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Points of Value Specific to Learjets



What are the specific points of value in the used Learjet marketplace? Jeremy Cox spotlights this popular business jet series with an eye on their values today...

The legendary Learjet series continues to be popular among business jet owners and operators today – and that includes the used aircraft sales market with a total of 246 used transactions for Learjets occurring since January 2010 across all models.

All of the post-production Learjet models discussed within this article are currently projected by the Aircraft Bluebook to accumulate averages of between 306 and 408 flight hours annually. The highest annual projection belongs to the Learjet 35A and the lowest is assigned to the Learjet 31A.

The average total-times for each model at the time of writing were as follows:

- Learjet 75 (2015 Model): 697 flight hours
- Learjet 60 (2000 Model): 5,164 flight hours
- Learjet 55 (1983 Model): 10,986 flight hours
- Learjet 45 (2002 Model): 3,760 flight hours
- Learjet 40 (2006 Model): 4,575 flight hours
- Learjet 35 (1980 Model): 10,953 flight hours
- Learjet 31 (1995 Model): 6,125 flight hours

Following, we'll consider each model with its variants, and offer some insight into of their current market values.



Learjet 75

Learjet 70 & 75

Today, there are two Learjet models in production at Bombardier – the Learjet 75 (with a 2018 list price of \$13.8m) and the Learjet 70 (with a list price of \$11.3m). The Learjet 75 and 70 were introduced as improvements over the Learjet 45 and 40, respectively.

Among the enhancements these models offer are new TFE731-40BR engines, new winglets and a three-screen Garmin G5000 avionics panel packaged and marketed as the Bombardier Vision Flight Deck. While the MGTOW of both models is 21,500lbs, the Learjet 70 is 2.6 feet shorter than the Learjet 75.

In terms of residual value a 2015 Learjet 75 is indicated to be at about 52% of its new price, based upon a retail value today of \$7.2m.

Learjet 60/60SE/60XR

The Learjet 60 was introduced to the market as the successor to the Learjet 55 model (overleaf). It included a 3.5 foot stretched fuselage over its predecessor allowing

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for increased passenger and baggage space. Many have an optional Auxiliary Power Unit (APU) installed in the rear compartment.

Powered by two Pratt & Whitney Canada PW305A engines, the original Learjet 60 is equipped with Full Authority Digital Engine Control (FADEC) and has a standard Collins Proline 4 avionics package (with four-tube EFIS, digital tuning heads and Collins FMS-850 Flight Management System).

The Learjet 60SE followed the original Learjet 60, and is equipped with the same engines as the standard model, but has a 1,000lbs higher MGTOW (23,750lbs). It was introduced as the 'Special Edition', because it features an APU, the Collins TWR-850 Radar, TCAS II, new interior and entertainment system, and an expanded list of new-build options that could add up to \$1m to the delivered price.

The Learjet 60XR, meanwhile, is the same as a 60SE model, except that the avionics suite had been upgraded to the Proline 21, four-tube EFIS system. The Learjet 60XR also features a redesigned, expanded galley cabinet and a much-improved entertainment system. Finally, the aft lavatory incorporates a cabin window for natural lighting.

The residual value of a 2000-model Learjet 60 is currently at about 12% of its 2000 list price. The current retail value is approximately \$1.7m.

The following 'Appraised Value Add-Ons' for the Learjet 60 model are based on my own numbers, not those of the value guides:

- Auxiliary Power Unit (APU) below s/n 275 +\$150,000
- Flight Data Recorder +\$50,000
- TCAS II +\$90,000
- TWR-850 Radar +\$10,000
- Gogo Biz ATG-5000 +\$135,000 ➤



Learjet 60XR

Learjet 55/55B/55C

The Learjet 55 series included three models. The original Learjet 55 incorporated a pair of TFE731-3A-2B engines producing 3,700lbst each. Although the Learjet 55B that followed utilized the same engines, it also offered operators increased MGTO, and an all-digital flight deck.

Finally, the Learjet 55C introduced Delta Fins on the lower-rear fuselage for increased pitch, and directional stability, and single-point refuel became standard for this model. Rockwell Collins' Five-Tube EFIS-85L, APS-85 Autopilot and UNS-1A FMS were incorporated into the cockpit.

The residual value of a 1983 Learjet 55 is currently at about 11% of its 1983 list price (\$6.9m) and the current retail value is ~\$730k.

The following 'Appraised Value Add-Ons' for the Learjet 55 model are based on my numbers, not those of the value guides:

- ER Modification +\$25,000
- LR Modification +\$65,000
- Gogo Biz ATG-5000 +\$135,000

Learjet 45/45XR

The Bombardier Learjet 45 was a clean-sheet aircraft design when it entered the market. Most importantly for passengers, the interior cabin space was designed first, with the aircraft being built around that space, all by computer modeling. The only component shared with earlier Learjet models was the Nose Landing Gear. Everything else was new.

Up to s/n52, the standard Learjet 45 model came equipped with TFE731-20R engines, each producing 3,500lbst and featuring FADEC. After s/n52, these engines were delivered in the -20AR configuration (offering more robust hot-section components, and improved reliability with new carbon seals). An APU is an option on the Learjet 45.

