

FLIGHT TEST REPORT

FULCRUM ONE YOKE

FLIGHT SIMULATOR USED: MICROSOFT FS 2020
ALL UPDATES THROUGH SU7
ALL CONTROLLER SETTINGS: DEFAULT
AXIS SENSITIVITIES SET AT DEFAULT
SYSTEM USED: JETLINE SYSTEMS
OS: WINDOWS 10 HOME EDITION

PREFACE

All tests were flown after setting up the Fulcrum Yoke with the following settings:

1. Left side outer button: Toggle Gear
2. Left side inner button; Cockpit/external view mode
3. Right side outer button: Flaps down
4. Right side inner button: Retract flaps
5. Left side Pitch Trim; Default
6. Right Side Aileron Trim: Default

Aircraft used for flight test:

Default Cessna 152
Caranado Seminole
Just Flight BaE Hawk

Test Profile flown replicated a post maintenance test flight for each aircraft category. All tests used the same profile.

TEST RESULTS

Exterior view was chosen to check control movement on the aircraft vs yoke movement in the cockpit. All normal in both pitch and roll.

Special attention was placed on how the yoke reacted to pitch input at rotation on takeoff. Yoke exhibited absolutely no tendency to ratcheting with all responses being silky smooth allowing the slightest pressure to effect pitch change.

The overall grade for the yoke performance on takeoff based on a 1-10 grading is a solid 10.

Next phase of flight was stabilized climb

Here the pitch trim was tested carefully using the following method:

1. The aircraft was established at climb attitude
2. Power was adjusted to climb power.
3. Pitch trim was used to stabilize the climb.

The pitch trim on the yoke is extremely smooth for a function programmed in the plane's FDE as a repeat function. There is a trim axis available in FS2020 and I found it unnecessary to assign it to the yoke.

Trim response was graded as a 10 for the Fulcrum yoke.

Next phase tested was level flight

Each plane was leveled off using the following method:

1. The altitude was reached and the plane leveled off and held at the desired altitude using the yoke as primary pitch control.
2. Power was adjusted (RPM as well if applicable) to the desired cruise setting while maintaining altitude with the Fulcrum yoke.
3. Pitch trim was used to release all pressure on the Fulcrum yoke.

Again, the Fulcrum yoke performed silky smooth making the process effortless.

Again I graded the Fulcrum yoke a solid 10.

Next phase was a stall series in each aircraft

I performed a series of stalls ranging from power off at 1g through accelerated at higher g and airspeed using partial power and a cross control departure.

All stalls resulted in performance so smooth from the Fulcrum yoke that it was possible to perform the stall using the same rate of airspeed reduction into the stall I would experience in the real aircraft.

I rated the fulcrum yoke another 10 for the stall series.

Next phase involved landings

Of all the phases tested I was specifically interested in how the Fulcrum yoke would perform during the flare to touchdown during landings. It is here where the lower priced yokes can exhibit a tendency to "ratchet".

The Fulcrum yoke performed flawlessly on landings actually allowing application in pitch so smooth control was never close to becoming an issue.

Again, I rated the Fulcrum a solid 10.

In summation I really wasn't surprised with the performance on the Fulcrum yoke. It is extremely well designed and made using Hall sensors and quality materials.

My overall opinion after testing the Fulcrum is that it is of exceptional quality and I have no problem at all recommending it to the flight simulation community.

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