THE SCRAPYARD MONSTER FLIGHT MANUAL



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PRESENTATION

A bunch of silly ideas added on top of each other. This airplane is kind of a schizophrenic machine. It can be (relatively) smooth and be the best and more trustworthy bush plane for relaxing, low and slow flights in the country side, operating from decent length grass runways... or, it can be the devil that takes off on the spot, flies at 200 knots, climbs at +6000 feet/minute (and descends at about 22 000 feet/minute!) to finally land on a helipad with its own, embedded, instantaneous arresting systems!

That crazy machine, wrapped in a lot of easter eggs, references, and details, and presented in two very different flavors, is the Scrapyard Monster.

PERFORMANCES

Power

At the core of this aberration, breathes a real jewel. Produced by Cosworth, soberly named "RA", let me introduce you to **the most powerful atmospheric V-12 engine ever born**.

It develops more than 1000 Horsepower (it has been measured at around 1100 HP max), and weights only about 206 kg (454 lbs). And for the good measure, Flying Fries even maxed it to 1160 HP (we must have read this number somewhere at some point of the development).

The Aston Martin Valkyrie, equipped with this engine, produces 740 N.m of torque at 7000 RPM. But since we needed to reduce drastically the RPMs at the propeller (less speed = more torque), **we end up with a peak of 2700 N.m at your propeller blades.** It's no longer the plane taking off, it's your prop pushing the Earth away from you!



With all this power, the Scrapyard Monster has a Max Operating Altitude of 25 000 feet.

More info on the engine, here:

- Cosworth website: <u>https://en.wikipedia.org/wiki/Cosworth_RA</u>
- Wikipedia: <u>https://www.cosworth.com/case_studies/aston-martin-valkyrie/</u>

Weight

And here is the detail on the **total weight (without the ballast)** of your new virtual plane as simulated (it's not simulated with this precision level, but let's just pretend):

Component	Weight (kg)	Weight (lbs)	
Engine + accessories	300	661	
Wings	130	287	
Tail	50	110	
Tail wings	80	176	
Main wheels	30	66	
Propeller	40	88	
Cabin	200	441	
Total empty weight	830	1830	
Fuel tank (full)	200	441	
Pilot	100	220	
Max total weight	1130	2490	

The weight distribution is carefully placed behind the main wheels, all around the engine. Which makes it almost impossible to tip over on landings, even if you come at an angle and despite being a taildragger.



Also: The wings are relatively lightweight (fuel tank is located where the passenger seat would be in a normal aircraft). The weight is then not only centered on the roll axis, but also on the pitch axis. With all that, you end up with a **plane capable of doing aerobatics quite easily.**



Last item regarding power and weight... and for a better visualization of how unique this beast is, here are a few power-to-weight comparisons (with numbers I could find for standards version of given aircraft):

Aircraft	Power (hp)	Empty weight (kg)	Power/weight
Cessna 172	180	762	0.24
Piper PA-28R Turbo III	200	742	0.27
Cirrus SR22	315	1067	0.29
Spitfire Mk XIV	2050	2892	0.7
Scrapyard Monster	1160	830	1.4

Reference speeds

Here is a table of the reference speeds (units are in Knots), given for a standard atmosphere, at sea level, without wind and with a 50% fuel tank:

With ballast	Without ballast	
150	150	
170	170	
220	220	
250	250	
80	50	
45	30	
70	unknown	
90	unknown	
	150 170 220 250 80 45 70	

Electrical system

The electrical system has been written from scratch and it includes:

- 1 battery,
- 2 alternators,
- 2 magnetos (automatically operated),
- 41 individual circuits split across 26 working breakers,
- 1 "pinball machine" starter which works with 1-euro coins.

Fuel system

The Scrapyard Monster only drinks AVGAS 100LL fuel. It has a fuel tank of about 273 liters (72 gallons).

The fuel circuit, even if it uses the more accurate fuel model offered by the sim, is simple and composed of:

- 1 fuel tank,
- 1 fuel valve,
- 1 electrical fuel pump (which needs to be activated during start-up).
- 1 mechanical fuel pump (activated by the engine).

