

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A21EA
Revision No.26
Bombardier, Inc.

CL-600-1A11 (CL-600)
CL-600-2A12 (CL-601)
CL-600-2B16 (CL-601-3A Variant)
CL-600-2B16 (CL-601-3R Variant)
CL-600-2B16 (CL-604 Variant)
CL-600-2B19 (Regional Jet Series 100 & 440)
CL-600-2C10 (Regional Jet Series 700, 701 & 702)
CL-600-2D15 (Regional Jet Series 705)
CL-600-2D24 (Regional Jet Series 900)

May 02, 2007

TYPE CERTIFICATE DATA SHEET NO. A21EA

This data sheet, which is part of Type Certificate No. A21EA, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Bombardier, Inc.
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 Dorval, Quebec, Canada
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I - Model CL-600-1A11 (Transport Category), Approved November 7, 1980, by the FAA and August 10, 1980, by the Canadian Department of Transport (DOT).

Engines Two AVCO Lycoming ALF-502L or ALF-502L-2

Fuel	Type	Specifications		
		Canada	U.S.A.	U.K.
Jet A		CAN2-3.23-M81	ASTM D1655	D. Eng RD2494
Jet A-1		CAN2-3.23-M81	ASTM D1655	D. Eng RD2494
Grade JP-5		-	MIL-T-5624	D. Eng RD2452
Grade JP-8		-	MIL-T-83133A	D. Eng RD2453
Jet B		CAN2-3.22-M80	ASTM D1655	D. Eng RD2486
JP-4		CAN2-3.22-M80	MIL-T-5624	D. Eng RD2486

Jet A and Jet A-1 fuels must contain an approved anti-icing additive unless Canadair Modification Summary 600-702 and Lycoming Service Bulletin ALF-502-79-0007 are incorporated.

Oil Engine, APU, Generator Adapter:
MIL-L-7808 (Type I) or MIL-L-23699 (Type II) or other approved oils as identified in the Maintenance Manual (refer to Approved Publications).

Engine Limits	SL Static Thrust(lb.)	Compressor RPM		Interturbine Temperature	
		LP	HP	°C	°F
		%N1	%N2		
Takeoff (5 minutes)	7500	96.0	98.2	904	1660
Maximum Continuous	7100	96.0	96.4	877	1610
*Starting maximum				823	1513

Maximum Oil Temperature: Normal 143°C(290°F)
 **Transient 170°C(338°F)
*Time limit 10 seconds above 793°C(1460°F)
**Permitted during power reduction. Normal temperature must be achieved within two minutes of achieving steady state operation.

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Oil Pressure	Maximum	Sea Level	120 p.s.i.		
	Minimum	At steady state low or high idle	30 p.s.i.		
APU Limits	Maximum RPM	110%			
	Maximum EGT:		<u>°C</u>	<u>°F</u>	
	Starting (10 Seconds)		974	1785	
	Running		731	1348	
Airspeed Limits (CAS) (See NOTE 1)	V _{mo} and M _{mo} (maximum operating)		<u>m.p.h.</u>	<u>Knots</u>	<u>Mach</u>
	Sea level to 10000 ft.		345	300	
	above 10000 ft.		368	320	0.79
	V _{fe} (Flaps extended)	20°	265	230	
		30°	226	196	
		45°	193	168	
	V _a (maneuvering)				
	(See Flight Manual for variation of V _a with altitude and aircraft weight).				
	V _{1o} (Landing gear operation)		226	197	
	V _{1e} (Landing gear extended)		288	250	
C.G. Range (See NOTE 1)	<u>Weight, lb.</u>	<u>Forward Limit</u>		<u>Aft Limit</u>	
	24000 to 31300	<u>% MAC (Sta.)</u>	16% (+502.848)	<u>% MAC (Sta.)</u>	---
	36500		18% (+504.701)		28% (+513.965)
	25800		---		33% (+518.598)
	24000		---		33% (+518.598)
	Straight line variation between points given.				
Datum	Fuselage station 0, located 375 inches forward of weighing datum jig point.				
Mean Aerodynamic Chord (MAC)	92.644 in. (Leading edge of MAC from datum at +488.025 in.)				
Leveling Means	Target plate and plumb bob bracket within rear fuselage, at fuselage station 718.				
Maximum Weights (See NOTE 1)		<u>lb.*</u>			
	Ramp		36500		
	Takeoff		36000		
	Landing		30500		
	Zero Fuel		25800		
	Minimum flight weight		24000		
	*Certain aircraft are eligible for operation at an increased weight. See AFM as in approved publications.				
Minimum Crew	Two (Pilot and Co-pilot)				
Maximum Occupants (See NOTE 1)	Twenty-one (includes crew).				

Fuel Capacity		<u>U.S. Gal</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom. Arm-in.</u>
	2 main tanks (each)	732.5	611.3	2259.1	4981	(+506.5)
	1 center tank	751	625.8	2316.1	5107	(+457.5)
	total	2216	1848.4	6834.3	15069	- - -
	<u>Usable</u>					
	2 main tanks (each)	725	605	2236	4930	(+506.5)
	1 center tank	750	625	2313	5100	(+457.5)
	total	2200	1835	6785	14960	- - -

See NOTE 1(b) for system fuel.

Oil Capacity		<u>U.S. Gal</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom. Arm-in.</u>
	2-engines (each)	3.69	3.07	12.88	28.4	(+623)
	total	7.38	6.14	25.76	56.8	(+623)
	<u>Usable</u>					
	2-engines (each)	1.94	1.61	6.76	14.9	(+623)
	total	3.87	3.22	13.52	29.8	(+623)
	See NOTE 1(c) for system oil.					
	<u>APU</u>					
	usable	.408	.340	1.43	3.144	(+675)
	total	.714	.594	2.49	5.5	(+675)
	unusable	.306	.254	1.06	2.356	(+675)

Maximum Operating Altitude (See NOTE 1) Take off and landing: 5000 ft.
 En route: 40000 ft.
 41000 ft. with Canadair Limited Modification
 Summaries 600-1923 and 600-8330 incorporated.

Control Surface Movements	Rudder	20° (+1.0°, - 0.5°)Left	20° (+1.0°, - 0.5°)Right
	Elevator	23.6°(+ or - 1.0°)Up	18.4°(+ or - 1.0°)Down
	Horizontal Stabilizer	0°(+0.5° or -0.25°)LE Up	-9°(+ or -0.5°)LE Down
	Aileron	20.8°(+ or - 1.0 °)Up	21.3°(+ or - 1.0°) Down
	Flap – Inboard		0° - 45° (+ or -1°) Down
	- Outboard		0° -46.7°(+ or -1°) Down
	Flight spoiler	0° -40°(+3°, -0°)Up	

Serial Numbers Eligible 1002, 1004 and subsequent

Service Information: Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

II - Model CL-600-2A12 (Transport Category), Approved March 11, 1983, by the FAA and February 25, 1983, by the Canadian Department of Transport (DOT).

Engines Two General Electric CF-34-1A or *

Fuel	<u>Type</u>	<u>Specifications</u>		
		<u>Canada</u>	<u>U.S.A</u>	<u>U.K.</u>
	Jet A	CAN2-3.23-M81	ASTM D1655	D. Eng RD2494
	Jet A-1	CAN2-3.23-M81	ASTM D1655	D. Eng RD2494
	Grade JP-5	-	MIL-T-5624	D. Eng RD2452
	Grade JP-8	-	MIL-T-83133A	D. Eng RD2453
	Jet B	CAN2-3.22-M80	ASTM D1655	D. Eng RD2486
	JP-4	CAN2-3.22-M80	MIL-T-5624	D. Eng RD2486

Oil Engine, APU, Generator Adapter:
MIL-L-7808 (Type I) or MIL-L-23699 (Type II) or other approved oils as identified in the Maintenance manual (refer to Approved Publications).

Engine Limits	SL Static Thrust (lb.)	Compressor RPM		Interturbine Temp.**		Time Limit
		LP %N1	HP %N2	°C	°F	
Max. takeoff (APR operating)	9140	98.6	99.4	857	1576	5 minutes
Max. takeoff (APR not operating)	8650	96.2	98.2	842	1548	5 minutes
Max. continuous	8920	98.6	99.2	838	1540	
Idle range			62.9-64.0			
Min. Idle in icing conditions			64.0			
Transient:						
Takeoff (APR operating)				886	1627	2 minutes
Takeoff (APR not operating)				864	1588	2 minutes
Start/relight				899	1650	25 seconds
				885	1625	50 seconds

* One - General Electric CF-34-3A and one CF-34-3A2 or
One - General Electric CF-34-1A and one CF-34-3A or
Two - General Electric CF-34-3A or
Two - General Electric CF-34-3A2
Service Bulletin 601-0238 "Engines use of 3A engines at 3A power settings," must be incorporated.

** See AFM as listed in Approved Publications for CF-34-3A and CF-34-3A2 engines ITT limits.

NOTE

1. Above 40000 feet, engine anti-ice bleed or air conditioning unit must be selected ON for each engine.
2. Engine Limits with APR Operating are only applicable to Outside Air Temperatures of -4°F (-20°C) and above.

		°C	°F
Oil Temperature	Maximum Permissible (15 minutes Maximum):	+163	325
	Maximum for Single Engine Climb (60 minutes maximum)	+155	311
	Maximum continuous:	+150	302
	Minimum for starting:	- 40	- 40
Oil Pressure	Maximum Transient Cold Start:	100 psi (Six minutes maximum)	
	Maximum Continuous:	95 psi	
	Minimum at steady state idle:	25 psi	
	at takeoff (power):	40 psi	

APU Limits	Maximum RPM	110%		
	Maximum EGT:	<u>°C</u>	<u>°F</u>	
	Starting (10 seconds)	974	1785	
	Running	731	1348	
Airspeed Limits (CAS)	V_{mo} and M_{mo} (maximum operating)	<u>m.p.h.</u>	<u>Knots</u>	<u>Mach</u>
	Sea level to 10000 ft.	345	300	-
	10000 ft. to 21420 ft.	420	365	-
	21420 ft. to 25740 ft.	-	-	0.79
	25740 ft. to 28640 ft.	385	335	
	above 28640 ft.	-	-	0.835
	V_{fe} (Flaps extended)	20°	265	230
		30°	226	196
		45°	215	187
	V_a (maneuvering) (See Flight Manual for variation of V_a with altitude and aircraft weight).			
	V_{10} (Landing gear operation)		226	196
	V_{1e} (Landing gear extended)		288	250
C.G. Range (See NOTE 1)		Forward Limit	Aft Limit	
	<u>Weight, lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>	
	25000 to 42250	16 % (+502.848)	- - -	
	42250	- - -	30% (+515.818)	
	31000	- - -	35% (+520.450)	
	25000	- - -	35% (+520.450)	
	Straight line variation between points given.			
Datum	Fuselage station 0, located 375 inches forward of weighing datum jig point.			
Mean Aerodynamic Chord (MAC)	92.644 in. (Leading edge of MAC from datum at +488.025 in.)			
Leveling Means	Target plate and plumb bob bracket within rear fuselage, at fuselage station 718.			
Maximum Weights (See NOTE 1)		<u>lb.*</u>		
	Ramp	42250		
	Takeoff	42100		
	Landing	36000		
	Zero Fuel	29500		
	Minimum flight weight	25000		
	*Certain aircraft are eligible for operation at an increased weight. See AFM as in approved publications.			
Minimum Crew	Two (Pilot and Co-pilot)			
Maximum Occupants (See NOTE 1)	Twenty-two (includes crew).			

