

Simple Ground Equipment & Services



REVISED AUGUST 2025

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Simple Ground Equipment & Services (SGES)

Simple Ground Equipment & Services displays or hides static objects around your aircraft on the ground. You can popup a variety of ramp equipment (passengers bus, GPU, Air start unit, cones, belt loader, ULD loaders, airstairs, PRM truck, deicing, catering, cleaning van...), a simplified marshaller, a pushback truck or an aircraft arresting system (cable, barrier or EMAS).

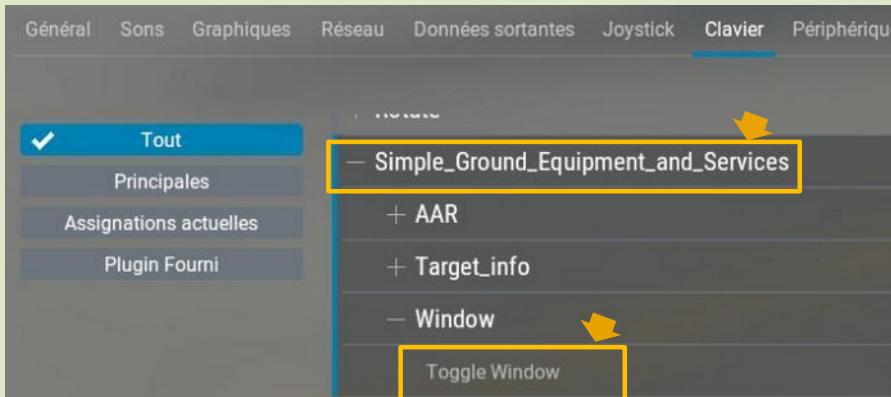
Any aircraft is serviceable. Moreover a customization of the ground handling is already embedded for a lot of existing X-Plane models.

Tested in X-Plane 12.2.2 (as of July 2025) and in X-Plane 11.55, SGES is in constant evolution and sees frequent updates.

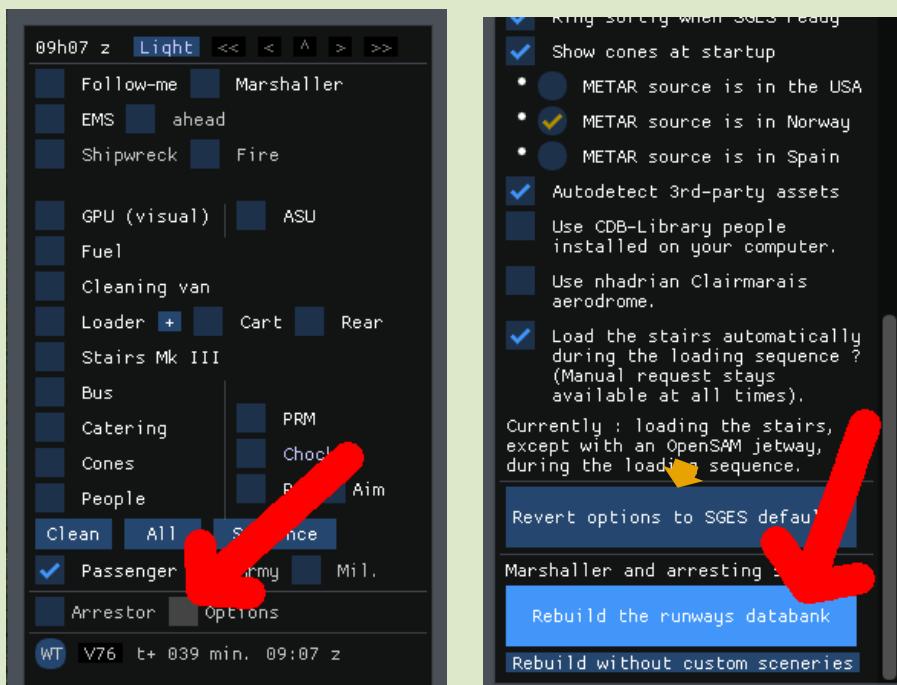
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Installation

- 1) Install [FlyWithLua NG](#) for X-Plane 11 or [FlyWithLua NG+](#) for X-Plane 12
- 2) Drop all files and folders into : [X-Plane \[11 or 12\]/Resources/plugins/FlyWithLua/Scripts](#)
- 3) Open the keyboard menu in X-Plane and attribute a key to toggle our menu



- 4) Build the marshaller and arresting system databank (stands and runways):
Open the SGES menu. → Select "Options" → Click on "*Rebuild the runways databank*"



Then please wait a few minutes while we scan all default and custom sceneries. Done.

