

MD 530F

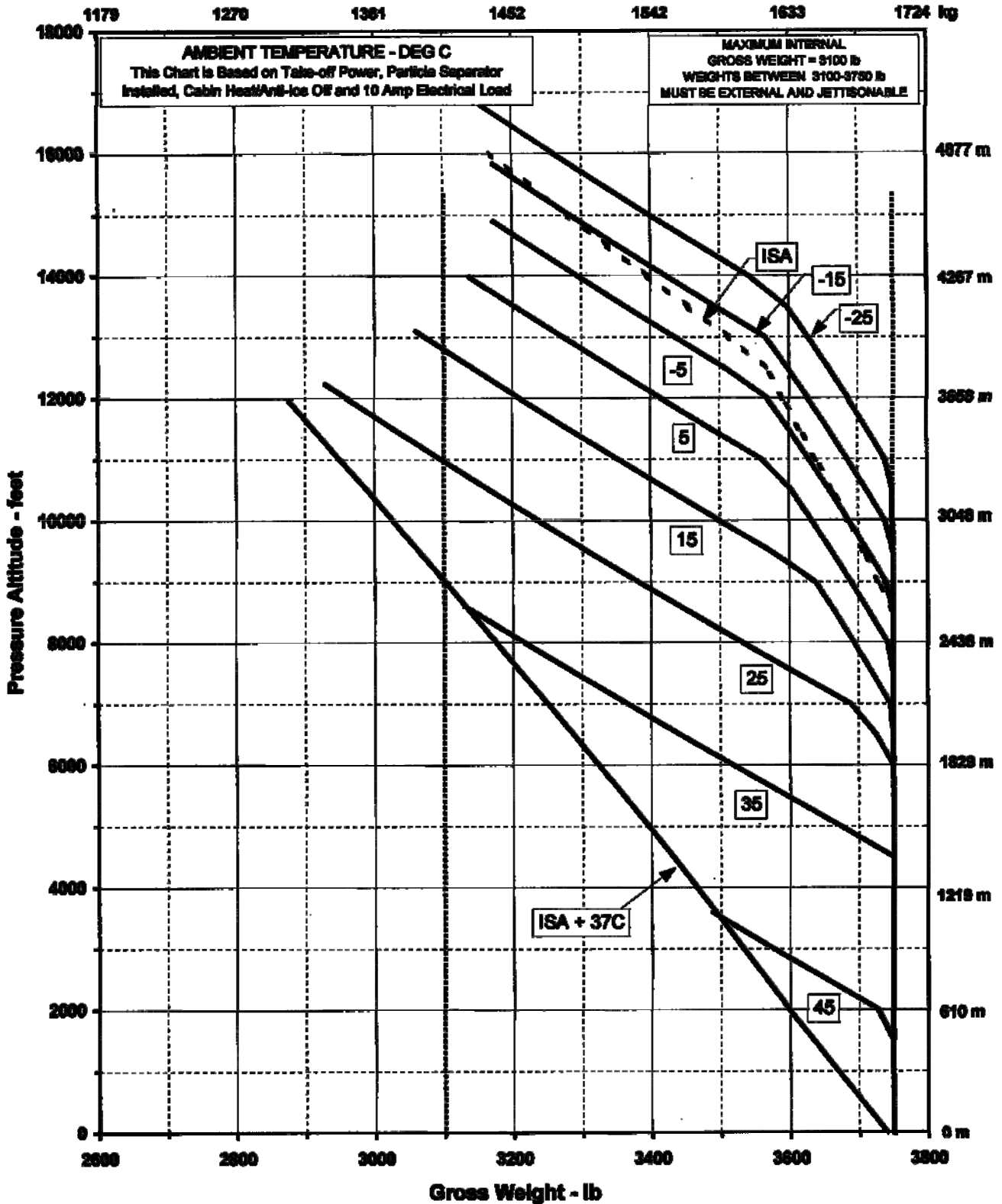
PERFORMANCE SPECIFICATIONS

7.0 Performance Specifications

Characteristics at Design Gross Weight		Metric 1406 kg	Imperial 3,100 lb
Maximum Cruise Speed	Sea Level 1524 m (5,000 ft)	248 km/hr 249 km/hr	134 kt (154 mph) 135 kt (155 mph)
Speed for Best Range	1524 m (5,000 ft)	243 km/hr	118 kt (219 mph)
Maximum Permitted Speed	V _{NE} at sea level	282 km/hr	152 kt (175 mph)
Maximum Range	Sea Level 1524 m (5,000 ft)	381 km 430 km	206 nm (237 m) 232 nm (267 m)
Maximum Endurance	Sea Level	381 km	206 nm (237 m)
Maximum Rate of Climb	Sea Level, Standard Day ISA +20° C Day	10.5 m/sec 105 m/sec	2069 fpm 2061 fpm
Maximum Operating Altitude	Density Altitude	6096 m	20,000 ft
Service Ceiling	ISA	5700 m	18,700 ft
Maximum Hook Capacity		907 kg	2,000 lb
Hovering Performance (No wind)			