		<u>U.S. Gal</u>	<u>Imp. Gal</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom. Arm-in.</u>	
Fuel Capacity	2 main tanks (each)	721	600.4	2224	4903	(+506.6)	
	Fuselage Tanks	1012	842.7	3121	6882	(+455.6)	
	Total	2454	2043.4	7569	16688		
	<u>Usable</u>						
	2 main tanks (each)	720	600	2221	4896	(+506.6)	
	Fuselage tanks	1011	842	3118	6875	(+455.6)	
Total	2451	2042	7560	16667			
See NOTE 1(b) for system fuel.							
Oil Capacity			<u>U.S. Gal</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom. Arm-in.</u>
	2-engines (each)		1.70	1.42	5.94	13.09	(+656.0)
	Total		3.40	2.83	11.88	26.18	(+656.0)
	<u>Usable</u>						
	2-engines (each)		1.38	1.14	4.80	10.59	(+656.0)
	Total		2.75	2.29	9.60	21.18	(+656.0)
	See NOTE 1(c) for system oil.						
	<u>APU</u>						
	usable		.408	.340	1.43	3.144	(+646.0)
	Total		.714	.594	2.49	5.5	(+646.0)
unusable		.306	.254	1.06	2.356	(+646.0)	
Maximum Operating Altitude	Take off and landing:	10000 ft.					
	En route:	41000 ft.					
Control Surface Movements	Rudder	25°(+1.0°, -.5°) Left			25°(+1.0°, -.5°) Right		
	Elevator	23.6°(+ or - 1.0°)Up			18.4°(+ or - 1.0°)Down		
	Horizontal Stabilizer	0°(+0.5° or -0.25°)LE Up			-9°(+ or - 0.5°)LE Down		
	Aileron	20.8°(+ or - 1.0°)Up			21.3°(+ or - 1.0°) Down		
	Flap - Inboard				0° -45°(+ or - 1°) Down		
	- Outboard				0° -46.7°(+ or -1°) Down		
Flight spoiler	0° -40°(+3°, -0°) Up						
Serial Numbers Eligible	1003, 3001, and subsequent						
Service Information:	Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.						

III - Model CL-600-2B16 (Transport Category), Approved April 30, 1987, by the FAA and April 21, 1987, by the Canadian Department of Transport (DOT).

Engines	(variant CL-601-3A)	Two General Electric CF-34-3A or CF-34-3A2 or One General Electric CF-34-3A and one CF-34-3A2
	(variant CL-601-3R)	Two General Electric CF-34-3A1 (Serial Number 5135 and subsequent) Approved by the FAA 15 July 1995.
	(variant CL-604)	Two General Electric CF 34-3B (Serial Number 5301 and subsequent) Approved by the FAA 31 May 1995.

Fuel	Type	Specifications		
		<u>Canada</u>	<u>U.S.A.</u>	<u>U.K.</u>
	Jet A	CAN2-3.23-M81	ASTM D1655	D. Eng RD2494
	Jet A-1	CAN2-3.23-M81	ASTM D1655	D. Eng RD2494
	Grade JP-5	-	MIL-T-5624	D. Eng RD2452
	Grade JP-8	-	MIL-T-83133A	D. Eng RD2453
	Jet B	CAN2-3.22-M80	ASTM D1655	D. Eng. RD2486
	JP-4	CAN2-3.22-M80	MIL-T-5624	D. Eng RD2486

Oil Engine, APU, Generator Adapter:
MIL-L-7808 (Type I) or MIL-L-23699 (Type II) or other approved oils as identified in the
Maintenance manual (refer to Approved publications).

CL-601 3A & 3R Variants

Engine Limits	SL Static Thrust (lb.)	Compressor RPM		Interturbine Temp.**		Time Limit
		LP %N1	HP %N2	°C	°F	
Max. takeoff (APR operating)	9140	98.6	99.4	871	1600	5 minutes
Max. takeoff (APR not operating)	8650	96.2	98.2	860	1580	5 minutes
Max. continuous	8920	98.6	99.2	860	1580	
Idle range			62.9-64.0			
Min. Idle in icing conditions			64.0			
Transient:						
Takeoff (APR operating)				900	1652	2 minutes
Takeoff (APR not operating)				878	1612	2 minutes
Start/relight				899	1650	25 seconds
				885	1625	50 seconds

** See AFM as listed in Approved Publications for CF-34-3A and CF-34-3A2 engines ITT limits.

NOTE

- Above 40000 feet, engine anti-ice bleed or air conditioning unit must be selected ON for each engine.
- Engine Limits with APR Operating are only applicable to Outside Air Temperatures of -4°F (-20°C) and above.

		°C	°F
Oil Temperature	Maximum Permissible (15 minutes Maximum):	+163	325
	Maximum for Single Engine Climb (60 minutes maximum)	+155	311
	Maximum continuous:	+150	302
	Minimum for starting:	- 40	- 40
Oil Pressure	Maximum Transient Cold Start:	100 psi (Six minutes maximum)	
	Maximum Continuous:	95 psi	
	Minimum at steady state idle:	25 psi	
	at takeoff (power):	40 psi	

APU Limits	Maximum RPM	110%		
	Maximum EGT:		<u>°C</u>	<u>°F</u>
	Starting (10 seconds)		974	1785
	Running		731	1348

CL-601 3A & 3R Variants

Airspeed Limits (CAS)	V_{MO} and M_{MO} (maximum operating)	<u>m.p.h.</u>	<u>Knots</u>	<u>Mach</u>
	Sea level to 10000 ft.	345	300	-
	10000 ft. to 21330 ft.	420	365	-
	21330 ft. to 25640 ft.	-	-	0.79
	25640 ft. to 28720 ft.	385	335	
	above 28720 ft.	-	-	0.835
	V_{fe} (Flaps extended)			
	20°	265	230	
	30°	226	196	
	45°	215	187	
	V_a (maneuvering)			
	(See Flight Manual for variation of V_a with altitude and aircraft weight).			
	V_{LO} (Landing gear operation)	226	196	
	V_{LE} (Landing gear extended)	288	250	

C.G. Range (See NOTE 1)	<u>Weight, lb.</u>	<u>Forward Limit % MAC (Sta.)</u>	<u>Aft Limit % MAC (Sta.)</u>
	25000 to 42250	16% (+502.848)	- - -
	43250	- - -	30% (+515.818)
	31000	- - -	35% (+520.450)
	25000	- - -	35% (+520.450)
	Straight line variation between points given.		

Datum Fuselage station 0, located 375 inches forward of weighing datum jig point.

Mean Aerodynamic Chord (MAC) 92.644 in. (Leading edge of MAC from datum at +488.025 in.)

Leveling Means Target plate and plumb bob bracket within rear fuselage, at fuselage station 718.

Maximum Weights (See NOTE 1)	<u>lb. *</u>
Ramp	43250
Takeoff	43100
Landing	36000
Zero Fuel	29500
Minimum flight weight	25000

*Certain aircraft are eligible for operation at different weights. See AFM as in approved publications. 601-3R Variant for aircraft S/N 5135 and subsequent.

Minimum Crew Two (Pilot and Co-pilot)

Maximum Occupants Twenty-two (includes crew).

CL-604 Variant

Engine Limits	CF34-3B	SL Static Thrust (lb.)	Compressor RPM		Interturbine Temp.		Time Limit
			LP %N1	HP %N2	°C	°F	
Max. takeoff (APR operating)		9220	98.6	99.4	900	1650	5 minutes
Max. takeoff (APR not operating)		8729	96.2	98.2	884	1623	5 minutes
Max. continuous		9140	98.6	99.2	874	1605	
Idle range				62.9-64.0			
Min. Idle in icing conditions				64.0			
Transient:							
Takeoff (APR operating)					928	1702	2 minutes
Takeoff (APR not operating)					900	1650	2 minutes
Start/relight					899	1650	25 seconds
					885	1625	50 seconds

NOTE

- Above 40000 feet, engine anti-ice bleed or air conditioning unit must be selected ON for each engine.
- Engine Limits with APR Operating are only applicable to Outside Air Temperatures of -4°F (-20°C) and above.

Oil Temperature	Maximum Permissible (15 minutes Maximum):	°C	°F
	Maximum for Single Engine Climb (60 minutes maximum)	+163	325
	Maximum continuous:	+155	311
	Minimum for starting:	+150	302
Oil Pressure	Maximum Transient Cold Start:	- 40	- 40
	Maximum Continuous:		
	Minimum at steady state idle:		
	at takeoff (power):	115 psi (10 min. maximum)	95 psi
APU Limits	Maximum RPM	25 psi	45 psi
	Maximum EGT:		
	Starting (10 seconds)	110%	
	Running		

CL-604 Variant

Airspeed Limits (CAS)	V_{mo} and M_{mo} (maximum operating)	m.p.h.	Knots	Mach
	Sea level to 8000 ft.	345	300	-
	8000 ft. to 22160 ft.	400	348	-
	22160 ft. to 26570 ft.	-	-	0.78
	26570 ft. to 30997 ft.	366	318	
	above 30997 ft	-	-	0.85
V_{fe} (Flaps extended)	20°	266	231	
	30°	227	197	
	45°	217	189	
V_a (maneuvering)				
(See Flight Manual for variation of V_a with altitude and aircraft weight).				
V_{10} (Landing gear operation)		227	197	
V_{1e} (Landing gear extended)		288	250	

C.G. Range (See NOTE 1)	<u>Weight, lb.</u>	Forward Limit <u>% MAC (Sta.)</u>	Aft Limit <u>% MAC (Sta.)</u>
	26000 to 38000	20% (+506.553)	- - -
	39500 to 44750	16% (+502.847)	- - -
	47700	20% (+506.553)	- - -
	47700 to 43000	- - -	38% (+523.228)
	38000 to 26000	- - -	35% (+520.449)
	Straight line variation between points given.		

Datum Fuselage station 0, located 375 inches forward of weighing datum jig point.

Mean Aerodynamic Chord (MAC) 92.644 in. (Leading edge of MAC from datum at +488.025 in.)

Leveling Means Target plate and plumb bob bracket within rear fuselage, at fuselage station 718.