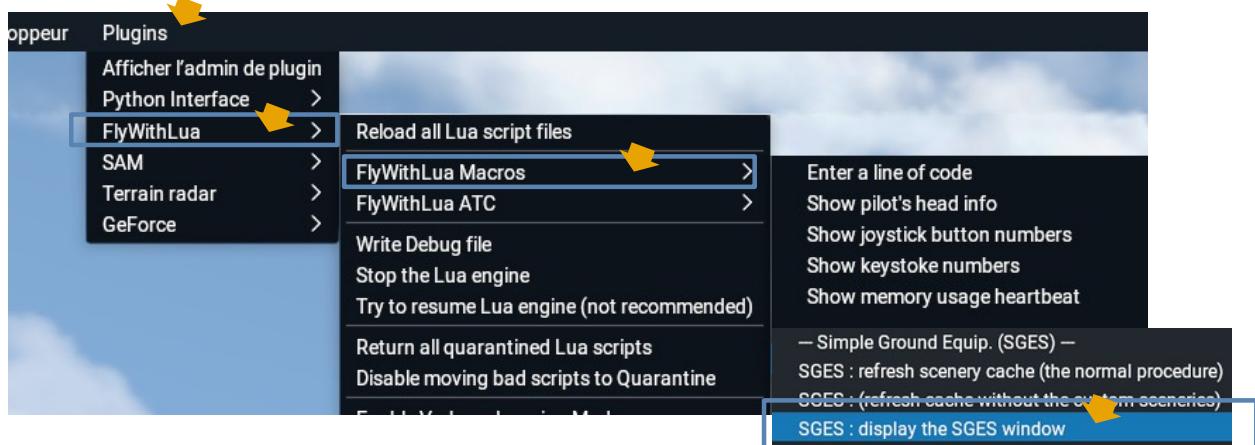


Operation

When you start X-Plane, your aircraft parked on ground has no ground services.

Press your keyboard key, set during the installation process, for instance « F », to open the ground services menu.

You can also popup our control panel from the FlyWithLua menu.



The ramp equipment

When the menu is open, tick the boxes as required.

- To avoid interfering with any systems, **those ground services are purely visual**.
- **Ground services** are displayed in the vicinity of the fuselage, but **not necessarily in contact to it**. The idea is to bring some life to the apron but to keep it simple.

Passenger set: when unticked, the passenger bus and the catering are replaced by an alternative set of vehicles suited to freighter operations next time you cycle them.

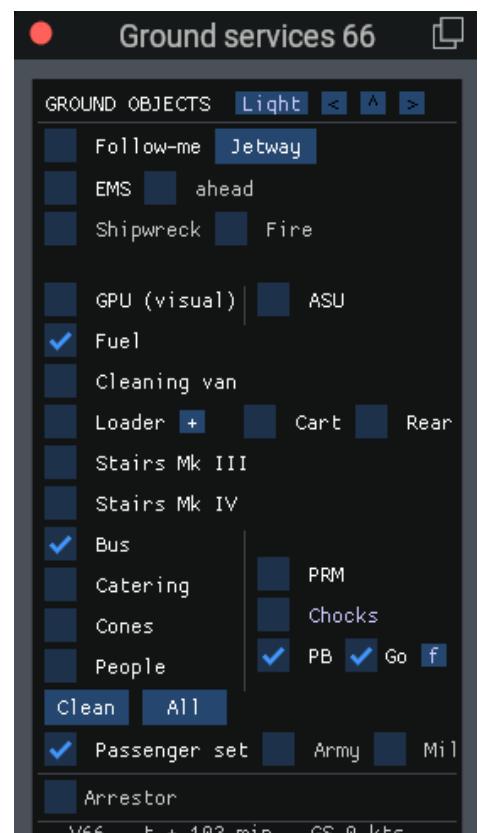
Chocks: active chocks that actually retain your aircraft (as demonstrated in the picture below), allowing you to release the parking brake as required.