In-ground effect	Standard Day ISA +20° C Day	4877 m 4359 m	16,000 ft 14,300 ft
Out-of-ground effect	Standard Day ISA +20° C Day	4389 m 3536 m	14,400 ft 11,600 ft
WEIGHTS			
Characteristics		Metric	Imperial
Maximum Gross Weight	Normal Capacity External Load Operations	1406 kg 1701 kg	3,100 lb 3,750 lb
Empty Weight	Standard Configuration	722 kg	1,591 lb
Useful Load	Normal Capacity	684 kg	1,509 lb
External Load Operations		979 kg	2,159 lb
Usable Fuel Capacity	242 l (64 gal)	183 kg	403 lb
POWER PLANT			
Characteristics		Metric	Imperial
Rolls-Royce 250-C30 gas turbine	Rated Power	485 kw	650 shp
Derated for reliability and safety to	Takeoff Power Max Continuous Power	317 kw 280 kw	425 shp 375 shp

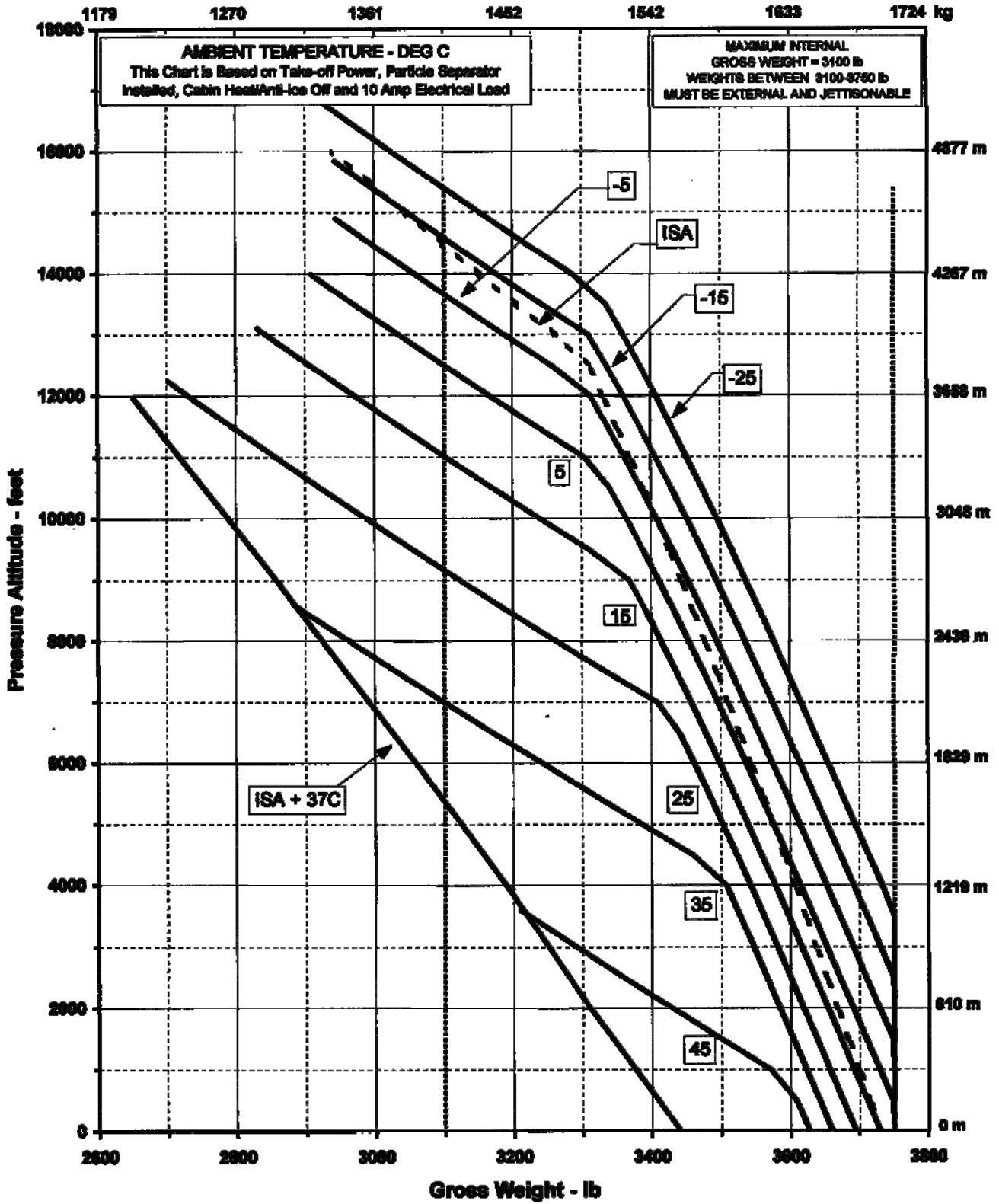
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7.1 Hover-In-Ground-Effect



