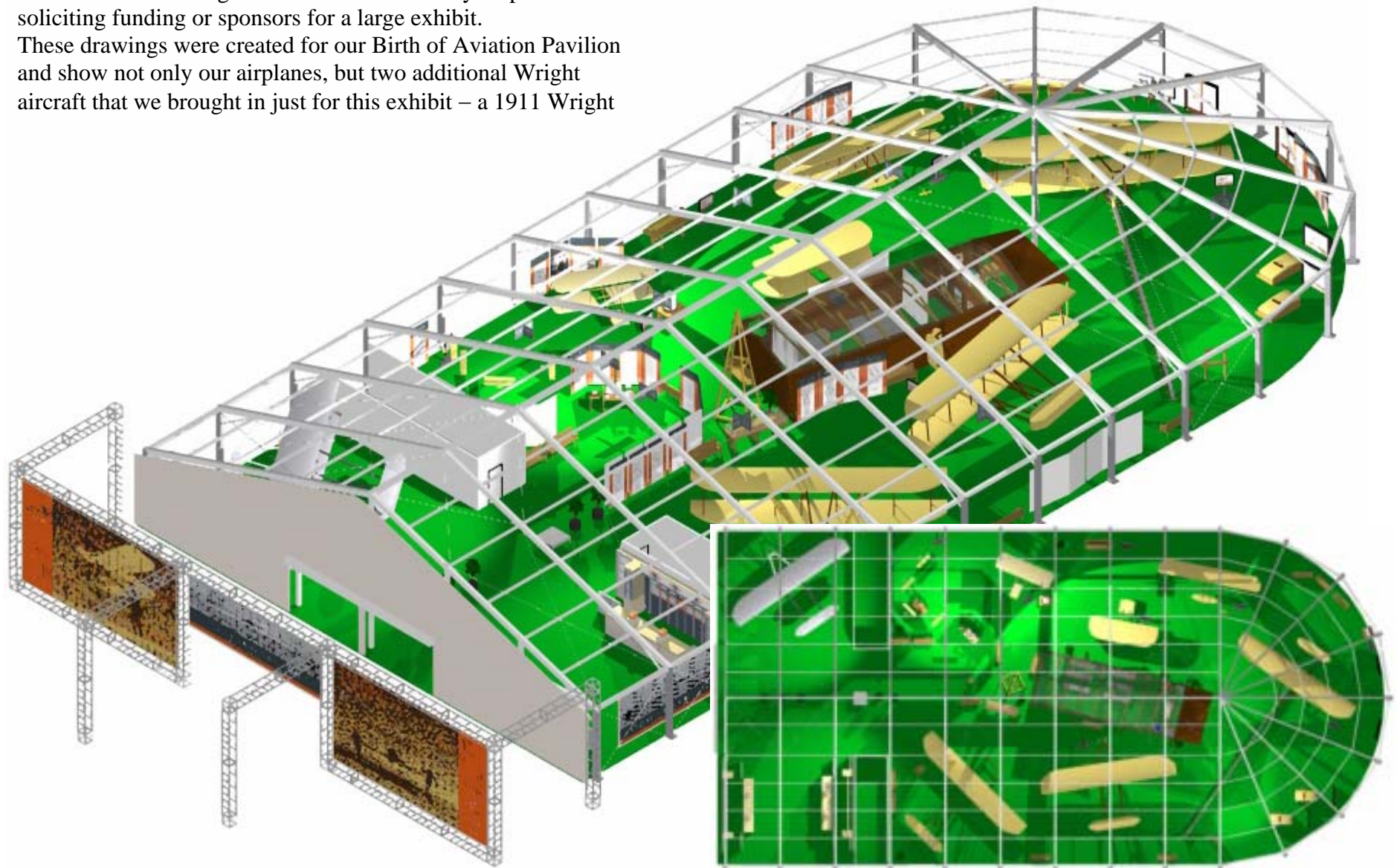
Below are several examples of displays that we helped to design. The large plan to the left is the initial layout for our Birth of Aviation Pavilion, one of the featured attractions at the Dayton Air Show. The plan to the right is a display that we created for the Society of American Engineers (SAE) for their annual convention.



