

Ex 10 – Slow Flight & Stalls

Ex 10A – SLOW FLIGHT

AIM: TO RECOGNISE AND RECOVER FROM FLIGHT AT CRITICALLY LOW AIRSPEEDS **IN BALANCE**

T OTHER AIRCRAFT
E TOO SLOW, STALLING
M GOOD LOOKOUT, HASELL / HELL, MONITOR AND MAINTAIN AIRSPEED, STALL WARNER

- BEFORE ENTRY: HASELL CHECK
 - HEIGHT - > 3,000 AGL
 - AIRFRAME
 - SAFETY AND SECURITY
 - ENGINE T's & P's, CARB HEAT
 - LOCATION
 - AIRFIELDS
 - BUILT UP AREAS
 - CLOUDS & CONTROLLED AIRSPACE
 - DANGER AREAS
 - LOOKOUT 2 x 90° TURNS

Ex 10A – SLOW FLIGHT

AIM: TO RECOGNISE AND RECOVER FROM FLIGHT AT CRITICALLY LOW AIRSPEEDS IN BALANCE

1 $V_{S1} + 10$ KNOTS (63 KTS)

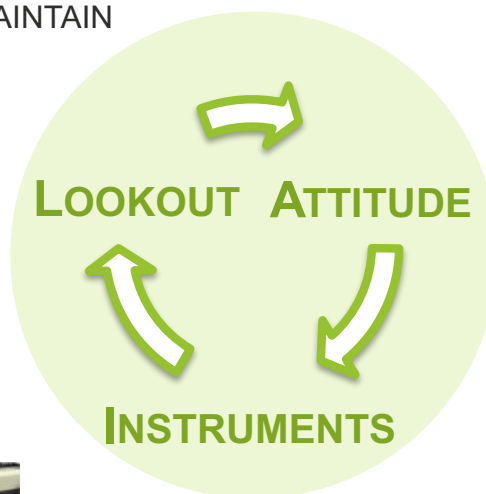
- POWER 1700RPM CARB HEAT ON
- ATTITUDE, MAINTAIN 63 KTS STRAIGHT & LEVEL
- NOTE: HIGH ANGLE OF ATTACK / HIGH DRAG
- MORE POWER MAY BE NEEDED TO MAINTAIN ALTITUDE
- TRIM +



GOOD LOOKOUT

2 TURNING & CLIMBING AT 63 KTS

- LEVEL LEFT TURN 15° AOB
- CLIMBING 15° AOB LEFT TURN
- ROLL THROUGH TO 15° AOB RIGHT TURN (STILL CLIMBING)
- LEVEL OFF 15° AOB TURN STILL TO RIGHT
- STRAIGHT & LEVEL



3 RETURN TO NORMAL S&L FLIGHT

- POWER 2300RPM CARB HEAT OFF
- ATTITUDE, STRAIGHT & LEVEL
- TRIM 90 KTS

4 $V_{S0} + 10$ KTS (58 KTS)

- POWER 1700RPM CARB HEAT ON
- WHITE ARC – FULL FLAPS (IN STAGES)
- ATTITUDE, MAINTAIN 58 KTS STRAIGHT & LEVEL
- NOTE: DIFFERENT PICTURE WITH FLAP
- EVEN MORE POWER MAY BE NEEDED TO MAINTAIN ALTITUDE!
- TRIM 58 KTS

GOOD LOOKOUT

5 REPEAT TURNS AND CLIMBS WITH FULL FLAP

EX 10B - STALLING

AIM: TO RECOGNISE AND RECOVER FROM A CLEAN STALL WITH MINIMUM HEIGHT LOSS

T OTHER AIRCRAFT, AIRSPACE
E LOSS OF HEIGHT
M HASELL, GOOD STALL RECOVERY

Revision: Slow Flight

HASELL CHECK

- CARB HEAT HOT
- SMOOTHLY CLOSE THROTTLE
- PREVENT YAW
- TRY TO MAINTAIN ALTITUDE WITH ELEVATOR
- WINGS LEVEL
- AILERONS NEUTRAL