Maximum Weights (See NOTE 1)	<u>lb.*</u>
Ramp	47700
Takeoff	47600
Landing	38000
Zero Fuel	32000
Minimum	26000

*Certain aircraft are eligible for operation at different weights. See AFM as in approved publications. 601-3R Variant for aircraft S/N 5135 and subsequent.

Minimum Crew Two (Pilot and Co-pilot)
Maximum Occupants Twenty-two (includes crew).

3A variant Fuel Capacity	<u>U.S. Gal</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom.Arm-in.</u>
<u>Usable</u>					
2 main tanks (each)	722	601	2227	4909	(+506.6)
Fuselage tanks	1010	841	3115	6868	(+455.6)
Total	2454	2043	7569	16686	
See NOTE 1(b) for system fuel.					

3R variant Fuel Capacity	<u>U.S. Gal</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom.Arm-in.</u>
<u>Usable</u>					
2 main tanks (each)	722	601	2227	4909	(+506.6)
Fuselage tanks	1010	841	3115	6868	(+455.6)
Tail tank	187.7	156.24	579	1276	(+816.7)
Total	2641.7	2199.24	8148	17962	
See NOTE 1(b) for system fuel.					

604 variant Fuel Capacity	<u>U.S. Gal</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom.Arm-in.</u>
<u>Usable</u>					
2 main tanks (each)	722	601	2227	4909	(+506.6)
Fuselage tanks	1062	885	3275	7222	(+450.6)
Tail tank	466	387.9	1437	3169	(+771.7)
Total	2972	2474.9	9166	20209	
See NOTE 1(b) for system fuel.					

Oil Capacity	<u>601-3A Variant*</u>	<u>U.S. Gal.</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>Weight, lb.</u>	<u>Mom.Arm-in.</u>
	2-engines (each)	1.70	1.42	5.94	13.09	(+653.0)
	Total	3.40	2.83	11.88	26.18	(+653.0)
	<u>Usable</u>					
	2-engines (each)	1.38	1.14	4.80	10.59	(+653.0)
	Total	2.75	2.29	9.60	21.18	(+653.0)
	See NOTE 1(c) for system oil.					
	<u>APU</u>					
	usable	.408	.340	1.43	3.144	(+646.0)
	Total	.714	.594	2.49	5.5	(+646.0)
	unusable	.306	.254	1.06	2.356	(+646.0)
	<u>*601-3R Variant & 604 Variant</u> - same as 601-3A, except as listed in the AFM approved publication.					

Maximum Operating Altitude	Take off and landing:	10000 ft.		
	En route:	41000 ft.		
Control Surface Movements	Rudder	25°(+ 1°, -0.5°)Left		25°(+ 1° or -0.5°) Right
	Elevator	23.6°(+ or -1.0°) Up		18.4°(+ or -1.0°) Down
	Horizontal stabilizer	0°(+0.5° or -0.25°)LE Up		-9°(+ or - 0.5°) LE Down
	Aileron	20.8°(+ or - 1°)Up		21.3°(+ or - 1°) Down
	Flap – Inboard			0° -45°(+ or - 1°) Down
	- Outboard			0° -46.7°(+ or -1°) Down
	Flight spoiler	0° -40°(+3°, -0°) Up		

Serial Numbers Eligible 5001 and subsequent

Service Information: Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

IV - Model CL-600-2B19 (Transport Category), Regional Jet Series 100 Approved January 21, 1993, by the FAA and July 31, 1992, by Transport Canada.

Model CL-600-2B19 (Transport Category), Regional Jet Series 440 Approved November 30,2001, by the FAA and October 4, 2001, by Transport Canada.

Engines Two General Electric CF-34-3A1 or
Two General Electric CF-34-3B1
Engines may be intermixed in accordance with AFM as listed in Approved Publications.

Type	Specifications			
	<u>Canada</u>	<u>U.S.A.</u>	<u>U.K.</u>	<u>Romanian</u>
Jet A	CAN2-3.23	ASTM D1655	D. Eng RD2494	
Jet A-1	CAN2-3.23	ASTM D1655	D. Eng RD2494	STAS 5639/88 TH†
Grade JP-5		MIL-T-5624	D. Eng RD2452	
Grade JP-8	-	MIL-T-83133A	D. Eng RD2453	
Jet B	CAN2-3.22	ASTM D1655	D. Eng RD2486	
JP-4	CAN2-3.22	MIL-T-5624	D. Eng RD2486	

†Fuel Additives Restricted to those listed in AFM (CSP-A-012) (Limitations, Fuel Additives) and/or antistatic STADIS-450 (max. 3ppm).

Oil Engine, APU and IDG:
MIL-L-7808 (Type I) or MIL-L-23699 (Type II) or CASTROL 4000. *
* Mixing of different types of oils is prohibited.

Engine Limits Conditions

	Fan RPM	Core RPM	ITT		Time Limit (Min)
	N ₁ %	N ₂ %	°C	°F	
Max. Take - off (APR Operating)	98.6	99.4	900	1650	5***
			928	1702	2*
Normal Take-off	96.2	98.2	884	1623	5***
			900	1650	2*
Max. Continuous	98.6	99.2	860 (874) (3A1/3B1)	1580/1605 (3A1/3B1)	
Idle Range	-	56.5 to 68.0**	-	-	-
Acceleration	-	-	900	1652	-
Starting	-	20.0	900	1652	-

* 2 minutes out of 5 total transient.

** Refer to Idle Speed Limit Chart in the AFM

If N₂ idle RPM is more than 2% lower, do not advance thrust lever above 70% N₂ until N₂ idle RPM has stabilized to within normal limits.

*** Transient limits. NOTE:

Above 40000 feet, one air conditioning unit or cowl anti-ice must be selected on for each engine.

Oil Temperature	Maximum Permissible (15 minutes Maximum):	<u>°C</u>	<u>°F</u>
	Maximum Continuous	+163	325
	Minimum for Starting	+155	311
		-40	-40
Oil Pressure	Maximum Transient (after cold start)	156 psi (130 psi at idle, 10 minutes maximum)*	
	Maximum Continuous	115 psi maximum	
	Take-off Power	45 psi minimum	
	Steady State Idle	25 psi minimum	
	* Engine must remain at idle until oil pressure returns to normal range.		
APU	GARRETT GTCP-36-150RJ		
APU Limits	Maximum RPM:	107%	
	Maximum EGT:	<u>°C</u>	<u>°F</u>
	Starting	974	1785*
	Running	743	1369
	* Not to be exceeded under any operating condition.		

Airspeed Limits	V _{mo} and M _{mo} (maximum operating)	<u>m.p.h.</u>	<u>knots</u>	<u>Mach</u>	
	Sea Level to 8000 ft.	380	330	-	
	8000 ft. to 25400 ft.	386	335	-	
	25400 ft. to 28300 ft.	-	-	0.80	
	28300 ft. to 31400 ft.	362	315	-	
	31400 ft. to 41000 ft.	-	-	0.85	
	V _{fe} (Flaps Extended)	8°	265	230	-
		20°	265	230	-
		30°	226	196	-
		45°	220	191	-
	V _a (maneuvering) (See Flight Manual for variation of V _a with altitude and aircraft weight).				
	V _{LO} (Landing Gear Operation)	288	250	*-	
		230	200	**_	
	V _{LE} (Landing Gear Extended)	288	250	-	
	* extending , ** retracting				

C.G. Range:-

Max T/O 47 450 lbMax T/O 51 000 lb

<u>Weight, lb.</u>	<u>Forward Limit % MAC (Sta.)</u>	<u>Aft Limit % MAC (Sta.)</u>	<u>Weight, lb.</u>	<u>Forward Limit % MAC (Sta.)</u>	<u>Aft Limit % MAC (STA)</u>
25480	16.5% (+510.201)	-	25480	16.5% (+510.201)	-
30000 to 34000	11.0% (504.732)	-	30000 to 34000	11.0% (+504.732)	-
36000 to 47700	9.0 % (+502.744)	-	36000 to 51250	9.0% (+502.744)	-
47700	-	-	51250	-	24% (+517.659)
47700 to 36000	-	35% (528.596)	50000 to 36000	-	35% (+528.596)
34000 to 30000	-	32% (+525.613)	34000 to 30000	-	32% (+525.613)
25480	-	27% (+520.642)	25480	-	27% (+520.642)

- NOTES: 1) Effect of landing gear retraction on CG position is negligible.
2) Straight line variation between points given.

C. G. Range:-

Max T/O 53 000 lb

<u>Weight, lb.</u>	<u>Forward Limit % MAC (Sta.)</u>	<u>Aft Limit % MAC (Sta.)</u>
25480	16.5% (+510.201)	-
30000 to 34000	11.0% (504.732)	-
36000 to 53250	9.0 % (+502.744)	-
53250	24.0 %	-
53250 to 36000	-	35% (528.596)
34000 to 30000	-	32% (+525.613)
25480	-	27% (+520.642)

- NOTES: 1) Effect of landing gear retraction on CG position is negligible.
2) Straight line variation between points given.

Datum Fuselage station 0, located 375 inches forward of weighing datum jig point.

Mean Aerodynamic Chord 99.43 inches (MAC leading edge at fuselage sta. 494.793)
(MAC)

Leveling Means Target plate and plumb bob bracket within rear fuselage, at fuselage station 718.75.

Maximum Weights	<u>lb.</u>	<u>lb.</u>	<u>lb.</u>	<u>lb.</u>	<u>lb.</u>	<u>lb.</u>
Ramp	47700	51250	51250	53250	53250	53250
Takeoff	47450	51000	51000	53000	53000	53000
Landing	44700	46750	47000	46750	47000	47000
Zero Fuel	42200	44000	44000	44000	44000	39500
Minimum flight weight	30000	30000	30000	30000	30000	30000

NOTE: The maximum take-off weight and/or maximum landing weight may be further limited due to performance considerations (refer to Airplane Flight Manual).

Minimum Crew Two (Pilot and Co-pilot)

Maximum Occupants Series 100 Fifty-five (55) (including 50 passengers, 4 crew, and 1 flight observer)
Series 440- Forty-Nine (49) (including 44 passengers, 4 crew, 1 flight observer)CL-600-2B19 Green Aircraft Configuration

Refer to Note 5.

Fuel Capacity (usable)	<u>Load *</u>		<u>Weight *</u>	
	<u>U.S. Gal.</u>	<u>Imp. Gal.</u>	<u>Kg.</u>	<u>lb.</u>
2 main tanks (each)	700.0	582.8	2159	4760
Center Tank	735.0	612.0	2267	4998
Total	2135.0	1669.6	6585	14518

* Pressure refueling (based on 0.8028 kg/L)

Engine Limits Conditions	Refer to Limits Table in the AFM (CSP B-012)		
Oil Temperature	Maximum Permissible (15 minutes Maximum):	°C	°F
	Maximum Continuous	+163	325
	Minimum for Starting	+155	311
Oil Pressure	Maximum Transient (after cold start)	-40	-40
	Maximum Continuous	156 psi (130 psi at idle, 10 minutes maximum)*	
	Take-off Power	45-116 psi	
	Steady State Idle	45-116 psi	
		25 psi minimum	

* Engine must remain at idle until oil pressure returns to normal operating range.