Scale: Each Square is 10' x 10'

If you so wish, we can take your rough layouts and create striking digital art to show the display in two or three dimensions, as shown on this page and the next. We can even provide an animated “walk-through.” This can be extremely helpful when soliciting funding or sponsors for a large exhibit. These drawings were created for our Birth of Aviation Pavilion and show not only our airplanes, but two additional Wright aircraft that we brought in just for this exhibit – a 1911 Wright

Model B replica and the Utah State University “21st Century Flyer, a modern interpretation of the Wright design.



A Quick Tour

So what are the components of the Birth of Aviation Exhibition? There are several categories – airplanes, artifacts, interpretive signage, and interactive displays. If you have the space for everything we have to offer, we can set them up in a walk-through timeline that will take you visitors from the Wright brothers' childhood to their twilight years with particular emphasis on the six years they spent inventing the airplane, from 1899 to 1905. The interactive displays, which include our flight simulators, can be organized into "Will and Orv's Flying School," which take young people through the Wrights' scientific discoveries *in the order in which they made them* along the path to a practical flying machine.

These photos were taken at the Dayton Air Show 2003-2005, where we displayed our entire collection, including the timeline and the flying school, in a 20,000-square foot pavilion. You may not have that kind of space available, but these photos will provide a "catalogue" from which you can pick and choose the airplanes, artifacts, signs, and displays that interest you. If you do have the space, this will show how our collection all works together in a humongous knock-your-socks-off traveling exhibition.



1. Introductory timeline banners and 1878 (Wright childhood) banners. At the left is the Wright Bat display.
2. 1886 Wright printing career banners and display, including a working nineteenth-century offset press.



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3. 1896 Display, including Wright bicycles and pre-Wright aircraft – Langley Aerodrone, Chanute Glider, and Lilienthal Glider.
4. 1899 Display with Inner Tube Box Experiment.



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5. 1900 Wright Glider and display.
6. Wright Scientific Instruments display.



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7. 1901 Wright Glider and display.
8. 1901 Wright bicycle experiment and wind tunnel display.
9. "Machines of the Wright Brothers" video station.



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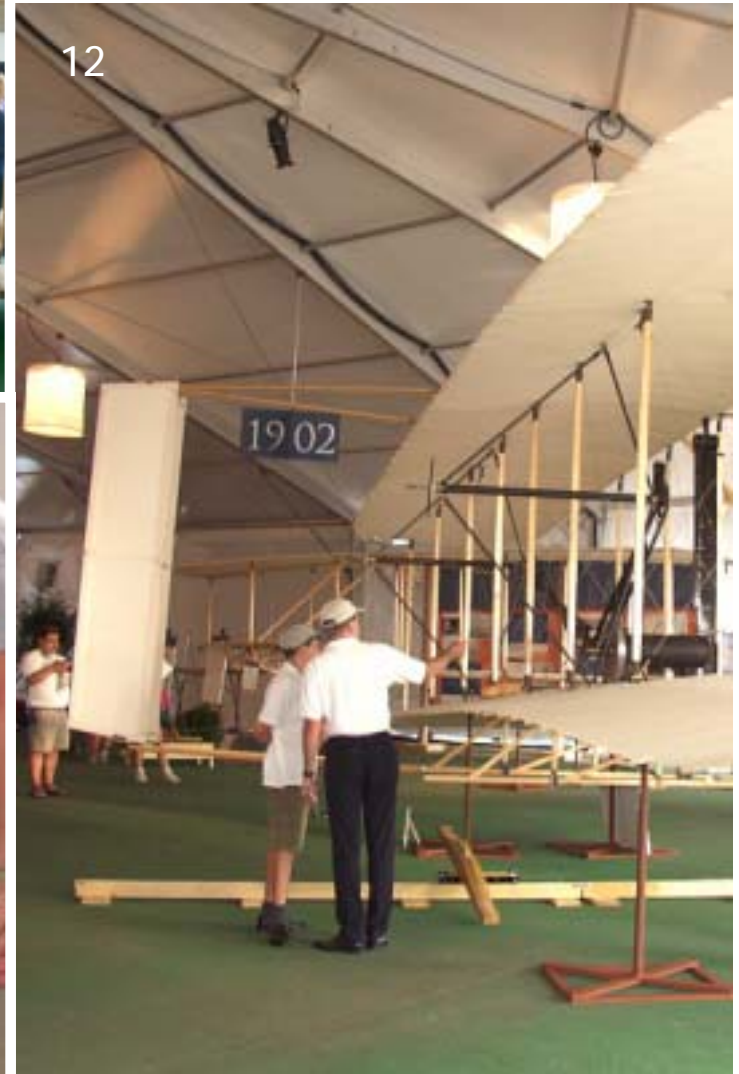
- 10. 1902 Wright Glider display.
- 11. Major Andrew "Rocket" Thurman, USAF, a test pilot who actually flew our 1902 Wright Glider.