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7.2 Hover-Out of-Ground-Effect



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7.3 Takeoff Gross Weight Worksheet

	Example	Mission #1	Mission #2
Empty Weight	1,591 lb (722 kg)		
Pilot	170 lb (77 kg)		
Fuel	403 lb (183 kg)		
Payload	936 lb (424 kg)		
Takeoff GW	3,100 lb (1406 kg)		

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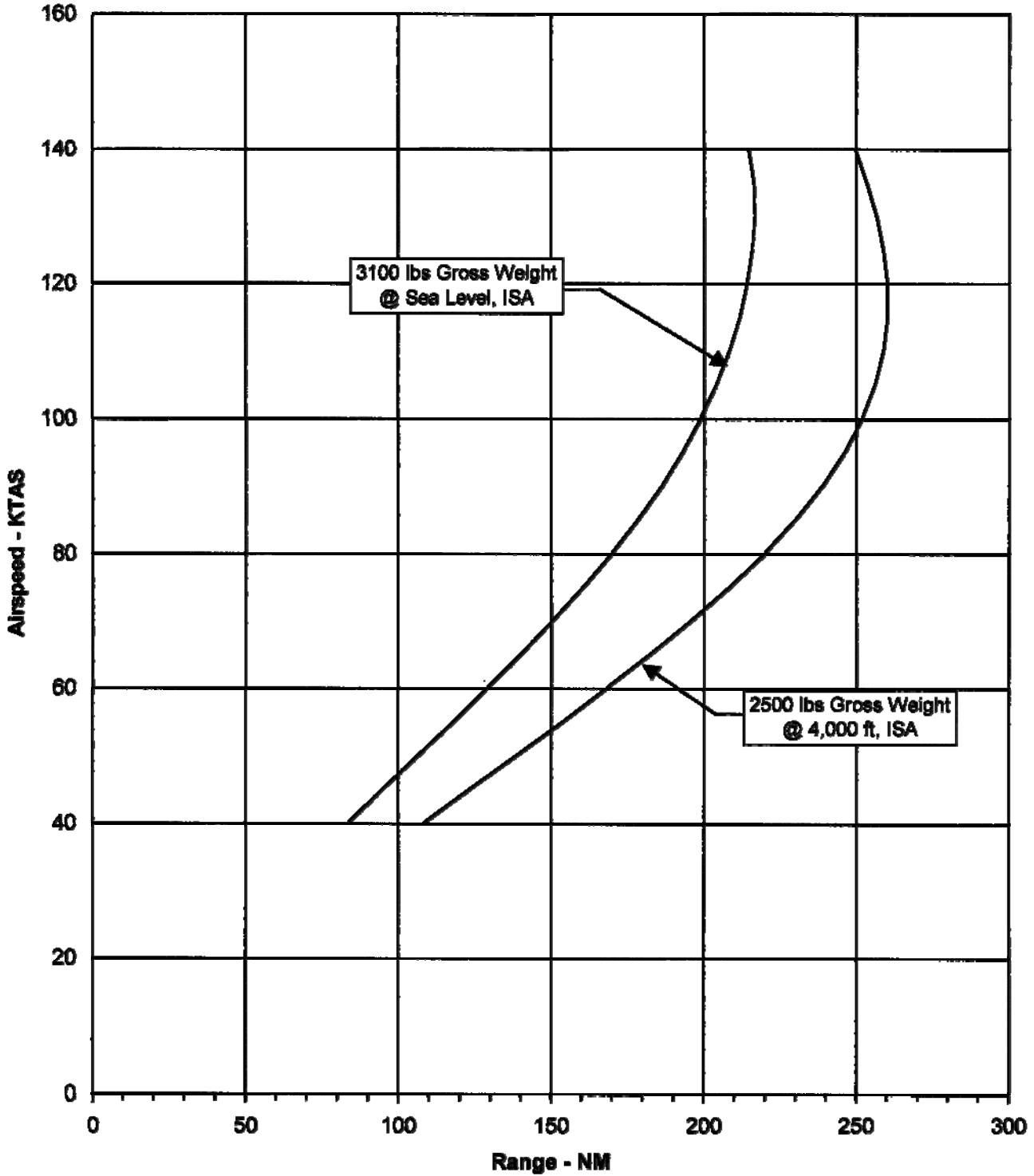
7.4 Payload vs Range (5000', ISA)