It's not easy to give exact numbers of fuel consumption and the range you can reach with full or half tank... (it's significantly different whether you are revving these 1160HP or not!) But fear not: On the MFD placed over the dashboard, you will have all the information you need in real time:

Carolina and Andrew Andre	Contraction of the second of t
TRIP FUEL PREDICTION	TRIP FUEL PREDICTION

Two pictures taken at the same time, with the same fuel quantity, same everything... Only difference is one has very little throttle input and the other one is at max manifold pressure. Can you guess which is which?

Power controls

With all this power at your disposal, now it's time to answer: "how do I use it?" and "What the hell is up with this Katana?!"

You have two controls, which colors match the real-life color code:

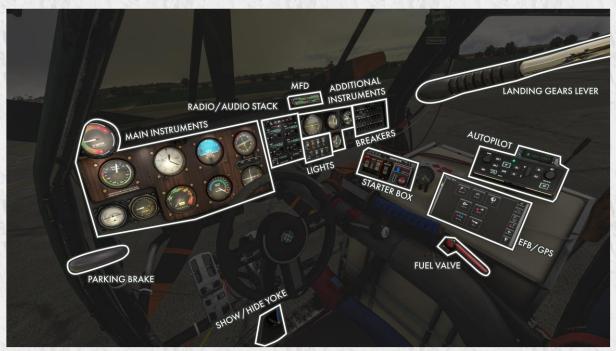
- Black (8-ball) is your throttle (manifold pressure) control.
- Blue (Katana) is your propeller pitch (RPM) control.

There is no mixture lever, it is done automatically by this beautiful "high-tech" plane 😳



Please note: the propeller control has an important effect on the RPM (like it should), but only when your throttle is idle to low. If you have your throttle above 12 inHg, the katana will not have much effect: your propeller will already be saturated by all this power coming from the engine.

COCKPIT OVERVIEW



A picture is better than a thousand words. More details on all these instruments later.

HYING FRIES

LIGHTING

All this aircraft interior lights, plus the landing light, are custom. The light switches can ALL be found on the same space. **The upper row is for the exterior lights** (notice that there is no taxi light. Because who cares, right?) and **the lower row for the interior**.

The additional button, with a blue rim light when activated, is for the emissive paint.



Note that "Glare" and "Cockpit" toggles have 3 positions for various colors:

	Glareshield light switch	Cockpit light switch	
Up	Green	Red	
Middle	OFF	OFF	
Down	White	White	

There are also 3 potentiometer knobs, attached under the glareshield, which control all interior lights intensity:



Tip: when flying by night, and when using your landing light, try to enable your engine light too. It should significantly reduce the glare produced by the landing light.



Left: Engine light OFF. Right: Engine light ON.

SOUND

The Scrapyard Monster sound pack was handcrafted by Flying Fries. Using references and very limited samples of the existing Cosworth RA engine, and a lot of magic and engineering to recreate all the details and texture of this mechanical marvel breathing through its full range of RPMs.

Additionally, there are about 40 custom sounds which you will hear on any knob, switch, handle operation, etc.

If some of these sounds have been recorded internally, **others have been found on freesound.org and are under free license** (public domain or Creative Commons license: <u>https://creativecommons.org/licenses/by/4.0/</u>).

These are the profiles of the people who created these additional gorgeous sound effects:

- o <u>https://freesound.org/people/MattRuthSound/</u>
- o <u>https://freesound.org/people/PeteBarry/</u>
- o <u>https://freesound.org/people/Aiwha/</u>
- o <u>https://freesound.org/people/sandyrb/</u>
- o <u>https://freesound.org/people/tyops/</u>
- o <u>https://freesound.org/people/nicStage/</u>
- o <u>https://freesound.org/people/HerraBilbo/</u>
- <u>https://freesound.org/people/ProjectsU012/</u>
 <u>https://freesound.org/people/csnmedia/</u>

- o <u>https://freesound.org/people/daenerys/</u>
- o <u>https://freesound.org/people/MWLANDI/</u>
- o <u>https://freesound.org/people/jaegrover/</u>
- o <u>https://freesound.org/people/TMFKSOFT/</u>
- o <u>https://freesound.org/people/BockelSound/</u>
- o <u>https://freesound.org/people/shelbyshark/</u>
- o <u>https://freesound.org/people/elmasmalo1/</u>
- o <u>https://freesound.org/people/Koops/</u>
- o <u>https://freesound.org/people/uEffects/</u>

I FLYING FRIES

FEATURES

Flight controls

A nice, but probably second hand, German car manufacturer steering wheel is driving the gigantic ailerons for roll left/right, and the elevators for pitch up/down. There is a click spot at its base to show or hide it.