APU	ALLIED SIGNAL RE220 (RJ)		
APU Limits	Maximum RPM:	106%	
	Maximum EGT:	°C	°F
	Starting	692-1038	1274-1900*
	Running-Ground	789	1452
	Running-Flight	806	1482

* Dependant upon altitude and temperature. Refer to AFM (CSP B-012)

** Not to be exceeded under any operating condition.

*** Refer to AFM for detail limitations

Airspeed Limits	Vmo and Mmo (maximum operating)	m.p.h.	knots	Mach	
	Sea Level to 8000 ft.	380	330	-	
	8000 ft. to 25400 ft.	386	335	-	
	25400 ft. to 28300 ft.	-	-	0.80	
	28300 ft. to 31400 ft.	362	315	-	
	31400 ft. to 41000 ft.	-	-	0.85	
	Vfe (Flaps Extended)	1	265	230	-
		8	265	230	-
		20	265	230	-
		30	213	185	-
45		196	170	-	
	Va (maneuvering)	(See AFM for variation of Va with altitude and aircraft weight).			

VLO (Landing Gear Operation)	253	220	*
	230	200	**
VLE (Landing Gear Extended)	253	220	-
* extending , ** retracting			

C.G. Range:-	Refer to AFM (CSP B-012) for detail CG limits.		
Datum	Fuselage station 0, located 144.0 inches forward of aircraft nose		
Mean Aerodynamic Chord (MAC)	133.185 inches (MAC leading edge at fuselage sta. 743.1)		
Leveling Means	Target plate and plumb bob bracket within rear fuselage, at fuselage station 1145.75		
Maximum Weights	Type	Spec.	Option
		lb.	lb.
	Ramp	73000	75250
	Takeoff	72750	75000
	Landing	67000	67000
	Zero Fuel	62300	62300
	Minimum flight weight	42000	42000

NOTE: The maximum take-off weight and/or maximum landing weight may be further limited due to performance considerations. Refer to Airplane Flight Manual for aircraft eligibility.

Minimum Crew Two (Pilot and Co-pilot)

Maximum Occupants Series 700 – 68 or less passengers
Series 701 – 70 passengers
Series 702 – 78 passengers
Plus 5 crew-members (Pilot, Copilot, Observer forward and Aft Flight attendants)

Fuel Capacity (usable)	Load *		Weight *	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 main tanks (each)	1110	924.1	3399	7493
Center Tank	683	568.6	2091	4610
Total	2903	2416.7	8889	19596

See Note 1(b) for system fuel

* Pressure refueling (based on 0.809 kg/L) (6.75 lb/U.S. Gal.)

With option TS670-79-201 – Engine Oil – No Remote Replenishment System

Oil Capacity	Load		Weight	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 Engines (each)	2.6	2.2	9.65	21.2
Total	5.2	4.36	19.30	42.4

With option CR670-79-201 – Engine Oil – Remote Replenishment System

Oil Capacity	Load		Weight	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 Engines (each)	2.6	2.2	9.65	21.2
Replenishment Tank	1.6	1.3	5.9	13.0
Total	6.8	5.7	25.2	55.4

See Note 1(c) for system oil

Maximum Operating	Take off and landing:	8000ft (without Modsum 670T82357) 9600ft (with Modsum 670T82357)
Altitude	En route:	41000 ft.

Control Surface Movements	Rudder	33° Left	33° Right
	Horizontal Stabilizer	2.0° LE Up	13.0° LE Down
	Aileron	25.1° Up	21.3° Down
	Elevator	23.6° Up	18.4° Down
	Multi-Function Spoilers	48.0° Up	
	Ground Spoiler	44.9° Up	
	Flap - Inboard		45.0° Down
	- Outboard		41.6° Down
Slat		25.0° Down	

Serial Numbers Eligible 10002 and subsequent

VI – Model CL-600-2D15 (Transport Category), Approved May 4, 2005, by the FAA and May 3, 2005 by Transport Canada.

Engines	Two General Electric CF34-8C5 or optional CF34-8C5A1 TC No. E00063EN				
Fuel	Type	Specifications			
		Canada	U.S.A.	U.K.	Roumanian
	Jet A	CAN2-3.23	ASTM D1655	D. Eng RD2494	
	Jet A-1	CAN2-3.23	ASTM D1655	D. Eng RD2494	STAS 5639/88TH
	Grade JP-5		MIL-T-5624	D. Eng RD2452	
	Grade JP-8		MIL-T-83133	D. Eng RD2453	
	†Fuel Additives Restricted to those listed in AFM (CSP-C-012) (Limitations, Fuel Additives) and/or antistatic STADIS-450 (max. 3ppm).				
	Note: CL-600-2D15				
	JP4 and Jet B not applicable to CL-600-2D15				
Oil	Engine, APU and IDG: MIL-L-7808 (Type I) or MIL-L-23699 (Type II) or CASTROL 4000. *				
	* Mixing of different types of oils is prohibited.				
Engine Limits Conditions	Refer to Limits Table in the AFM (CSP C-012)				
Oil Temperature			°C	°F	
	Maximum Permissible (15 minutes Maximum):		+163	325	
	Maximum Continuous		+155	311	
	Minimum for Starting		-40	-40	
Oil Pressure	Maximum Transient (after cold start)		182 psi (95 psi after 10 minutes)		
	Maximum Continuous		45-95 psi		
	Take-off Power		45-95 psi		
	Steady State Idle		25 psi minimum		
	* Engine must remain at idle until oil pressure returns to normal operating range.				
APU	ALLIED SIGNAL RE220 (RJ)				
APU Limits	Maximum RPM:	106%			
	Maximum EGT:	°C	°F		
	Starting	692-1038	1274-1900		
	Running-Ground*	789	1452		
	Running-Flight*	806	1482		
	* Dependent upon altitude and temperature. Refer to AFM (CSP C-012)				
	** Not to be exceeded under any operating condition.				
	*** Refer to AFM for detail limitations				
Airspeed Limits	Vmo and Mmo (maximum operating)	m.p.h.	knots	Mach	
	Sea Level to 8000 ft.	380	330	-	
	8000 ft. to 25400 ft.	386	335	-	
	25400 ft. to 28300 ft.	-	-	0.80	
	28300 ft. to 31400 ft.	362	315	-	
	31400 ft. to 34000 ft.	-	-	0.85	
	34000 ft. to 41000 ft.	-	-	0.84	
	Vfe (Flaps Extended)	1	265	230	
		8	265	230	-
		20	253	220	-
		30	213	185	-
		45	196	170	-
	Va (maneuvering)				

(See AFM for variation of Va with altitude and aircraft weight).

VLO (Landing Gear Operation)	253	220	*
	230	200	**
VLE (Landing Gear Extended)	253	220	-
* extending , ** retracting			

C.G. Range:- Refer to AFM (CSP C-012) for detail CG limits.

Datum Fuselage station 0, located 144.0 inches forward of aircraft nose

Mean Aerodynamic Chord (MAC) 133.185 inches (MAC leading edge at fuselage sta. 833.1 inches)

Leveling Means Target plate and plumb bob bracket within rear fuselage, at fuselage station 1146.75

Maximum Weights	Type		
	Spec. lb.	Option lb.	Option lb.
Ramp	80,750	82,750	85,000
Takeoff	80,500	82,500	84,500
Landing	73,500	73,500	75,100
Zero Fuel	70,000	70,000	70,750
Minimum flight weight	45,000	45,000	45,000

NOTE: The maximum take-off weight and/or maximum landing weight may be further limited due to performance considerations. Refer to Airplane Flight Manual for aircraft eligibility.

Minimum Crew Two (Pilot and Co-pilot)

Maximum Occupants 75 or less passengers
Plus 5 crew-members (Pilot, Copilot, Observer forward and Aft Flight attendants)

Fuel Capacity (usable)	Load *		Weight *	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 main tanks (each)	1110	924.1	3398	7492
Center Tank	683	568.6	2091	4610
Total	2903	2416.7	8888	19595

See Note 1(b) for system fuel

* Pressure refueling (based on 0.809 kg/L) (6.75 lb/U.S. Gal.)

With option TS670-79-201 – Engine Oil – No Remote Replenishment System

Oil Capacity	Load		Weight	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 Engines (each)	2.6	2.2	9.65	21.2
Total	5.2	4.36	19.3	42.4

With option CR670-79-201 – Engine Oil – Remote Replenishment System

Oil Capacity	Load		Weight	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 Engines (each)	2.6	2.2	9.65	21.2
Replenishment Tank	1.6	1.3	5.9	13.0
Total	6.8	5.7	25.2	55.4

See Note 1(c) for system oil

Maximum Operating Take off and landing: 8000ft (without Modsum 670T82357)
9600ft (with Modsum 670T82357)

Altitude	En route:	41,000 ft.	
Control Surface Movements	Rudder	33° Left	33° Right
	Horizontal Stabilizer	2.0° LE Up	13.0° LE Down
	Aileron	25.1° Up	21.3° Down
	Elevator	23.6° Up	18.4° Down
	Multi-Function Spoilers	48.0° Up	
	Ground Spoiler	44.9° Up	
	Flap – Inboard		45.0° Down
	- Outboard		41.6° Down
	Slat		25.0° Down
	Serial Numbers Eligible	15001 and subsequent	
Service Information:	Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.		

VII – Model CL-600-2D24 (Transport Category), Approved October 25,-2002, by the FAA and September 9, 2002 by Transport Canada.