PAYLOAD & RANGE (5000', ISA)



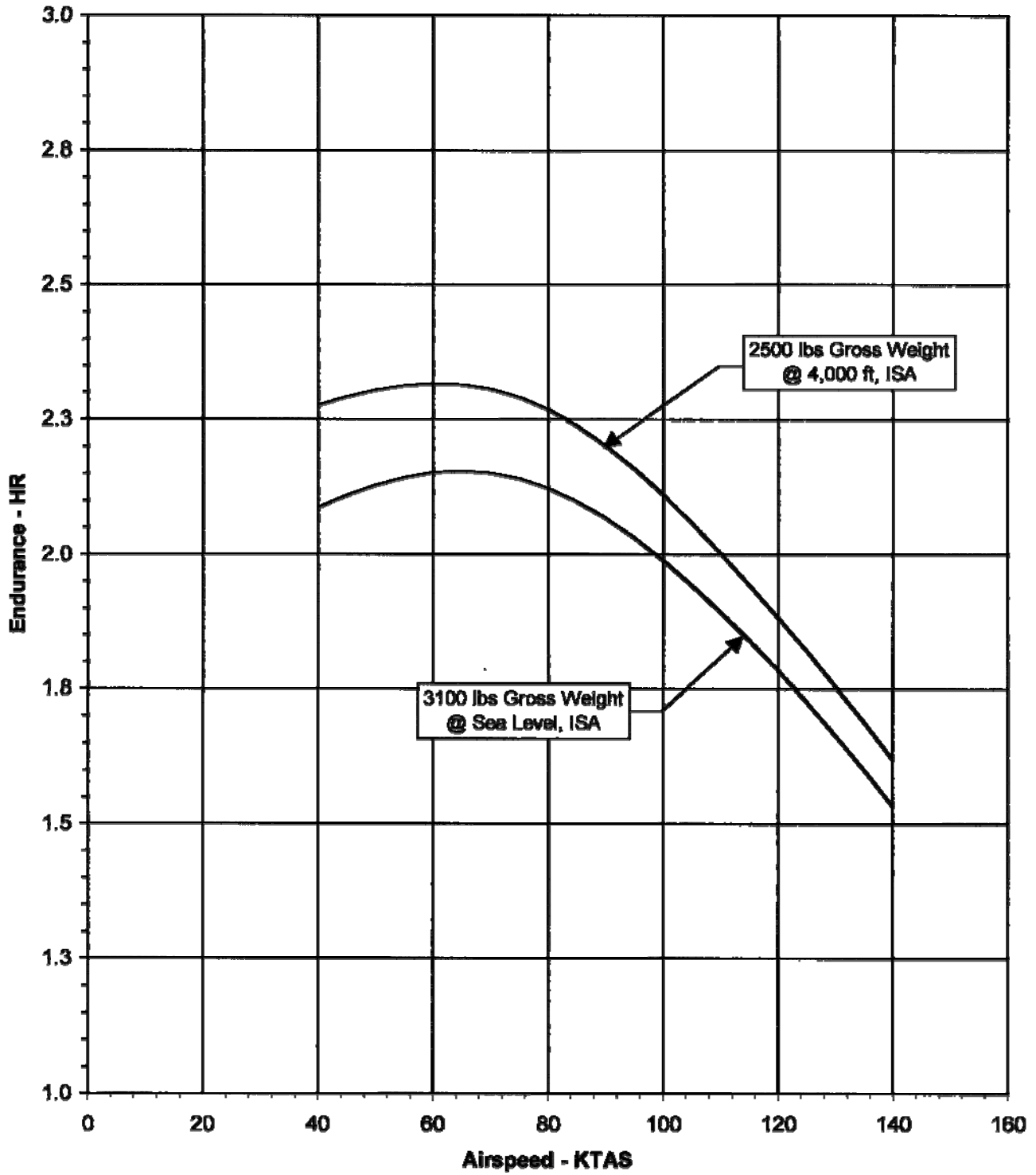
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7.5 Speed for Best Range



