The Boeing 737 Fuselage Rail Precedent: ~1,700–1,800 Miles and the July 3, 2014 Clark Fork Derailment

Pillar: Space Hardware | **Basis:** Historical Event (Dated Precedent) | **Primary Source:** BNSF / Montana Rail Link / Boeing Public Record | **As Of:** 2026-11-16 (Primary check: ~1,700–1,800 mi)

Every Boeing 737 fuselage travels ~1,700–1,800 miles by rail from Wichita to Renton; on July 3, 2014, a 19-car Montana Rail Link derailment put three 737 fuselages into the Clark Fork River—the region's benchmark aerospace rail loss.

Operational Continuity & Corridor Facts

• Every Boeing 737 fuselage moves approximately 1,700–1,800 miles by rail from Spirit AeroSystems in Wichita, Kansas, to Boeing's Renton final assembly plant (note: primary-source range is ~1,700–1,800 mi vs. 1,800–2,000 mi informal shorthand).

• On July 3, 2014, 19 cars of a 90-car Montana Rail Link train derailed near Alberton/Superior, Montana, carrying six 737 fuselages plus 777/747 structures.

• Three 737 fuselages plunged down the embankment into or beside the Clark Fork River; zero injuries occurred, but all six 737 fuselages were scrapped locally due to structural compromise.

July 3, 2014 Clark Fork River Aerospace Rail Precedent

Dimension	Documented Fact	Lesson for Space Hardware
Route & Distance	Wichita, KS to Renton, WA (~1,700–1,800 mi)	Long-haul out-of-gauge rail exposes structures to canyon/grade risk
Derailment Scope	July 3, 2014; 19 of 90 cars near Alberton, MT	Track-alignment failures can occur far from origin/destination
Cargo Loss	6 737 fuselages (3 in/by river); all 6 scrapped	Zero-repair tolerance on flight-critical primary structures

Corridor Exposure, Triggers & Facility Actions

• For Washington launch-vehicle and large-structure builders, the 2014 Renton-bound derailment is the closest public precedent for oversized aerospace rail risk.

• Primary flight structures subjected to rail shock or water immersion typically cannot be recertified and must be written off as total losses.

• Ensure transit insurance covers full replacement cost plus schedule-delay spares rather than standard carrier per-pound liability.

Cross-Cluster Links & Primary Sources

• **WA Space Cluster Hub (#1382):** https://bcesg.org/washington-space-cluster-census/

• **Renton WA Space Cluster Profile:** https://bcesg.org/renton-wa-space-cluster-profile/

• **Boeing Defense Space & Security Profile:** https://bcesg.org/boeing-defense-space-security-puget-sound-profile/

• **Finance: CCA, CBAM & Insurance:** https://bcesg.org/wa-space-role-finance-cca-cbam-insurance/

• **Launch Segment Continuity Exposure:** https://bcesg.org/wa-space-launch-continuity-corridor-exposure/

• **BNSF Railway Network:** https://bnsf.com/

• **49 CFR DOT / FRA / PHMSA Regulations:** https://www.ecfr.gov/current/title-49

Provenance Note: Primary-source check records ~1,700–1,800 miles (vs. 1,800–2,000 frame shorthand). July 3, 2014 derailment: 19 cars, 6 737 fuselages, 3 down embankment/river, all 6 scrapped.