Ex 1 [FI(S) ATP]. Skills Test Profile

Aim: Why:	Establish a baseline. P2 to gain experience with the airframe for later demonstrations and teaching PIC can identify items that may need emphasis. P2 can note details of each manoeuvre to aid later teaching
TEM:	Risks: Cockpit gradient and role issues- Mit. P2 left seat is PF PIC right seat. PIC adopt terminology of Chula or Bloggs AR. Pilots may not share the same expectations of the style of circuit to be flown: Mit. Brief prior to flight In the event of emergency role confusion may arise. Mit. Brief prior to flight.
Air Ex: P2 Manages all aspects of aircraft prep and briefs PIC as if s/he was a passenger. Completes all checks and takes off and levels at agreed level. FREDA PIC asks for P2 to undertakes exercises as per the test card including cruise climb (70 kts) but excluding en route NAVEX items PIC asks or a demonstration of a go around on first approach	

Ex 2 [FI(S) ATP]. Use of GPS

Aim: Why:	Show how GPS can be used to support DR navigation Encourages proper use and highlights risks of in appropriate use of GPS equipment.
TEM:	Risks: Cockpit gradient and role issues- Mit. P2 left seat is PF PIC right seat. PIC adopt terminology of Chula or Bloggs AR. Pilots may not share the same expectations of the style of circuit to be flown: Mit. Brief prior to flight In the event of an emergency role confusion may arise. Mit. Brief prior to flight.
Air Ex: 1. Prior to flight set up GPS 2. Fly the start of a navex leg and use GPS device as the last item to support the gross error check. 3. Simulate a diversion to train/test use of GOTO function with emphasis given to avoiding inadvertent infringement of CAS (rubber band course if possible). [Training tip for SPL students, do not introduce GPS until sure they can navigate by DR, and can respond appropriately to being uncertain of position	

Ex 3 [FI(S) ATP]. Give Advanced Turning

Aim: Why:	Show how to teach Steep turns. [Turning at constant 45 degree (dg) bank, level and speed rolling out onto a specified heading (Hdg)] As glider pilots we can be blasé about steep turns we need an alertness to risks associated with power ops Safety at higher angles of bank. Teach use of the ball. Note differential use of the rudder left turning versus right.
TEM:	Risks: Exceed VNE esp with a spiral dive. Collision. DI drift. Disorientation (geo). Mit. Start low cruise speed (<Va) say 60. HASSEL checks. Periodic orientation check and post exercise FREDA. Hell Checks

Air Ex:

PIC Slow to safe cruise speed. (Clearing turns.) Emphasis given to noting the precise IAS level and heading (feature).

Demos

1. Show what 45 dg bank **looks like**. Point out "the picture" & other cues. L&R
2. Demonstrate a steep turn **emphasising the work cycle** (Look out - Attitude - Instruments) **and any necessary corrections**
   a. Roll in adding (approx. 200 RPM) as 30 degrees is passed.
   b. Work cycle (LAI)
   c. Roll out. Reduce power as AoB becomes less than 30dgs.
3. Turn at 45 dg **rolling out to a feature**. Note IAS and Alt.
   a. Roll in adding (approx. 100 RPM) as 30 degrees is passed.
   b. Work cycle LAI. ASI and Alt initially
   c. Roll out to a feature. Reduce power as back reduce to less than 30dgs.
4. Turn at 45 dg **rolling out to a heading,** anticipate by half angle of bank. DI to be brought increasingly into the scan as the roll out HDG approaches.
5. Lack of power and or speed. Note adverse yaw is a distinct sign of low speed. Recovery from incipient departure. Release back Px, add (full) power, reduce power, restore to S&L
6. Insufficient back Px. Recovery from spiral dive. Close throttle, Level wings add power, return to S&L

Ex 4 [FI(S) ATP]. Give back advanced Turning   As Ex 3 with P2 flying throughout

Ex 5 [FI(S) ATP] Navigation

Aim:	P2 to practice teaching DR Navigation with and without GPS. Including deviation and diversion techniques
TEM:	Risks: Disorientation and CAS infringement. Collision
	Mit. No role playing. PIC monitor GPS throughout. CRM only one pair of eyes in at any one time. Route selection and full use of RT

Air Ex:
The concept for the flight is this. Imagine you are demonstrating the NAVEX that your student will have to do on their test. Attend to all necessary pre-flight matters and then fly the route as below.
Route of not less than 80nm to be chosen by P2 "including a land away" (see example elsewhere on this website.). Exceptionally, if P2is an experienced touring pilot confident with standard overhead joins etc, they may omit the land away. Example flight:
Leg 1 to be flown without complication using Double track error method (SCA as required)
Leg 2 Deviation to be practiced and thenland
Leg 3 Demonstrate a diversion mid leg (VDF or training fix to be practiced if required)

Ex 6 [FI(S) ATP] Give Approach Control

Aim:	To Teach No power approach control and powered approach techniques.
Why:	Powered approaches may be useful to fit it with other circuit traffic and to minimise risk of carb icing
TEM:	Risks: Collision risk as in circuit. Mis handled or rushed go arounds
	Mit. Choice of circuit and time. Particular attention to look out including outside of circuit. Revise Go around procedure

Air Ex: Flown by P2 PIC act as student Bloggs
Glide approaches circuit at 800' maintain slow safe cruise until RP 'is made'
Practice 1 show overshoot test whether student can identify the trend – demo go-around;
Practice 2 show overshoot get student to identify the trend – demo undershoot;
Practice 3 show correct approach profile test whether student can identify steady RP; land convert to touch and go
Powered approach
Practice 4 At an earlier stage start cruise Descent at 60kt reducing power at 200

Points to make
Power circuits are square and/or follow noise abatement routes. They are flown at a constant height.

Land with lots of AB. Don't rotate airbrake handle. Don't land with AB open to the stop

Ex 7 [FI(S) ATP] Give Back Approach Control   As Ex 6 with P2 flying through out