Engines	Two General Electric CF34-8C5 or optional CF34-8C5A1 TC No. E00063EN					
Fuel	Type	Specifications	Canada	U.S.A.	U.K.	Roumanian
	Jet A	CAN2-3.23	ASTM D1655		D. Eng RD2494	
	Jet A-1	CAN2-3.23	ASTM D1655		D. Eng RD2494	STAS 5639/88TH
	Grade JP-5		MIL-T-5624		D. Eng RD2452	
	Grade JP-8		MIL-T-83133		D. Eng RD2453	
	†Fuel Additives Restricted to those listed in AFM (CSP-C-012) (Limitations, Fuel Additives) and/or antistatic STADIS-450 (max. 3ppm). Note: CL-600-2D24 JP4 and Jet B not applicable to CL-600-2D24					
Oil	Engine, APU and IDG: MIL-L-7808 (Type I) or MIL-L-23699 (Type II) or CASTROL 4000. * * Mixing of different types of oils is prohibited.					
Engine Limits Conditions	Refer to Limits Table in the AFM (CSP C-012)					
Oil Temperature	Maximum Permissible (15 minutes Maximum):		°C	°F		
	Maximum Continuous		+163	325		
	Minimum for Starting		+155	311		
Oil Pressure	Maximum Transient (after cold start)		-40	-40		
	Maximum Continuous			182 psi (95 psi after 10 minutes)		
	Take-off Power			45-95 psi		
	Steady State Idle			45-95 psi		
				25 psi minimum		
* Engine must remain at idle until oil pressure returns to normal operating range.						
APU	ALLIED SIGNAL RE220 (RJ)					
APU Limits	Maximum RPM:		106%			

Maximum EGT:	°C	°F
Starting	692-1038	1274-1900
Running-Ground*	789	1452
Running-Flight*	806	1482

* Dependent upon altitude and temperature. Refer to AFM (CSP C-012)

** Not to be exceeded under any operating condition.

*** Refer to AFM for detail limitations

Airspeed Limits	V _{mo} and M _{mo} (maximum operating)		m.p.h.	knots	Mach
	Sea Level to 8000 ft.		380	330	-
	8000 ft. to 25400 ft.		386	335	-
	25400 ft. to 28300 ft.		-	-	0.80
	28300 ft. to 31400 ft.		362	315	
	34000 ft. to 41000 ft.		-	-	0.84*
	31400 ft. to 41000 ft.		-	-	0.85
	V _{fe} (Flaps Extended)	1	265	230	
		8	265	230	-
		20	253	220	-
	30	213	185	-	
	45	196	170	-	

V_a (maneuvering)

(See AFM for variation of V_a with altitude and aircraft weight).

*with the incorporation of M/S 690T002727 – Introduction of new winglet

VLO (Landing Gear Operation)	253	220	**
	230	200	***
VLE (Landing Gear Extended)	253	220	-
** extending , *** retracting			

C.G. Range:- Refer to AFM (CSP C-012) for detail CG limits.

Datum Fuselage station 0, located 144.0 inches forward of aircraft nose

Mean Aerodynamic Chord (MAC) 133.185 inches (MAC leading edge at fuselage sta. 833.1 inches)

Leveling Means Target plate and plumb bob bracket within rear fuselage, at fuselage station 1146.75

Maximum Weights	Type			
	Spec.	Option	Option	
	lb.	lb.	lb.	
Ramp	80,750	82,750	85,000	
Takeoff	80,500	82,500	84,500	
Landing	73,500	73,500	75,100	
Zero Fuel	70,000	70,000	70,750	
Minimum flight weight	45,000	45,000	45,000	

NOTE: The maximum take-off weight and/or maximum landing weight may be further limited due to performance considerations. Refer to Airplane Flight Manual for aircraft eligibility.

Minimum Crew Two (Pilot and Co-pilot)

Maximum Occupants 90 or less passengers
Plus 5 crew-members (Pilot, Copilot, Observer forward and Aft Flight attendants)

Fuel Capacity (usable)	Load *		Weight *	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 main tanks (each)	1110	924.1	3398	7492
Center Tank	683	568.6	2091	4610

Total	2903	2416.7	8888	19595
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See Note 1(b) for system fuel

* Pressure refueling (based on 0.809 kg/L) (6.75 lb/U.S. Gal.)

With option TS670-79-201 – Engine Oil – No Remote Replenishment System

Oil Capacity	Load		Weight	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 Engines (each)	2.6	2.2	9.65	21.2
Total	5.2	4.36	19.3	42.4

With option CR670-79-201 – Engine Oil – Remote Replenishment System

Oil Capacity	Load		Weight	
	U.S. Gal.	Imp. Gal.	Kg.	lb.
2 Engines (each)	2.6	2.2	9.65	21.2
Replenishment Tank	1.6	1.3	5.9	13.0
Total	6.8	5.7	25.2	55.4

See Note 1(c) for system oil

Maximum Operating	Take off and landing:	8000ft (without Modsum 670T82357) 9600ft (with Modsum 670T82357)
Altitude	En route:	41,000 ft.
Control Surface Movements	Rudder	33° Left 33° Right
	Horizontal Stabilizer	2.0° LE Up 13.0° LE Down
	Aileron	25.1° Up 21.3° Down
	Elevator	23.6° Up 18.4° Down
	Multi-Function Spoilers	48.0° Up
	Ground Spoiler	44.9° Up
	Flap – Inboard	45.0° Down
	- Outboard	41.6° Down
	Slat	25.0° Down

Serial Numbers Eligible 15001 and subsequent

Service Information: Service Bulletins, structural repair manuals, and aircraft flight manuals which contain a statement that the document is Transport Canada approved or Transport Canada approved through the Manufacturers Design Approval Representative are accepted by the FAA and are considered FAA approved. These approvals pertain to the type design only.

Data Pertinent to all Models

Approved Publications

Model CL-600-1A11

- (a) Airplane Flight Manual, Canadair Publication RAG-600-101, Issue 2 (PSP 600 (U.S.) FAA, and PSP 600-1 (U.S.) for the appropriate configuration, (See NOTE 1) and approved revisions.
- (b) Drawing List, Canadair Publication RAL-600-105, and later approved revisions.

Model CL-600-2A12

- (a) Airplane Flight Manual, Canadair Publication PSP 601-1A, PSP 601-1A-1, PSP 601-1B and PSP 601-1B-1 for the appropriate weight configuration, (See NOTE 1) and approved revisions.
- (b) Drawing List, Canadair Publication RAL-601-105, and later approved revisions.

Model CL-600-2B16 (601-3A, 601-3R, & 604 Variants (from S/N 5301 to 5699))

- (a) Airplane Flight Manual, Canadair Publication PSP 601A-1, PSP 601A-1-1 and PSP 604-1 for the appropriate weight configuration, (See NOTE 1) and approved revisions.
- (b) Drawing List, Canadair Publication RAL-601A-105 (3A & 3R Variants) and RAL-604-0001 (604 Variant), and later approved revisions.

Model CL-600-2B16 (604 Variant (from S/N 5701 & Subs))

- (a) Airplane Flight Manual, Canadair Publication PSP 605-1 for the appropriate weight configuration, (See NOTE 1&9) and approved revisions.
- (b) Drawing List, Canadair Publication RAL-604-0001 (604 Variant), and later approved revisions.

Model CL-600-2B19

- (a) Airplane Flight Manual, Canadair Publication CSP A-012 for the appropriate weight configuration and approved revisions.
- (b) Maintenance Review Board (MRB) Report and subsequent revisions as contained in the Maintenance Requirements Manual (MRM), Canadair Publication CSP A-053, Part 2 and subsequent approved revisions.
- (c) Structural Repair Manual (SRM), Canadair Publication CSP A-008 and subsequent approved issues.
- (d) Certification Maintenance Tasks, Canadair Regional Jet, Model CL-600-2B19 Engineering Report No. RBR-601R-167, as contained in Part 2 to the Maintenance Requirements Manual (MRM), Canadair Publication CSP A-053, and subsequent approved revisions.

Model CL-600-2C10

- (a) Airplane Flight Manual, Canadair Publication CSP B-012 for the appropriate weight configuration and approved revisions.
- (b) Maintenance Review Board (MRB) Report and subsequent revisions as contained in the Maintenance Requirements Manual (MRM), Canadair Publication CSP B-053, Part I and subsequent approved revisions.
- (c) Structural Repair Manual (SRM), Canadair Publication CSP B-008 and subsequent approved issues.
- (d) Certification Maintenance Tasks, as contained in the Maintenance Requirements Manual (MRM), Canadair Publication CSP B-053, Part II and subsequent approved revisions.

Model CL-600-2D15/DC-600-2D24

- (a) Airplane Flight Manual, Canadair Publication CSP C-012 for the appropriate weight configuration and approved revisions.
- (b) Maintenance Review Board (MRB) Report and subsequent revisions as contained in the Maintenance Requirements Manual (MRM), Canadair Publication CSP B-053, Part I and subsequent approved revisions.
- (c) Structural Repair Manual (SRM), Canadair Publication CSP B-008 and subsequent approved issues.
- (d) Certification Maintenance Tasks, as contained in the Maintenance Requirements Manual (MRM), Canadair Publication CSP B-053, Part II and subsequent approved revisions.

Import Eligibility

A U.S. Airworthiness Certificate may be issued on the basis of the Canadian Department of Transport "Certificate of Airworthiness for Export" signed by the Minister of Transport. This form must contain the following statement:

a) Model CL-600-1A11

"This certificates that the aircraft described below has been manufactured in conformity with data forming the basis for the DOT Aircraft Type Approval No. A-131, as modified by Drawing List, Canadair Publication RAL-600-105, and later approved revisions (FAA Type Certificate No. A21EA)".

b) Model CL-600-2A12

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the DOT Aircraft Type Approval No. A-131 as modified by Drawing List, Canadair Publication RAL-601-105, and later approved revisions (FAA Type Certificate No. A21EA)".

c) Model CL-600-2B16 (3A & 3R Variants)

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the DOT Aircraft Type Approval No. A-131 as modified by Drawing List, Canadair Publication RAL-601A-105 and later approved revisions (FAA Type Certificate No. A21EA)".

Model CL-600-2B16 (604 Variant)

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the DOT Aircraft Type Approval No. A-131 as modified by Drawing List, Canadair Publication RAL-604-0001 and later approved revisions (FAA Type Certificate No. A21EA)".

d) Model CL-600-2B19

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the Transport Canada Type Approval No. A-131 and includes the minimum type design defined in document RAZ-601R-111 as being required to comply with the basis for the FAA Type Certificate No. A21EA".

The approved type design appropriate to the "as delivered" configuration of a particular CL-600-2B19 airplane is defined in the document RAL-601R-XXXX. (XXXX represents the Serial Number for the airplane concerned).

Model CL-600-2B19 Green Configuration

For CL-600-2B19 Green Configuration and associated modifications refer to NOTE 4.

e) Model CL-600-2C10

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the Transport Canada Type Approval No. A-131 and includes the minimum type design defined in document RAL-670-0001 and RAL-670-0002 as being required to comply with the basis for the FAA Type Certificate No. A21EA".

The approved type design appropriate to the "as delivered" configuration of a particular CL-600-2C10 airplane is defined in the document RAL-670-XXXX for S/N 10002 to 10132 and RAL-BA670-XXXX for S/N 10133 and subsequent. (XXXX represents the Serial Number for the airplane concerned).

f) Model CL-600-2D15/CL-600-2D24

"This certifies that the aircraft described below has been manufactured in conformity with data forming the basis for the Transport Canada Type Approval No. A-131 and includes the minimum type design defined in document RAZ-BA690-129 as being required to comply with the basis for the FAA Type Certificate No. A21EA".

The approved type design appropriate to the "as delivered" configuration of a particular CL-600-2D15/CL-600-2D24 airplane is defined in the document RAL-690-XXXX for S/N 15001 to 15013 and RAL-BA690-XXXX for S/N 15014 and subsequent. (XXXX represents the Serial Number for the airplane concerned).

