



# ***Aeroprakt A-32 Vixxen***

***Cruiser | Explorer | Pioneer | Voyager***



**FLIGHT MANUAL**

Microsoft **Flight Simulator**

# PREFACE

## FOR SIMULATION USE ONLY - DESIGNED FOR SINGLE-PILOT OPERATIONS:

This aircraft has been developed for single pilot operations and has been adapted in such a way to better represent the simulated environment. It has been produced using multiple real-world data points and manuals from various dates and sources with modifications to various components to make them more manageable in Microsoft Flight Simulator.

## PHOTOSENSITIVE SEIZURE WARNING:

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights or patterns that may appear in video games. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause these “photosensitive epileptic seizures” while playing video games.

Immediately stop playing and consult a doctor if you experience any symptoms.

These seizures may have a variety of symptoms, including light-headedness, altered vision, eye or face twitching, jerking, or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that can lead to injury from falling or striking nearby objects.

Parents should watch for or ask their children about the above symptoms. Children and teenagers are more likely than adults to experience these seizures.

You may reduce the risk of photosensitive epileptic seizures by taking the following precautions:

- Play in a well-lit room.
- Do not play if you are drowsy or fatigued.

If you or any of your relatives have a history of seizures or epilepsy, consult a doctor before playing video games.

## FLIGHT MANUAL INFORMATION:

This flight manual has been written to aid in both Microsoft Flight Simulator 2020 and Microsoft Flight Simulator 2024 gameplay. Although some images and information may be directed towards a specific simulator, most of the information is shared between both simulators. If you find discrepancies in this manual that differ between either, please contact the Got Friends team at [gotfriends.marketing@gmail.com](mailto:gotfriends.marketing@gmail.com) and we will do our best to address these issues and forward the changes to Microsoft for future manual releases. Thank you for your patience in advance and we look forward to receiving your feedback.

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# INTRODUCTION

Presenting the Aeroprakt A-32 Vixen, a next-generation light sport aircraft developed in close collaboration with Aeroprakt USA and our real-world training partners at Heavenbound Aviation. What began as a simple aircraft project has grown into a complete aviation series, launching with four fully developed variants that offer both modern glass technology and classic analog instrumentation, available in both standard and tundra tire configurations.

This add-on has already been actively used by Heavenbound Aviation during its beta phase, flown across everything from Ohio grass strips to rugged mountain passes and scenic European countryside tours. Test pilots have consistently praised its exceptional visibility, short-field agility, and its rare ability to feel both welcoming and performance-focused. It is an aircraft that builds confidence quickly and rewards mastery over time.

To honor its real-world roots, we have also hand-built McKnight Airfield (ICAO: 50I8), the home of Heavenbound Aviation. This scenery is included with your purchase and is available on both PC and Xbox. This is where the real Vixen is flown and where this exact simulation will be used for active flight training. The environment is authentic, the aircraft is alive, and every detail is grounded in reality.

The Aeroprakt A-32 Vixen Includes the Following Variants:

- ❖ **Cruiser:** Standard Tires (Fairings Option) + Modern Glass (Digital Displays)
- ❖ **Explorer:** Tundra Tires (Mud Guard Option) + Modern Glass (Digital Displays)
- ❖ **Pioneer:** Standard Tires (Fairings Option) + Analog Dashboard Instrumentation (Gauges)
- ❖ **Voyager:** Tundra Tires (Mud Guard Option) + Analog Dashboard Instrumentation (Gauges)



The Aeroprakt A-32 Vixxen is a two-seat, high-wing light sport aircraft designed and manufactured by Aeroprakt in Kyiv, Ukraine. It is an evolution of the earlier A-22 and A-20 series, refining those proven designs into a faster, more aerodynamically efficient platform with improved visibility and touring performance. The A-32 first flew in 2014 and has since become one of Aeroprakt's flagship models, especially favored by training schools and recreational pilots for its stability, low operating cost, and exceptional forward visibility.

The A-32 was engineered with a primary focus on responsive yet forgiving handling, making it suitable for both new pilots and experienced backcountry flyers. Its aerodynamic improvements over the A-22 include a cleaner airframe, reduced drag, and extended cruise efficiency. The aircraft is powered by the Rotax 912 series engine family and is typically equipped with a top cruise speed of around 115 knots, while maintaining short takeoff and landing performance comparable to dedicated STOL aircraft.

