



1904: Improvements in Dayton

The Society now has you working on other projects, but you are still interested in the progress the Wright Brothers are making, so on your own, you travel up to Dayton in the fall of 1904. When you inquire at the shop, you are told that Wilbur and Orville are experimenting at a farm just outside Dayton owned by a man named Torrence Huffman. Before you go, you call on a friend who is a reporter for a Dayton newspaper. He tells you that the Wrights had twice invited the press out to see their invention, and both times, it didn't even fly! Nobody he knew was bothering to go back.

Puzzled by this, you catch the electric trolley and head for the Huffman farm. What you see amazes you. There, in a 100-acre cow pasture called "Huffman Prairie," you see Orville flying in a circle around the field! Wilbur is standing by a small building in the corner of the field, and you hurry over to greet him. He tells you that they had some bad luck with the engine both times they invited the press out, and now they don't come at all.

Astonished, you mumble something about how far the brothers have come since Kitty Hawk. Wilbur says that they've made a stronger frame with a larger engine, and moved the center of gravity to the rear, but have still not



Orville and Wilbur standing by the Wright 1904 Flyer.



Launching derrick.

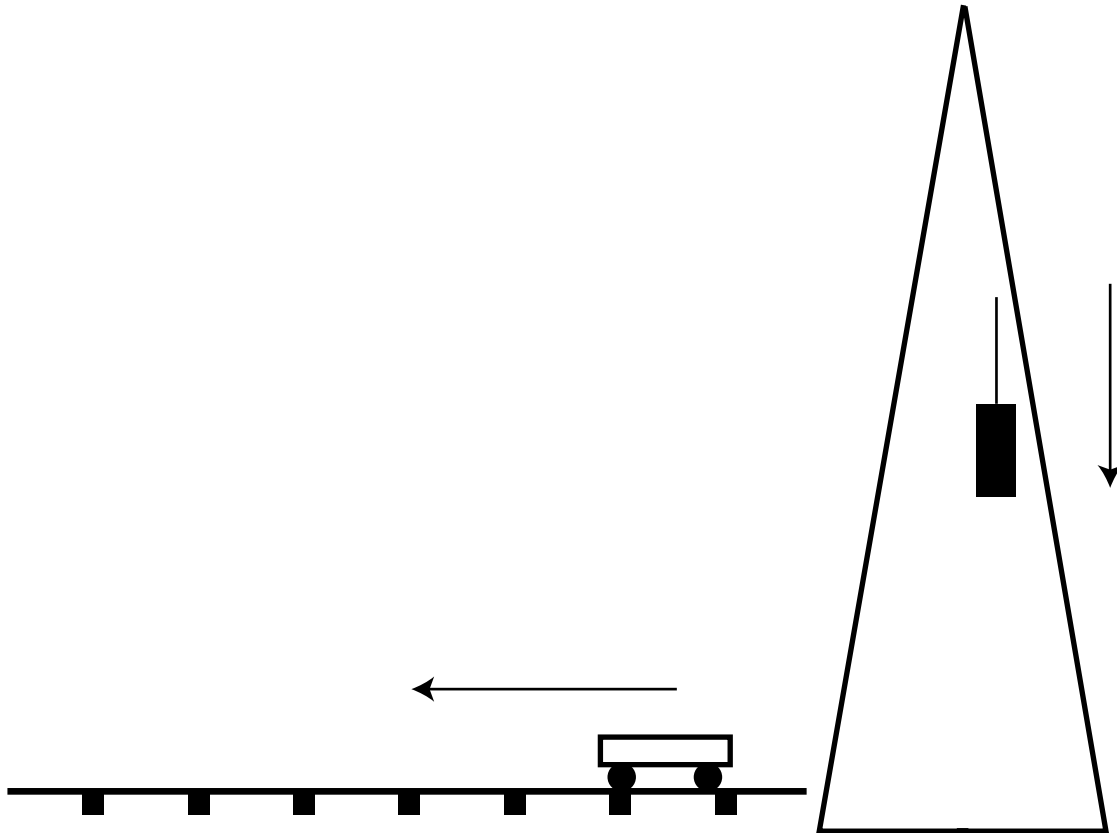
perfected the up-and-down control. It's hard to keep the craft from bobbing up and down. You ask how they get up into the air without the wind and hills at Kitty Hawk, and he shows you a launching derrick they built. A 1600-pound weight is hoisted to the top. When the weight drops, the plane is catapulted down 60 feet of track and becomes airborne. Their longest flight has been about 5 minutes.

You stay and watch a few more flights, help the brothers put the flyer away, and ride back to Dayton with them on the trolley.



Activity 20—How To Launch the Flyer

This diagram represents the derrick (shown on page 34) used to launch the 1904 Flyer, which would rest on the small wheeled trolley (or launch cradle) shown on the launch track. The problem is how to get the launch cradle to move forward when the weight drops. Can you draw ropes (lines) and pulleys (circles) in a way that would make this happen? Draw arrows to show the direction each section of rope would move when the weight is dropped.



1. If the wind generally comes from the west, which way should the launch cradle travel?
2. What are the difficulties in using this launch system?
3. Why didn't they just use the force from the flyer's propellers to take off like planes do today?



