

## How to Monitor the Descent - Descent Profile Management

At ToD, multiply FL by 4; this gives notional DTG on the green line. Red line is altitude multiplied by 3 = notional 3° G/S distance. (Yes, this yields a small error because it should be altitude divided by 3 but multiplication is easier and it all comes out in the wash!!)

Continue with FL x 4 at 300kt down to FL150 then switch to FL x 3 plus 1nm per 10kt above V<sub>APP</sub> (call it 150kt for simplicity), pink line. So for example, below FL150:

F130 at 300kt with a V<sub>APP</sub> of 140kt (KISS = 150), say to yourself:

$$(13 \times 3) + (150/10) = 39 + 15 = 54\text{nm}$$

Now look at the FPLN distance to go; compare. If the FPLN distance is more than 54nm, say 49nm, you're high by 3 times the difference or  $5 \times 3 = 1500\text{ft}$  and v.v.

So now we slow to 250kt. Let's try again:

F110 at 250, it goes like this:

$$(11 \times 3) + 10 = 43\text{nm}$$

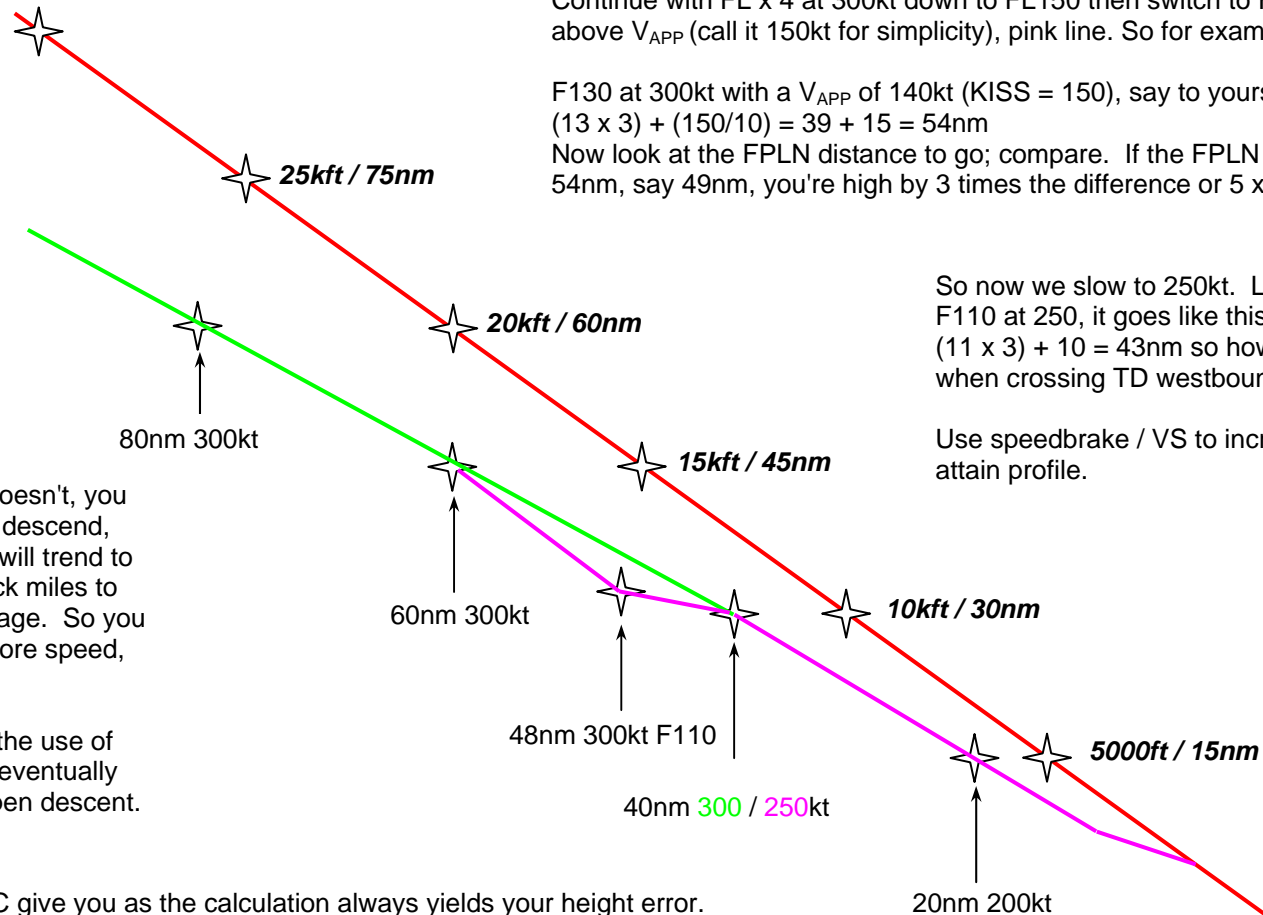
so how does that compare when crossing TD westbound?

Use speedbrake / VS to increase / reduce ROD to attain profile.

**Notional 3° G/S at V<sub>APP</sub>**

**3 x profile + delta V**

**4 x profile**



So how does it handle wind? It doesn't, you do. If you start on profile, as you descend, you'll notice that a large tailwind will tend to give an answer less than the track miles to run on the bottom of the FPLN page. So you need to modify the profile with more speed, speedbrake or more track miles.

A large headwind would require the use of V/S. In both cases the wind will eventually wash off and you will revert to open descent.

It doesn't matter what speed ATC give you as the calculation always yields your height error.

Always keep a sensible "TO" waypoint on the ND/MCDU to help in assessing distance to touchdown.

Use the DME from the airfield VOR / ILS distance or PROG page to the runway threshold to give you distance to touchdown information. Beware ILS/DME at the far end of the runway, such as ICN!