Visually, the Vixxen is known for its sleek canopy design, unobstructed forward view, and distinctive pusher propeller configuration. Its enclosed cabin is wider than many aircraft in its class and features excellent downward visibility, making it popular for sightseeing, aerial observation, and bush exploration. Operators frequently praise its slow-flight stability and precise low-speed control, giving it a strong reputation as both an instructional aircraft and an adventure platform.

Today, the A-32 continues to evolve under Aeroprakt's active development. It is flown across Europe, North America, Australia, and beyond, with many schools adopting it for modern sport pilot training. Its balance of efficiency, situational awareness, and versatility has earned it a strong position among the most capable next-generation light sport aircraft in active production.



# FEATURES

- ❖ Highly Detailed 3D Model with 4K HD Textures
- ❖ Accurate Flight Model with Emergency Electrical System Simulation
- ❖ 12 Hand-Painted Liveries inspired by Aeroprakt's Authentic Factory Palette
- ❖ Custom Rotax 912iS WWISE Sound Pack with optional Headphone Simulation
- ❖ Glass Cockpit Option with Working Title G3X Touch, Custom G5 ADI and Asobo MFD-650
- ❖ Analog Cockpit with Full-Set of Instrumentation including Working Title's GNS-430 System
- ❖ Automatic **PMS50 GTN-650/750** \* Detection Support Built into the Main Package by Default
- ❖ Optional **TDS GTN-650Xi/750Xi** \* Detection Support Available with Got Friends TDS Expansion
- ❖ Tundra and Standard Tire Variants including Detailed Compression Simulation
- ❖ Gear Accessory Options including Wheel Fairings (Wheel Pants) and Mud Guards
- ❖ Custom AOA Indicator and Audio Warning System with Tone, Voice and Silent Audio Options
- ❖ Native MSFS 2024 Version including Walkaround Preflight, Additional EFB, Dynamic Dirt, Upgraded Flight Modeling, Asobo Character Support, and **Career Compatibility** \*
- ❖ Deeply Simulated Lighting System, Electrical Systems, Navigation Systems, and Engine Systems to meet real-world expectations in the Simulated Training Environment
- ❖ Full Multiplayer Compatibility including Visual Elements, Tail Registration and Dynamic Dirt
- ❖ Removable Elements include Tail Registration, Cabin Doors, Gear Accessories, Tablet, AOA Indicator, Wheel Chocks and Aircraft Covers with the ability to Re-Install Covers Post-Flight
- ❖ Individually Hidable Pilot and Copilot Yokes for Maximum Immersion with Simulation Rigs

## **CAREER COMPATIBILITY DISCLAIMER:**

Currently, Microsoft does not allow add-ons installed via the Community Folder (including those purchased through third-party stores) to be recognized by the MSFS 2024 Career System. As of this manual's publication, Career Mode compatibility is limited to the In-Game Marketplace version of the Aeroprakt A-32 Vixxen only. We hope that in the future, Microsoft expands support to include verified third-party marketplace products, allowing all legitimate customers to benefit equally from core simulator features without limitations.

## **PMS50 GTN-750/650 SUPPORT:**

Support for PMS50's GTN-750/650 is built into the aircraft. To enable automatic detection, simply install the PMS50 Base Package into your Community Folder. For more details or to purchase Lite or Premium versions, visit [PMS50's Official Website](#). Xbox users must instead install another aircraft that already include PMS50 (such as the Hangar Studios Super Decathlon, Flysimware Sierra C24R, FSReborn Sirius TL3000, or AzurPoly's Jaguar). Once that aircraft is installed, the Vixxen will enable PMS50 automatically.

## **TDS GTN-750Xi/650Xi SUPPORT:**

Support for TDS' GTN-750Xi/650Xi requires an additional TDS Expansion Pack available on our [Official Website](#), alongside TDS' Base Software Package. To use these units, you must also have the TDS Software and Garmin Trainer installed. For more details on the Base and Pro Upgrade options, please visit [TDS' Official Website](#).