On the left side of your seat, a dartboard is used for the elevator trim. It's directly linked to the elevator trim tabs.

A shiny 8-ball (black) drives the manifold pressure. It will be related as your throttle.

The broken katana with a blue Ito (the fabric wrap) controls the propeller pitch. More useful at low manifold pressure than at high, on such a beast!

The black handle on red metal lever (on your top left, exterior of the cabin) controls the flaps position. There are only two positions:

- Up (0 degree).
- Down (40 degrees).

The flaps down position, with its incredible angle, is quite useful for slowing down quickly and gives you an incredible lift for take-off. Just try to enter the airspeed white arc before operating it in flight.

The black handle on your right, above your head, operates the landing gear position.

Finally, the umbrella handle on the bottom left of your field of view operates the parking brake (only for the bush version).

On the float variant of the plane (the Sea Monster), you have a skull lever with embedded red LEDs which servers as parking brake + water rudders retract/extend. The water rudders can only be operated with this lever (or the parking brake bind) and only work when the landing gears are up.

The eyes of the skull are illuminated red if the water rudders are lowered.

Covers

We are sure the first question you'll be asking yourself, if you start from cold and dark, is "How do I get rid of these covers?"

Very easily: By clicking this blue carabiner hanging behind the gears lever:



And if the weather turns badly while you fly, and you don't want your magnificent haircut to be ruined by the rain, just click again and you'll stay dry!

Wrench / Noise reduction headset

While we're here, you can also notice, on the previous picture, the wrench that can help you stop the clunking noise which can trigger randomly if the option is enabled.

And the noise reduction headset which will noticeably increase your comfort while the V-12 screams just behind your ears!

Avionics switch

It will be easily recognizable for French people... The avionics main switch is the grey "Legrand" breaker, on the left side of your radio stack.

Starter box aka "The Alarm Clock"

This refurbished alarm clock mixed with some pinball machine parts and random switches is critical to give life to the Scrapyard Monster.



From left to right:

- Battery toggle + protections.
- Alternator 1 toggle.
- Alternator 2 toggle.
- Fuel booster pump toggle (only required for the engine start-up).
- A coin slot. Only takes "1-euro" coins. Just click on it to feed it with cash.
- "Play": That's your starter. It will handle magnetos and ignition (if you put money in!).
- "Snooze" (on top): If you press it, it will stop the magnetos, fuel pump, battery and both alternators. So be careful with this.

And just below the starter box, hidden behind the Katana handle, you will find the one and only fuel valve of the aircraft (you will also need to have it open if you want to start your engine and fly your plane).

Auto Pilot



Since the version 2.0, the Scrapyard Monster is equipped with a "state of the art" auto pilot. Don't pay attention to the screwdriver stuck in it! This auto pilot includes all the following modes:

Global: Level hold, Flight Director.

Vertical navigation: Altitude hold, Flight Level Change, Vertical Speed, Approach with glideslope (only if the ILS frequency and course is set on NAV 1).

Lateral navigation: Heading, Nav 1 (GPS/VOR/LOC), Nav 2 (VOR).

MFD

An external MFD equips the Scrapyard Monster. It has two push buttons to cycle through several pages:



More gauges for your aircraft. It's the startup page on cold and dark starts.

The "Fast and Furious" page! It's the startup page when you begin your journey from the runway or mid-air.

*	TAS GS R.ALT	115 knots	TRK	216.6 deg 214.4 deg 13.5 °C	j
« »	TRI 2 41 NM	IP FUEL PRE	DICTIC 0:22'		
*		WINE		KNOTS	

Precision navigation page. Note that the radar altimeter only works below 2000 ft AGL and with the wings roughly leveled.

"Should I slow down?" page. Giving you live range and endurance predictions according to your ground speed, fuel remaining and fuel flow.

Wind direction (True North) and speed indication, as well as an animated relative wind direction arrow.

Electronic Flight Bag

The EFB is simple but efficient. A **Garmin Aera touchscreen by Asobo, on a wide, 10.5" tablet.** You can see the VFR map, the traffic around you, create a flight plan (and follow it with your HIS and Auto Pilot), get information regarding the closest VORs, airports, etc. And you also have a synthetic 3D vision if you are flying in the fog or by night!

