SINGAPORE YOUTH FLYING CLUB
Takes You To Greater Heights

GlobalGROUP ISO 9001 0039 UKAS MANAGEMENT SYSTEMS
Registration No. 6600410852

FLIGHT SIMULATION COMPETITION RULES 2019

The Singapore Youth Flying Club announces the new flight route Flight Simulation competition 2019 and the judging criteria. Microsoft Flight Sim or X Plane programmes are allowed. Aircraft used shall be Cessna 172 with glass cockpit view. Runway in use shall be WSSL (Seletar) runway 03 direction.

1. Categories

a. Junior – Sec 1 and 2.
b. Senior – Sec 3, 4 and 5.

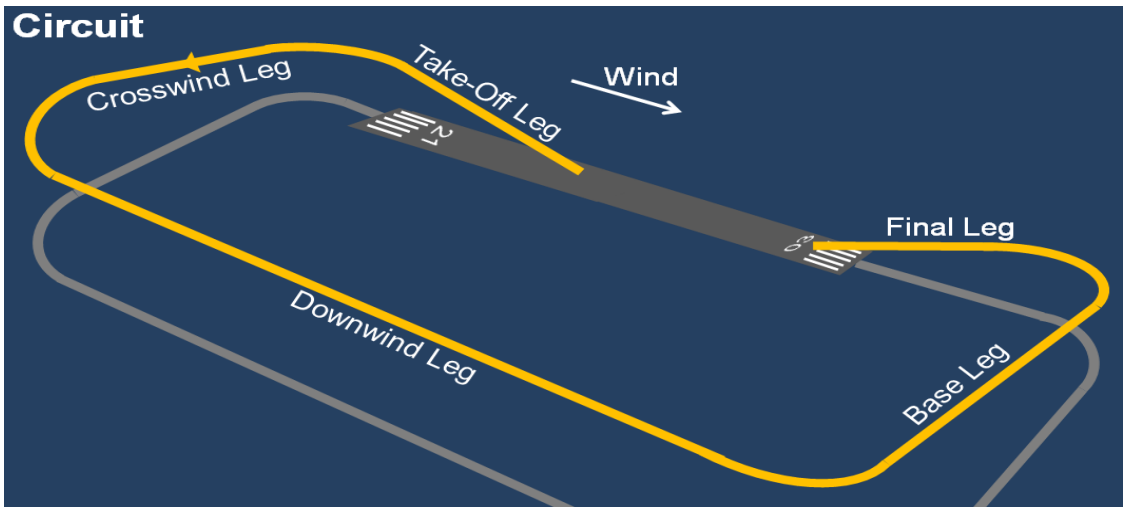
2. Rules and Regulations

Failure to keep within the following parameters will result in an immediate disqualification

- Exceed HEIGHT below 600ft or over 1200ft.
- Veering off runway on take-off or landing.
- Landing in any other place other than WSSL runway.

3. Competition Route

1. Take off with 10 degrees flaps, full throttle, rotate at 60kts RWY 03 at WSSL (**Upwind leg**).
2. Climbing speed at 70kts. Passing 500ft execute a 90 degree climbing left turn to 300 deg (**Crosswind leg**).
3. Level off at 800ft, throttle reduce to 2,100rpm and execute a 90 degree medium level left turn to 210 deg (**Downwind leg**).
4. Fly parallel to the runway on downwind with sufficient spacing to the runway at a speed not exceeding green sector.
5. Once on a 45 degree angle to the 1st marker, make a 90 degree medium level left turn and throttle to idle and begin descent for approach at own discretion at 70kts with flaps as required to 120 deg (**Base leg**).
6. At own discretion, turn left for finals on runway 03 (**Final leg**) with flaps as required, maintain 70kts all the way to land the aircraft safely and perform a full stop on runway 03. End of competition.



4. Scoring criteria:

All scores will be on a scale of 1 to 7, 1 being poor score and 7 being good score.
All the scores will be added up and the net individual score will determine total points.

Sector	Grade	Grade	Grade
Take-off	**1-3** Poor control of aircraft. Aircraft drifts far from centreline and not corrected. Rotation speed or technique poorly used.	**4-5** Acceptable/Above average handling. Aircraft straying from centreline quickly corrected. Proper rotation speed and technique used. Confident in handling of aircraft.	**6-7** Perfect handling of aircraft. No drifting from centreline and all speeds and attitudes used are perfect. Extremely confident in handling of aircraft.
Upwind	**1-3** Aircraft weaves in and out. Heading, speed and altitude vary. Poor control of aircraft.	**4-5** Most parameters flown correctly, slight drift in heading/altitude/speed. Steady climb at full power used.	**6-7** Perfect handling of aircraft. Proper climbing technique used on full power. All parameters correct.
Crosswind	**1-3** Poor/unsteady rate of climb performed. Full power not used in climb. Not levelling off before circuit altitude. Not correcting heading drift and incorrect turning onto downwind.	**4-5** Acceptable rate of climb, pilot compensates for dip or rise in speed as required. Pilot correctly levels off at the circuit altitude. Heading drift corrected and turn onto downwind is accurate.	**6-7** Perfect rate of climb, pilot maintains perfect climbing speed and level off correctly upon reaching circuit altitude. Turn onto downwind also perfect.
Downwind Parameter: 800ft 210 Deg (HDG)	**1-3** No attempt made at maintaining: 1) Spacing from runway 2) Circuit altitude 3) Downwind heading. Poor aircraft handling and trimming.	**4-5** Maintain parameters to a satisfactory extent. Flies downwind leg accurately and displays proper trimming techniques.	**6-7** Maintain parameters near perfect. Perfect trimming techniques with minimal loss of height.
Base (Approach) Turning point: 45 degrees to runway from 1st marker	**1-3** Poor entry and descent techniques. Descent is unstable and does not turn at the appropriate point on the circuit. All other parameters not flown well.	**4-5** Satisfactory techniques and stability on the descent. Initiation of descent takes place within limits (40 to 50 degrees). Parameters flown correctly.	**6-7** Perfect technique and control of the aircraft on the descent. Perfect timing when initiating the turn onto base. Parameters flown perfectly.
Final (Approach)	**1-3** Turn to final done incorrectly. Overshooting or undershooting of the approach path. Incorrect height maintained. Poor	**4-5** Turn to final done correctly. Slight overshooting or undershooting.	**6-7** Turn to final executed perfectly. No overshooting or undershooting. All turns and descents

	judgement and anticipation. Poor effort to maintain centreline or correction for entry into approach. Aircraft is poorly set up for landing.	Satisfactory judgement and anticipation. Effort made to maintain centreline and corrections for approach. Aircraft is set up for approach accurately.	performed perfectly and accurately. Aircraft set up for perfect approach.
Landing	**1-3** Poor landing techniques. No attempt made to flair out. Poor in maintaining centreline, aim point, and speed. Hard landing.	**4-5** Satisfactory landing techniques. Flair out is done correctly but is either slightly shallow or poorly timed. Able to maintain centreline, aim point, and speed. Landing rate is satisfactory.	**6-7** Perfect use of landing techniques. Flair out perfectly executed and maintaining of parameters. Smooth landing.
General score on entire flight	**1-3**	**4-5**	**6-7**

5. Protest/s

Any member(s) of the teams competing may submit a protest to the Contest Director based on the following guidelines:

A. Protest must be directed to the contest director within half-an-hour from the termination of the race in which the protest is concerned about.
B. The Contest Director shall decide on the outcome of the protest. The outcome will include dismissing the protest, granting attempt, calling for a re-fly.
C. Decision(s) made by Contest Director will be final.

David Su
Contest Director
SYFC