# GENERAL SPECIFICATIONS

## General Characteristics:

Capacity:	Pilot + Copilot (Passenger with Removable Yoke)
Wingspan:	31 ft / 9.45 m
Wing Area:	138 sqft / 12.82 sqm
Length:	20'7" / 6.27 m
Flaps:	0° / 10° / 20° (Flaperons)
Max Gross Weight:	1,320 lbs / 600 kg
Empty Weight:	800 lbs / 363 kg
Tire Sizes:	15" / 38.1 cm (Standard)   17.6" / 44.7 cm (Tundra)
Control Surfaces:	Flaperons, Elevator, Rudder
Critical AOA:	19.5°
Critical AOA (Full Flaps):	17.75°
Max G-Force:	4.00
Glide Ratio:	12:1

## Powerplant:

Brand:	Rotax 912iS
Max Rated HP:	100 hp
Idle RPM:	1,400 rpm
Cruise RPM (Min):	3,000 rpm
Cruise RPM (Max):	5,500 rpm
Take-Off RPM (Max):	5,800 rpm

## Propeller:

Blades:	3
Diameter:	68.11" / 173 cm
Type:	Fixed Pitched

## Fuel Capacity:

Fuel Capacity:	30.10 US Gallons / 114 Liters
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## V-Speeds:

Normal Operating (VNO)	112 kts / 207 kph
Never Exceed (VNE):	130 kts / 241 kph
Cruise Speed (VC):	94 kts / 174 kph
Takeoff Speed (VS):	32 kts / 59 kph
Best Climb Speed (VY):	65 kts / 120 kph
Best Angle Climb Speed (VX):	54 kts / 100 kph
Best Glide (VBG):	59 kts / 109 kph
Stall Speed Full Flaps (VS0):	27 kts / 50 kph
Stall Speed Flaps Up (VS):	32 kts / 59 kph

## Oil & Fuel:

Oil Pressure:	12 psi (Idle)   22 psi (Min)   22 – 72.5 psi (Normal)   101.5 psi (Short Max Peak)
Oil Temperature:	120 °F / 50° C (Min)   190-230 °F / 90-110° C (Normal)   266 °F / 130° C (Max)
Fuel Pressure:	2 psi (Min)   3 psi (Normal)   5 psi (Max)



# VIRTUAL COCKPIT (GLASS)

## AIRCRAFT COCKPIT (GLASS)



1. Notepad
2. Notepad Options
  - ❖ Aircraft Covers
    - i. Inhibits Engine Start
  - ❖ Wheel Chocks
    - i. Inhibits Aircraft Movement
  - ❖ Tail Registration
  - ❖ Additional Tablet
    - i. Mounts Tablet in Cabin (*Software #21*)
  - ❖ AOA Indicator
    - i. Mounts AOA on Front Panel
  - ❖ Gear Accessories
    - i. Standard: Wheel Fairings
    - ii. Tundra: Mud Guards
  - ❖ Cabin Doors
    - i. Optional Visibility
3. AOA Indicator & Warning System
  - ❖ Tone, Voice or Silent Audio Options
4. G5 Digital Attitude Indicator
5. Cabin Lighting Brightness Knob
6. Avionics Lighting Brightness Knob
7. Magnetic Compass
8. Pitot Heat Switch
9. Avionics Master Switch
10. Backup Battery Switch
11. Pilot Yoke Visibility Toggle
12. Working Title G3X Touch
13. GMC-307 Autopilot Panel
14. ECU Lane A Warning Light
15. ECU Lane B Warning Light
16. GMA-345 Audio Panel
17. Secondary Navigation Unit
  - ❖ Asobo MFD-650 (Default)
  - ❖ PMS50 GTN-650 (Optional)
  - ❖ PMS50 GTN-750 (Optional)
  - ❖ TDS GTN-650Xi (Optional)
  - ❖ TDS GTN-750Xi (Optional)
18. Emergency Locator Transmitter (ELT)
19. Copilot Yoke Visibility Trigger
20. Additional Tablet
21. Tablet Software Selection
  - ❖ MSFS 2020: Aera Navigation
  - ❖ MSFS 2024: EFB or Aera Navigation
22. Right Air Inlet
23. Left Air Inlet