The tablet turns on with the avionics toggle. It requires the "USB" breaker to be plugged in and you can turn it on/off by clicking on its own "home" button.



Moreover, you can change its position by clicking the suction cups above your attitude indicator or the side stand attached to the fuel tank.

The yellow SD card will show you the setup screen of the Scrapyard Monster, from where you will be able to access the aerobatic smoke, your custom (and persistent) settings, your fuel management, reference speeds and more.



Don't hesitate to flash the QR code with your phone, on the last tab, to view the various resources of the Scrapyard Monster, directly on Flying Fries website and up to date. These resources include the latest version of this manual, the paint kit, spad.next profiles, etc.

Aerobatic Šmoke

Available through the "Setup EFB" SD card on your tablet. You will be able to enable/disable the smoke system. And for each of the five mounting points:

- Mount/unmount the device.
- Enable/disable the device.
- Change the smoke color.

AND	
	UNMOUNT ML COLOR: STATUS: ACTIVE UNMOUNT ML COLOR: STATUS: INACTIVE UNMOUNT STATUS: INACTIVE UNMOUNT COLOR: STATUS: INACTIVE UNMOUNT COLOR: STATUS: INACTIVE UNMOUNT COLOR: STATUS: INACTIVE UNMOUNT COLOR: STATUS: INACTIVE UNMOUNT COLOR: STATUS: INACTIVE UNMOUNT COLOR: STATUS: INACTIVE

All these options are persistent across flight session, except for the master ON/OFF switch.



Ballast

The ballast weights about 830 kg (1830 lbs). If you've been paying extra attention to the "weight" chapter of this document, you would have noticed it's the exact same weight as the aircraft itself (empty).

In other words: the ballast doubles your empty weight. Dumping it will really unlock all the incredible power and STOL capabilities of your monster. As Zeus would say: "RELEASE THE KRAKEN!"

You can drop/remount your ballast by using the handle in the cockpit or the Toggle Anti-Ice MSFS key bind.

Ballast handle only works if you have electricity in your plane. **The weight is dropped after the 4**th **beep** (works on the ground or mid-air). You can interrupt/cancel the weight release if you rearm the handle in time.

Otherwise, after the weight has been dropped, and if you are on solid ground, you will have to wait for the red LEDs to turn off before you can reattach the weight (9 more seconds).



Ballast auto-remount

A very simple description of this feature: an arresting gear in disguise 😌

After your weight has been dropped, you can arm the "auto remount". It will reattach your weight to your plane as soon as your two main gears are in contact with solid ground. This will help you slow down dramatically but can also create some strong shakes, so you'd better be ready for the bumpy landing!



Flaps retractor

This device doesn't require any electricity. It's purely mechanical.

When armed, it will automatically retract your aircraft's flaps as soon as you touch the ground (any part of the plane!) — note that the flaps are working on an hydraulic circuit, so their speed is linked to the engine's power.

This will have for effect to greatly reduce your lift and pushing with even more weight on the ground, slowing you even more efficiently.



On this picture, you have the flaps retracted (red lever up) and the automatic flaps retractor is already armed.

You could also do this manually, but with this automation and the previous one, you will be able to focus on the throttle/prop pitch and handling of your aircraft when you'll land on carriers or helipads.

G-Meter

If you have damages enabled in the sim, **try to stay within -1 and +4 Gs to avoid overstressing your fragile bird.** If you exceed this range, red lights and a sound alarm will alert you before the airframe tears apart.

Battery indicator

There are 3 positions, indicating, respectively: the battery voltage, the battery drain (in amperes) and the current delivered by the alternators (amperes).

If the engine is running high enough, and at least one alternator is powered on, the battery amps will just display: "on charge" and the battery voltage will increase until it reaches its max of 25.4 volts.



If you take too long to start the engine, or if the alternators are off, or even if the engine is not running fast enough, the battery will discharge, and systems will be shutting down one after the other. Each circuit has its own minimum required voltage.

This gauge has a "secret" feature. If you hold the gauge's button for more than 3 seconds, the 3 LEDs will light on and the display will tell you your version of the Scrapyard Monster. A single push on the button will put the gauge back to its regular cycle.

Anchor lever



On the « sea Monster » variant only, a lever raises or lowers the plane's anchor (anvil).