Active deicing: This option only appears when the ambient temperature is less than 5°C. Your aircraft will be actually protected from X-Plane ice for 45 minutes after the last fluid application. You can change this value in the in-game options.



In the latest SGES versions, we use an animated version of MrX deicing truck with added deicing fluid effects.

Follow-me: you can **select the follow-me** in the menu only when your taxi speed is below 30 kts. The follow me car is not intelligent. It will turn when you steer your own aircraft nose wheel, so you're actually just pretending following him.



EMS (Emergency services): Those services will follow behind the plane. “**ahead**

Shipwreck: an emergency situation at sea is created far ahead of your current aircraft. Click several times to change the distance to the site.



Passenger / Army / Military set: alternative set of vehicles for passenger apron operations, cargo operations, military operations. “Army” does only appear when external assets are configured (see the manual).

Bush mode : alternative set of vehicles suited for field operations. This option appears in the menu only with small planes in X-Plane 12.

The arresting systems



Say you intend to land at Boise Intl, Idaho, runway 28R. When in the vicinity of the field, select “**Arrestor**” then “**28R**”.



This will put the arresting system at the end of the runway 28R.

You can then either select a “**Cable**” (the cable can only

catch aircraft with a tailhook down), **EMAS** (high-energy-absorbing materials) or a **net barrier** at the end of the runway. Both EMAS and the barrier capture any aircraft type, tailhook or not.

Fighting the wildfires

Tick the checkbox "Fire".



If the external temperature set in X-Plane is sufficient enough, a specific wildfire effect will be shown.

Starting with the version 76 of SGES, this wildfire can be extinguished.

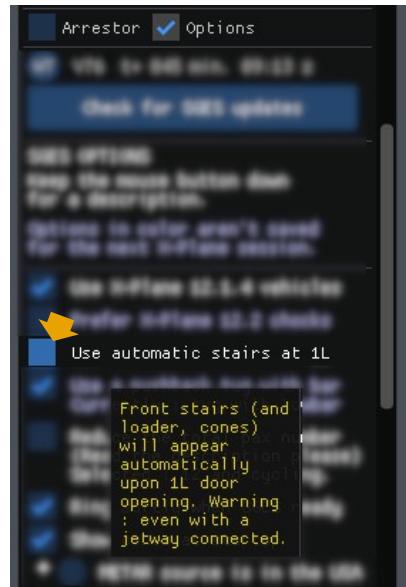
Overfly the wildfire and jetison the firefighting payload with accuracy to extinguish the fire.



Automatic stairs (option)

You can make the front stair automatically popup when the 1L door is open, and disappear when closed. This will work only with a quite limited selection of airplanes, when the 1L door dataref is manually referenced in our aircraft configuration file.

- In the options you can allow or disable the automatic front stairs with the tick box “Auto stairs”.

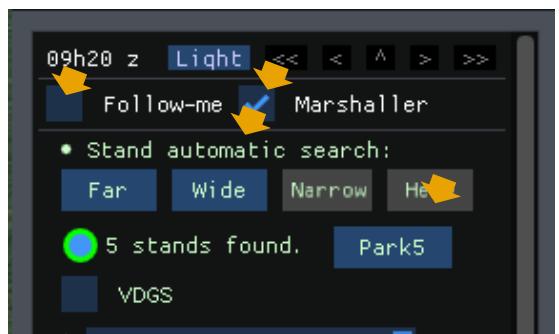


The marshaller

To get a marshaller, we need to target the intended parking position beforehand.

1. Request the **follow-me** or the **marshaller**
2. Capture your intended parking position

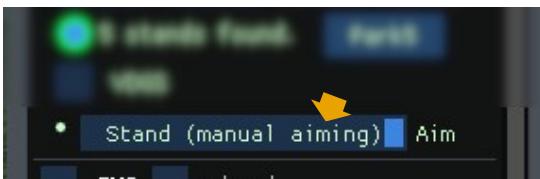
We do so either automatically from x-plane airport definitions (not always accurate) or manually, *i.e.* visually, from our flight deck through the windshield.



