How good is "Linux Air Combat" when compared to other online combat flight simulators for Linux?

Overview of Linux Air Combat (LAC)

Linux Air Combat (LAC) is a free, open-source combat flight simulator designed specifically for Linux, focusing on World War II-era aircraft. It is derived from the older GL-117 game but has been significantly rewritten to emphasize realistic flight simulation over arcade-style gameplay. LAC supports a variety of features, including 54 historically accurate WWII aircraft, online multiplayer missions for up to 10 players, joystick/mouse/gamepad input, and integration with Mumble for voice communication. Its lightweight design allows it to run smoothly on modest hardware, including Raspberry Pi, and it is available in both source code and precompiled AppImage formats. sourceforge.net libregamewiki.org forums.raspberrypi.com

Comparison with Other Online Combat Flight Simulators for Linux

To evaluate LAC, we compare it to other notable online combat flight simulators available for Linux, such as **FlightGear**, **Digital Combat Simulator (DCS)**, **YSFlight**, and **War Thunder**. These simulators vary in focus, realism, and system requirements, providing a broad spectrum for comparison.

1. **Realism and Flight Model**

- **LAC**: LAC prioritizes historical simulation over arcade gameplay, offering a sophisticated flight model with features like stalls, high-speed compressibility, high-G blackouts/redouts, realistic high-altitude engine degradation, and fuel consumption proportional to engine load. It simulates 54 WWII aircraft with detailed performance characteristics based on historical data, making it a strong choice for enthusiasts of realistic WWII air combat. However, its AI for bots is noted as less sophisticated, relying on simple mathematical rules for combat behavior, which can lead to predictable or "stupid" actions. sourceforge.net bbosen.itch.io fossgames.com
- **FlightGear**: An open-source civilian flight simulator, FlightGear is highly realistic for general aviation, with detailed flight dynamics and a wide range of aircraft. However, it lacks a strong focus on combat, offering only basic dogfighting capabilities (e.g., WWI Sopwith Camel). Its combat features are minimal compared to LAC, making it less suitable for dedicated combat simulation. reddit.com flightgear.org
- **Digital Combat Simulator (DCS)**: DCS is a free-to-play military combat simulator with a focus on modern and WWII aircraft. It offers highly detailed flight models, avionics, and weapon systems, surpassing LAC in realism for modern jets and helicopters. The free version includes two aircraft (Su-25T and TF-15D) and a large mission area, but additional content requires costly DLC. DCS's graphics and system

requirements are significantly higher than LAC's, making it less accessible on low-end hardware. digitaltrends.com

- **YSFlight**: YSFlight is a customizable, lightweight simulator with both civilian and combat capabilities. Its flight model is less complex than LAC's, leaning toward arcade-style gameplay. While it supports multiplayer dogfights and community-created add-ons, its realism is limited compared to LAC's detailed WWII aircraft performance and historical focus. digitaltrends.com
- **War Thunder**: A free-to-play, arcade-focused combat simulator, War Thunder supports WWII and modern aircraft with multiplayer battles. It sacrifices realism for accessibility, with simplified controls and less complex flight dynamics compared to LAC. Its graphics are superior, but it requires a stronger system and consistent internet connection, unlike LAC's modest requirements. digitaltrends.com

Verdict: LAC excels in providing a realistic WWII combat experience tailored for Linux, outshining FlightGear and YSFlight in combat-specific realism and matching or exceeding War Thunder for historical accuracy. However, DCS offers superior realism for modern aircraft but at the cost of accessibility and additional purchases.

2. **Graphics and Performance**
   - **LAC**: LAC uses simple, "old-school" graphics reminiscent of classic simulators like Microsoft Combat Flight Simulator 2. This design ensures high frame rates (59-60 FPS) even on low-end hardware like Raspberry Pi or older desktops. Non-

flight graphics (e.g., ground detail) are minimal to prioritize performance. sourceforge.net forums.raspberrypi.com

- **FlightGear**: FlightGear's graphics have improved over time but remain rough compared to commercial simulators. It demands more resources than LAC, particularly for detailed scenery, and may not run as smoothly on very low-end systems. reddit.com
- **DCS**: DCS boasts high-quality graphics, far surpassing LAC in visual fidelity. However, this comes with steep hardware requirements, making it impractical for budget systems or devices like Raspberry Pi. digitaltrends.com
- **YSFlight**: YSFlight's graphics are basic and Atari-style, similar to LAC but less polished. Its lightweight nature allows it to run on modest hardware, comparable to LAC. digitaltrends.com
- **War Thunder**: War Thunder offers modern, high-quality graphics, making it visually superior to LAC but requiring more powerful hardware and a stable internet connection. digitaltrends.com

Verdict: LAC's minimalistic graphics ensure excellent performance on virtually any Linux system, giving it an edge over DCS and War Thunder for accessibility. It matches YSFlight's lightweight design but offers a more polished experience for combat. FlightGear's graphics are more demanding without providing combat-focused visuals.