The anchor is only effective if it is lowered, the plane is on "the ground", engine is stopped, and the Sea Monster ground speed is below 5 kph.

Fries drawer

Never fly without your delicious golden fries! You can eat them anytime (there are 4 portions). And as soon as you are on the ground, feel free to restock a bunch of new fries.



Sun visor

It's a very efficient one, with a nice green tint, and you can open it/close it as much as you want.





Windshield deiger



Since version 2.0, the windshield is subject to icing. You can turn on the industrial heater, which directs its hot air into buses, blowing on the windshield from the outside to melt the ice.

Clunking noise

If you enabled it from your EFB options menu, you would occasionally hear some rumbling/clunking noises. To make them stop, you will need to grab the wrench (hanging over the right door frame) and hit the transmission shaft just further than your power controls.

If you fly the Rusty Baron livery, there is a sticker that tells you where to "kick" (actually, you have to hit it with the wrench). – see the picture above about the windshield deicer.

Most of the time it won't work on the first try, and you will probably have to hit it 5 or 6 times before the noise stops. My advice is to ask yourself: *What would Bob Ross do?*



Tie downs

They appear and disappear automatically with your parking brake position, ground speed, prop RPM and electrical status.

Propeller stroboscope

If you are sensitive to blinking light, the stroboscopic effect of the propeller turning between your eyes and the daylight/sun, might create some discomfort. Just click on the sunglasses hanging by the radio stack to toggle between the stroboscope (more realistic) or blurred effect (more comfortable).

Chocks

They appear and disappear automatically with your parking brake position, fuel valve position and ground speed.

Breakers

You have 26 breakers, and they all work accurately. They are all related to their dedicated and labelled circuit and every one of them is really supporting the intensity written on it. Because, even with fun and fictional planes, details matter!



Let's go camping

Since the version 2.1 of the Scrapyard Monster, you have the possibility to equip/remove a cargo pod under the tail (from the EFB / Setup page). For information, this attachments weights 140 kgs / 308 lbs. The weight is automatically calculated, there is no need to try to change it in the weight and balance menu.

When the aircraft is sitting stationary on solid ground with the parking brake set, you can walk down from your seat and click on the zip of the bag. This will deploy a tent, a camping seat and a guitar.

- Click on the log at the entrance of the tent to light up a fire (click again to remove the campfire).
- Click on the guitar to hear a nice music (almost 4 minutes long) by TRow. You can find the music on soundcloud and listen to it/download it for free: <u>https://soundcloud.com/megatrev/acoustic-guitar-arrangement</u>



As soon as you click the zip a second time or if you remove the parking brake, everything is folded back in the cargo pod and you're ready to take off.

Note: You can add/remove the cargo pod (and its weight) at any time from the EFB. This setting is persistent across sessions.

INSTRUMENTS

Gauges

Quick overview of all the Scrapyard Monster's gauges:

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Airspeed – in knots. Taxi in the blue arc and flaps/gears extended not above the white



Altimeter with a QNH calibration knob.



Turn coordinator with the standard turn rate markings.

GS

ETA

DIST



Vertical Speed indicator. Non-linear scale.



Propeller RPM indicator.



Horizontal Situation Indicator. With glideslope support and heading bug. Connected to NAV1.





Course Deviation Indicator. With glideslope support. Connected to NAV2.



Attitude Indicator, with horizon level calibration.



Manifold Pressure indicator (throttle).



Automatic Direction Finder.



Double gauge: Cylinder Head Temperature and Exhaust Gas Temperature.



Fuel Flow Indicator.



G-Meter. If you go in the dark orange, LEDs will turn on and an alarm will ring in the plane.



Fuel gauge with low fuel indicator light.



Battery & Alternators indicator. Already discussed.

Radio / Navigation

Radio and Navigation are custom coded. You will get a few indications in the LCD displays, like the type of radio you have in active or standby frequency for the COMs, or whether your NAV radio has an identifier, a DME, a glideslope and if you are currently receiving a signal. **Signal and glideslope are also visible directly with "physical" tags and needles on your HSI (for NAV1) and CDI (NAV2).**



Transponder

Transponder is also custom and works as expected. You can push the "ident" button to start an identifier call. It will get released automatically after 18 seconds. And the only original feature is that you can select the VFR standard squawk (7000) by tapping the screen. If you tap again, it will swap back to your last selected frequency.

