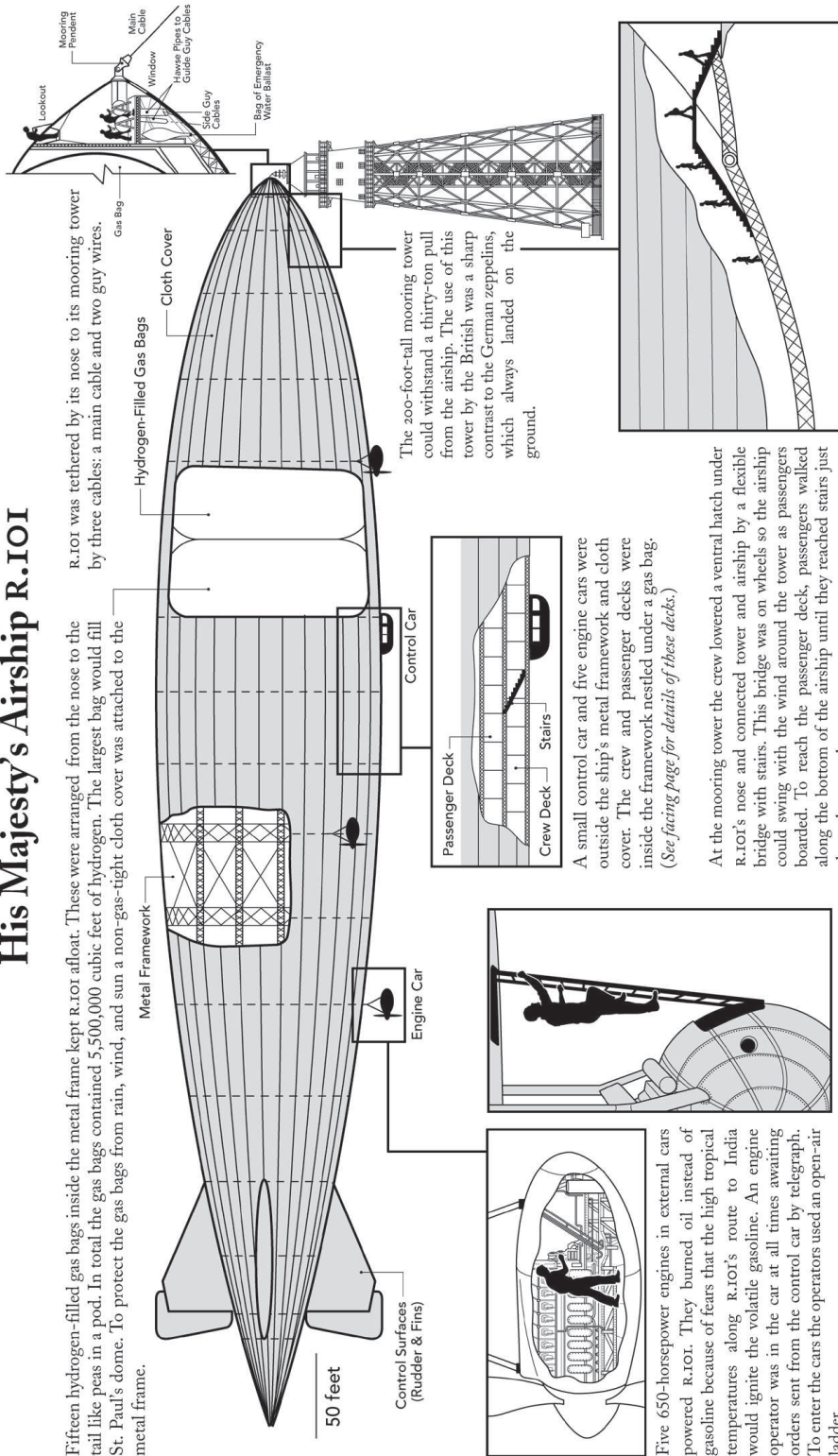


His Majesty's Airship R.101

Fifteen hydrogen-filled gas bags inside the metal frame kept R.101 afloat. These were arranged from the nose to the tail like peas in a pod. In total the gas bags contained 5,500,000 cubic feet of hydrogen. The largest bag would fill St. Paul's dome. To protect the gas bags from rain, wind, and sun a non-gas-tight cloth cover was attached to the metal frame.



R.101 was tethered by its nose to its mooring tower by three cables: a main cable and two guy wires.

The 200-foot-tall mooring tower could withstand a thirty-ton pull from the airship. The use of this tower by the British was a sharp contrast to the German zeppelins, which always landed on the ground.