# VIRTUAL COCKPIT (ANALOG)

## ВИРТУАЛ КОКПИТ (АНАЛОГ)



1. AOA Indicator & Warning System
  - ❖ Tone, Voice or Silent Audio Options
2. Magnetic Compass
3. Notepad
4. Notepad Options
  - ❖ Aircraft Covers
    - i. Inhibits Engine Start
  - ❖ Wheel Chocks
    - i. Inhibits Aircraft Movement
  - ❖ Tail Registration
    - i. Optional Visibility
  - ❖ Additional Tablet
    - i. Mounts Tablet in Cabin (*Software #32*)
  - ❖ AOA Indicator
    - i. Mounts AOA on Dashboard
  - ❖ Gear Accessories
    - i. Standard: Wheel Fairings
    - ii. Tundra: Mud Guards
  - ❖ Cabin Doors
    - i. Optional Visibility
5. Pitot Heat Switch
6. Avionics Master Switch
7. Backup Battery Switch
8. Cabin Light Brightness Dimmer
9. Avionics Light Brightness Dimmer
10. ECU Lane A Warning Light
11. ECU Lane B Warning Light
12. Airspeed Gauge
13. Attitude Gauge
14. Altimeter Gauge
15. Tachometer (RPM) Gauge
16. Turn Coordinator & Bank Indicator
17. Direction Heading Gauge and Course Indicator
18. Vertical Speed Gauge
19. Course Deviation Indicator (CDI) Gauge
20. Pilot Yoke Visibility Trigger
21. Oil Temperature & Pressure Gauge
22. Exhaust Gas Temperature & Fuel Flow Gauge
23. Vacuum Suction & Battery Ammeter Gauge
24. Digital OAT / Volt / Clock (M803)
25. Emergency Locator Transmitter (ELT)
26. Copilot Yoke Visibility Trigger
27. GMA-345 Audio Panel
28. Primary Navigation Unit
  - ❖ Working Title GNS-430 (Default)
  - ❖ PMS50 GTN-650 (Optional)
  - ❖ TDS GTN-650Xi (Optional)
29. AS76C Transponder System
30. KAP-140 Autopilot Panel
31. Additional Tablet
  - ❖ MSFS 2020: Aera Navigation
  - ❖ MSFS 2024: EFB or Aera Navigation
32. Tablet Software Selection
  - ❖ MSFS 2020: Aera Navigation
  - ❖ MSFS 2024: EFB or Aera Navigation
33. Right Air Inlet
34. Left Air Inlet



# VIRTUAL COCKPIT (LOWER PANEL) АВИАКОКПИТ (ГОМЕКЪ ПАНЕЛ)



1. Headphone Simulation
  - ❖ Dampens MSFS In-Game Cockpit Audio
2. GTN Swap Switch
  - ❖ Glass:
    - i. Swaps PMS50 GTN-650 / 750
    - ii. Swaps TDS GTN-650Xi / 750Xi
  - ❖ Analog:
    - i. Swaps GNS-430 / PMS50 GTN-650
    - ii. Swaps GNS-430 / TDS GTN-650Xi
  - ❖ Requires Add-on by [PMS50](#) or [TDS](#)
  - ❖ TDS Requires [Got Friends TDS Expansion](#)
3. Emergency Power Switch
  - ❖ Bypasses Main Battery & Routes Systems to Backup Battery
  - ❖ Limited System Functionality
4. Cockpit Heat Lever
  - ❖ Simulated Structural De-Icing Switch
5. Left Fuel Quantity Gauge
6. Right Fuel Quantity Gauge
7. Left Tank Low Fuel Light
  - ❖ Indicates 12.5% Remaining
8. Right Tank Low Fuel Light
  - ❖ Indicates 12.5% Remaining
9. Landing Light Switch
10. Taxi Light Switch
11. Wig-Wag Mode Switch
  - ❖ Requires Landing and Taxi Lights
12. Navigation Light Switch
13. Strobe Light Switch
14. Cabin Light Switch
15. Windshield Air Switch
  - ❖ Simulated Canopy De-Ice Switch
16. Push to Start Button
  - ❖ Requires Momentary Starter Switch
17. Main Fuel Pump (#1)
18. Backup Fuel Pump (#2)
19. ECU Lane A Switch
20. ECU Lane B Switch
21. Momentary Starter Switch
  - ❖ Stays Active for 3-Seconds
22. Master Battery Key
23. Brake Lever
24. Parking Brake Valve
25. Pitch Trim Lever
26. Throttle Lever
27. Throttle Friction Lever
  - ❖ Simulated Aircraft Vibration
28. Left Door Handle
  - ❖ MSFS 2024: After Opening, Click Seatbelt to Exit
29. Right Door Handle