SIGNS OF APPROACHING STALL

- FALLING AIRSPEED
- SLOPPY CONTROLS
- HIGH AoA / NOSE HIGH
- STALL WARNER (5-10 KTS)
- LIGHT BUFFET


SYMPTOMS OF STALL

- NOSE DROP
- SINK (DESCENT ON VSI)
- LOW IAS
- HEAVY BUFFET
- POSSIBLE WING DROP –
DO NOT USE AILERON
- MAINTAIN CONTROL INPUT

POWER OFF RECOVERY

- CONTROL COLUMN CENTRALLY FORWARD TO REMOVE BUFFET AND SILENCE STALL WARNER
- WINGS LEVEL 
- WHEN ASI >65, RAISE NOSE TO S&L
- APPLY POWER
- NOTE HEIGHT LOSS

STANDARD STALL RECOVERY

- CONTROL COLUMN CENTRALLY FORWARD TO REMOVE BUFFET AND SILENCE STALL WARNER
- SIMULTANEOUSLY APPLY FULL POWER
- PREVENT YAW WITH RUDDER 
- WINGS LEVEL
- RECOVER TO THE CLIMB
- NOTE HEIGHT LOSS

EX 10B – STALLING IN DIFFERENT CONFIGURATIONS

AIM: TO RECOGNISE AND RECOVER FROM A CLEAN STALL WITH MINIMUM HEIGHT LOSS

T OTHER AIRCRAFT, AIRSPACE
E LOSS OF HEIGHT
M HASELL, GOOD STALL RECOVERY

Revision: SSR

HASELL CHECK

CLEAN STALL


- CLOSE THROTTLE
- MAINTAIN ALTITUDE WITH ELEVATOR
- WINGS LEVEL – AILERONS NEUTRAL
- SYMPTOMS:
 - LOW AIRSPEED HIGH NOSE ATTITUDE
 - SLOPPY CONTROLS BUFFET
 - STALL WARNER
- IGNORE STALL WARNER
- “I WILL TELL YOU WHEN TO RECOVER”

STANDARD STALL RECOVERY

CONTROL COLUMN
CENTRALLY FORWARD TO
REMOVE BUFFET AND SILENCE
STALL WARNER


+

Full Power

- PREVENT YAW WITH RUDDER 
- WINGS LEVEL
- RECOVER TO POSITIVE RATE OF CLIMB
- NOTE HEIGHT LOSS

HELL CHECK

APPROACH / BASE TO FINAL


- 1500 RPM, CARB HEAT HOT
- LOI - CHECK IN THE WHITE ARC
- FLAPS 1ST STAGE
- 20° AOB TURN 
- MAINTAIN ALTITUDE WITH ELEVATOR
- RECOVER ON FIRST SYMPTOM OF STALL

STANDARD STALL RECOVERY

CONTROL COLUMN
CENTRALLY FORWARD TO
REMOVE BUFFET AND SILENCE
STALL WARNER

+


Full Power

- PREVENT YAW WITH RUDDER 
- **WINGS LEVEL**
- RECOVER TO POSITIVE RATE OF CLIMB

- FLAPS UP IN STAGES
- NOTE HEIGHT LOSS

HELL CHECK

LANDING

- 1500 RPM, CARB HEAT HOT
- LOI - CHECK IN THE WHITE ARC
- FLAPS TO FULL (IN STAGES)
- STRAIGHT AND LEVEL 
- MAINTAIN ALTITUDE WITH ELEVATOR
- RECOVER ON FIRST SYMPTOM OF STALL

STANDARD STALL RECOVERY

CONTROL COLUMN
CENTRALLY FORWARD TO
REMOVE BUFFET AND SILENCE
STALL WARNER

+

Full Power

- PREVENT YAW WITH RUDDER 
- WINGS LEVEL
- **REMOVE DRAG FLAP**
- RECOVER TO POSITIVE RATE OF CLIMB

- FLAPS UP IN STAGES
- NOTE HEIGHT LOSS