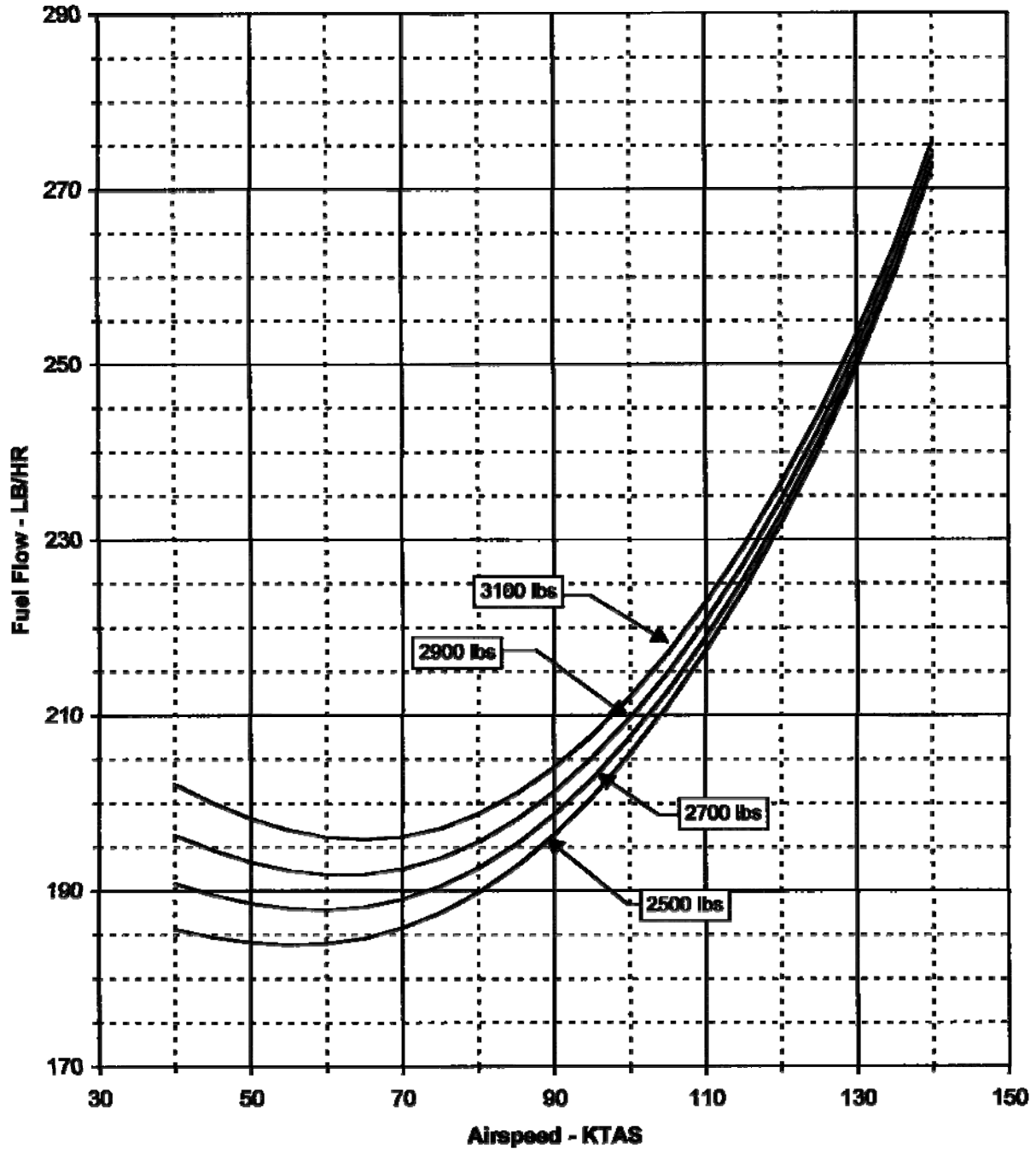
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7.6 Speed for Best Endurance



