

ADG	Manufacturer	Model	Physical Class (Engine)	AAC	Approach Speed (V _{ref})	Seating	Wingspan (ft.)	Range (NM)	MTOW	Operations Data		Ability to limit Operations Score
										Annual Ops 2018	Annual Ops Future	
III	Boeing	737-MAX 8	Jet	D	142	178****	117.83	3,550	181,200	4,621	5,005	
III	Boeing	737-MAX 7 (same engine as MAX 8)	Jet	D	142	153***	117.83	3,850	177,000	5,376	5,822	
III	Airbus	A320-200 Sharklet	Jet	C	136	157	117.45	3,300	171,961	5,484	5,939	
III	Airbus	A220-300	Jet	C	135	140	115.08	3,350	149,000	5,876	6,363	
III	Airbus	A320 NEO Sharklet	Jet	C	136	157	117.45	3,500	174,165	5,876	6,363	
III	Airbus	A319-100 Sharklet	Jet	C	126	132	117.45	3,750	168,653	6,426	6,959	
III	Boeing	737-700 with winglets	Jet	C	130	137	117.42	4,400	154,500	6,528	7,070	
III	Embraer	EMB 195-E2	Jet	C	124	120	115.15	2,600	135,584	6,855	7,423	
III	Airbus	A220-100	Jet	C	130	109	115.08	3,400	134,000	7,547	8,173	
III	Embraer	EMB 190-E2	Jet	C	124	97	110.70	2,850	124,341	8,480	9,184	
III	Embraer	E 190 Standard	Jet	C	124	96**	94.25	2,450	105,359	8,569	9,279	
III	Mitsubishi	M90 SpaceJet	Jet	C		88*	95.83	2,040	94,358	9,348	10,123	
III	Embraer	EMB 175-E2	Jet	C	124	80	101.70	2,000	98,767	10,282	11,135	
III	Mitsubishi	M100 SpaceJet	Jet	C		76	91.30	1,910	86,000	10,823	11,721	
III	Embraer	EMB 175 LR, extended wingtips	Jet	C	124	76	93.92	2,150	85,517	10,823	11,721	
III	Bombardier	Dash 8 Q400	Turboprop	C	125	76	93.25	1,100	65,200	10,823	11,721	
II	Bombardier	CRJ 700/701/702 LR	Jet	C	135	70	76.27	1,400	77,000	11,751	12,726	2
III	Embraer	E 170 Standard	Jet	C	124	69	85.42	2,150	82,012	11,921	12,910	
II	Bombardier	CRJ 100/200/440 LR (CL-600-2B19)	Jet	C	140	50	68.67	1,650	53,000	16,452	17,816	
II	Bombardier	CRJ 550 (Same airframe as CRJ-700)	Jet	C	135	50	76.27	1,000	65,000	16,452	17,816	

Notes:

Noise and Emissions Source - ICAO Certification Database, August 2019 | HMMH, August 2019; Per-passenger interpretation - Kimley-Horn August 2019.

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Aircraft Load and Dimensions from FAA Aircraft Design Characteristics Database OCT 2018

ASE Operational Capability from August 2018 Aircraft Feasibility analysis done by Alec Seybold - Flight Tech Engineering

