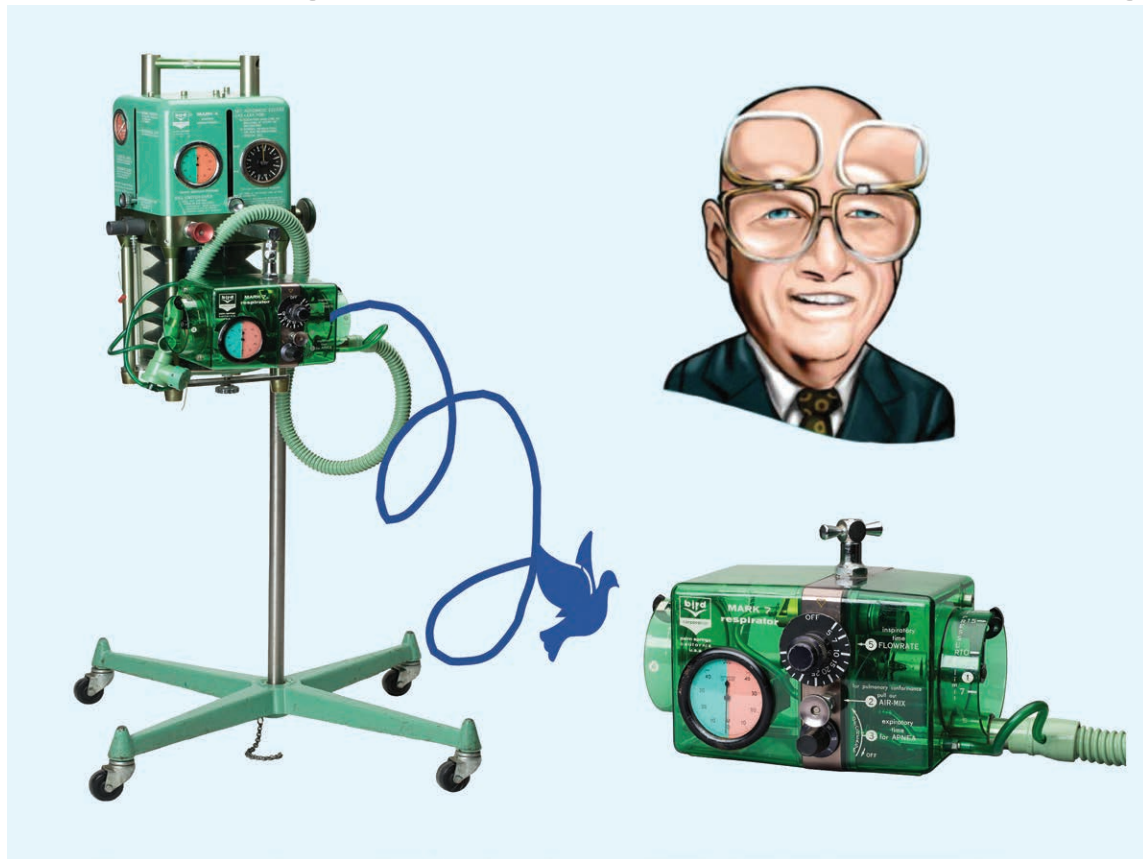


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## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

# Dr. Bird Takes Flight, and Ventilation Reaches New Heights



The son of a World War I pilot, Forrest Bird, M.D., Ph.D. (1921 to 2015, *upper right*), stayed true to his family name, flying solo at age 14. He, too, became a military pilot during World War II. At the time, hypoxia in pilots using standard oxygen masks limited the operational altitude of turbocharged Allied aircraft. Examination of an oxygen delivery system on a captured German Junkers plane inspired Bird's first invention—a positive-pressure face mask that enabled pilots to ascend 8,000 feet higher. Bird also helped design G-suits to prevent aviator black-outs during sharp maneuvering. After the war, he cobbled together the first prototype of his popular respirator from strawberry shortcake tins, a doorknob, and a G-suit's magnetic clutch. Six iterations later, the portable and affordable Bird Mark 7 (1957, *lower right and upper left*) entered the market just as anesthesiologists, captivated by curare, began to explore controlled ventilation. The Bird Mark 4 (1959, *left*) adapted the Mark 7 unit for anesthetic gas delivery and enabled finer control of ventilatory volumes. Both devices' transparent casing invited future inventors to improve upon their design. By the 1970s, Bird respirators enjoyed widespread use around the world. Ever true to his surname, Dr. Bird continued to fly his father's 1938 Piper Cub into his later years. (Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology, Schaumburg, Illinois.)

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