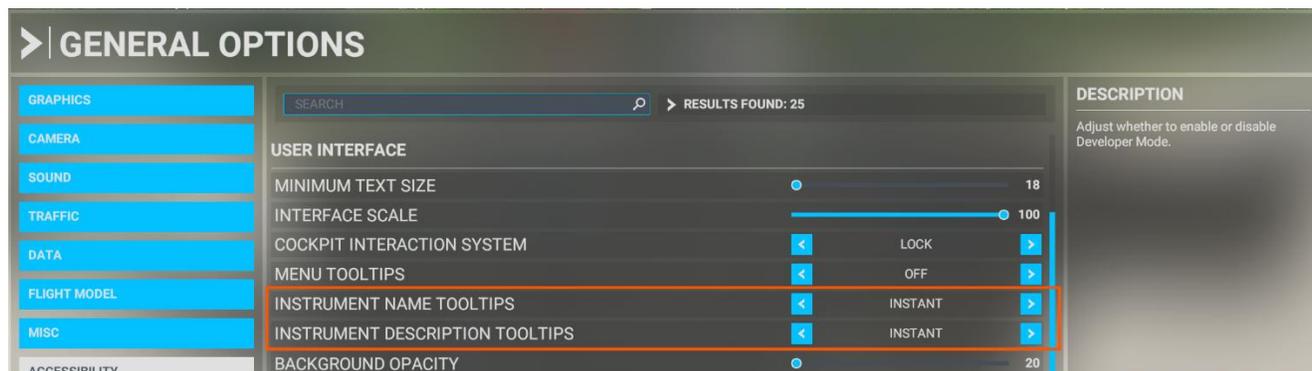


# VIRTUAL COCKPIT (REAR) АВИАКОКПИТ (ЗАДНИЙ)



1. Right Fuel Tank Valve
2. Left Fuel Tank Valve
3. Copilot Visibility Toggle
  - ❖ MSFS 2020 Exclusive Interaction
  - ❖ Shows / Hides Visible Copilot
4. Seatbelt Toggle
  - ❖ MSFS 2024 Exclusive Interaction
  - ❖ Exits Aircraft to First-Person Mode
  - ❖ Requires Left Cabin Door to be Open
5. Master Battery Connection Switch

