



Chuck Hall Aviation - Ramona FTC Airplane Hangar is D6	760-789-8178
Ramona ASOS	760-789-7699
Ramona ATIS	132.025
Ramona CTAF	119.875
Ramona Ground	121.65
Ramona Tower Hours: 08:00-20:00	119.875
Ramona Unicom	122.95
Ramona Practice Area	122.75
OWNER: www.Fly4Fun.us The Gudorf Group, Inc. eMail: Greg@Gudorf.net	858-432-8786

NOTICE

This aircraft conforms to ASTM consensus standards of airworthiness developed and maintained by the aviation community under ASTM Technical Committee F37. (**Checklist v.03-31-2022**)

PASSENGER NOTICE

This aircraft was manufactured in accordance with Light Sport Aircraft airworthiness standards. Does not conform to standard category airworthiness requirements.

LIMITATIONS

- This Special Light Sport Aircraft (SLSA) is approved only for Day/Night VFR flights under no icing conditions and only if the pilot has the proper certification for such flights.
- Maximum crosswind component is 14 KTS
- Aerobatics and intentional spins are prohibited!

AIRSPEED (IAS)

VSO	Stall Speed MTOW & Full Flaps	31 MPH
VS	Stall Speed MTOW & Flaps Up	37 MPH
VFE	Maximum Flaps Extended Speed	90 MPH
VO	Maneuvering at Gross & Min Weight	93 MPH
VNE	Never Exceed Speed	150 MPH
VX	Best Angle of Climb	62 MPH
VY	Best Rate of Climb	75 MPH
	Best Glide	68 MPH

ENGINE SPEED

Full Power (Limited 5 Minutes Maximum)	5800 RPM
Maximum Revolutions (No Time Limit)	5500 RPM
Normal Idle	1800-2000 RPM
Warm Up Idle	2000-2500 RPM
Minimum Revolutions at Idle	1400 RPM

FUEL

Total usable fuel (15 GAL per tank)	30.0 GAL
Non-usable Fuel	0.13 GAL
NOTE: When a gauge reads ½ tank has only	5.55 GAL

MAX TAKEOFF WEIGHT

Empty Weight as Equipped	725 lbs
POTENTIAL PAYLOAD	595 lbs
Fuel at 30 GAL:- Payload (People & Baggage)	415 lbs
Fuel at 20 GAL:- Payload (People & Baggage)	475 lbs
Maximum Baggage	66 lbs

Aeroprakt VIXXEN N328AM PREFLIGHT: Pilots must inspect the general condition of the airplane during its preflight check. The airplane must have no damage or maladjustments that may be critical for the flight safety. The cockpit glass, propeller, wing and empennage must be clean of rainwater, snow, frost, ice, and dirt as they impair visibility and aerodynamics and increase weight. The preflight check must be performed in accordance the checklist and in the following sequence:

Aeroprakt Vixxen

OVERALL AIRPLANE

- | | |
|--------------------------------------|-------------------|
| 1) Cover | REMOVE & STOW |
| 2) Door Locks | UNLOCK BOTH DOORS |
| 3) Tailpost | REMOVE & STOW |
| 4) Rainwater, Snow, Frost, Ice, Dirt | NONE |
| 5) Rigging | CHECK Visually |
| 6) External Damage | NONE |

