Student	 	
Date		

Sport Star Maneuvers Guide

by:Daniel Most

Vr-48kts

Vy-63kts

Vx-55kts

Va-80kts

V-BG 57kts

Power Settings for Maneuvers 4200RPM

Slow Cruise 4200RPM

Fast Cruise 4800-5000RPM

Landing Speed Normal 60kts

Landing Speed Short Field 55kts

Before All Maneuvers Check Area for obstacles, check fuel, engine gauges, and CLEAR AREA OF TRAFFIC!!!

Pitch Controls Airspeed, PWR controls Alt., Rudders control Yaw Rt. Rudder is required in a Climb and high PWR settings, Less RT rudder or LFT rudder is required in decents or low PWR settings.

Low Engine PWR= Carb Heat Hot High Engine PWR= Carb Heat Cold

### Slow Flt.

Clear Area

Pwr 4200RPM

Carb Heat hot/ (Vary for conditions i.e hot day)

Pwr Idle

Pitch to maintain Alt.

Flaps Down Incr. in the Wht Arc

PWR to 4200/ Rt. Rudder to hold heading.

(Maintain Min airspeed without stalling A/C, Maintain heading +/-10\*, Alt +/- 100ft,

Bank +/- 10\* Max 45\*

RECOVER

Full PWR.

Carb Heat Cold

Pitch down to maintain Alt

Retract Flaps Inc.

Return to Slow Cruise

# **Steep Turns**

Clear Area

PWR 4200RPM

3 1inch turns using technique to bank A/C 45\*

1 inch Pitch back to maintain Alt

2 Turns of Power to Maintain A/S

Use Same process to roll out of turn on Specified heading.

3 1 inch turns in opposite direction

1 inch forward pitch to maintain ALT.

PWR 2 turns back to 4200RPM

Maintain Alt +/- 100Ft A/S +/- 10Kts HD+/- 10\*

### **PWR ON STALL**

Clear Area

**PWR 4200RPM** 

Maintain coordination

Full PWR/ Rt. Rudder

Initiate 3in climb using Technique

Recognize the stall; (wing buffet or wing drop)

Keeping knees together so as not to allow for inadvertent aileron use

Recovery

Pitch to Horizon

PWR to 4200

(Min loss of ALT, Maintain HD +/-10\*)

### **PWR OFF STALL**

Clear Area

**PWR 4200RPM** 

Carb Heat Hot

PWR to Idle

Flaps Down Inc. (Clean or Dirty config.)

Pitch up 1 inch above horizon, using technique

Knees closed to stop potential aileron deflection

Recognize stall (Wing drop/buffet)

Recovery

Full PWR/RT Rudder

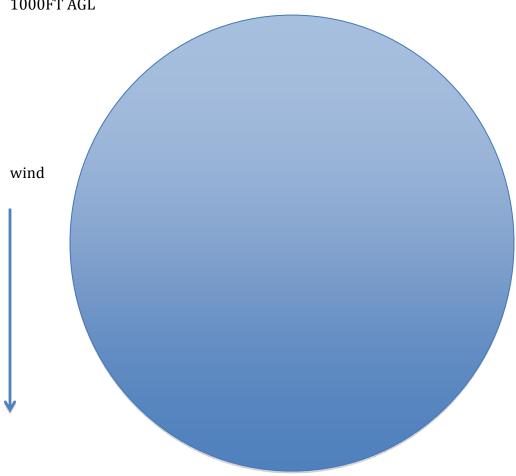
Carb Heat Cold

Pitch Vy

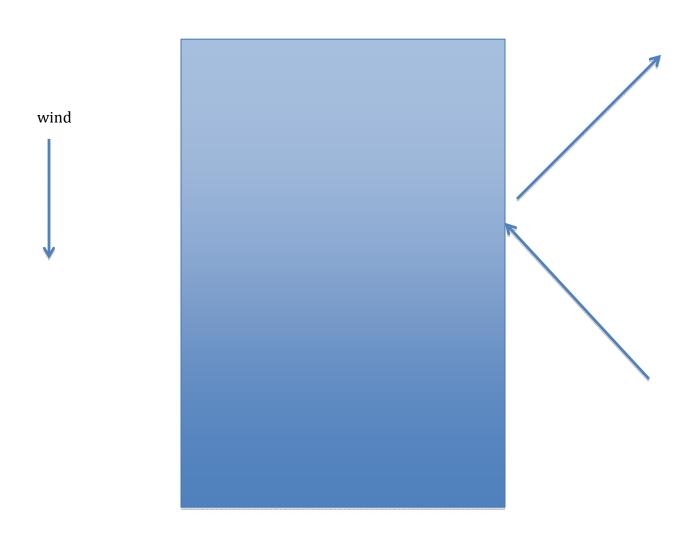
## Ground Ref:

## **Turn Around A Point**

PWR 4200 1000FT AGL



# Rectangular Course 4200RPM 1000Ft AGL



## S-Turns Across A Road 4200 RPM 1000 FT AGL

wind