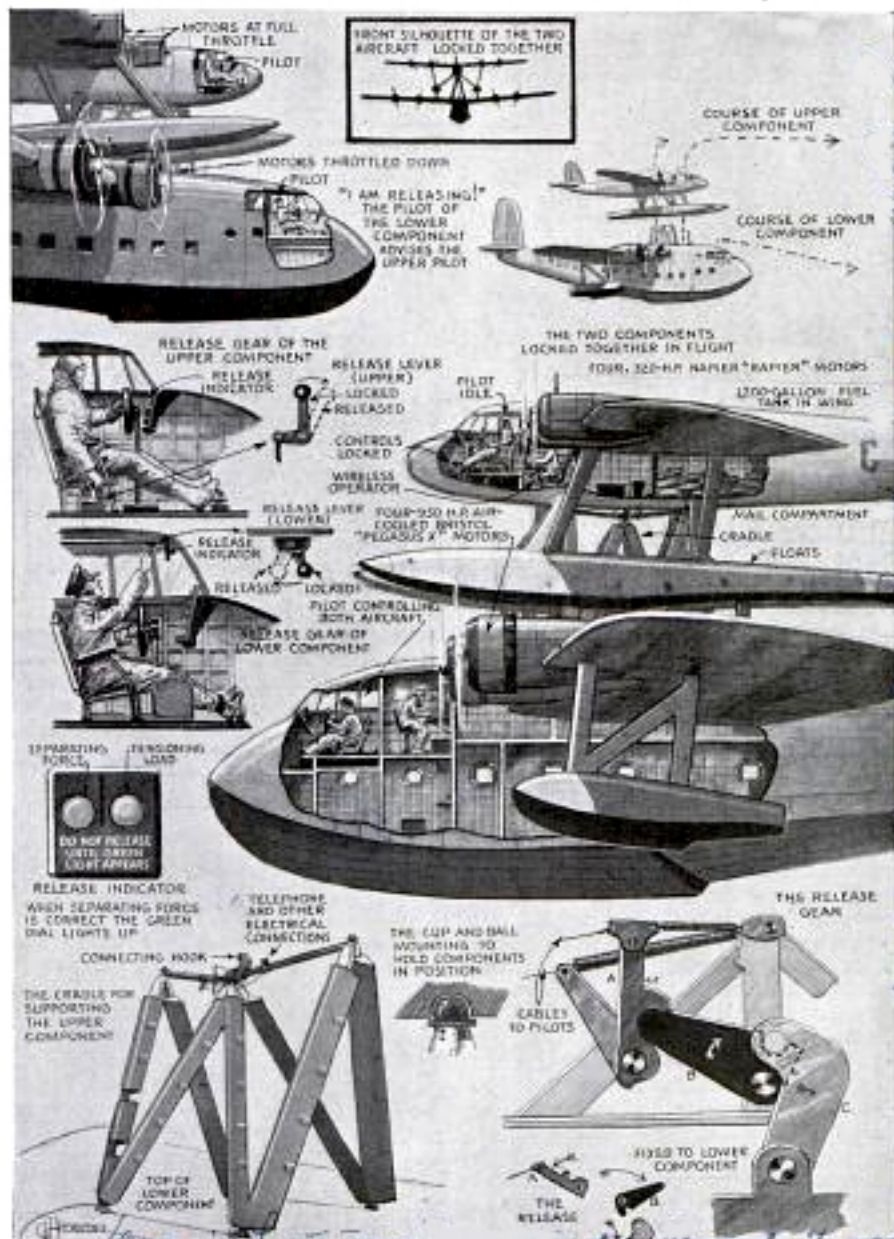