COCKPIT INTERIOR Preliminary

- | | |
|---|---------------------------------|
| 7) Cabin | CLEAN, INTACT, NO LOOSE OBJECTS |
| 8) Seats | INTACT, ADJUSTED, SECURE |
| 9) Seatbelts | INTACT |
| 10) Flight Plan, Weight & Balance | PERFORMED |
| 11) Required Docs (AROW) | ONBOARD |
| 12) Baggage Container | NOTE CONTENTS |
| 13) Starter Key | REMOVED |
| 14) All Electrical Switches | OFF |
| 15) Flight Instruments | INTACT |
| 16) Control Lock | REMOVE & STOW |
| 17) Movement of Controls | Check FREE & FULL |
| 18) Flaps | DEPLOY & RETRACT |
| 19) Flaperon Control Linkage | INTACT & SECURE |
| 20) Yokes/Stick, Rudder Pedals,
Elevator & Trim Tab Lever | NEUTRAL |
| 21) Flaps | RETRACTED |
| 22) Battery & Cables | SECURE, CONDITION OK |
| 23) Control System Linkages
(inside the rear fuselage) | CHECK Visually |
| 24) Parking Brake | ON |
| 25) Battery Switch (under pilot's seat) | ON |
| 26) BackUp Battery Switch | ON |
| 27) Starter Key Master | ON |
| 28) Record Fuel Quantity | Recorded |
| 29) Garmin: Select 'Engine' Page | Performed |
| 30) Record Total time | Performed |
| 31) Check Navigation Lights,
Strobe Lights & Landing Light | Performed |
| 32) Starter Key Master | OFF |
| 33) BackUp Battery Switch | OFF |
| 34) Battery Switch (under pilot's seat) | OFF |

LANDING GEAR

- | | |
|----------------------------|------------------------|
| 1) Wheel Fairings | CLEAN, INTACT & SECURE |
| 2) Wheel Pressure | OK |
| 3) Tires | NO CRACKS, WEAR OK |
| 4) Wheel Brakes | CLEAN, INTACT & SECURE |
| 5) Braking Fluid | NO LEAKS |
| 6) Nose & Main Legs | NO CRACK & INTACT |
| 7) Nose Leg Shock Absorber | INTACT |

RIGHT WING

- | | |
|--|---|
| 8) Wing & Strut Surface | CLEAN & INTACT |
| 9) Wing & Strut | INTACT, SECURE
(Attachment fittings & bolts) |
| 10) Wing Fuel Tank Cap | IN PLACE & SECURE |
| 11) Fuel Tank Vent Outlet | CLEAN & INTACT |
| 12) Fuel Leaks | NONE |
| 13) Wing Tip & Navigation/Strobe Light | INTACT |
| 14) Flaperon | CLEAN & INTACT |
| 15) Flaperon Control Linkage | INTACT & SECURE |
| 16) Flaperon Hinge Brackets | INTACT, BOLTS
SECURE, HINGES GREASED |
| 17) Tie-Down & Wheel Chock | Remove & Stow |

RIGHT SIDE OF FUSELAGE

- | | |
|------------------------|--------------------------|
| 18) Fuselage Surface | CLEAN & INTACT |
| 19) Cockpit Glass | CLEAN, INTACT, NO CRACKS |
| 20) Door Hinges & Lock | INTACT |

EMPENNAGE

- | | |
|--|--|
| 1) Empennage Surface | CLEAN & INTACT |
| 2) Horizontal Stabilizer | INTACT & SECURE
(Attachment Fittings & Bolts) |
| 3) Rudder, Elevator & Trim Tab | CLEAN & INTACT |
| 4) Rudder, Elevator & Trim Tab
Hinge Brackets | INTACT, SECURE & GREASED |
| 5) Rudder, Elevator & Trim Tab
Control Linkage Attachment | INTACT & SECURE |

LEFT SIDE OF FUSELAGE

- | | |
|-----------------------|---|
| 6) Fuselage Surface | CLEAN & INTACT |
| 7) Cockpit Glass: | CLEAN, INTACT, NO CRACKS |
| 8) Door Hinges & Lock | INTACT |
| 9) Drain Belly Valve | Collect Fuel Sample,
then CLOSE, NO FUEL LEAKS |

