## Comparison of ALES vs. F5J vs. F5J Lite

	ALES	F5J	F5J-Lite
Task Time	10 min	Same as ALES	Same as ALES
Motor Run Limit	30 sec	Same as ALES	Same as ALES
Altitude Limit	200 meters	No Limit	No Limit
Launch Altitude Penalty	None	½ point per meter up to 200 meters plus 3 points per meter for every meter above 200 meters	½ point per meter up to 200 meters plus 3 points per meter for every meter above 200 meters
Flight Window	10 minutes starting after a 10 second launch window	10 minutes including launch	Same as ALES
Landing Task	10 meter tape, 5 points per meter	Same as ALES	Same as ALES
Flight Starts	When plane leaves pilot's hand	Same as ALES	Same as ALES
Flight Time Ends	When plane touches the ground	Earlier of when plane touches ground or the flight window closes.	Same as ALES
Flight Score	One Point Per Second up to maximum possible task points (600) minus one point for every point in excess of task time from flight start to flight end	One point per second up to 600 points minus Launch Altitude Penalty	One point per second up to 600 seconds minus Launch Altitude Penalty
Flight Group Score	Flight Scores are normalized to 1000 points against the best Flight score in the Group	Sums of Flight Scores plus Landing Scores are normalized to 1000 points against the best total score in the group. (Flights AND Landings are normalized)	Same as ALES except no points are deducted for exceeding task time – the maximum points scored is the task time in seconds (600 sec).
Total Group Score	Sum of Flight Group Score plus Landing Score	Flight Group Score	Same as ALES except no landing is scored if flight time exceeds task time (600 sec).
Motor Restart	Zero Flight	Not Possible	Zero Flight
Altitude Switch	Simple Altitude/Time Cutoff	Time cutoff with readout for Launch Altitude (Highest altitude attained between launch and 10 seconds after motor cutoff.) Motor restarting is not possible	Time cutoff with readout for Launch Altitude. Motor restart may be enabled but not used.