

## **King Air Flight Controls**

PAG provides expert flight control repair and resurface services, right down to the metal.

- Repair/Replace skins
- Repair/Replace ribs and spars
- Sheetmetal repairs
- DER Repair capabilities
- Elevators, flaps, ailerons, rudders, winglets, gear door, engine mounts, and more





Others sell parts, WE SELL SUPPORT®

## **AVIONICS • COMPONENTS • ENGINES • MANUFACTURING / DER**



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## Top Five Reasons to Repair and Resurface King Air Flight Controls

Regular repair and resurfacing of King Air flight controls are essential to maintaining aircraft safety, predictable handling, and long-term asset value.

- 1. As aircraft age and accumulate flight hours, the ailerons, elevators, and rudder are continuously exposed to aerodynamic loads, moisture, UV exposure, vibration, and environmental contaminants. Over time, this exposure can lead to surface degradation, corrosion, paint erosion, and wear in hinge points and skin materials.
- 2. Repairing and resurfacing King Air flight control surfaces is required to ensure smooth and accurate aerodynamic flow. Minor surface roughness, paint breakdown, or small dents can introduce drag and reduce control responsiveness. Pilots may notice reduced authority during takeoff rotation, climb performance, or during crosswind landings where precise control inputs are critical. Resurfacing restores a clean, uniform aerodynamic profile that preserves the aircraft's original performance characteristics.
- 3. Corrosion prevention is another key factor. King Air operators frequently fly in varying climates, including humid, coastal, or high-moisture environments that accelerate corrosion on aluminum skins and control surface components. Left unaddressed, corrosion can propagate beneath paint layers, compromise structural integrity, and lead to costly major repairs. Proper resurfacing removes contaminants, treats corrosion, and applies modern protective coatings that extend the life of the component while preventing future degradation
- 4. Control surface balance is equally important. Repairs that correct dents, replace skins, or restore coatings help preserve proper mass balance across ailerons, elevators, and the rudder. Imbalance can introduce flutter risks, vibration, or abnormal control feel. Skilled repair and resurfacing return the component to factory-approved balance limits, ensuring stability throughout the flight envelope.
- 5. Additionally, resurfacing provides an opportunity to inspect hinge bearings, attach fittings, control rods, and internal structure for wear or fatigue. Identifying issues early prevents in-service failures and reduces the likelihood of unplanned downtime.

For operators focused on dispatch reliability, preventive repairs significantly lower operational interruptions.

## **Part of PAG's Component Services**

Trace Aviation specializes in the repair and resurfacing of King Air flight controls for all Beechcraft King Air and Airliner models.