LEFT WING

- | | |
|--|---|
| 10) Flaperon | CLEAN & INTACT |
| 11) Flaperon Control Linkage | INTACT & SECURE |
| 12) Flaperon Hinge Brackets | INTACT, BOLTS
SECURE, HINGES GREASED |
| 13) Wing Tip & Navigation/Strobe Light | INTACT |
| 14) Wing Fuel Tank Cap | IN PLACE & SECURE |
| 15) Fuel Tank Vent Outlet | CLEAN & INTACT |
| 16) Fuel Leaks | NONE |
| 17) Wing & Strut Surface | CLEAN & INTACT |
| 18) Wing & Strut | INTACT, SECURE
(Attachment fittings & bolts) |
| 19) Tie-Down & Wheel Chock | Remove & Stow |
| 20) Pitot/Static Probe: | COVER REMOVED
CLEAN & INTACT |

POWERPLANT

- | | |
|-----------------------------|--|
| 1) Prop & Spinner | CLEAN, INTACT & SECURE |
| 2) Top Cowling | REMOVE for Inspection
CAUTION: Place cowling on the ground
with 'nose into wind' |
| 3) Coolant & Braking Fluid | CHECK Levels |
| 4) Engine mount | NO CRACKS & INTACT
& Vibration Dampers |
| 5) Cables & Hoses | INTACT & SECURE |
| 6) Fuel, Oil, Coolant Leaks | NONE |
| 7) Exhaust System | NO CRACKS & INTACT
Attachments, Joints & Springs |
| 8) Oil Reservoir | Open & Lift Dipstick |
| 9) Propeller: | ROTATE Until Oil Reservoir
'Gurgles' (1st Flight of Day Only)
CAUTION: ALWAYS ROTATE PROPELLER
IN THE DIRECTION OF THRUST
(COUNTERCLOCKWISE)
TREAT PROPELLER AS LIVE
TURN PROPELLER WITH CAUTION |
| 10) Oil Level | CHECK Dipstick Reading
2-3 minutes after the burp |
| 11) Oil Reservoir | Recap & SECURE |
| 12) Top Cowling | RE-ATTACH |
| 13) Cowling Fasteners | INTACT & LOCKED |

COCKPIT INTERIOR Final

- | | |
|----------------------|--|
| 1) Seatbelts | Latched & ADJUSTED
(with pilots in the seats) |
| 2) Baggage Container | BAGGAGE SECURED
& CONTAINER CLOSED |
| 3) Headsets | Plugged In & Ready |

ENGINE START

- 1) Doors CLOSED & SECURE
- 2) Electrical Switches OFF
- 3) Main Battery Switch (under pilot's seat) ON
- 4) Integrated Battery Back Up Switch ON
- 5) Navigation Lights ON
- 6) Strobe Lights ON
- 7) Fuel Valves ON
- 8) Starter Key INSERT & Set to ON
- 9) Garmin Initialization Verify COMPLETE
- 10) Fuel Level CHECK
- 11) Throttle IDLE
- 12) Choke Lever FULLY FORWARD
(cold engine only)
- 13) Parking Brake ON
- 14) Propeller CHECK "CLEAR PROP"
- 15) Ignition A & B Switch ON
- 16) Starter Key Set to START Until Engine Starts
(10 seconds maximum)
- 17) Throttle Idle MINIMUM STABLE REVOLUTIONS
(approx 1800 RPM)
- 18) Choke Lever FULLY BACK
(gradually, when engine runs smoothly)
- 19) Engine WARM UP at 2000-2500 RPM
- 20) Oil Pressure GREEN within 30 seconds
- 21) Required Electric Equipment ON & ADJUST
Instruments
- 22) Radio Transponder VERIFY ON
- 23) Transponder VERIFY APPROPRIATE CODE
- 24) Transponder set for MODE C VERIFY

TAXIING

- 25) Throttle IDLE
- 26) Coolant & Oil Temperature GREEN
- 27) Parking Brake OFF
- 28) Hand Brakes CHECK
- 29) Throttle SET FOR REQUIRED TAXI SPEED
- 30) Yoke/Stick: Elevator NEUTRAL
Ailerons INTO Crosswind
- 31) Brakes Use as Required
Throttle to IDLE When Stopping
- 32) Emergency Stop IGNITION OFF/BRAKE