- in automatic mode, press “**Wide**” to look for the stands available around you. You can then browse through the detected stands to select one of them. Alternatively the button “**Narrow**” restricts the search for stands in a very much smaller area around your aircraft. Please always prefer a “wide” search than a “narrow” one.

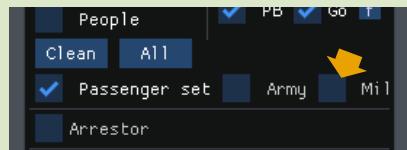
A misalignment between the underlying stand definition and the texture might happen with third parties sceneries. The visual capture may be more accurate then.

- in manual mode (visual capture), capture your stand position visually by selecting «**manual aiming**» in the menu. Click and slide the blue arrow until it is collocated with your parking position.
3. Continue rolling toward the final parking position.
 4. Taxi slowly and pay attention to the marshaller signals.



Using default military assets

Since SGES version 55, the user can display a default military set, *i.e.* ground vehicles repainted in a military style. Use the "Mil" option in the menu.



Using optional military assets

SGES supports more refined military vehicles from a third party. When the X-Trident Chinook is installed, the fuel truck are replaced by a HEMTT M978 vehicle. The catering and the bus are replaced by a HMMWV M998 (Hummer) vehicle.

Requirement

Those military vehicles are not provided in our archive (they are not our files). You must buy the [X-Trident Chinook](#) to get them. We will reference the files and reuse them, from where they already are on your hard disk. Nobody is allowed to copy the X-Trident intellectual property.

How to reference the Chinook?

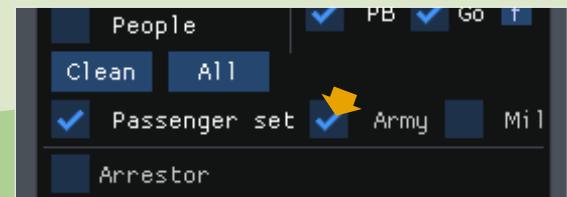
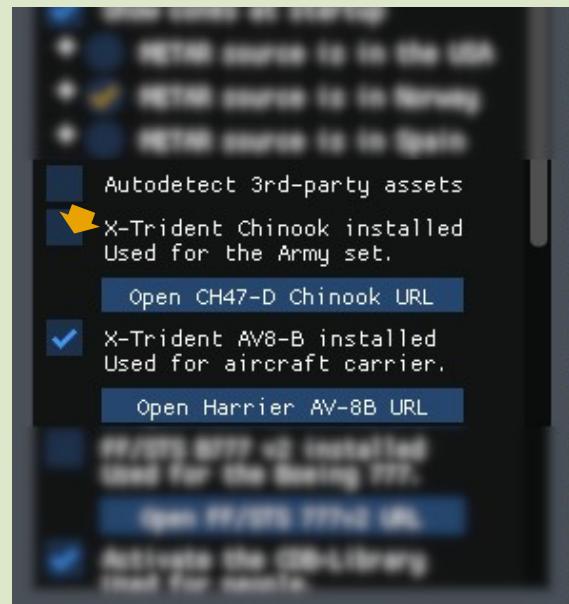
We try to detect if the Chinook is installed.

In the "options", you can either select to auto-detect all third party assets at each flight, or to auto-detect each asset on manual command.

In this later case, you can tell SGES that the payware CH47 is already installed by ticking the X-Trident Chinook checkbox. We will scan X-Plane folders to find it.

You can also click on the button "Open CH47 URL" to buy the product.

When the X-Trident Chinook is known, the "Army" checkbox becomes available.



Prevent AI respawn

X-Plane allows combat between teams. SGES can prevent downed aircraft to be regenerated in flight by X-Plane. In flight, you can use the drop down FlyWithLua menu to activate this function. Any aircraft reaching the earth will then be captured.