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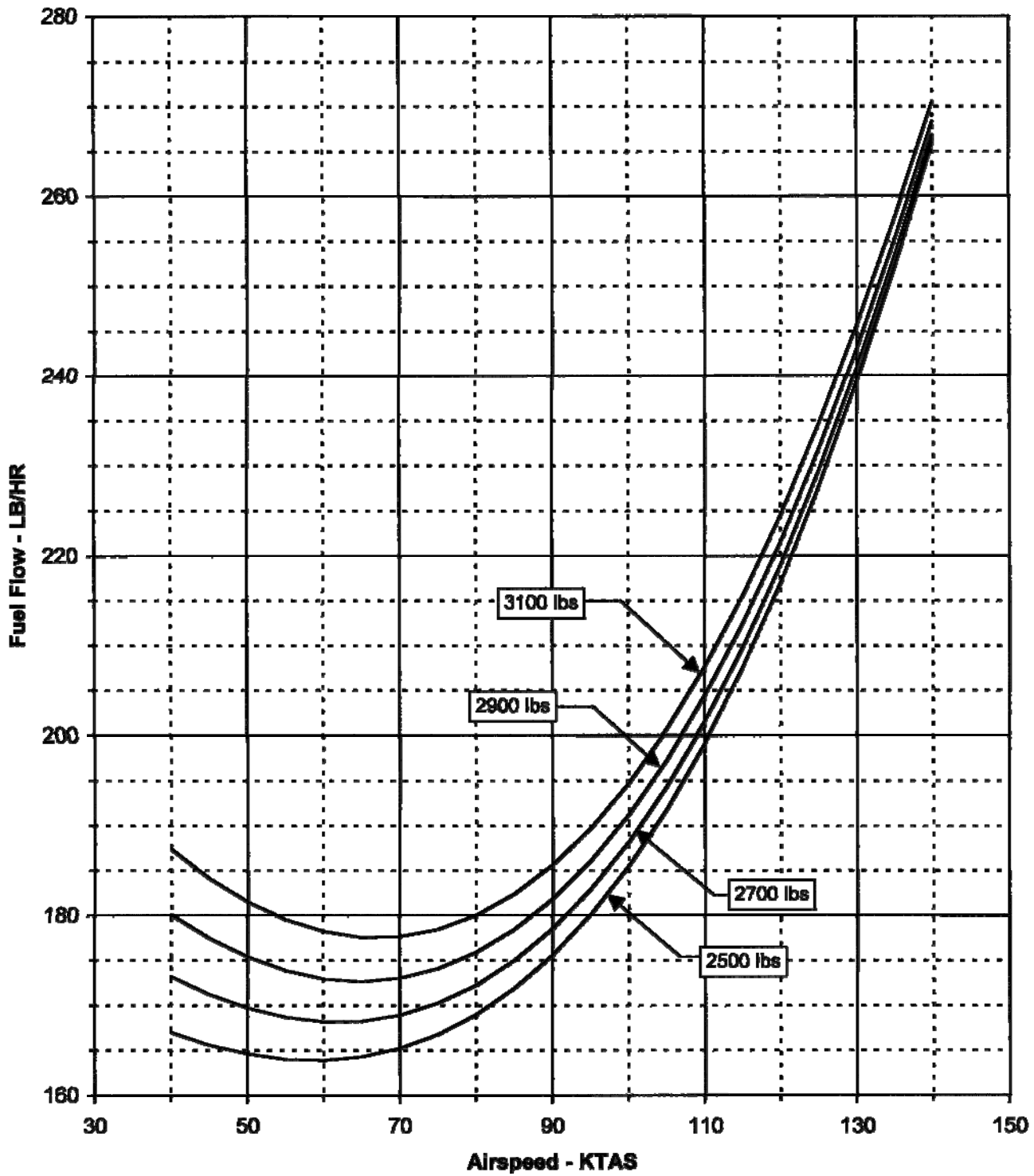
7.7 Fuel Flow, Sea Level, ISA (15°C)



Note: Use for Estimates Only. Not FAA Approved. Based on clean aircraft, level flight performance, minimum specification engine, particle separator and 10 ampere electrical load.

