

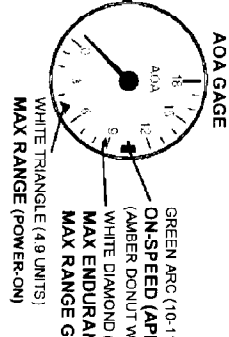
# T-6 Emergency Landing Patterns

- 1 - Point Nose to Runway.
- 2 - Power to MAX & Pull Nose up to Dash Vents on Horizon (~20° NH).
- 3 - 500' below High Key - Begin to Lower Nose to Level Flight & Pull Power to ~25% Torque (back to Gear Handle Light On and then back up a bit)
- 4 - Call "High Key" just prior to actual High Key Position.
- 5 - After directed to "Report Low Key," Lower gear, Pull Power toward 4-6% Torque, and initiate descending 30° banked turn at High Key Position

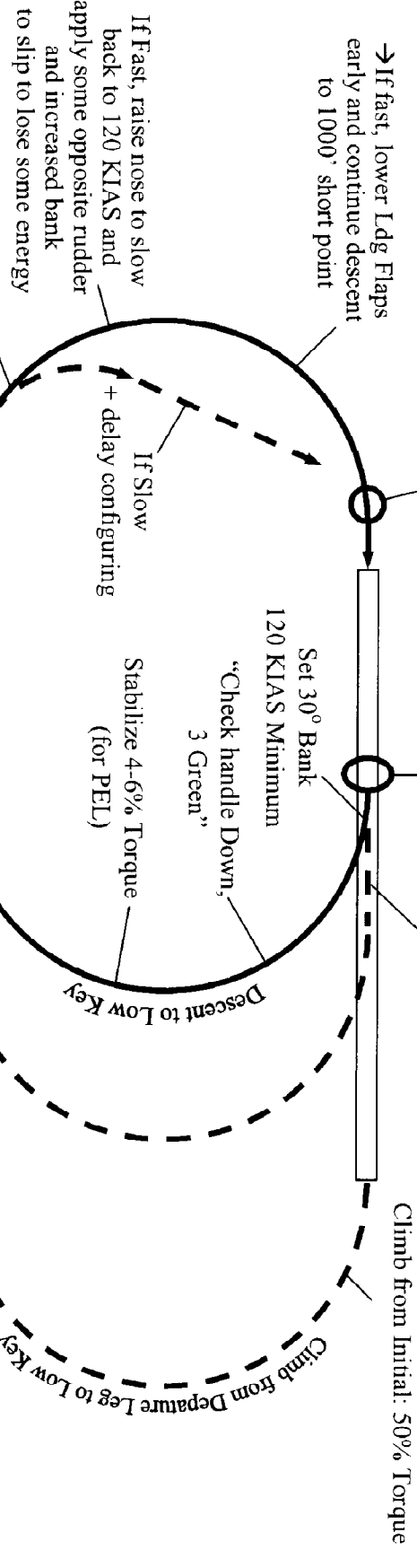
Norm ELP Glide		
(Approximate)		
Config	KIAS	Pitch
Clean	125	-1°
Gear	120	-2°
G/T/O Fl	120	-5°
G/T/O Fl	120	-7°
G/Ldg Fl	120	-11°
G/Ldg Fl	120	-10°

Best Range Glide*		
(Approximate)		
Config	KIAS	Pitch
Clean	105-125	+2.5° -4.5°
Gear	105-125	+1.5° -5.5°
G/T/O Fl	100-120	-2.5° -7°
G/Ldg Fl	95-115	-3° -6.5°

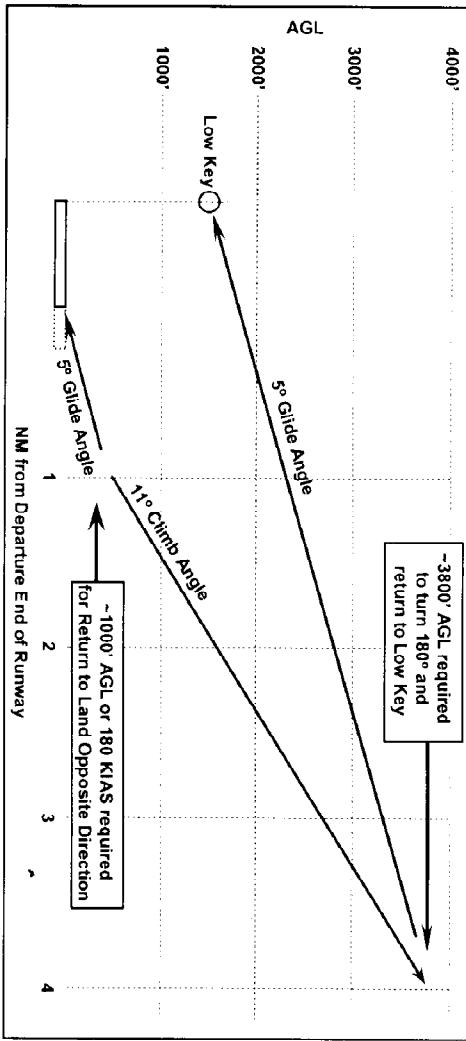
\* - 8.8 Units AOA / White Diamond



- If fast, lower Ldg Flaps early and continue descent to 1000' short point
- If 120 KIAS, extend Ldg Flaps & intercept normal final approach path to threshold
- If slow on final (<120 minimum A/S), delay Ldg Flaps until Round-Out



## Return to Land From Departure Leg



## ELP Public Math

First - Maintain Aircraft Control by "Turn-Climb-Clean" - Turn toward nearest runway, Climb to intercept 125 KIAS glide, and Deconfigure & check the PCL to off (to minimize drag) if not providing usable torque.

Second - "Check" - Apply Engine Failure or other applicable BOLD/FADE or critical procedures.

Third - Fly to intercept ELP and apply Meth:

"Backwards" or "DME" Method - Compare aircraft energy state to a specific field.

- (1) Determine Target Altitude for Nearest Field? → NRST button gives you field elevation. Target Altitude = Field Elevation + 3000' for High Key
- (2) Minimum Altitude Required? = Distance/2 + Target Altitude
- (3) High Enough to make High Key? Compare Aircraft MSL to Min Altitude Required
- (4) If not high enough to make High Key, are you high enough to make Low Key? Or for a straight-in ELP? Tgt Alt = Fld Elev + 1500' (Low Key) or 500' (St-In). Compare Aircraft MSL to Minimum Altitude Required for Low Key or Straight-In ELP.

Frontwards Method - Easiest: Means to compare your energy state to more than one field

- (1) Max Glide Distance to High Key? (Aircraft AGL - High Key Altitude) x 2
- (2) Is Desired Field within Glide Distance? Compare Max Glide Dist to Actual Dist.
- (3) Other Fields within Glide Dist? Determine other fields within Glide Distance
- (4) Determine most Suitable Field (e.g., runway length).

Example: Columbus AFB  
Distance from Field: 10 NM  
Tgt Alt = 200'+3000' = 3200'  
10 / 2 + 3200' = 8200'  
Aircraft MSL > 8200'?

Example: Aircraft at 10,000' AGL  
Glide Dist = (10-3)/2 = 14 NM  
Is Desired Field within 14 NM?  
What other fields within 14 NM?

- Assumptions:
- 6000' Runway (does NOT impact glide to Low Key for Landing Runway)
  - 5° Glide Angle for 125 KIAS (negligible wind)
  - 180 KIAS / 10° Average Climb Angle Intercepted 1.0 NM from DER at 500'