Certification Basis

Model CL-600-1A11, CL-600-2A12, and CL-600-2B16 (3A & 3R Variants)

FAR Part 25 dated February 1, 1965, including Amendments 25-1 through 25-37, plus FARs 25.675(a), 25.685(a), 25.733(c), 25.775(e), 25.787(c), 25.815, 25.841(b), 25.951(a), 25.979(d) and (e), 25.1041, 25.1143(e), 25.1303(a), 25.1322, 25.1385(c), 25.1557(b), 25.1583(a), of Amendment 25-38; FARs 25.901(b) and (c), 25.903(c) and (e), 25.933(a), 25.943, 25.959, 25.1091(a) and (d), 25.1145(c), 25.1199(b) and (c), 25.1207, 25.1549, 25.1585(a)(9) of Amendment 25-40; and FAR 25.1309 of Amendment 25-41; FAR 25.1353(c) of Amendment 25-42; FAR's 25.571 and 25.629(d)(4) (v) of Amendment 25-45; FARs 25.351 and 25.603 of Amendment 25-46.

Model CL-600-2B16 (604 Variant)

FAR Part 25 dated February 1, 1965, including Amendments 25-1 through 25-78 with the following exceptions: FAR Part 25 at Amendment 25-37 for paragraphs: 109, 149, 365, 561, 625, 701, 772, 783 (except 783(f)), 785 (except 785(g)), 789, 791, 801, 803, 807, 809, 811, 812, 813, 831, 853, 855, 857, 1307, 1359, 1415, & 1419; FAR Part 25 at Amendment 25-37 for existing installations and Amendment 25-78 for new installations for paragraphs: 963, 965, 994, 997, and 1438; FAR Part 25 at Amendment 25-38 for paragraphs 787 and 1439; FAR Part 25 at Amendment 25-40 for paragraph 25.973; FAR Part 25 at Amendment 25-37 for paragraph 25.109 (see note 7); FAR Part 25 at Amendment 25-44 for paragraph 25.1413; FAR Part 25 at Amendment 25-54 for paragraph 851; FAR Part 25 at Amendment 25-80 for paragraph 1316. New FAR Part 25 requirements 562, 810, 819, 832, 858, 869, (a) & (b), 1421, 1423 and 1450 are not part of the certification basis.

Model CL-600-2B19

FAR Part 25 dated February 1, 1965, including Amendments 25-1 through 25-62 with the following exceptions; FAR 25.109 at Amendment 25-41, FAR 25.832 not included, FAR 25.1401 at Amendment 25-40, FAR 25.1438 not included and FAR 25.783(f) at Amendment 25-23 for the cargo compartment door, the main avionics compartment door and the service/emergency door. FAR 25.773(b)(2) and 25.785(h) at Amendment 25-72.

Model CL-600-2C10

FAR Part 25 dated February 1, 1965, including Amendments 25-1 through 25-86 with the following exceptions; FAR 25.783(f) at Amendment 25-23 for the cargo compartment door, the main avionics compartment door and the service/emergency door. FAR 25.571 at Amendment 25-96 and FAR 25.493 at Amendment 25.97.

Model CL-600-2D15/CL-600-2D24

14 CFR Part 25, including Amendments 25-1 through 25-86, Amendments 25-88 through Amendments 25-90, and Amendments 25-92 through 25-98 with the following exceptions: (a) FAR 25.783(f) at Amendment 25-23 shall replace FAR 25.783(f) at Amendment 25-88 for the Aft Cargo Compartment and Main Avionics Bay Doors only (common doors with CL-600-2C10 (CRJ-700)); (b) FAR 25.807(d)(6) at Amendment 25-72 shall replace FAR 25.807(h) at Amendment 25-94; (c) Plus FAR 25.365, FAR 25.831(a) and FAR 25.1447(c) at Amendment 25-87. FAR 25 Amendment 25-91 is not included in Type Certification Basis.

Additional FAA Requirements

(a) Model CL-600-1A11

- (1) FAR Part 36 dated December 1, 1969, as amended through Amendment 36-9 inclusive.
- (2) SFAR 27 dated February 1, 1974, as amended through Amendment SFAR 27-2.
- (3) Special Conditions No. 25-94-EA-12 dated March 26, 1980, (FAA Docket No. 16921) and Amendment No. 1 dated September 11, 1981.

Date of application for Type Certificate August 3, 1976. Type Certificate A21EA issued November 7, 1980.

(b) Model CL-600-2A12

- (1) FAR Part 36 dated December 1, 1969, as amended through Amendments 36-9 inclusive.
- (2) SFAR 27 dated February 1, 1974, as amended through Amendment SFAR 27-2.
- (3) Special Conditions No. 25-ANM-1 dated March 8, 1983.

Date of application for amendment to Type Certificate May 1, 1981. Type Certificate A21EA amended March 11, 1983.

(c) Model CL-600-2B16 (3A & 3R Variants)

- (1) FAR Part 36 dated December 1, 1969, as amended through Amendments 36-9 inclusive.
- (2) SFAR 27 dated February 1, 1974, as amended through Amendment SFAR 27-2.
- (3) Special Conditions No. 25-ANM-1 dated March 8, 1983.

Date of application for amendment to Type Certificate March 3, 1986.
Type Certificate A21EA amended April 30, 1987.

(d) Model CL-600-2B16 (604 Variant)

- (1) FAR Part 36 dated December 1, 1969, as amended through Amendments 36-20 inclusive.
- (2) FAR Part 34 dated August 25, 1990 as amended through Amendment 34-1.
- (3) Special Conditions No. 25-ANM-109 dated October 31, 1995 (HIRF).

Date of application for Change to Type Design June 14, 1993.
Change to Type Design approved November 2, 1995.

(e) Model CL-600-2B19

- (1) FAR Part 36 dated December 1, 1969, as amended through Amendments 36-18 inclusive.
- (2) Applicable portions of FAR 34 (previously codified as SFAR 27).
- (3) Special Conditions No. 25-ANM-61 dated July 22, 1992.

Date of application for amendment to Type Certificate May 26, 1988.
Type Certificate A21EA amended January 21, 1993.

(f) Model CL-600-2C10

- (1) FAR Part 36 dated December 1, 1969, as amended through Amendments 36-22 inclusive.
- (2) Applicable portions of FAR 34
- (3) Special Conditions:
 - High intensity radiated fields
 - Go-around performance credit for use of automatic power reserve (APR)

Date of application for amendment to Type Certificate May 6, 1996
Type Certificate A21EA amended February 16, 2001.

(g) Model CL-600-2D15/CL-600-2D24

- (1) 14 CFR Part 36 effective September 10, 1990, and including all amendments effective on the date of Type Certification.
- (2) 14 CFR Part 34, effective September 10, 1990, and including all amendments effective on the date of Type Certification.
- (3) Special Conditions:
 - High Intensity Radiated Fields, No. 25-ANM-109
 - Go-around performance credit for use of automatic power reserve (APR) No. 25-167-SC (same as CL-600-2C10)
 - Sudden Engine Stoppage, No. 25-217-SC
- (4) Exemption
Exemption No. 7447 Hydraulic Systems Testing for FAR 25.1435(b)(1)

Date of application for amendment to Type Certificate November 1, 1999.
Type Certificate A21EA amended October 31, 2002.

Equivalent safety has been established for the following requirements:(a) CL-600-1A11, CL-600-2A12, and CL-600-2B16.

- (1) FAR 25.773(b)(2) DV Window
- (2) 25.955(a)(4) Blocked Flow Meter Fuel Flow Requirements
- (3) FAR 25.201 Stall Determination

(b) CL-600-2B16 (604 Variant)

- (1) FAR 25.955 (a)(4) Blocked Flow Meter Fuel Flow Requirements
- (2) Several FAR's for the use of Reduced Minimum Operating Speed Factors

- (c) CL-600-2B19
- (1) FAR 25.811(d)(2) Emergency Exit Marking Sign
 - (2) FAR 25.813(c)(1) Access to Type III exit-seat cushion intrusion
 - (3) Several FAR's for the use of 1-g Stall Speed (nonstructural items)
 - (4) FAR 25.621 (c)(2) Overwing Emergency Exit Door Critical Castings, P/N 601R38685-1, (documented in Transport Airplane Directorate ELOS Memo TD3995NY-T-A-1)
- (d) CL-600-1A11, CL-600-2A12, and CL-600-2B16
- (1) Ditching provisions of FAR 25.801
 - (2) Ice Protection of FAR 25.1419
- (e) CL-600-2C10
- (1) FAR 25.103 and others Reduced Minimum Operating Speed Factors
 - (2) FAR 25.107(e)(1)(iv) V_{lof} and V_{mu}
 - (3) FAR 25.109 Rejected Takeoff and Landing Performance Criteria
 - (4) FAR 25.811(d)(2) Main Door Exit Marking Sign
 - (5) FAR 25.813(c)(2)(i) Emergency Exit Access
 - (6) FAR 25.904 Performance Credit for Use of APR During Reduced Thrust Takeoff
 - (6) FAR 25.933(a)(1)(ii) Thrust Reverser System
 - (7) FAR 25 App. I 25.5(b)(4) Lack of On/Off Switch for Automatic Takeoff Thrust Control System (ATTCS)
 - (8) FAR 25.841(b)(6) – High Altitude Takeoff and Landing Operations documented in Transport Airplane Directorate ELOS Memo AT2587NY-T dated January 31, 2007.

CL-600-2D15/CL-600-2D24

- (1) FAR 25.103 and others Reduced Minimum Operating Speed Factors
- (2) FAR 25.811(d)(2) Main Door Exit Marking Sign
- (3) FAR 25.813(c)(2)(i) Emergency Exit Access
- (4) FAR 25.904 Performance Credit for Use of APR During Reduced Thrust Takeoff
- (5) FAR 25.933(a)(1)(ii) Thrust Reverser System
- (6) FAR 25 App. I 25.5(b)(4) Lack of On/Off Switch for Automatic Takeoff Thrust Control System (ATTCS)
- (7) FAR 25.841(b)(6) – High Altitude Takeoff and Landing Operations documented in Transport Airplane Directorate ELOS Memo AT2587NY-T dated January 31, 2007.

Compliance with the following optional requirements has been established for the CL-600-2B16 (604 Variant):

- (1) Ditching provisions of FAR 25.801
- (2) Ice Protection of FAR 25.1419

Compliance with the following optional requirements has been established for the CL-600-2B19, CL-600-2C10 and CL-600-2D15/CL-600-2D24:

- (1) Ice Protection of FAR 25.1419
- (2) Ditching provisions of FAR 25.801 when the safety equipment requirements of FAR 25.1411 and the ditching equipment requirements of FAR 25.1415 are satisfied.

Equipment

The basic equipment as prescribed in the applicable airworthiness requirements (See Certification Basis) must be installed in the aircraft for certification.

NOTE 1

This Aircraft Type Certificate Data Sheet defines a configuration which does not include passenger provision for the CL-600-1A11, CL-600-2A12, and CL-600-2B16 models. Carriage of persons in the cabin is permitted when an approved seating arrangement and related required passenger provisions are incorporated.