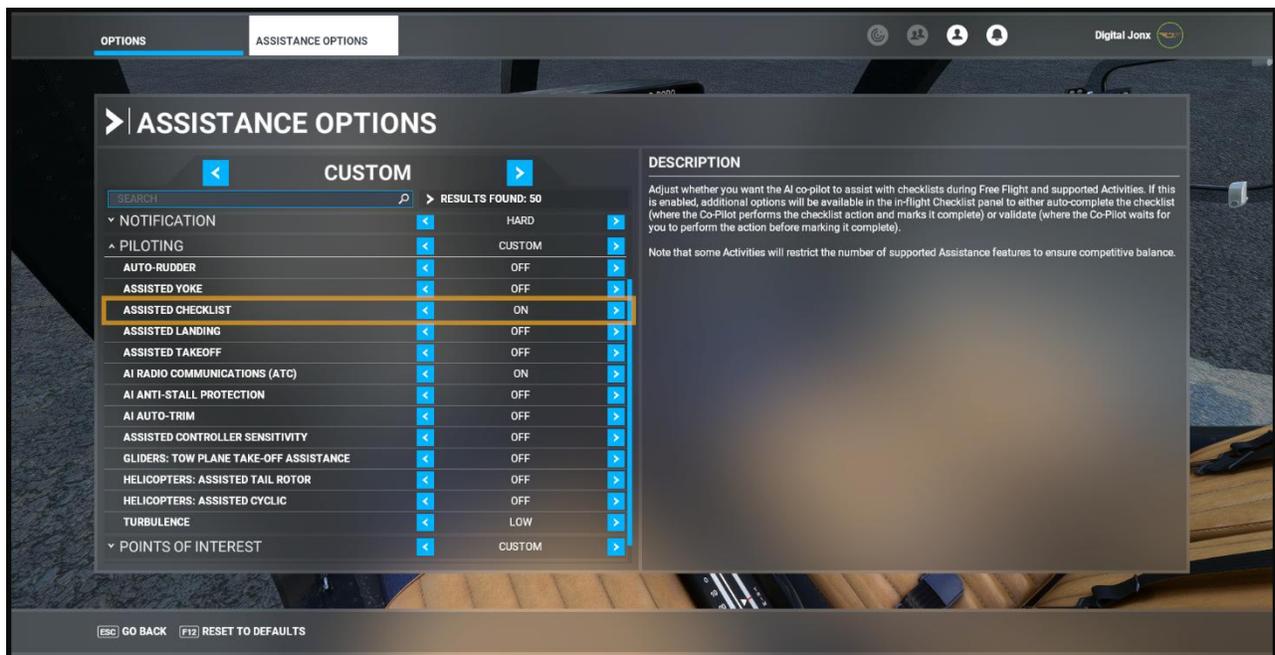
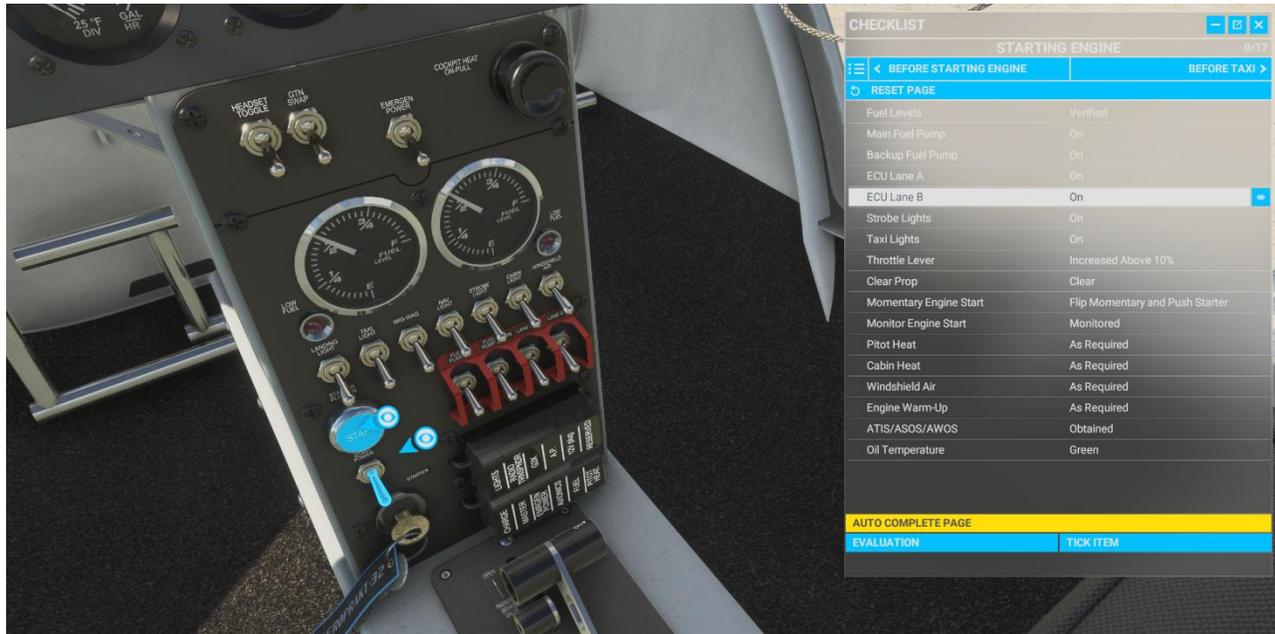
**Tip: We strongly suggest leaving tooltips enabled until you are comfortable with the cockpit layout. This option is available in both MSFS 2020 and MSFS 2024.**



# CHECKLISTS (MSFS 2020)

## CHECKLISTS (MSFS 2020)

The Aeroprakt A-32 Vixxen has been developed to fully utilize Microsoft Flight Simulator 2020's In-Game Checklist System. If you would like an in-depth walk-through during any phase of flight, you can select the Checklist Pop-Up Menu and get started. If you would like deeper checklist functionality, please consider turning "ON" the Assisted Checklists Option from Microsoft Flight Simulator's Assistance Options Menu.