3. **Multiplayer and Community Features**

- **LAC**: LAC is designed for online multiplayer, supporting up to 10 players per mission with features like Mumble voice integration, Morse code-style text communication, and a “Network Router” panel for real-time player tracking. Its community is small but active, with weekly online battles and developer support via forums and YouTube tutorials. Replay features allow solo players to engage with recorded “Replay Blokes” for practice. sourceforge.net itch.io fossgames.com
- **FlightGear**: FlightGear supports multiplayer but is not combat-focused, limiting its appeal for dogfighting or strategic missions. Its community is larger than LAC’s but geared toward civilian flight simulation. flightgear.org
- **DCS**: DCS offers robust multiplayer with sophisticated AI and mission editors, supporting large-scale battles. Its community is large and active, but the free version limits aircraft and mission options, and premium content can fragment the player base. digitaltrends.com
- **YSFlight**: YSFlight supports multiplayer dogfights and has a dedicated community creating add-ons. However, its multiplayer features are less advanced than LAC’s, lacking integrated voice communication or complex mission structures. digitaltrends.com
- **War Thunder**: War Thunder has a massive multiplayer community with large-scale battles and cross-platform play. Its arcade nature makes it more accessible but less tactically deep than LAC’s strategic missions. digitaltrends.com

Verdict: LAC's multiplayer features are well-suited for small, tactical WWII battles, with unique communication tools like Mumble and Morse code radio. It surpasses YSFlight and FlightGear in combat-focused multiplayer but lags behind War Thunder's scale and DCS's complexity. Its small community is a drawback but mitigated by active developer support and replay features.

4. **Content and Customization**
   - **LAC**: LAC offers 54 WWII aircraft, offline tutorials, and online missions across varied terrains (Desert, Mountain, Pacific Island). It supports custom aircraft models in .3ds format and sound files in .wav format. Its standardized "glass cockpit" simplifies learning across aircraft. However, it lacks the extensive mission variety of commercial simulators. sourceforge.net lutris.net fossgames.com
   - **FlightGear**: FlightGear provides a vast array of aircraft and global scenery, with extensive customization via open-source contributions. Its combat content is limited, but it excels in civilian flight variety. flightgear.org
   - **DCS**: DCS's free version includes two aircraft and a large mission area, with a level editor for custom missions. Paid DLC significantly expands aircraft and scenarios, offering unmatched depth but at a high cost. digitaltrends.com
   - **YSFlight**: YSFlight is highly customizable with community add-ons for aircraft, maps, and vehicles. Its content is diverse but leans toward arcade-style missions rather than historical accuracy. digitaltrends.com

- **War Thunder**: War Thunder offers a wide range of vehicles, from WWII planes to modern tanks, with progression-based unlocks. Its content is vast but less customizable than LAC or YSFlight due to its commercial model. digitaltrends.com

Verdict: LAC provides solid WWII content with moderate customization, ideal for historical enthusiasts. FlightGear and YSFlight offer broader customization but less combat focus. DCS excels in depth with DLC, while War Thunder provides extensive content with less emphasis on realism.

5. **Accessibility and Cost**
   - **LAC**: Completely free and open-source, LAC is accessible on nearly any Linux system, including low-end hardware. Its AppImage format eliminates compilation needs, and its ad-supported model ensures no cost to users. sourceforge.net lutris.net
   - **FlightGear**: Also free and open-source, FlightGear runs on Linux but requires more resources than LAC. It's accessible but less optimized for low-end systems. flightgear.org
   - **DCS**: Free-to-play with two aircraft, but its high system requirements and expensive DLC make it less accessible than LAC. digitaltrends.com
   - **YSFlight**: Free and lightweight, YSFlight matches LAC's accessibility for low-end systems but lacks its polish and combat depth. digitaltrends.com
   - **War Thunder**: Free-to-play with optional microtransactions, War Thunder is accessible but demands better hardware and internet than LAC. digitaltrends.com

Verdict: LAC is the most accessible due to its low system requirements and completely free model, surpassing DCS and War Thunder. It matches YSFlight's accessibility and outperforms FlightGear on low-end hardware.

Conclusion

Linux Air Combat stands out as the leading open-source combat flight simulator for Linux, particularly for WWII enthusiasts seeking a balance of realism and accessibility. It offers a more realistic flight model and combat focus than FlightGear and YSFlight, with a lightweight design that runs on modest hardware, unlike DCS or War Thunder. Its multiplayer features, including voice and text communication, are robust for its small community, though it lacks the scale of War Thunder or DCS. While its graphics are dated, this contributes to its performance edge. For Linux users prioritizing free, realistic WWII combat simulation on low-end systems, LAC is unmatched. However, those seeking modern aircraft, cutting-edge graphics, or large-scale battles may prefer DCS or War Thunder, provided they have the hardware and budget.

sourceforge.net sourceforge.net

Recommendation

If you're a Linux user with modest hardware and a passion for WWII air combat, LAC is an excellent choice due to its realism, accessibility, and active developer support. For broader flight simulation or modern combat, consider FlightGear or DCS, respectively, but be prepared for higher system demands or costs. YSFlight is a viable alternative for casual, arcade-style combat, while War Thunder suits those prioritizing action over simulation depth.