Range is nominal stated by manufacturer

* Single-class seating as configured for ANA for use in Japan. Range is 76 to 92

** Dual-class seating per Manufacturer

*** Dual-class range 138 to 153

**** Dual-class range 162 to 178

1 = Measurably meets community goals
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ADG	Manufacturer	Model	Physical Class (Engine)	AAC	Approach Speed (V _{ref})	Seating	Wingspan (ft.)	Range (NM)	MTOW	ASE Operational Capability			ASE Operation Capability Score
										ASE Missed Approach Capable? Winter	ASE Missed Approach Capable? Summer	Significant Wt Penalty at ASE?	
II	Bombardier	CRJ 550 (Same airframe as CRJ-700)	Jet	C	135	50	76.27	1,000	65,000	Y	Y	N	
III	Airbus	A220-100	Jet	C	130	109	115.08	3,400	134,000	Y	Y	N	
III	Boeing	737-MAX 7 (same engine as MAX 8)	Jet	D	142	153***	117.83	3,850	177,000	Y	Y	N	
III	Airbus	A319-100 Sharklet	Jet	C	126	132	117.45	3,750	168,653	Y	Y	N	
III	Bombardier	Dash 8 Q400	Turboprop	C	125	76	93.25	1,100	65,200	Y	Y	N	
II	Bombardier	CRJ 700/701/702 LR	Jet	C	135	70	76.27	1,400	77,000	Y	Y	Y	2
III	Embraer	EMB 175 LR, extended wingtips	Jet	C	124	76	93.92	2,150	85,517	Y	Marginal	Y	
III	Boeing	737-700 with winglets	Jet	C	130	137	117.42	4,400	154,500	Y	Marginal	Y	
III	Boeing	737-MAX 8	Jet	D	142	178****	117.83	3,550	181,200	Y	Marginal	Y	
II	Bombardier	CRJ 100/200/440 LR (CL-600-2B19)	Jet	C	140	50	68.67	1,650	53,000	Charter	N	Y	
III	Airbus	A220-300	Jet	C	135	140	115.08	3,350	149,000	Unknown	Unknown	Unknown	
III	Mitsubishi	M100 SpaceJet	Jet	C		76	91.30	1,910	86,000	Unknown	Unknown	Unknown	
III	Mitsubishi	M90 SpaceJet	Jet	C		88*	95.83	2,040	94,358	Unknown	Unknown	Unknown	
III	Embraer	EMB 175-E2	Jet	C	124	80	101.70	2,000	98,767	Unknown	Unknown	Unknown	
III	Embraer	EMB 195-E2	Jet	C	124	120	115.15	2,600	135,584	Unknown	Unknown	Unknown	
III	Embraer	E 170 Standard	Jet	C	124	69	85.42	2,150	82,012	Unknown	Unknown	Unknown	
III	Embraer	E 190 Standard	Jet	C	124	96**	94.25	2,450	105,359	Unknown	Unknown	Unknown	
III	Embraer	EMB 190-E2	Jet	C	124	97	110.70	2,850	124,341	Unknown	Unknown	Unknown	
III	Airbus	A320 NEO Sharklet	Jet	C	136	157	117.45	3,500	174,165	Unknown	Unknown	Unknown	
III	Airbus	A320-200 Sharklet	Jet	C	136	157	117.45	3,300	171,961	Unknown	Unknown	Unknown	

Notes:

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ADG	Manufacturer	Model	Physical Class (Engine)	AAC	Approach Speed (Vref)	Seating	Wingspan (ft.)	Range (NM)	MTOW	ICAO Emissions										Emissions Score	
										Fuel per LTO Cycle (kg) per Passenger	Fuel Compared to CRJ-700	CO2 Total Mass LTO (g) per Passenger	CO2 Compared to CRJ-700	NOx Total Mass LTO (g) per Passenger	NOx Compared to CRJ-700	NOx Takeoff	NOx Climbout	NOx Approach	NOx Idle		NOx Total (All Segments)
III	Airbus	A220-300	Jet	C	135	140	115.08	3,350	149,000	1.98	59%	14.33	40%	25.08	85%	0.24	0.19	0.10	0.06	0.58	
III	Airbus	A320 NEO Sharklet	Jet	C	136	157	117.45	3,500	174,165	1.99	60%	22.00	62%	19.13	65%	0.16	0.13	0.06	0.03	0.37	
III	Boeing	737-MAX 8	Jet	D	142	178****	117.83	3,550	181,200	1.99	60%	13.52	38%	32.01	108%	0.27	0.13	0.06	0.03	0.48	
III	Airbus	A320-200 Sharklet	Jet	C	136	157	117.45	3,300	171,961	2.57	77%	27.55	77%	31.17	106%	0.16	0.13	0.07	0.04	0.40	
III	Embraer	EMB 195-E2	Jet	C	124	120	115.15	2,600	135,584	2.63	78%	53.83	151%	26.17	89%	0.16	0.13	0.07	0.03	0.39	
III	Airbus	A220-100	Jet	C	130	109	115.08	3,400	134,000	2.71	81%	17.44	49%	36.83	125%	0.17	0.14	0.07	0.03	0.40	
III	Airbus	A319-100 Sharklet	Jet	C	126	132	117.45	3,750	168,653	2.89	86%	39.96	112%	31.07	105%	0.12	0.08	0.06	0.03	0.29	
III	Boeing	737-700 with winglets	Jet	C	130	137	117.42	4,400	154,500	2.99	89%	47.66	134%	32.15	109%	0.15	0.12	0.06	0.03	0.37	
III	Embraer	EMB 175 LR, extended wingtips	Jet	C	124	76	93.92	2,150	85,517	3.23	96%	26.96	76%	30.34	103%	0.20	0.17	0.14	0.06	0.57	
III	Embraer	EMB 190-E2	Jet	C	124	97	110.70	2,850	124,341	3.23	96%	67.14	188%	31.81	108%	0.20	0.17	0.09	0.04	0.49	
III	Embraer	E 190 Standard	Jet	C	124	96**	94.25	2,450	105,359	3.24	97%	68.39	192%	31.59	107%	0.20	0.17	0.09	0.04	0.49	
II	Bombardier	CRJ 100/200/440 LR (CL-600-2B19)	Jet	C	140	50	68.67	1,650	53,000	3.34	100%	67.00	188%	22.74	77%	0.23	0.20	0.14	0.08	0.65	
II	Bombardier	CRJ 700/701/702 LR	Jet	C	135	70	76.27	1,400	77,000	3.35	100%	35.62	100%	29.50	100%	0.20	0.18	0.15	0.06	0.60	2
III	Embraer	E 170 Standard	Jet	C	124	69	85.42	2,150	82,012	3.57	107%	29.65	83%	33.63	114%	0.22	0.19	0.16	0.07	0.63	
II	Bombardier	CRJ 550 (Same airframe as CRJ-700)	Jet	C	135	50	76.27	1,000	65,000	4.69	140%	49.87	140%	41.30	140%	0.29	0.25	0.22	0.09	0.84	
III	Mitsubishi	M100 SpaceJet	Jet	C		76	91.30	1,910	86,000					Information not available							
III	Mitsubishi	M90 SpaceJet	Jet	C		88*	95.83	2,040	94,358					Information not available							
III	Embraer	EMB 175-E2	Jet	C	124	80	101.70	2,000	98,767					Information not available							
III	Boeing	737-MAX 7 (same engine as MAX 8)	Jet	D	142	153***	117.83	3,850	177,000					Information not available							
III	Bombardier	Dash 8 Q400	Turboprop	C	125	76	93.25	1,100	65,200					Information not available							