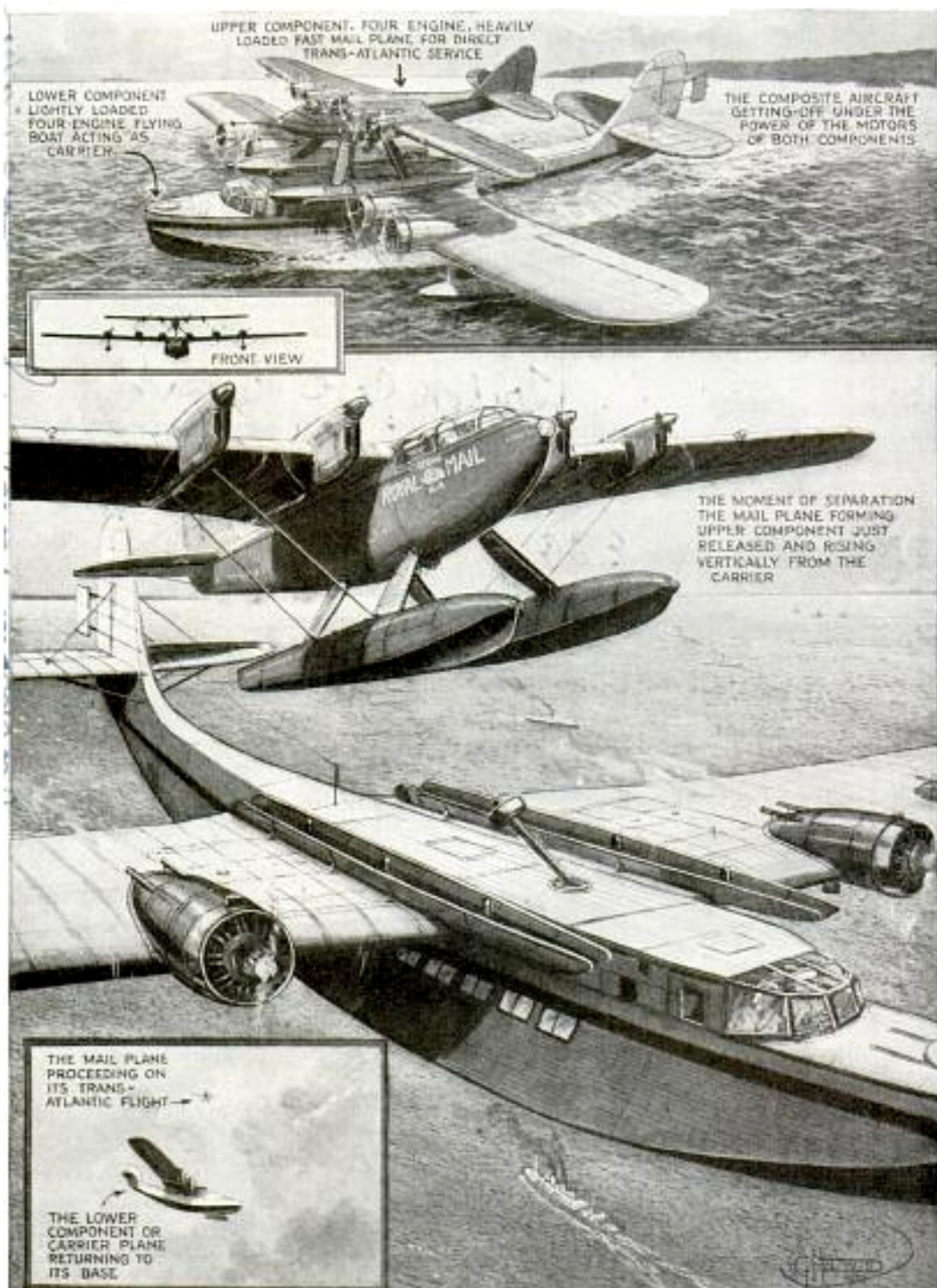