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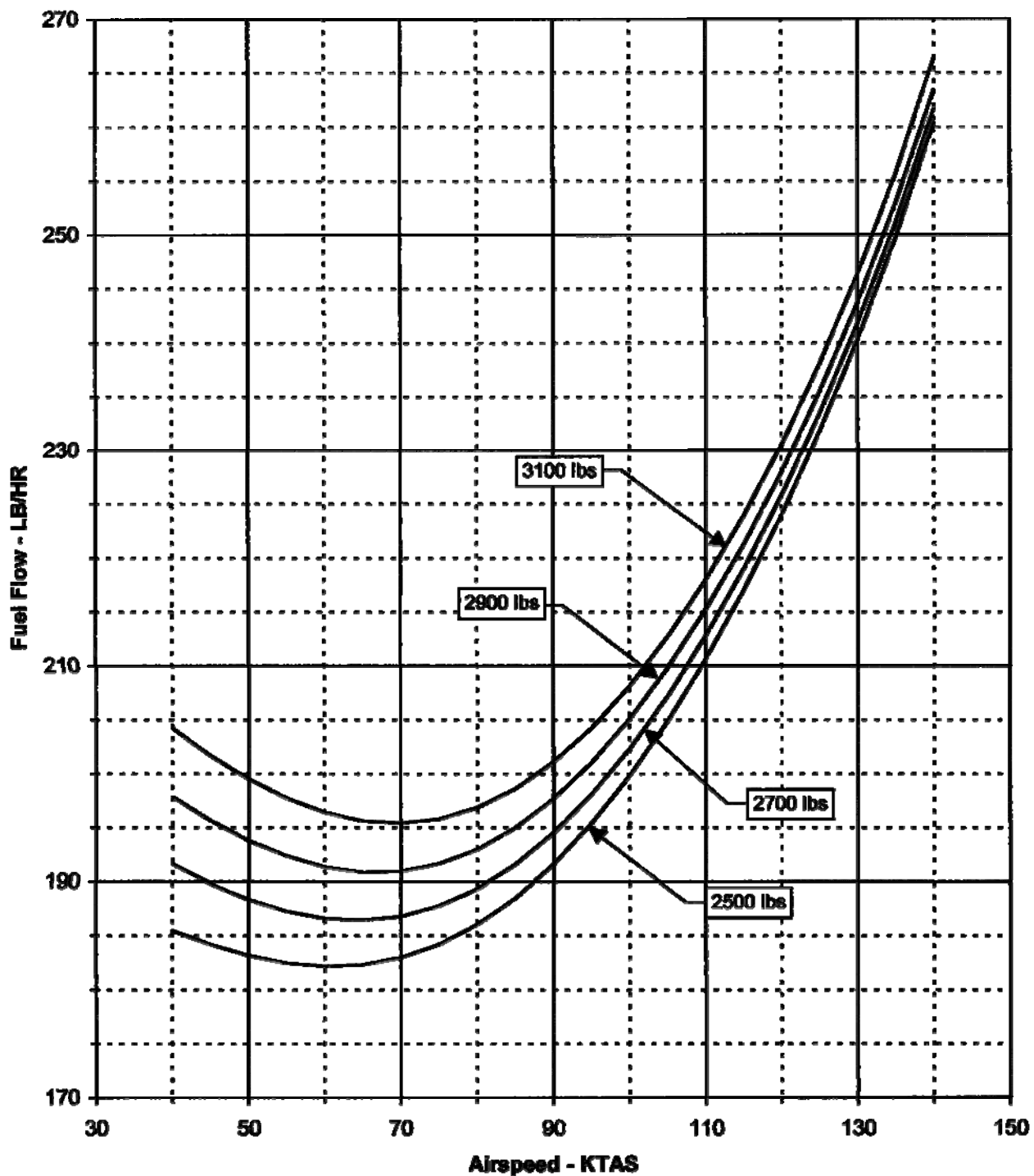
7.8 Fuel Flow, Sea Level, ISA +20°C (35°C)