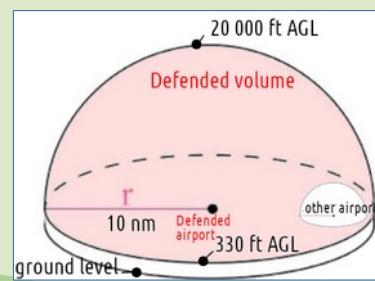
Please keep that option disabled when you don't need it. We'll avoid doing calculations.

At low airspeed, you can also use the in-game military menu :



Surface to Air threat

A threat composed of medium range heat-seeking missiles directed by an active search and tracking radar can be popped up on the scene. If you take no evasive action when you're fired upon, your aircraft will receive real damages. You need to escape the defended volume of air before the missile hits you or drop decoys.



In flight, use the drop down FlyWithLua menu to activate this function. *Plugins → FlyWithLua → FlyWithLua Macros → SGES : deploy an active SAM site*

At low airspeed, you can also use the in-game military menu: tick the checkbox "SAM".

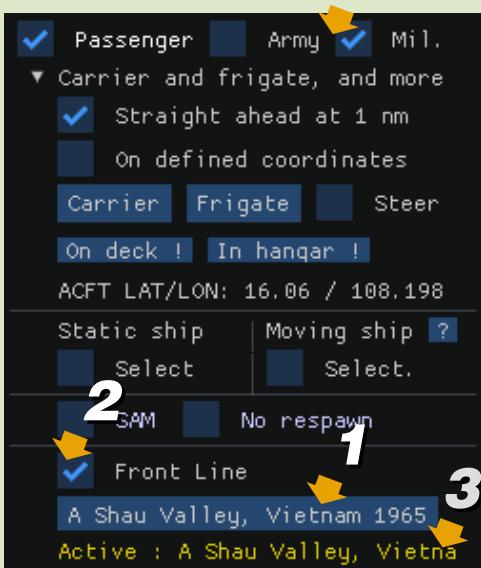
Starting with the version 76 of SGES, **this SAM site can be killed part by part by X-Plane bombs**, provided they are dropped with accuracy.



The Front Line expansion

The Front Line expansion allows to draw a front line. Several battles will be displayed in the X-Plane world. In the SGES menu you can select the military sub-menu.

- 1 – Select one of the battle areas** by clicking the “front line button” one or more times (legend 1)
- 2 – Check the box “Front Line”** (legend 2)
- 3 – The name of the active front line is displayed in yellow.** (legend 3)



- 4 - Remove the front line battles** by unticking the box “Front Line”.



By contrast with the SAM site which can be killed by X-Plane bombs or the wildfire which can be silenced by a pinpoint water drop, you cannot interact with the battles on the ground from your aircraft.

Editing vehicle objects

In a text editor you may change our vehicles for specific objects of your choice in a specific configuration file :

Simple_Ground_Equipment_and_Services_CONFIG_vehicles.lua.

Editing aircraft parameters

In general, **you shouldn't have to edit aircraft parameters**. The table next page shows that **we already ship a comprehensive compatibility with X-Plane models**. On top of that, SGES should be compatible with most airplanes even if they don't have a specific customization.

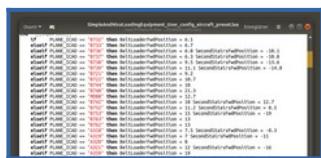
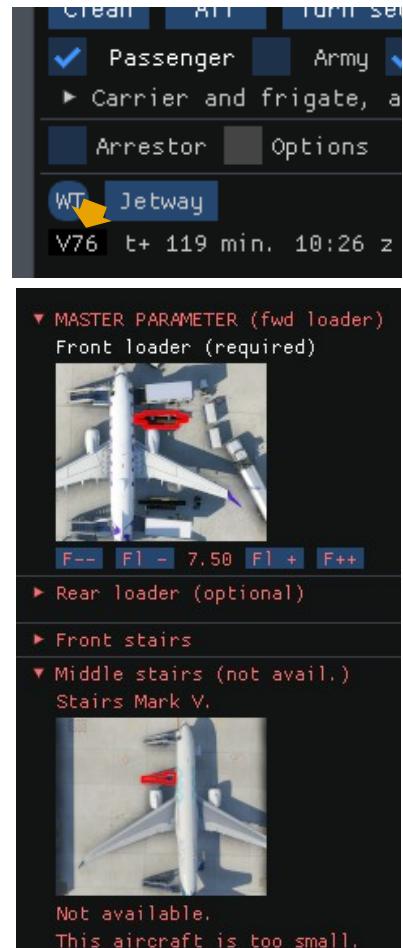
Should you want to edit some ground services locations, you have two options : create a user profile or edit the main configuration file that SGES uses when there is no user profile already saved.