# CHECKLISTS (MSFS 2024)

## CHECKLISTS (MSFS 2024)

The Aeroprakt A-32 Vixxen in Microsoft Flight Simulator 2024 has been fully designed around the simulator's integrated Electronic Flight Bag checklist system, offering interactive, step-by-step procedures at any phase of flight with automatic item highlighting and progress tracking. MSFS 2024 also enables a physical first-person walkaround experience, allowing you to manually remove aircraft covers, wheel chocks, and even inspect control surface and tire wear directly through the checklist system — delivering an exceptionally immersive and authentic preflight experience.



# MCKNIGHT AIRFIELD (ICAO: 5018)

## MCKNIGHT AIRFIELD (ICAO: 2018)

This package includes a handcrafted recreation of McKnight Airfield, developed by Mykrode with support from Emerald Scenery Design. McKnight is the real operational base of Heavenbound Aviation, the flight school actively using the Aeroprakt A-32 Vixxen for real-world instruction. The default Microsoft Flight Simulator 2024 version of the airfield did not accurately represent the terrain, structures, or training environment, so a custom build was created directly with guidance from the property owner to match its current real-world state. This scenery is not just decorative, it is the authentic location where students train in the actual Vixxen, making it ideal for realistic short-field practice, pattern work, and preflight walkarounds in MSFS 2024's First-Person Inspection Mode.



**CAREER COMPATIBILITY DISCLAIMER: PLEASE READ AGAIN!**

*This is important enough that we are stating it twice...*

**Career Mode compatibility is limited to the In-Game Marketplace version of the Aeroprakt A-32 Vixxen.**

Currently, Microsoft does not allow add-ons installed via the Community Folder (including those purchased through third-party stores and our Official Website) to be recognized by the MSFS 2024 Career System.

The Aeroprakt A-32 Vixxen is compatible with the following Career Types:

- ❖ First Flight (FIFPLN)
- ❖ Ferry Flight (FEFPLN)
- ❖ Private Charter Service (PRCPSO)
- ❖ Flightseeing (TORPLN)
- ❖ Light Cargo Transport (CARPSO)



## Aeroprakt A-32 Vixxen Development Team

<b>PROJECT MANAGER &amp; ANIMATIONS</b>	Jonx
<b>CUSTOM PHYSICS &amp; CODING</b>	GotGravel
<b>3D MODELING</b>	Mykrode
<b>TEXTURES &amp; SOUNDS</b>	twoseventyinc
<b>OFFICIAL PARTNER (AIRCRAFT)</b>	Aeroprakt USA
<b>OFFICIAL PARTNER (TRAINING)</b>	Heavenbound Aviation
<b>SCENERY SUPPORT</b>	Emerald Scenery Designs (RotorNut44)

## Alpha & Beta Testers

Kilo Mike	Pieter	Sarah (GT:Sazzle)
TwoToneMurphy	MajorDad	Kev Lewis (PhotosByKev)
Westcoast Willy	Burstix	RotorNut44
AvAngel	Forder Learn to Fly	Tree Top Flyer
Floxtrot	TDS Simulation	PMS50
TheGreatFishfoo	itzNorCally	Eight of Dragons
OohCando	Boozy Sheep	ShamrockOneFive
LBR Gaming	TomSmitty (National eSTOL)	ChunkyFlyer

### Microsoft Flight Simulator Resources, Communities, and Event Pages:

- Got Friends Discord Server (Events / Support / News): <https://discord.gg/QHcUNwr4DR>
- Aeroprakt A-32 Paint Kit (Create Custom Liveries): <https://www.got-friends.com/pages/official-paintkits>
- PMS-50 GTN-750/650 Add-on (Optional Navigation): <https://pms50.com/msfs/>
- TDS GTN-750Xi/650Xi Pro Add-on (Optional Navigation): <https://tdssim.com/tdsgtnxi>
- Got Friends TDS Expansion Pack: <https://www.got-friends.com/pages/enhancement-mods>
- Heavenbound Aviation (Real Aeroprakt A-32 Flight Training): <https://heavenboundaviation.com/>
- Aeroprakt USA: <https://aeropraktusa.com/>

