

# WASHINGTON DESCENT

## "FALL OFF THE WALL"

### WASHINGTON DESCENT ("FALL OFF THE WALL")

The recommended procedure is as follows:-

- (1) From the altitude/temperature/wind table determine the decel/descent point to achieve  $72^{\circ}30'W$  @ 52,000 ft. at 325 kts. C.A.S. (M1.3).
- (2) One minute prior to descent point select 'Pitch Hold' and datum adjust so that at descent point there is no vertical descent/ascent i.e. the pitch attitude at decel/descent point is for level flight.
- (3) 'Bug' 450 kts. on an external bug (M1.35 @ 39,000 ft.)
- (4) At descent point throttle promptly in the standard way.
- (5) Carefully monitor Flight Level against distance on the graph, with a particular check at M1.6. A 'minus' T.D. has a greater effect than any other factor on the profile. Manufacturers agree that idle power below M1.6 is acceptable in that air conditioning is the prime consideration, and since the time between M1.6 and M1.0 at idle power is relatively short, no problem should arise.
- (6) At  $72^{\circ} 30'W$ :
  - (i) Select full 'pitch down' on datum adjust for at least 3 seconds to achieve a minimum pitch down attitude of  $0^{\circ}$ , and engage 'Mach Hold' on Autopilot.
  - (ii) Set 39,000 ft. on altitude selector and prime "Alt Acq".
  - (iii) DO NOT prime the auto-throttles.

N.B. If high and/or fast at  $72^{\circ}30'W$  the pitch down technique should be followed, as described, but IDLE power selected.

If you arrive at 325 kts. and 52,000 ft. before  $72^{\circ}30'W$  anticipate by applying power to maintain 325 kts. (M1.3), using auto-throttle if desired, but DO NOT delay the pitch over at  $72^{\circ}30'W$  - the aircraft is still travelling at one mile every 5 seconds
- (7) 'Mach Hold' may not initially hold M1.3 - the speed may drop to M1.25 - but this is not vital. Continue to monitor the distance to Robbinsville and T.D. If T.D. drops significantly select idle. However, if at or above 45,000 ft. at 75 D.M.E. Robbinsville select Idle power.
- (8) Close monitoring by all three crew members throughout the entire manoeuvre is essential, but in particular ensure that:-
  - (i) 450 kts. C.A.S. is not exceeded.
  - (ii) 39,000 ft. is set on Alt. Selector.
  - (iii) 'Alt Acq' is selected and 'the acquire' starts at about 43,000 ft.
  - (iv) The auto-throttles are NOT primed.
- (9) At 39,000 ft. when the Acquire has been completed and deceleration to M0.95 has been achieved a standard M0.95 auto-throttle cruise should be adopted.

# WASHINGTON DESCENT 'FALL OFF THE WALL'

DISTANCE FROM DECELERATION POINT AT  
CRUISE ALTITUDE TO FL 520 AND M = 1.3

FLIGHT LEVEL	TAILWIND-KT				HEADWIND-KT			
	40	20	0	20	40	60	80	100
	DISTANCE-NM							
600	105	102	100	98	95	93	91	89
590	96	94	92	90	87	85	83	82
580	88	86	84	82	80	79	77	75
570	81	79	77	76	74	73	72	70
560	76	75	73	71	70	68	67	65
550	72	71	70	68	67	65	64	62
540	70	68	67	66	64	63	62	60

NOTE: THE TABLE IS CORRECT FOR TEMPERATURES ISA +5°C AND HIGHER  
FOR TEMPERATURES BELOW ISA +5°C ADD 1 NM PER DEGREE.

