a. The Instrument Landing System (iv) Flying the Glideslope

Scan flying the Glideslope

ASI Primary → **AI Master** → **ALT Primary**

Power Secondary

**TC Secondary** · **HSI Primary** · **VSI Secondary**
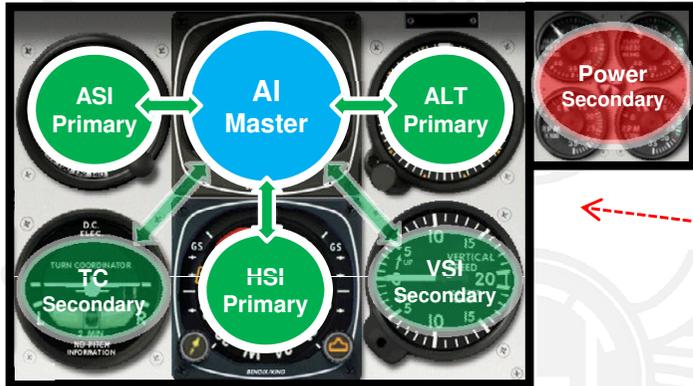
3. As the Glideslope is about to centre, perform the Final Approach Point (FAP) check of Altimeter vs. DME distance
4. When the Glideslope is centred on the datum, reduce power to 16" MP and pitch down to -3°; the aircraft is now flying down the glideslope
5. The Scan becomes
   AI : Master
   ASI, HSI, ALT : Primary
   T/C, VSI, Power: Secondary

4 | 2 | 2. With 3 greens confirmed, at quarter-scale deflection select FLAP 20 | 1 | 1. Anticipate the Glideslope pointer descending from the top of the scale. At half-scale deflection, select GEAR DOWN

Since POWER + ATTITUDE = PERFORMANCE, the correct power and attitude should result in the aircraft flying precisely down the 3° glideslope just as easily as maintaining level flight. The rate of descent required is a function of groundspeed. A rule-of-thumb is ROD fpm = 5x Groundspeed kts. The approach chart also has an accurate table of this relationship.

Gnd speed-Kts	70	90	100	120	140	160
ILS GS 3.00° or LOC Descent Gradient 5.2%	377	485	539	647	755	862
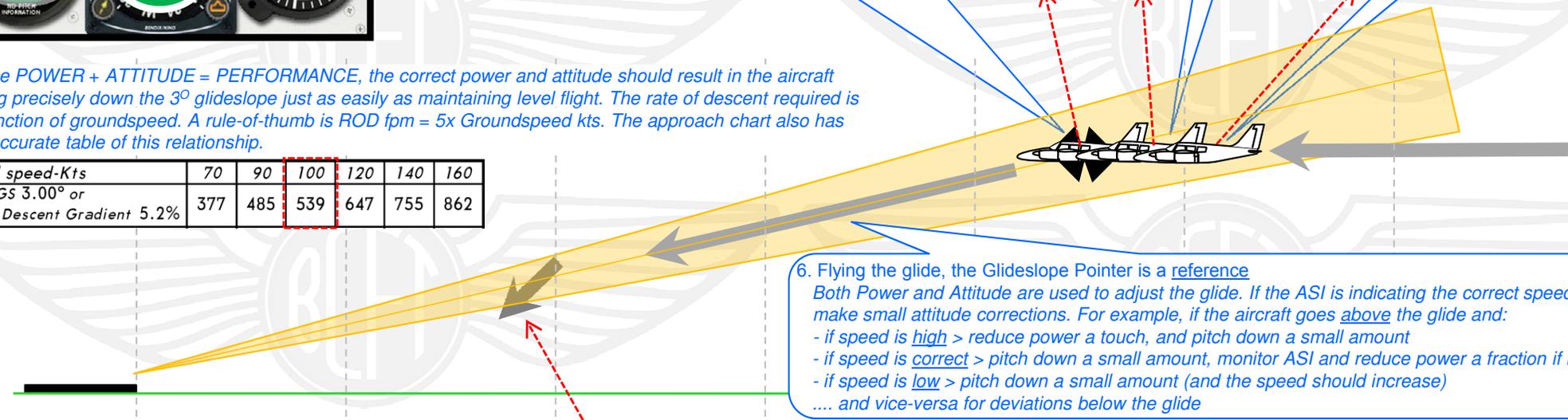
6. Flying the glide, the Glideslope Pointer is a reference
   Both Power and Attitude are used to adjust the glide. If the ASI is indicating the correct speed, then make small attitude corrections. For example, if the aircraft goes above the glide and:
   - if speed is high > reduce power a touch, and pitch down a small amount
   - if speed is correct > pitch down a small amount, monitor ASI and reduce power a fraction if req'd
   - if speed is low > pitch down a small amount (and the speed should increase)
   .... and vice-versa for deviations below the glide

As the aircraft progress down the Glideslope, smaller pitch changes are needed to correct a given pointer deflection. In this example, the grey arrow represents a correcting pitch-down which would be fine at 5nm, but which is excessive in the narrower Glideslope at 2nm.
Remember, the LOC needle and GS pointer are Indicators only, of relative position. They are not Directors, so a half-scale deflection does not mean a significant attitude correction is appropriate. Approaching the DA, the LOC and GS 'cone' is so narrow, that only very small corrections are needed.

0.0 · **1.0** · **2.0** · **3.0** · **4.0** · **5.0** · **6.0**

• **The "golden rule" for flying the Glide is to action corrections on the AI with reference to the ASI and Power**