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ADG	Manufacturer	Model	Physical Class (Engine)	AAC	Approach Speed (V _{ref})	Seating	Wingspan (ft.)	Range (NM)	MTOW	ICAO Noise			Noise Score	Operations for 2018 Enplanements
										EPNLdB Noise Level Lateral/Full-Power	EPNLdB Noise Level Approach	EPNLdB Noise Level Flyover		
II	Bombardier	CRJ 100/200/440 LR (CL-600-2B19)	Jet	C	140	50	68.67	1,650	53,000	82.4	92.2	77.7		16,452
III	Bombardier	Dash 8 Q400	Turboprop	C	125	76	93.25	1,100	65,200	84.9	94.0	77.8		10,823
III	Airbus	A220-100	Jet	C	130	109	115.08	3,400	134,000	88.0	91.5	78.8		7,547
III	Airbus	A320 NEO Sharklet	Jet	C	136	157	117.45	3,500	174,165	86.4	92.4	80.5		5,876
III	Airbus	A220-300	Jet	C	135	140	115.08	3,350	149,000	87.5	92.4	80.3		5,876
III	Boeing	737-MAX 8	Jet	D	142	178****	117.83	3,550	181,200	88.2	94.0	80.9		4,621
II	Bombardier	CRJ 550 (Same airframe as CRJ-700)	Jet	C	135	50	76.27	1,000	65,000	89.5	92.6	82.4		16,452
II	Bombardier	CRJ 700/701/702 LR	Jet	C	135	70	76.27	1,400	77,000	89.5	92.6	82.4	2	11,751
III	Embraer	E 190 Standard	Jet	C	124	96**	94.25	2,450	105,359	92.2	92.3	82.9		8,569
III	Airbus	A319-100 Sharklet	Jet	C	126	132	117.45	3,750	168,653	91.4	92.9	83.3		6,426
III	Embraer	E 170 Standard	Jet	C	124	69	85.42	2,150	82,012	92.0	94.5	81.3		11,921
III	Embraer	EMB 190-E2	Jet	C	124	97	110.70	2,850	124,341	92.3	92.3	83.8		8,480
III	Airbus	A320-200 Sharklet	Jet	C	136	157	117.45	3,300	171,961	90.9	93.6	84.1		5,484
III	Embraer	EMB 195-E2	Jet	C	124	120	115.15	2,600	135,584	92.3	92.7	84.9		6,855
III	Boeing	737-700 with winglets	Jet	C	130	137	117.42	4,400	154,500	93.1	95.9	83.5		6,528
III	Embraer	EMB 175 LR, extended wingtips	Jet	C	124	76	93.92	2,150	85,517	91.8	95.1	93.0		10,823
III	Mitsubishi	M100 SpaceJet	Jet	C		76	91.30	1,910	86,000	Information not available				10,823
III	Mitsubishi	M90 SpaceJet	Jet	C		88*	95.83	2,040	94,358	Information not available				9,348
III	Embraer	EMB 175-E2	Jet	C	124	80	101.70	2,000	98,767	Information not available				10,282
III	Boeing	737-MAX 7 (same engine as MAX 8)	Jet	D	142	153***	117.83	3,850	177,000	Information not available				5,376

Notes:

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