ADF

Another custom instrument (at this point you probably understood that everything is custom, right?). But really, there is nothing much to say about this, except it was particularly painful to implement. But it is as simple as it can be and should work as you imagine. There is no standby frequency: you directly tune in your active frequency.

Audio Panel

The audio panel will let you choose on which COM you will enable your transmission (OFF/COM1/COM2) and then which navigation frequency/tool will emit beeps when the signal is received by your radios. It's all very straightforward, so let's move on.

OPERATIONS

Ground operations

Preferably attach ballast for all taxi operations.

Adjust your trim (down for a better turn/drift radius, and up for more controllable straights).

Always stay around the blue mark on the airspeed indicator (20 knots).

Normal ground handling (prop to minimum, throttle to not much more).

Turn with rudder pedals + toe brakes.

Hard to handle above 15 knots wind!

Hard to turn in the same direction than the wind > better do a drifting spin the other way!



Drifting spin: Start still. Just a touch of down trim, a heavy throttle input + full rudder pedal where you want to turn. Immediately cut the throttle, compensate roll with ailerons and turn radius with toe brakes + rudder pedals. It's easier that you might think 😂

Civilized take-off

No flaps.

Ballast attached.

Elevator trim to neutral.

Prop to minimum.

Increase throttle fast enough all the way to maximum.

Fine rudder inputs. No brakes... You'll probably end up drifting but it's okay, put slightly more power.

Trim gently up or pull the yoke at about 100 KIAS (60/70 if ballast wasn't attached).

"Kite" take-off

Flaps down.

Ballast dropped.

Elevator trim to neutral.

Toe brakes fully depressed.

Prop to max.

Throttle to max.

Release toe brakes... You're flying!

Cruise

With flaps extended: you can cruise between 50 and 100 knots easily.

With flaps retracted: you can cruise from 100 and up to 200 knots.

Best cruise configuration: about 100/110 knots, flaps up, prop to low and throttle to "just enough". You should get about 1600 RPMs and your fuel flow gauge should be in the blue arc. Your MFD should indicate very good fuel range and endurance estimations.

Of course, if you go flat out, you will reach 220 KIAS (probably 230/240 knots ground speed) but you will fly less far and for a very shorter amount of time.

HYING FRIES

Aerobatics

You can safely perform aerobatics maneuvers if you don't exceed -2 or +4 Gs.

Your maximum KIAS for aerobatics is 200 knots.

Civilized descent

Keep an eye on your speed and G-meter during descents. Stay within safe limits. But if you are in a rush, you can do a *"look at me, I'm a rock!"* descent...

"Look at me, I'm a rock!" descent

This will make you lose between 3000 and 7000 feet in a few seconds and without moving to much relatively to the ground (the less dense the air, the more altitude you will lose):

Prop to minimum.

Throttle to minimum.

Wings level and flying straight.

Speed at 100 KIAS.

Go inverted using only ailerons and wait... The plane will fall, in an upside/down loop, without excessive G Force and it will gain a lot of speed but have faith: it will not reach the critical high limit.

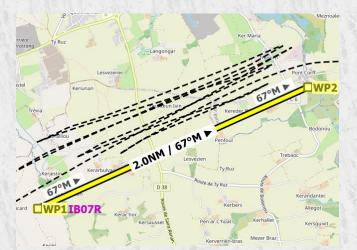
Only inputs from you: If required, use your ailerons to maintain the plane straight during the loop.

You will be descending between -10 000 feet/min and -22 000 feet/min on the steeper part of the loop.

After the plane recovers itself (it will!), you will have lost a few thousand feet doing a "C" figure in the sky.

Readjust your throttle and prop pitch according to your desire.

If you still need to lose altitude, repeat the operation, again and again, doing "S" figures upside down and staying roughly above the same point on the ground.



Descending from FL370 (37 000 feet) to 2000 feet on a 2NM segment.

Civilized landing

You don't need to slow down too early before the runway. This machine's flaps and this stupid fuselage also serve as speed brakes!

When your speed is in the white arc, lower your gears and flaps.

Approach at about 60 knots.

Adjust your angle with the throttle and your speed with pitch.

Adjust your alignment with the runway axis mostly with the rudder pedals.

Reduce speed to 45/50 knots above runway threshold.

