Attachment 18

Operational Factors Group Chairman's Factual Report

DCA00MA030

Close in Descent Procedures

Fuel Flow Settings

	Approximate Fuel Flows	
Level Flight Airspeed	**-200**	**-300/-500**
320 knots	3400 pph	3200 pph
250 knots	2700 pph	2500 pph
210 knots	2400 pph	2300 pph
190 knots/Flaps 1	2400 pph	2300 pph
170 knots/Flaps 5	3200 pph	3000 pph
150 knots/Flaps 15/gear down	3800 pph	3600 pph

All of the recommended settings above are for level flight, and are a good place to start. Adjust thrust as necessary depending on altitude, temperature, and weight.

To descend using the above settings, configurations, and airspeeds, reduce fuel flow about 100 pph per 100 fpm of descent desired, for example: 250 knots descent at 1000 fpm reduce power to 1700 pph.

Close In Descent Calculations

- Flaps Up, Landing Gear Up, Speedbrakes DOWN will give about 1000feet/3 nautical miles.
- Flaps up, Landing Gear Up, Speedbrakes EXTENDED will give about 1000feet /2 nautical miles.
- Flaps up, Landing Gear Down, Speedbrakes EXTENDED, 210 knots will give almost 1000 feet/1 nautical mile (800 feet actually).
- Flaps 5, Landing Gear Up, Speedbrakes DOWN, 170 knots will give about 1000 feet/2 nautical miles.
- Flaps 30, Gear Down, 140 knots, will give about 600 feet/1 nautical mile
- If you are really behind—the best choice:

  Level off, configure all the way to flaps 40—then start down. Remember the flaps blow up to 30 just above 150 knots flaps 40, Landing Gear down and 140 knots will give about 1000 feet per nautical mile (almost 1 for 1).

In any case, have the engines spooled up by 500 feet AGL. You must lead with power—a good technique is to begin advancing power as the glideslope comes off the bottom of the case or the upper VASI turns pink.