The Learjet 45XR differed from the standard model, by

incorporating a further upgraded version of the same TFE731-20BR engines which allowed a 1,000lbs increase to MGTO (21,500lbs). Again, an APU is standard.

The residual value of a 2002 Learjet 45 is currently at about 15% of its 2002 list price (\$13.209m), and current retail value is approximately \$2m.

The following 'Appraised Value Add-Ons' for the Learjet 45 model are based on my numbers, not those of the value guides:

- No APU -\$150,000
- BR Engine Modification +\$180,000
- Gogo Biz ATG-5000 +\$135,000

Learjet 40/40XR

The Learjet 40 is shorter by two feet than the Learjet 45XR model, but is powered by the same engines. Performance is stellar, but it carries less fuel and therefore offers a shorter range. The reduced cabin length also eliminates two seats. Further, the Learjet 40 is not equipped with an APU.

The Learjet 40XR offers approximately 650lbs greater MGTO (21,000lbs) than the Learjet 40 and increased range with the greater fuel capacity.

The residual value of a 2006 Learjet 40 is currently at about 18% of its 2006 list price (\$10.838m) with the current retail value being around \$1.9m.

The following 'Appraised Value Add-Ons' for the Learjet 40 model are based on my numbers, not those of the value guides:

- BR Engine Modification +\$180,000
- Dual UNS-1EW w/WAAS +\$80,000
- Gogo Biz ATG-4000 +\$120,000 ➤



Learjet 40XR



Learjet 31A

Learjet 35/35A/36/36A

The Learjet 35 and Learjet 36 out-produced and out-sold all other Learjet models. The original Learjet 35 had two aerodynamic configurations:

- The original factory wing with top-surface mounted vortex generators; or
- The STC'd Raisbeck wing (Mark IV Stall Improvement System) that eliminated the generators and added two wing fences

Learjet's own factory production 'Softflite' wing became standard on the Learjet 35A model, while thrust reversers were optional on both models. The original Learjet 35 utilized a pair of TFE731-2-2A engines, but the -2B powerplants were chosen for the Learjet 35A. The Learjet 35A model also had two extra cabin windows and offered an increased MGTOw of 18,300lbs (versus 17,000lbs) over the Learjet 35.

The -2B powerplants on the Learjet 35A is upgradable to the -2C version which offers more robust hot-section components, improved reliability with new carbon seals, increased compressor and turbine cycle lives to scrap.

The Learjet 36, meanwhile, used the same engines as

the Learjet 35, but with a fuselage tank that reduced cabin length (eliminating two seats), but resulting in an added 500nm range. The Learjet 36A meanwhile kept the same engines, but offered a higher MGTOw than the Learjet 35A.

The residual value of a 1980 Learjet 35A is currently about 13% of the 1980 list price, and the current retail value is ~\$645,000.

The following 'Appraised Value Add-Ons' for the Learjet 35/36 models are based on my numbers, not those of the value guides:

- Cargo/Big Door +\$20,000
- Delta Fins +\$30,000
- Raisbeck Locker +\$40,000
- Avcon RX Modification +\$100,000
- Avcon RX & ZX Lite Modification +\$200,000
- No T/Rs -\$60,000
- Gogo Biz ATG-4000 +\$120,000

Learjet 31/31A

The Learjet 31 is essentially a model 35A that retains the same engines but flies with the wing from the Learjet 28 Longhorn (i.e. winglets in-place of wing-tip fuel tanks). It also incorporates delta fins like the Learjet 55. With the loss of the tip-tanks, its range was restricted to 1,450nm (475nm less than the Learjet 35A).

The Learjet 31A model improved on the original Learjet 31 model by incorporating Bendix-King/Honeywell avionics with EFIS, a new autopilot, radios, and a Universal FMS. Later production model 31A aircraft were delivered with FADEC.

The residual value of a 1995 Learjet 31A is currently at about 14% of the 1995 list price, and the current retail value is about \$940k.

The following 'Appraised Value Add-Ons' for the Learjet 31 model are based on my numbers, not those of the value guides:

- Cargo/Big Door +\$20,000
- Collins AHRS +\$60,000
- Gogo Biz ATG-4000 +\$120,000

The Years of Manufacture of Each Model are as Follows:

Learjet 75:	2013-Present	-	109 built (108 currently active)	Learjet 40:	2003-2012	-	133 built (132 currently active)
Learjet 70:	2015-Present	-	13 built (13 currently active)	Learjet 35:	1974-1992	-	739 built (562 currently active)
Learjet 60:	1992-2013	-	430 built (415 currently active)	Learjet 31:	1988-2003	-	246 built (232 currently active)
Learjet 55:	1981-1990	-	149 built (129 currently active)	Learjet 20 Series:	1964-1984	-	642 built (320 currently active)
Learjet 45:	1995-2012	-	454 built (446 currently active)	Total Learjets Built = 2,915 aircraft (2,357 currently active)			