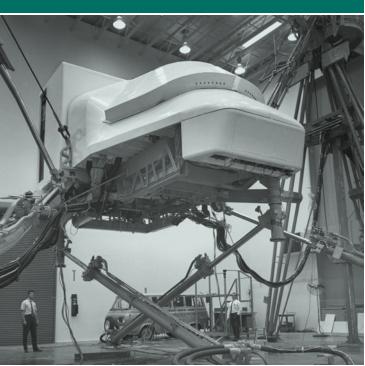
Safety Firsts

Production of the storied 747 will come to an end as 2022 draws to a close. With more than five decades of service so far, the iconic "Queen of the Skies" leaves a lasting legacy of safety firsts.

The 747 was the first airplane with:

- Triple redundancy in all major systems.
- Quadruple redundancy in the control and hydraulic systems.
- Three wing spars, with the third spar extending to the outboard engine.
- Four main landing gear (the plane can operate with just two) that contribute to a soft landing.
- Enclosed overhead bins replacing open hat racks.
- Full-motion simulators for training.



MOTION PICTURE

The 747 team created the industry's first full-motion simulator. During development of the airplane, Boeing invested millions of dollars in a flight training program, including behavioral flight training (instead of procedural) and a cadre of top flight instructors. The "Test Data Van" is at the ready in the background.



IQ Sketch

HOME STRETCH SKETCH

One of the last 747s under construction, in Everett, Washington, as seen through the pencil, pen then paint of Jeff Barlow from Boeing Creative & Digital.

IMAGE: JEFF BARLOW/BOEING