- (a) Current weight and balance report including the list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

(b) Model CL-600-1A11, CL-600-2A12, and CL-600-2B16

System fuel, which must be included in the empty weight, is the amount of fuel required to fill the system plumbing and tanks to the undrainable level plus unusable fuel in the fuel tanks. The total amount of "system fuel" for the following

Challenger variants is:

<u>Model:</u>	<u>Total Unusable (system fuel)</u>
CL-600-1A11, 2A12	16.0 gal. total, 109 lb., (+500.00)
CL-600-2B16 (CL-601A)	17.5 gal. total, 119 lb., (+524.80)
CL-600-2B16 (CL-604 Variant)	19.0 gal. total, 129 lb., (+536.60)

Model CL-600-2B19

System fuel, which must be included in the empty weight, is the amount of fuel required to fill the system plumbing and tank to the undrainable level plus unusable fuel in the fuel tanks. The total amount of "system fuel" is 14.5 U.S. Gal., 97 lb. (+494.3).

Model CL-600-2C10

System fuel, which must be included in the empty weight, is the amount of fuel required to fill the system plumbing and tank to the undrainable level plus unusable fuel in the fuel tanks. The total amount of "system fuel" is 33.8 U.S. Gal., 228.2 lb. (arm +819.7 in).

Model CL-600-2D15/CL-600-2D24

System fuel, which must be included in the empty weight, is the amount of fuel required to fill the system plumbing and tank to the undrainable level plus unusable fuel in the fuel tanks. The total amount of "system fuel" is 34.0 U.S. Gal., 229.4 lb. (arm +929.3 in).

(c) Model CL-600-1A11

System oil, which must be included in the empty weight, is the amount of oil necessary for engine lubrication. The total amount of "system oil" is as follows:

7.38 U.S. gal. (total) 56.8 lb., (+623)

Model CL-600-2A12 and CL-600-2B16

System oil, which must be included in the empty weight, is the amount of oil necessary for engine lubrication. The total amount of "system oil" is as follows:

6.1 U.S. gal. (total) 47 lb., (+680.5)

Model CL-600-2B19

System oil, which must be included in the empty weight, is the amount of oil necessary for engine lubrication. The total amount of "system oil" is as follows:

5.83 U.S. gal. (total) 47 lb., (+785.67)

Model CL-600-2C10

System oil, which must be included in the empty weight, is the amount of oil required to fill the system plumbing and tanks. The total amount of "system oil" is as follows:

With option TS670-79-201 – Engine Oil – No Remote Replenishment System,
6.1 U.S. Gal., 49.9 lb. (arm +1077.7 in)

With option CR670-79-201 – Engine Oil – Remote Replenishment System,
7.8 U.S. Gal., 62.9 lb. (arm +1091.2 in)

Model CL-600-2D15/CL-600-2D24

System oil, which must be included in the empty weight, is the amount of oil required to fill the system plumbing and tanks. The total amount of "system oil" is as follows:

With option TS670-79-201 – Engine Oil – No Remote Replenishment System,
6.1 U.S. Gal., 49.9 lb. (arm +1229.7 in)

With option CR670-79-201 – Engine Oil – Remote Replenishment System,
7.8 U.S. Gal., 62.9 lb. (arm +1243.2 in)

(d) Model CL-600-1A11

Aircraft which incorporate Canadair Limited Modification Summaries:

- 1) 600-556 Modified main landing gear wheel,
- 2) 600-592 Modified main landing gear sidestay,
- 3) 600-1933 Revised airspeed limitation placard.

May be operated to the following limitations (eligible Serial Numbers 1002, 1004 through 1037):

<u>Maximum Weight</u>	<u>lb.</u>
Ramp	38650
Takeoff	38500
Landing	32500
Zero Fuel	28500

Maximum Occupants Twenty-two (includes crew)

<u>C.G. Range</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
<u>Weight, lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>
24000 to 38650	16 % (+502.848)	- - -
38650	- - -	28% (+513.965)
25800	- - -	33% (+518.598)
24000	- - -	33% (+518.598)

Straight line variation between points given.

Maximum Operating Altitude

Takeoff and landing	10000 ft.	
En route	40000 ft.	
	41000 ft.	with Canadair Limited Modification Summaries 600-1923 & 600-8330 incorporated.

Model CL-600-1A11

(e) Aircraft which incorporate Canadair Limited Modification Summaries:

- 1) 600-594 Landing gear for 40400 lb. takeoff weight aircraft,
- 2) 600-616 Wheels and brakes for the 40400 lb. takeoff weight aircraft,
- 3) 600-643 Structural reinforcement at wing B.L. O rib,
- 4) 600-752 Modified anti-skid unit,
- 5) 600-817 Stall protection system computer for the 40400 lb. takeoff weight aircraft,
- 6) 600-8150 Placard for the 40400 lb. takeoff weight aircraft,
- 7) 600-760 Drop down passenger door-production improvement (required only on S/N 1024 & subsequent).

may be operated to the following limitations (eligible Serial Numbers 1002, 1004 and subsequent):

<u>Maximum Weight</u>	<u>lb.</u>
Ramp	40550
Takeoff	40400
Landing	36000
Zero fuel	28500

Maximum Occupants Twenty-two (includes crew)

C.G. Range (Aircraft without Canadair Modification Summary 600-8265)

<u>Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
<u>lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>
24000 to 40550	16 % (+502.848)	-

40550	-	27% (+513.039)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
27500	-	33% (+518.598)
24000	-	33% (+518.598)

Straight line variation between points given.

C.G. Range (Aircraft with Canadair Modification Summary 600-8265 Incorporated)

Weight <u>lb.</u>	Forward Limit <u>% MAC (Sta.)</u>	Aft Limit <u>% MAC (Sta.)</u>
24000 to 40550	16 % (+502.848)	-
40550	-	27% (+513.039)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
28500	-	35% (+520.450)
24000	-	33% (+520.450)

Straight line variation between points given.

Maximum Operating Altitude

Takeoff and landing	10000 ft.	
En route	40000 ft.	
	41000 ft.	with Canadair Modification Summaries 600-1923 & 600- 8330 incorporated

Model CL-600-1A11

(f) Airspeed Limits (CAS)

Aircraft which, in addition to the Canadair Modification Summaries essential for operation at a maximum takeoff weight of 40400 lb., also incorporate the following Canadair Modification Summary:

- 1) 600-665 Revised Vmo/Mmo outputs of ADC and limitations placard may be operated at the following limitations:

<u>Vmo and Mmo (maximum operating)</u>	<u>m.p.h.</u>	<u>Knots</u>	<u>Mach.</u>
Sea level to 10000 feet	345	300	-
Above 10000 feet	420	365	0.835

Extension of the flight spoilers at airspeeds above Mach = 0.79 is not permitted unless the following additional Canadair Modification Summaries are incorporated:

- 1) 600-512 Prevention of spoiler asymmetry
- 2) 600-809 Dormant failure protection of the flight spoiler detent
- 3) 600-8212 Hydraulic pipe routing to suit spoiler detent mechanism.

Model CL-600-1A11

(g) Aircraft Serial Numbers 1086 and subsequent and aircraft incorporated the following:

- 1) Either
 - a) Canadair Service Bulletin 600-0378 – Modification - Stall Protection System - Stall Strip Removal and Altitude Compensation
 - or b) Supplementary Type Certificate SA99NE - Wing Stall Strip Removed.
- and
 - 2) Canadair Service Bulletin 600-0379 – Modification - Tires and Airspeed Limitation Placards - 41100 Pounds Takeoff Weight.
may be operated to the following limitations (eligible Serial Numbers 1002, 1004 and subsequent)

<u>Maximum Weight</u>	<u>lb.</u>
Ramp	41250
Takeoff	41100
Landing	36000
Zero fuel	28500

Maximum Occupants Twenty-two (includes crew).

C.G. Range Aircraft 1004, 1009, 1053 to 1056, 1066 and subsequent and Aircraft incorporating Canadair Service Bulletin 600-0221

<u>Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
<u>lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>
24000 to 41250	16% (+502.848)	-
41250	-	26% (+512.112)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
28500	-	35% (+520.450)
24000	-	35% (+520.450)

Straight line variation between points given.

C.G. Range (Other Aircraft)

<u>Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
<u>lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>
24000 to 41250	16% (+502.848)	-
41250	-	26% (+512.112)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
27500	-	33% (+518.598)
24000	-	33% (+518.598)

Straight line variation between points given.

Maximum Operating Altitude

Takeoff and landing	10000 ft.
En route	41000 ft.

Airspeed Limits (CAS)

<u>Vmo and Mmo (maximum operating)</u>	<u>m.p.h.</u>	<u>Knots</u>	<u>Mach.</u>
Sea level to 10000 feet	345	300	-
Above 10000 feet	420	365	0.835

Extension of the flight spoilers at airspeeds above Mach = 0.80 is not permitted on Aircraft S/N 1005 to 1008, 1010 to 1052, 1057 to 1066 not incorporating Canadair Service Bulletin 600-0086 Modification - Spoilers - Ground Spoiler Activation and Flight Spoiler Detent Mechanism.

Model CL-600-1A11

- (h) Aircraft incorporating the following Canadair Service Bulletins
- 600-0350 Modification - Engine Speed Indicating- N₁ Fan Speed Indicator
 - 600-0379 Modification - Tires and Airspeed Limitation Placards - 41100 lb. Takeoff Weight.
 - 600-0401 Modification - Winglets - Addition

With Aircraft Serial Numbers 1005 to 1008 and 1010 to 1051 incorporating the following additional Canadair Service Bulletins

- either 600-0096 Modification - Nose Landing Gear Steering
or 600-0380 Modification - Nose Gear - Steer by Wire.

may be operated to the following limitations (eligible Serial Numbers 1002, 1004 and subsequent).

<u>Maximum Weight</u>	<u>lb.</u>
Ramp	41250
Takeoff	41100
Landing	36000
Zero Fuel	28500

Maximum Occupants Twenty-two (includes crew).

C.G. Range Aircraft 1004, 1009, 1053 to 1056, 1066 and Subsequent and Aircraft Incorporating Canadair Service Bulletin 600-0221

<u>Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
<u>lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>
24000 to 41250	16% (+502.848)	-
41250	-	26% (+512.112)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
28500	-	35% (+520.450)
24000	-	35% (+520.450)

Straight line variation between points given.

C.G. Range (Other Aircraft)

<u>Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
<u>lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>
24000 to 41250	16% (+502.848)	-
41250	-	26% (+512.112)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
27500	-	33% (+518.598)
24000	-	33% (+518.598)

Straight line variation between points given.

Maximum Operating Altitude

Takeoff and landing	10000 ft.
En route	41000 ft.