# 'Mother' Plane Launches Small Ship in Midair



*Drawings show how Mayo composite aircraft takes off as one, then separates into two planes, the smaller being launched from back of the "mother" ship. Tests of the British aircraft have been successful*

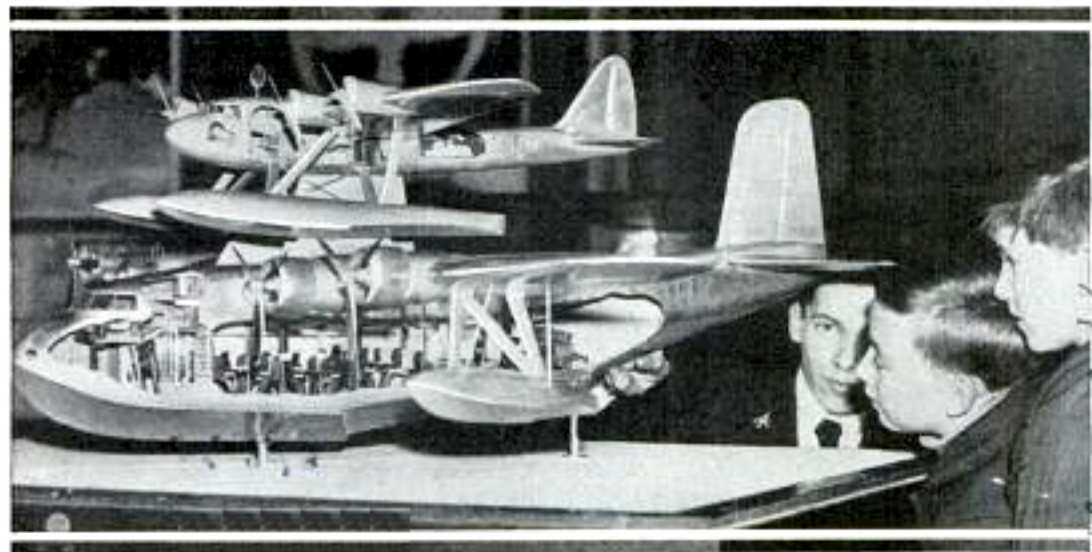
# Flying Boat Launches Sea Mail Plane in Air



**British Designer's Combination Flying Boat and Mail Plane, Each with Four Engines; Top, Mail Ship Attached to Flying Boat at Takeoff; Bottom, Launching Mail Plane in Air to Fly from England to Canada While Carrier Flies Back to Base; Mail Plane Has Floats; Composite Craft Is Being Constructed**



## Seaplane Gives Ocean Flier Pickaback Start



*Model of composite seaplane is cut away to show seating and cargo compartments; giant flying boat takes speedier, loaded plane on its back for a flying start and launches it when safe altitude is attained*

When Pan American Airways and Imperial Airways launch their joint transatlantic flying service, the British company may send over the ocean route a speedy monoplane that is given a flying start on the top of a giant flying boat. A model of this composite aircraft has been placed on exhibition in London. The smaller ship carries a heavy load of fuel and mail, and is given a "lift" off the sea by the powerful flying boat. When it reaches a safe alti-

tude, the monoplane casts off and races across the ocean with its cargo. The two air lines agreed recently on tentative plans for joint operation of passenger and mail planes between New York and London, Pan American using flying clipper ships of the type pioneering over the California-Hawaii-Philippines route. The Atlantic route will be from New York to Montreal, Harbor Grace, Ireland and London, or via Bermuda, the Azores and Spain.

## Big Plane Lifts Small Craft to Start Flight



*Top, the composite aircraft, consisting of large plane and smaller ship on top, is in flight. Bottom, the "mother" plane landing after a test hop. This arrangement is intended to help heavily loaded planes to start long journeys without the usual takeoff problems.*

For launching small, heavily loaded aircraft into the air at the start of a long flight, a large "mother" plane is being used in experimental takeoffs to lift the small ship. Then, at the proper altitude, the small plane casts off from its position atop the mother ship and continues alone, the larger plane returning to its base. In test flights at Rochester, Eng., land, recently, a giant flying boat took the role of mother ship, with a small, speedy plane serving as the other principal in the



"sister" act. The composite aircraft was conceived as a means of solving the problem of getting planes into the air with heavy loads. Frequently the pilots of planes scheduled to make long-distance flights have been unable to lift their ships due to the heavy load of gasoline.