Throttle to minimum.

Prop to minimum.

Keep back pressure on the yoke.

As soon as you touch down, use your rudders to stay in the center line and your ailerons to avoid "falling" on one side or another.

Use your brakes to slow down the plane.

Retract your flaps to lose even more lift and add more weight towards the ground, slowing you even more efficiently.

"Imma gonna land in this stadium" ... landing

First, drop your ballast.

After the "cooldown" (all the red lights of the ballast handle are off), arm the auto remount.

Arm your flaps auto retractor.

When your speed is in the white arc, lower your gears and flaps.

Approach at about 60 knots.

Adjust your angle with the throttle and your speed with pitch.

Adjust your alignment with the runway axis mostly with the rudder pedals.

Reduce speed to 45/50 knots above runway threshold.

Throttle to minimum.

Prop to minimum.

Keep back pressure on the yoke.

As soon as you touch down, you will hear loud "bangs" and "clangs" in your plane, and you will have to be quick on your rudder pedals.

You can even do a drift on purpose to help your wing tip slowing you down: These wing tips are not affected by ground collision, even with damage enabled. This monster is designed for rough landings ending with nasty drifts!

As long as you don't plant your nose in the ground, you should be fine.

LOCAL VARIABLES

All of the important custom aircraft systems use local variables (LVARS) to drive their status. If you are a user of spad, AxisAndOhs (AAO), FSUIPC, or any other 3rd party software able to address these variables, here is the list of what you might want to bind (if you don't have any of these tools, you can skip this chapter):

L: WEIGH	HT_AUTO_REARM
0	Disable Weight/Ballast auto remount.
1	Enable Weight/Ballast auto remount (you still have to wait 9s after dropping the weight, otherwise the variable will go back to "0").

L:FLAPS_	_RETRACTOR	
0-1	Disable automatic flaps retractor DISABLED/ENABLED.	1

L:Coin_	_Inserting	ĺ
1	Insert a coin in the starter machine > it will automatically go back to 0.	
1.		Callebra

FRITE	ES_Left	
0	No more fries in the drawer.	all a st
1-4	X portions of fries in the drawer.	A. S. De

L:Covers

0-1 Aircraft covers REMOVED/ATTACHED.

L:SCRAP	YOKE	HIDDEN

0-1 Yoke VISIBLE/HIDDEN.

:MFD_	Screen
0	Show oil/fuel pressure/temperature page on MFD.
1	Show power/torque page on MFD.
2	Show navigation/flight data and numbers on MFD.
3	Show range/endurance estimations on MFD.

L:Batt	Gauge_Mode
0	Displays battery voltage.
1	Displays amperes drain or battery charging.
2	Displays alternator status.
3	Display aircraft version.

L:Table	et_in_front	
0	Tablet/EFB is placed next to you.	
1	Tablet/EFB is placed in front of you.	

THE SCRAPYARD MONSTER - FLIGHT MANUAL

L:No_St	robo (PERSISTENT)
0	Propeller fast motion has a strong stroboscopic effect.
1	Propeller fast motion has (almost) no stroboscopic effect.

L:ANCH	OR		
0	Anchor raised (« Sea Monster » only).	Mary Mary 1	Car and
1	Anchor lowered (« Sea Monster » only).	STON S	

L:SMOKE_X_PRESENT (X, from 1 to 5: from left to right) (PERSISTENT)

0-1 Smoke X REMOVED/ATTACHED.

L:SMOKE_X_ACTIVE (X, from 1 to 5: from left to right) (PERSISTENT)

0-1 Smoke X DISABLED/ENABLED.

:SMOK	E_X_COLOR (X, from 1 to 5: from left to right) (PERSISTENT)
0	Color smoke X: white.
1	Color smoke X: blue.
2	Color smoke X: red.
3	Color smoke X: green.
4	Color smoke X: yellow.
5	Color smoke X: orange.

:EFB_F	Rom	
0	EFB shows Garmin Aera GPS.	
1	Scrapyard Monster's custom EFB.	

L:EFB_F	Page
0	EFB Setup: page "aerobatic smoke".
1	EFB Setup: page "options".
2	EFB Setup: page "fuel".
3	EFB Page: page "reference speeds".
4	EFB Page : page "comment and references link".

L: FRIES_Headphones

0-1 Noise reduction headset OFF/ON.