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12. 1903 Wright Flyer I display.
13. 1903 Wright engine and
Wright scholar Terry Hesler.

- 14. 1904 and 1905 Wright Flyer I displays.
- 15. 1905 Wright Flyer III with Orville, Wilbur, and Katharine Wright re-enactors.
- 16. Wright Flyer radio controlled model.





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- 17. Will and Orv's Flying School.
- 18. The 1900 Wright Glider simulator.
- 19. Bernoulli demonstrator.
- 20. Vertical wind tunnel.



An Inventory of Our Wright Stuff

AIRPLANES

- 1899 Wright Kite
- 1900 Wright Glider
- 1901 Wright Glider
- 1902 Wright Glider
- 1903 Wright Flyer 1 and launch rail
- 1905 Wright Flyer 3, launch rail, and catapult
- 1895 Lilienthal Glider (1/2 scale)
- 1896 Langlely Aerodrome #5 (1/2 scale)
- 1896 Chanute-Herring Glider (1/2 scale)
- 1908 Wright Military Flyer (1/8 scale, RC)
- 1505 DaVinci Ornithopter (1/8 scale)

All of these, with the exception of the 1905 Wright Flyer 3, can be suspended from a ceiling, provided the structure can handle the load.

ARTIFACTS

- 1878 Wright “Bat” (rubber band-powered toy)*
- 1886 Letterpress and plates to print “The Midget” (Wrights first newspaper)*
- 1898 Men’s *St. Clair* bicycle replica with experimental apparatus for lift tests*
- 1901 Wright Wind Tunnel
- 1901 Lift and drag balances for wind tunnel*
- Vintage Richards anemometer, clinometer, spring scales, other scientific instruments known to have been used by the Wright brothers.*

- 1903 Wright Engine replica*
- Vintage drill press used to make historic Wright engine
- Orville Wright’s pilot license*
- Piece of cloth from original 1903 Wright Flyer*


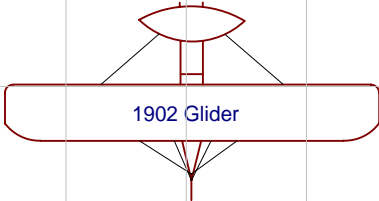




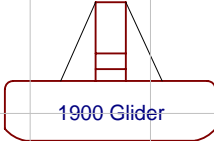
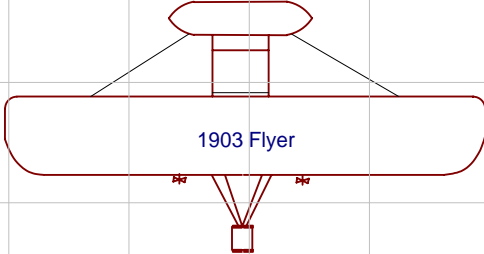


