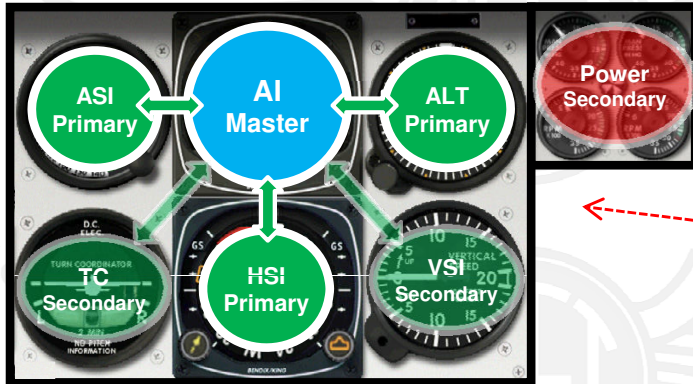


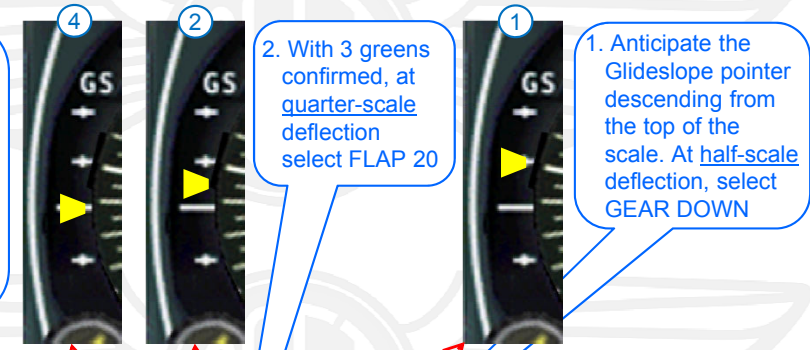
# 8. ILS

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

Scan flying the Glideslope

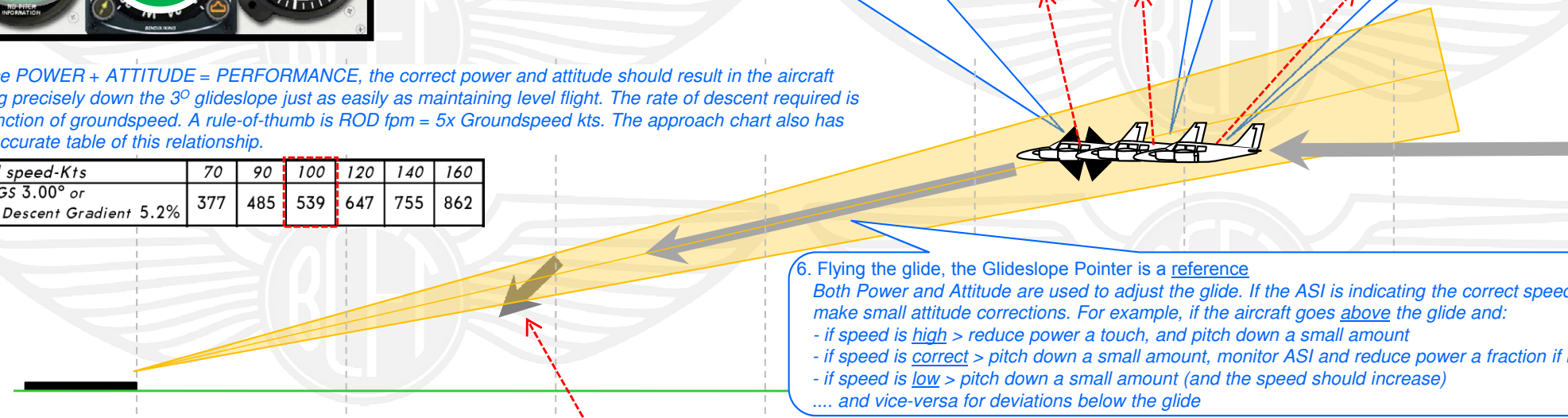


3. As the Glideslope is about to centre, perform the Final Approach Point (FAP) check of Altimeter vs. DME distance
4. When the Glideslope is centred on the datum, reduce power to 16" MP and pitch down to -3°; the aircraft is now flying down the glideslope
5. The Scan becomes  
AI : Master  
ASI, HSI,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



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  $ROD \text{ fpm} = 5 \times \text{Groundspeed kts}$ . 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



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