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|---|----------------|
| 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.12-01-2022**)

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) Battery & Cables | SECURE, CONDITION OK |
| 14) Starter Key | REMOVED |
| 15) All Electrical Switches | OFF |
| 16) Flight Instruments | INTACT |
| 17) Control Lock | REMOVE & STOW |
| 18) Movement of Controls | Check FREE & FULL |
| 19) Flaps | DEPLOY & RETRACT |
| 20) Flaperon Control Linkage | INTACT & SECURE |
| 21) Yokes/Stick, Rudder Pedals, Elevator & Trim Tab Lever | NEUTRAL |
| 22) Flaps | RETRACTED |
| 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) Verify all cockpit switches | OFF |
| 10) Verify all keys are | OUT |
| 11) Propeller: | ROTATE Until Oil Reservoir 'Gurgles' (1st Flight of Day Only) CAUTION: ALWAYS ROTATE PROPELLER IN THE DIRECTION OF THRUST (COUNTERCLOCKWISE when facing prop) TREAT PROPELLER AS LIVE TURN PROPELLER WITH CAUTION |
| 12) Oil Level | Wait 2-3 minutes after the burp CHECK Dipstick Reading (½ between the marks if proper) |
| 13) Oil Reservoir | Recap & SECURE |
| 14) Top Cowling | RE-ATTACH |
| 15) Cowling Fasteners | INTACT & LOCKED |

COCKPIT INTERIOR Final

- | | |
|-----------------------|--|
| 1) Headsets | Plugged In & Ready |
| 2) Baggage Container | BAGGAGE SECURED & CONTAINER CLOSED |
| 3) Seatbelts | Latched & ADJUSTED (with pilots in the seats) |
| 4) Passenger Briefing | |
| ○ S | Seatbelts |
| ○ A | Air vents |
| ○ F | Fire extinguisher |
| ○ E | Exits & Emergencies |
| ○ T | Talking & Traffic |
| ○ Y | Your Questions |

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 (cold engine only) | FULLY FORWARD |
| 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 Instruments | ON & ADJUST |
| 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) Instruments | SET |
| 4) Altimeter | SET |
| 5) AHRS | ALIGNED |
| 6) Fuel Valves | ON |
| 7) Fuel Level | SUFFICIENT FOR FLIGHT |

AUTO PILOT

- Engage Use AP Yoke or Mode Controller
- Flight Controls Verify AP can be overpowered; pitch & roll
- Disengage Verify AP off & audio alert heard
- Flight Director Set as Appropriate or push FD to turn off
- Flight Controls Verify Free & Clear w/AP disengaged, pitch & roll
- Elevator Trim SET FOR TAKEOFF

RUNUP

- Face Into Wind Check Clear Behind
- Brakes & Parking Brake ON
- Throttle 4000 RPM
- Ignition Circuits LEFT then RIGHT
Max RPM drop 300
Max RPM Difference 115
- Oil pressure Check 29-73 PSI
≤3500 RPM
- Carburetor Heat Check RPM Drop with Heat ON
- Engine Idle Throttle Full Idle Check
- Engine WARM UP at 2000-2500 RPM
- Coolant Temp CHECK minimum 140°F
- Oil Temp CHECK minimum 120°F
- Doors SECURE
- Seatbelts SECURE
- Landing light ON
- Parking Brake RELEASE
- Hand Brakes ON

SAFETY PLAN on TAKEOFF

- Pre-takeoff roll Verbalize
- Below 1,000 feet Verbalize
- Above 1,000 feet Verbalize

NORMAL TAKEOFF

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

PRE-LANDING CHECKS

- Fuel Valves BOTH ON
- Fuel Quantity SUFFICIENT
- Parking Brake OFF
- Landing Light ON

APPROACH

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

NORMAL LANDING

- Throttle IDLE when runway threshold is assured
- Maintain Proper Crosswind Controls:
 - Direction: MAINTAIN RUNWAY CENTERLINE using Rudder
 - Side Drift: CORRECT by Banking Against the drift (crosswind, if any)
- Flare Start at 15 ft & Level Off at 1 ft
Maintain Centerline in Flare & Level Off
- Touchdown At Minimum Speed
Avoid Touching Ground with Tail

NORMAL LANDING - Continued

- Yoke MAINTAIN Back Pressure to Reduce Speed, then PUSH Gently to Lower Nosewheel Slowly
- Rudder pedals Set NEUTRAL before touching ground with the nose wheel
- 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!
- Flaps RETRACT
- Landing Light OFF

BALKED LANDING - GO AROUND

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

SHUTDOWN

- Throttle IDLE
- Engine Instruments GREEN
- Equipment Switches ALL OFF
- Ignition Switches OFF
- Master Key Switch OFF
- Garmin Note Total Time
- Main Battery Switch (pilot's seat) OFF
- BackUp Battery Switch OFF
- Control Lock INSERT
- Tie-Downs SECURE
- Wheel Chocks SET
- Pitot/Static Probe: COVER ON
- Tail Post SET
- Doors LOCK
- Weather Cover (if outside) 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