The user profile method : user profiles allow to save your own changes to ground services locations. That's totally optional, **SGES works without user profiles** by default.

Users profiles will never be overwritten by SGES updates.

Open the developer menu by clicking on the version number displayed in the GUI. Set your desired parameters, then save the profile with the button "*Export to user profile*".

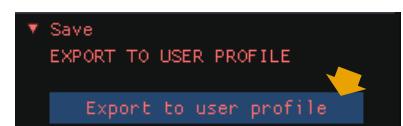
Expert method : expert users can edit directly the SGES aircraft config file (..._CONFIG_aircraft.lua), write the plane ICAO code and adjust at least the *BeltLoaderFwdPosition* parameter.



Simple_Ground_Equipment_and_Services_CONFIG_aircraft.lua

A main parameter (named *BeltLoaderFwdPosition*) is used to adjust the ground service to a particular plane type. As such, to visually adjust the ground equipment to a new aircraft type, enforce the forward belt loader to be in line with the actual forward cargo door.

Increasing the value pushes the truck forward, toward the nose of the aircraft. Adjust by trial and error.



In the same configuration file, advanced users may give the dataref which controls the doors of an airliner, so that calling the passenger bus can automatically open the left hand side aircraft doors. Most well-known X-Plane payware models are configured already for you.

List of customized aircraft (as of version 76.3)

The following types come with a preset embedded in SGES. On top of that, SGES should be compatible with most airplanes even if they don't have a specific customization, in particular light aviation aircraft.

	ICAO code
Airliners	Boeing 737 : B732, B733, B736, B738, B739
	B703
	B721
	B722
	Boeing 747 : B742, E-4B, B744, B748
	Boeing 757 : B752, B753
	Boeing 767 : B762, B763, B764
	Boeing 777 : B772ER, B773, B777X
	Boeing 787 : B788, B789
	MD82
	MD88
	MD11
	A306F
	A3ST Beluga
	A310
	A318
	A319 – option : ULD loader instead of conveyor belt
	A320, A20N, A320 Freighter – option : ULD loader instead of conveyor belt
	A321, A21N, A321 Freighter – option : ULD loader instead of conveyor belt
	A332
	A333
	A339
	A345
	A346
	A220-100
	IL-96
	E170/175
	E190/195
	BAe 146
	A359
	Concorde
	Saab 340
	Q400 (DASH8 D)
	Q300, Q200 (DASH8 A/C)
	CRJ700
	CRJ900
	Metroliner
	ATR-42, ATR-72
	AN-12
	AN-26
	Dornier 228-101, -212
	Dornier 328-110
	L188
	L410
BizJet	CL30, CL60, C750, Epic Victory, GLF650ER
Military	C17, C130, VULC, AV8B, Tornado, T-2, F4, F5, F16, F15, F14, F18, F22, F35, HAWK, F19, F104, SR-71, M346, F1 CAMEL, Fokker DR1, Nieuport XVII, Spad XIII
General Aviation	P28A
	P28R
	PA38
	BN2
	BE33 (F33A)
	B350
	BE9L
	BE76
	C206
	C172
	C152
	C140
	DR40
	EV55
	RV10
	SR22
	SF50
	PA18
	Lancair evolution
	L5
	PC12
	Twin Otter
	C525 CitationJet
	Embraer Lineage E19L
	DC3 / C47
Helicopters	S76, Bell 412, EC35/45, SA34 Gazelle, CH47, R22, H125, LAMA, Bö105, OH-58D, S61 Sea King, AW109SP, CH53E, AS365 Dauphin, W3A, MI24

Credits

See the credits in the dedicated expanded documentation.

