



NAME: LERA 100/200 (Long Endurance Research Aircraft)LERA Platform

Platform Overview Adaptable platform meant to be reconfigured based upon payload carriage requirements. Classic in design makes flying and operating easy and predictable.

Design Features Classic design of this aircraft makes flying and operating easy and the aircraft dynamics are predictable. Wing is cambered for operation on condition although moment arm of tail offers a large CG range. Platform can be configured for either hand launch, launcher, mobile, or geared launch based upon aircraft size. Recovery is to belly land or geared landing.

V100 Dimensions

Wingspan	48.78 Inches	4.06 Ft
Length	47.24 Inches	3.94 Ft
Max Gross Weight	5.5 lbs	
Payload/batt Weight	1.5 lbs	

V100 Performance Specs(Max Gross)

Endurance	45 minutes
Vel_Max Range	25 knots
Vel_Max Endurance	23 Knots

V200 Dimensions

Wingspan	69 Inches	5.75 Ft
Length	47.24 Inches	3.94 Ft
Max Gross Weight	7.5 lbs	
Payload/batt Weight	3.5	

V200 Performance Specs(Max Gross)

Endurance	45 minutes
Vel_Max Range	25 knots
Vel_Max Endurance	23 Knots

Payload Bay Specs-All Aircraft

Depth	2.46 Inches
Width	3.15 Inches
Length	32.48 Inches

Required to Build Body

5Min Epoxy - Hobby Grade
Sand Paper - 200Grit
Acrylic Paint -Color of Choice
Latex Paint - Color of Choice

RC Hardware Required

2x Mini Servos for Ailerons
3x Pushrods, 90 bend and Clevis for adjustment on one side
1x Full size servo for Elevator-Elevator Cross Bar utilized
1x Mini Servo for gear (if equipped)
Wire Gear Set w/nose gear (if desired)
2x Control Horns for Ailerons
Pin Hinges for cut in Ailerons and Elevator
Receiver: Apprentice S (SAFE® RX) (EFLR310013)

Battery: Eflite 11.1V, 3 Cell, 3100Mah
(Each of these are about 1/2 lb and will yield 15minflight time)
Add batteries up to 3 to get 45min flight time

Motor: 15 Size Eflite Motor
ESC: 60Amp Eflite or Castle ESC with BEC

top

CG1	3.5		
CG2	4		
CG3	3.5	Machining Pay/hour	3 dollars
CG4	4	Material Cost 1"	4 dollars
Total	15		
Material Cost	16		
MachiningCost	45		
Additional Items	0		
Total Cost	61		
Charge	150		