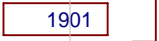

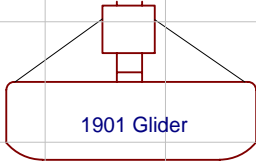
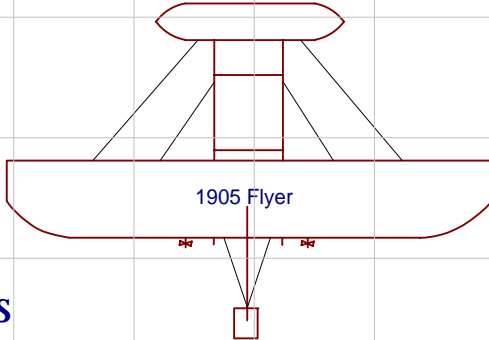
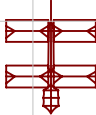









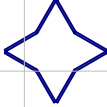

















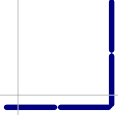
INTERPRETIVE MATERIALS

- Birth of Aviation Timeline (large – 52 4-foot by 9-foot banners, hung from wooden frames)
- Birth of Aviation Timeline (small – 8 3-foot x 6-foot displays framed in wood)
- First flight photos (Twelve 20-inch x 30-inch photos showing the first successful flight of our 1903 Flyer replica in 1-second intervals)
- Glider in flight (Four 3-foot x 5-foot banners showing 1902 Wright Glider flights)
- Specifications for all Wright gliders and airplanes*
- Explanatory signage for all artifacts*
- Four A/V stands with 19” televisions and DVD players

INTERACTIVE DISPLAYS

- 1900, 1901, 1902, 1903, and 1905 Wright glider and Flyer simulators
- Wind tunnel with wing shape experiment
- Wright kite demonstrator
- Vertical wind tunnel and helicopters
- Bernoulli demonstrator
- Wright printing examples*
- Wright Cycle Company bicycle catalogue*
- 1901 Wright Wind tunnel results*
- Wright scientific diaries*

**On display tables or easels*

Wright Airplanes				Pre-Wright Pioneer Aircraft		Interactive Displays (Flying School)																	
 1899 Kite		 1902 Glider		 1895 Lilienthal (1/2 Scale)		 Vertical Wind Tunnel		 Bernoulli Demonstrator		 Wright Kite Demonstrator													
 1900 Glider		 1903 Flyer		 1896 Chanute-Herring (1/2 Scale)		 Wright Wind Tunnel		 1901 Flight Simulator		 1903 Flight Simulator													
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<h3>Wright Artifacts</h3>																							
       General Purpose Display Tables Wright Printing Examples Wright Bicycle Catalog		    1900 Scientific Instruments 1901 Wind Tunnel 1903 Wright Engine 1903 Wright Drill Press																					
   1878 Wright Bat 1889 Printing Press 1898 Wright Bicycle						<div> 1903 Flyer in Flight (12 Photos)</div> <div> Large Timeline Banners (Straight)</div> <div> Large Timeline Banners (45° Corner)</div> <div> Large Timeline Banners (90° Corner)</div>																	
						<p>NOTE: There are 12 sets of large timeline banners, one set for each of the following years or subjects:</p> <table><tr><td>INTRO</td><td>1901</td></tr><tr><td>1878</td><td>1902</td></tr><tr><td>1889</td><td>1903</td></tr><tr><td>1896</td><td>1904</td></tr><tr><td>1899</td><td>1905</td></tr><tr><td>1900</td><td>SUMMARY</td></tr></table>						INTRO	1901	1878	1902	1889	1903	1896	1904	1899	1905	1900	SUMMARY
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