BEFORE TAKEOFF

- 1) Parking Brake ON
- 2) Controls FULL & FREE MOVEMENT
- 3) Elevator Trim SET FOR TAKEOFF
- 4) Instruments SET
- 5) Altimeter SET
- 6) AHRS ALIGNED
- 7) Fuel Valves ON
- 8) Fuel Level SUFFICIENT FOR FLIGHT

RUNUP

- 9) Face Into Wind Check Clear Behind
- 10) Brakes & Parking Brake ON
- 11) Throttle 4000 RPM
- 12) Ignition Circuits LEFT then RIGHT
Max RPM drop 300
- 13) Oil pressure Check 29-73 PSI
≤3500 RPM
- 14) Carburetor Heat Check RPM Drop
with Heat ON
- 15) Engine Idle Throttle Full Idle Check
- 16) Engine WARM UP at 2000-2500 RPM
- 17) Coolant Temp CHECK minimum 140°F
- 18) Oil Temp CHECK minimum 120°F
- 19) Doors SECURE
- 20) Seatbelts SECURE
- 21) Landing light ON
- 22) Parking Brake RELEASE
- 23) Hand Brakes ON

NORMAL TAKEOFF

- 24) Flaps EXTEND to Position 1
- 25) Flight controls Elevator NEUTRAL
Ailerons INTO CROSSWIND
Rudder MAINTAIN CENTERLINE
- 26) Brakes RELEASE
- 27) Throttle Smoothly Increase to FULL POWER
- 28) Lift the Nose Wheel At 25 MPH
- 29) After Take-Off Accelerate ≥ 62 MPH
Climb at 75 MPH
- 30) Flaps RAISE
- 31) Landing Light OFF

PRE-LANDING CHECKS

- 1) Fuel Valves BOTH ON
- 2) Fuel Quantity SUFFICIENT
- 3) Parking Brake OFF
- 4) Landing Light ON

APPROACH

- 5) Speed REDUCE <91 MPH
Minimum 62 MPH
- 6) Flaps EXTEND position 1
Wind >16 KTS: FLAPS UP
- 7) Elevator Trim Tab ADJUST as Required
- 8) Speed on Final: 62 MPH
+6 MPH in Rain or Strong Turbulence
- 9) Too high on final REDUCE RPM
at Idle: SLIP
- 10) Too Low on Final INCREASE RPM
DO NOT RETRACT FLAPS
when flying low over
obstacles or close to the ground!

NORMAL LANDING

- 11) Throttle IDLE when runway
threshold is assured
- 12) Maintain Proper Crosswind Controls:
a) Direction: MAINTAIN RUNWAY CENTERLINE
using Rudder
b) Side Drift: CORRECT by Banking Against
the drift (crosswind, if any)
- 13) Flare Start at 15 ft & Level Off at 1 ft
Maintain Centerline in Flare & Level Off
- 14) Touchdown At Minimum Speed
Avoid Touching Ground with Tail
- 15) Yoke MAINTAIN Back Pressure
to Reduce Speed, then PUSH Gently
to Lower Nosewheel Slowly
- 16) Rudder pedals Set NEUTRAL
before touching ground
with the nose wheel
- 17) Brakes ENGAGE as Required
Avoid Braking at a High Speed
or with nose wheel up!
Avoid resonant vibrations of the main
landing gear legs while braking!
- 18) Flaps RETRACT
- 19) Landing Light OFF

BALKED LANDING - GO AROUND

- 1) Throttle Smoothly Increase
to FULL POWER
- 2) Accelerate to 62 MPH Flying Level
Transition to Climb Attitude
- 3) Climb at 62 MPH
- 4) Flaps RETRACT SLOWLY
at safe altitude

SHUTDOWN

- 5) Throttle IDLE
- 6) Engine Instruments GREEN
- 7) Equipment Switches ALL OFF
- 8) Ignition Switches OFF
- 9) Master Key Switch OFF
- 10) Garmin Note Total Time
- 11) Main Battery Switch (pilot's seat) OFF
- 12) Control Lock INSERT
- 13) Tie-Downs SECURE
- 14) Wheel Chocks SET
- 15) Pitot/Static Probe: COVER ON
- 16) Doors LOCK
- 17) Weather Cover SECURE