L:SCRAP	_Wrench					
0	Wrench hanging above right door frame.	1212	N. And	1.	(C. Ash)	
1	Wrench "in hand", ready for duty!		M. Day		Miller.	14

L:SCRAP_Vibrations (PERSISTENT)

0-1 Levers and needles vibrations OFF/ON.

L:SCRAP_Rumbling (PERSISTENT)

0-1	Random rumbling/clunking noise DISABLED/ENABLED.	
SCRAF	P_Grid_Protect (PERSISTENT)	
0-1	Protection grid under dashboard REMOVED/MOUNTED.	
SCRAF	P_Pine (PERSISTENT)	
0-1	"Smelling tree" REMOVED/ATTACHED.	
SCRAP	2_Cat (PERSISTENT)	
0-1	Figure of <i>Tootsi</i> (Lord Frites' cat) on the dashboard VISIBLE/HIDDEN.	
SCRAF	P_VFX (PERSISTENT)	
0-1	Custom VFX (smoke, heat blurs, etc.) VISIBLE/HIDDEN.	
SCRA	P_TempUnit (PERSISTENT)	
0	OAT in MFD indicated.in Celsius.	
1	OAT in MFD indicated in Fahrenheit.	
SCRA	P_Cargo_Pod_Attached (PERSISTENT)	
0	Normal configuration : no cargo pod.	
1	Cargo pod attached under tail with 140 kgs (308 lbs) of camping gear.	

: Camp_	Deployed
0	Camping tent stowed in cargo pod (if attached).
1	Camping tent deployed (if cargo pod attached – and more conditions).

0	Campfire removed.
1	Campfire set (if cargo pod attached and tent deployed).

L: Campf	ire_Song_Playing
0	No song playing.
1	Acoustic guitar music playing (if cargo pod attached and tent deployed).

CHECKLISTS

Checklists for various operations are available directly in the sim. They are interactive and you can click on any item to move your camera to the location and highlight the click spot.

Otherwise, you can get a general idea about how to operate this monster in every condition, in the previous chapter: Operations.

And beyond that... just use the Force!



FAQ

Is there a paint kit?

There is a Photoshop paint kit available on Flying Fries website, next to all the other resources for the plane: <u>https://flyingfries.com/resources-product/scrapyard-monster</u>.

This is so arcade! You're ruining the sim!

Come on... This is not even a question. No answer required.

I have great ideas to improve this plane further. Do you take requests?

Of course. We don't guarantee that we will implement your ideas, but we might do it. And if you want to make your own mod (to add new stuff or tune the flight model, or anything), feel free to also contact us so we can see how to make your life easier by preparing a little slot in our code for your work.

So it's a freeware for PC but a payware for Xbox?

The Scrapyard Monster has been and will always be a freeware for PC users. Currently, the only way to bring content to the Xbox simmers is with a payware version through the Microsoft Marketplace.

This perspective allowed us to spend time, energy, and money during a few months to completely rework this machine. From refining and completing the 3D models, optimizing the UV maps, completely redoing the texture work, improving all the animations and interactions, adding new systems, creating a complete sound pack, etc.

Why did you remove the GTN 750 support?

The EFB aspect ratio was not compatible with a good integration of the GTN 750. Instead of doing something *"meh"*, we decided to remove it and rely only on the Aera 500 for now.

Why did you remove French language pack and manual?

It's too much work to have to maintain two versions of every label, every text, everything. But if you have any questions, you can always ask them to Lord Frites directly (even in French if you want!)

STAY IN TOUCH

If you want to get informed with any new updates for this airplane or regarding any of our other/future projects at Flying Fries, the best way is to join our Discord server and search through the various channels.



Here are a few behind the scenes shots, from various projects, that you can only see on Flying Fries' Discord.



Join us on Discord: Follow us on YouTube: https://discord.gg/VNdrSgTWYZ https://www.youtube.com/@flyingfries1027

LEGAL NOTICE

This has not been written by a lawyer, we hope you will excuse the form and understand the substance:

Do not build it!

Under no circumstances, Flying Fries or its representatives suggest that this virtual aircraft is realistic and that someone should get inspired by this mix-up of garbage to create his/her own Scrapyard Monster in real life. It would not fly. It would be a terrible idea. Don't do it, don't harm yourself or anyone else!