<u>Airspeed Limits (CAS)</u>	<u>m.p.h.</u>	<u>Knots</u>	<u>Mach.</u>
<u>Vmo and Mmo (maximum operating)</u>			
Sea level to 10000 feet	345	300	-
10000 ft. to 21420 ft.	420	365	-
21420 ft. to 25740 ft.	-	-	0.79
25740 ft. to 28640 ft.	385	335	-
above 28640 ft.	-	-	0.835

Vfe (Flaps extended)

20°	265	230
30°	226	196
45°	215	187

Extension of the flight spoilers at airspeeds above Mach = 0.79 is not permitted on Aircraft S/N 1005 to 1008, 1010 to 1052, 1057 to 1066 not incorporating Canadair Service Bulletin 600-0086 Modification - Spoilers - Ground Spoiler Activation and Flight Spoiler Detent Mechanism.

Model CL-600-1A11

- (i) Aircraft incorporating the following Canadair Service Bulletins
- a) 600-0350 Modification - Engine Speed Indicating- N₁ Fan Speed Indicator
 - b) 600-0446 Modification - Placard-41250 lb. Take-off Weight (Aircraft with Winglets).
 - c) 600-0401 Modification - Winglets - Addition

With Aircraft Serial Numbers 1005 to 1008 and 1010 to 1051 incorporating the following additional Canadair Service Bulletins

either 600-0096 Modification - Nose Landing Gear Steering

or 600-0380 Modification - Nose Gear - Steer by Wire.

may be operated to the following limitations (eligible Serial Numbers 1002, 1004 and subsequent).

<u>Maximum Weight</u>	<u>lb.</u>
Ramp	41400
Takeoff	41250
Landing	36000
Zero Fuel	28500

Maximum Occupants Twenty-two (includes crew).

C.G. Range Aircraft 1004, 1009, 1053 to 1056, 1066 and Subsequent and Aircraft Incorporating Canadair Service Bulletin 600-0221

<u>Weight lb.</u>	<u>Forward Limit % MAC (Sta.)</u>	<u>Aft Limit % MAC (Sta.)</u>
24000 to 41400	16% (+502.848)	-
41400	-	26% (+512.112)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
28500	-	35% (+520.450)
24000	-	35% (+520.450)

Straight line variation between points given.

C.G. Range (Other Aircraft)

<u>Weight lb.</u>	<u>Forward Limit % MAC (Sta.)</u>	<u>Aft Limit % MAC (Sta.)</u>
24000 to 41400	16% (+502.848)	-
41400	-	26% (+512.112)
38000	-	31% (+516.745)
31000	-	31% (+516.745)
27500	-	33% (+518.598)
24000	-	33% (+518.598)

Straight line variation between points given.

Maximum Operating Altitude

Takeoff and landing	10000 ft.
En route	41000 ft.

<u>Airspeed Limits (CAS)</u>	<u>m.p.h.</u>	<u>Knots</u>	<u>Mach.</u>
<u>Vmo and Mmo (maximum operating)</u>			
Sea level to 10000 feet	345	300	-
10000 ft. to 21420 ft.	420	365	-
21420 ft. to 25740 ft.	-	-	0.79
25740 ft. to 28640 ft.	385	335	-
above 28640 ft.	-	-	0.835

Vfe (Flaps extended)

20°	265	230
30°	226	196
45°	215	187

Extension of the flight spoilers at airspeeds above Mach = 0.79 is not permitted on Aircraft S/N 1005 to 1008, 1010 to 1052, 1057 to 1066 not incorporating Canadair Service Bulletin 600-0086 Modification – Spoilers - Ground Spoiler Activation and Flight Spoiler Detent Mechanism.

Model CL-600-2A12

- (j) Aircraft Serial Numbers 3018 and subsequent and aircraft incorporating the following Canadair Service Bulletin 601-0032 - Modification - Tires and Airspeed Limitation Placards 43100 lb. Takeoff Weight may be operated to the following limitations (eligible Serial Numbers 1003, 3001 and subsequent)

<u>Maximum Weight</u>	<u>lb.</u>
Ramp	43250
Takeoff	43100

Maximum Occupants Twenty-two (includes crew).

C.G. Range

<u>Weight</u>	<u>Forward Limit</u>	<u>Aft Limit</u>
<u>lb.</u>	<u>% MAC (Sta.)</u>	<u>% MAC (Sta.)</u>
25000 to 43250	16% (+502.848)	- - -
43250		30% (+515.818)
31000	- - -	35% (+520.450)
25000	- - -	35% (+520.450)

Straight line variation between points given.

NOTE: 2

Model CL-600-1A11

All placards must be installed in accordance with Canadair Limited Drawings: 600-40402, 600-40452, 600-51000, 600-51002, 600-51004

Model CL-600-2A12

All placards must be installed in accordance with Canadair Limited Drawings: 601-40402, 601-40452, 600-51000, 600-51002, 601-51004.

Model CL-600-2B16

All placards must be installed in accordance with Canadair Limited Drawings: 601-40402, 601-40452, 601A51000, 601A51002, 601A51004.(3A & 3R Variants)
601-40402, 601-40452 & 604-51000 (604 Variant)

Model CL-600-2B19

All placards must be installed in accordance with Canadair Limited Drawings: 601R47600, 601R47602, 601R47700.

Note: Customized markings and placards drawings are not included.

Model CL-600-2C10

All placards must be installed in accordance with Canadair Limited Drawings: BA670-47501, BA670-47506, BA670-47800. Self Illuminated Signs and Electrical Signs must be installed in accordance with BA670-47802 and BA670-47803.

Note: Customized markings and placards drawings are not included. Drawings noted above are for basic type certification only. For as-delivered aircraft configurations, refer to customer options listed in RAL-670-300.

Model CL-600-2D15/CL-600-2D24

All placards must be installed in accordance with the Bombardier Aerospace Drawings: BA690-47500, BA690-47506, BA690-47804. Self illuminated Signs and Electrical Signs must be installed in accordance with BA690-47805 and BA690-47806.

Drawings noted above are for basic type certification only. For as-delivered aircraft configurations, refer to RAL-690-XXXX for S/N 15001 to 15013, and RAL-BA690-XXXX for S/N 15014 and subsequent. (XXXX denotes the serial number for the aircraft concerned).

NOTE: 3

Model CL-600-1A11

The airplane life limits and repetitive inspections for components and equipment are listed in Canadair Time Limits/Maintenance Checks, PSP 605. These limitations may not be changed without FAA Engineering approval. This document with Canadair Maintenance Manual, PSP 602 and Job Inspection Card Manual PSP 622, NDT-612 contain all information essential for proper maintenance.

Model CL-600-2A12

The airplane life limits and repetitive inspections for components and equipment are listed in Canadair Time Limits/Maintenance Checks, PSP 601-5. These limitations may not be changed without FAA Engineering approval. This document with Canadair Maintenance Manual, PSP 601-2 and Job Inspection Card Manual PSP 601-22, NDT-612 contain all information essential for proper maintenance.

Model CL-600-2B16

The airplane life limits and repetitive inspections for components and equipment are listed as follow:

1. CL-601 3A and 3R Variants: Canadair Time Limits/Maintenance Checks, PSP 601A-5;
2. CL-604 Variant (s/n 5301 to 5699): Time Limits/Maintenance Checks, Identification No. CH 604 TLMC, Section 5-10;
3. CL-604 Variant (s/n 5701 and up): Time Limits/Maintenance Checks, Identification No. CH 605 TLMC, Section 5-10.

These limitations may not be changed without FAA Engineering approval. These documents and the associated Canadair Maintenance Manual:

1. CL-601 3A and 3R Variants: Aircraft Maintenance Manual PSP 601-2 Identification No. CH 601MM;
2. CL-604 Variant (s/n 5301 to 5699): Aircraft Maintenance Manual Identification No. CH 604MM;
3. CL-604 Variant (s/n 5701 and up): Aircraft Maintenance Manual Identification No. CH 605MM;

and/or Job Inspection Card Manuals PSP601A-22 (3A) and/or PSP 601R-22 (3R), PSP604-22 (CL604), NDT604-12 contain all information essential for proper maintenance.

Model CL-600-2B19

The airplane life limits and repetitive inspections for components and equipment and information essential for proper maintenance, are listed in Canadair Program Document CSP A-053, Part 2. These limitations may not be changed without FAA Engineering approval.

Model CL-600-2C10

The airplane life limits and repetitive inspections for components and equipment and information essential for proper maintenance, are listed in Canadair Program Document CSP B-053, Part 2. These limitations may not be changed without FAA Engineering approval.

Model CL-600-2D15/CL-600-2D24

The airplane life limits and repetitive inspections for components and equipment and information essential for proper maintenance, are listed in Bombardier Aerospace Program Document CSP B-053, Part 2. These limitations may not be changed without FAA Engineering approval.

NOTE 4:

Model CL-600-2B19

Major modifications which define the aircraft as the “Green Configuration” are recorded in document RAZ-601R-110 (Definition of Type Design for Transport Canada approval), as Appendix 2 to that document.

- NOTE 5 : Model CL-600-2B19
The green aircraft type design does not include passenger provisions. Carriage of persons in the cabin is permitted when an approved seating arrangement and related required passenger provisions are incorporated in accordance with the Type Approval Basis.
Aircraft delivered in the “Green Configuration” and incorporating Mod. Summary TC60255 (Blocking of Emergency Exits) are limited to carrying a maximum of twenty-two (22) occupants including the crew and no more than 19 passengers in accordance with FAR 25 requirements.
- NOTE 6 : Model CL-600-2B19
For all weather flight capability the Regional Jet aircraft is certified to operate in CAT II conditions, except when the aircraft is installed with the HGS system (TC 601R60262), in which case the aircraft is certified to operate in CAT IIIa conditions.
- NOTE 7 : Model CL-600-2B16 (CL-604 Variant)
The following additional requirements must be included with FAR 25.109 at Amendment 25-37:
1. Airplane Flight Manual information, in the form of guidance material, must be provided for supplementary operating procedures and performance information for operating on wet and contaminated runways.
 2. The accelerate-stop distance and landing distance must be determined using the braking performance which is obtained with the brake conditions that are expected in service.
- NOTE 8: The RJ200 is a marketing designation for the Regional Jet Series 100 aircraft with the General Electric CF-34-3B1 engines installed and is identified as the Regional Jet Series 100 or RJ100 in this TCDS. All Airworthiness Directives issued against any 100 series aircraft are similarly applicable to the 200 series.
Special Edition (SE) and Challenger 850 are marketing designations used for a CL-600-2B19 delivered in a green configuration (See NOTES 4 & 5) and subsequently finished with an approved interior via Supplemental Type Certificates.
- NOTE 9: The CL-605 is a marketing designation for the Challenger CL-600-2B16 (CL-604 Variant) with Modsums 604DX10000, 604DX20000 and 604DX30000 incorporated, beginning with aircraft s/n 5701 and subsequent. This designation is for marketing purposes only.

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