EMERGENCY

Loss of Instruments and/or Controls

Loss of Oil Pressure

- o Follow PRECAUTIONARY LANDING procedure
- o Engine overheating or stopped, follow EMERGENCY LANDING procedure

High Oil Pressure

- o Throttle REDUCE RPM IDLE if necessary
- o Airspeed Best Glide 68 MPH
- o Oil Pressure CONTROL
- o Oil Pressure Normal Follow PRECAUTIONARY LANDING procedure
- o Oil pressure remaining high Follow EMERGENCY LANDING procedure

Alternator Failure

- o Follow PRECAUTIONARY LANDING procedure

Overvoltage

- o Additional electrical items Switch ON (landing light, strobes, etc.)
- o Voltage CHECK
 - o Voltage Normal CONTINUE Flight
 - o Voltage High REMOVE Battery Charge Fuse and FOLLOW PRECAUTIONARY LANDING procedure

Engine Instrument Failures

- o Tachometer, oil, water and exhaust temperature indicators, fuel quantity indicator: IGNORE engine instrument readings
- o Engine rpm – CONTROL by engine noise
- o Follow PRECAUTIONARY LANDING procedure

Loss of flight controls

- o Elevator control fails – use elevator TRIM TAB control
- o Rudder control fails – use AILERONS to control direction
- o Aileron control fails – use RUDDER to control bank

ASI Failure Due to Pitot Line Blockage

- o Signs of the blockage: airspeed indicator reading either:
 - o does not change with changing airspeed in level flight
 - o or reduces during a steady descent
 - o or increases during a steady climb
- o Airspeed indicator readings – IGNORE
- o In level flight – SET THROTTLE to 4000-4500 rpm
- o Altitude – MAINTAIN
- o In descent – SET THROTTLE to IDLE
- o Sink rate – SET to 3 m/s (600 ft. /min)
- o Follow PRECAUTIONARY LANDING procedure

Altimeter, VSI and ASI failure due to static pressure line blockage

- o Signs of the blockage:
 - o altimeter and vertical speed indicator readings do not change with changing altitude
 - o or airspeed indicator reading increases during a steady descent
 - o or airspeed indicator reading reduces during a steady climb
- o IGNORE altimeter, VSI and ASI readings
- o Airplane attitude – CONTROL by the position of the horizon line with relation to the wings and engine cowling
- o Airspeed and vertical speed – CONTROL using throttle
- o Follow PRECAUTIONARY LANDING procedure

NOTES FOR ALL PILOTS

The ROTAX “Burp” & Avoiding Oil Overfill

- o Prior to Oil Check:
 - o open oil tank cap and lift dipstick
 - o turn the propeller by hand in direction of engine rotation (counterclockwise) several times to pump oil from the engine into the oil tank
 - o it is essential to build up compression in the combustion change. Maintain the pressure for a few seconds to let the pressure flow around the piston rings into the crankcase.
 - The speed of rotation (turning the prop) is not important for the pressure transfer into the crankcase, so take your time and don't rush.
 - o the process is finished when air is returning back to the oil tank and can be noticed by a murmur (the BURP) from the open oil tank
 - o Wait a minute or so and then insert the dipstick to check levels
 - if you think it looks low, wait a minute and reinsert the dipstick then re-read
 - the oil level should be in the upper half (between the 50% and the MAX mark) and should never fall below the MIN.
 - o If you do add oil, recognize that the difference between MAX and MIN is very small... just 0.95 pints, or less than ½ a quart.
 - o If the level reads above the MIN mark, you will likely be adding only ¼ a quart
 - o AVOID oil levels exceeding the MAX mark since excess oil could spray out through the venting system.

Cleaning the Windshields & Windows

- o Use Water or Plexus ONLY
- o Use microfiber towels ONLY
- o Wipe up and down ONLY