A small control car and five engine cars were outside the ship's metal framework and cloth cover. The crew and passenger decks were inside the framework nestled under a gas bag. (See facing page for details of these decks.)

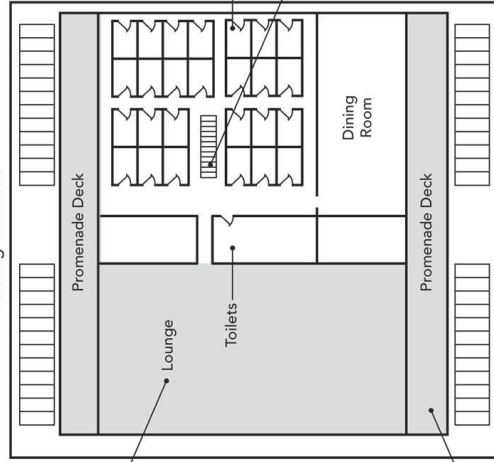
At the mooring tower the crew lowered a ventral hatch under R.101's nose and connected tower and airship by a flexible bridge with stairs. This bridge was on wheels so the airship could swing with the wind around the tower as passengers boarded. To reach the passenger deck, passengers walked along the bottom of the airship until they reached stairs just above the control car.

Five 650-horsepower engines in external cars powered R.101. They burned oil instead of gasoline because of fears that the high tropical temperatures along R.101's route to India would ignite the volatile gasoline. An engine operator was in the car at all times awaiting orders sent from the control car by telegraph. To enter the cars the operators used an open-air ladder.

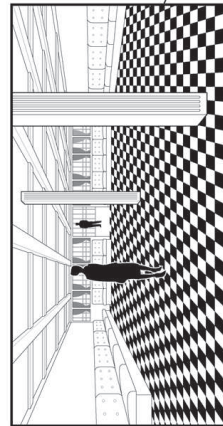
Passenger Deck

Port

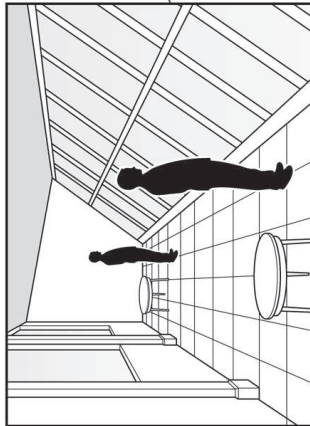
Viewing Windows



Aft



The tennis-court-sized floor of the lounge gleamed in the sunlight that poured in through giant windows port and starboard. Passengers could dance as a band played, or enjoy a drink while sitting on the built-in green-cushioned benches that lined the walls. Or, they could recline in one of the deep-blue wicker chairs scattered throughout. At the center of this drawing a small figure can be seen standing on one of the promenade decks.



The promenade decks were hidden behind the built-in benches of the lounge both port and starboard. Through an opening at the center passengers entered the decks. On the deck they could lean against a waist-high railing and enjoy a stunning bird's-eye view of the ground through a wall of glass tilted at forty-five degrees.

The quarters were spartan: bunk beds, a small luggage stool for cabin bags, a small rug, and a note on the protocols of airship life that described how to summon a steward. The cabins were decorated in white and gold. They had no doors and only a Cambridge blue curtain, which saved weight but decreased privacy, already minimal because of the thin cloth walls. No exact layout exists for the cabins, but from an internal memo we know that there were twenty-six double-berth cabins, so sleeping accommodations for fifty-two passengers.

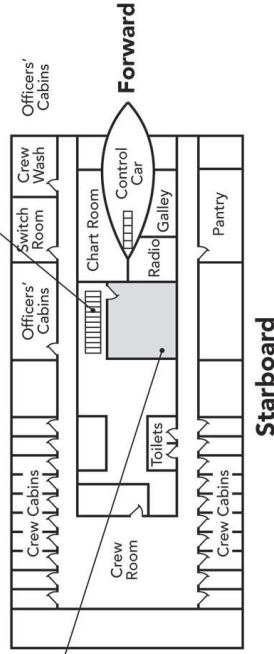
Sleeping Quarters

Forward

Stairs connecting decks

Crew Deck

Port



The only section of the lower deck accessible to passengers was the smoking room. To keep it away from the hydrogen-filled gas bags, the smoking room was built into the lower deck, instead of the upper passenger deck. A ventilator on the ceiling created a higher pressure inside than outside, ensuring that no hydrogen could leak into the room. Its wood walls were layered with asbestos and covered with aluminum. No matches were allowed; only the electric lighters built into the furniture.