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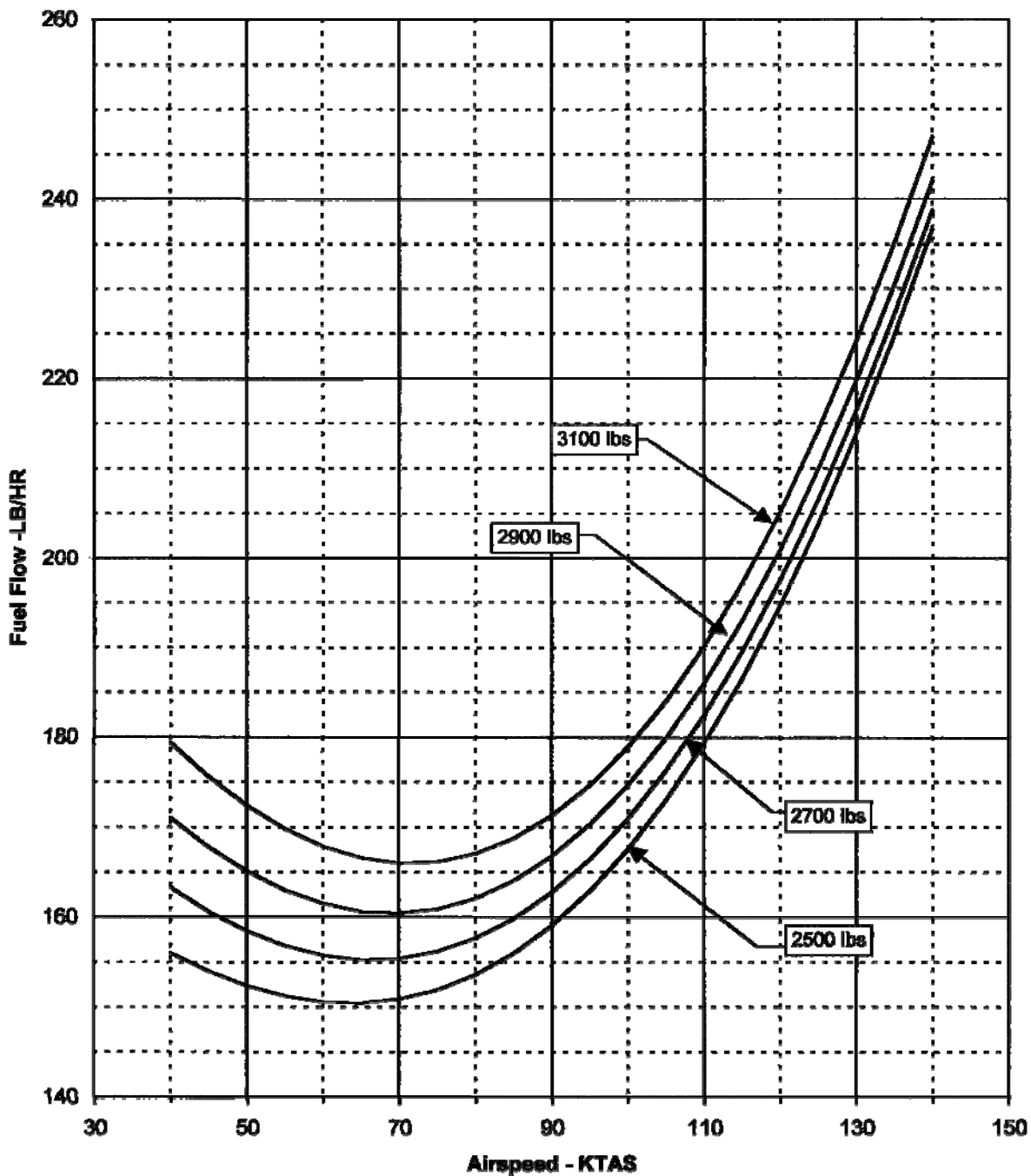
7.9 Fuel Flow, 4,000 feet, ISA (7°C)



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7.10 Fuel Flow, 4,000 feet, ISA +20°C (27°C)



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