F/A-18 SUPER HORNET

ARMA 3 VERSION 1.9

BY JOHN_SPARTAN AND SAUL

INTRODUCTION

The Boeing F/A-18E/F Super Hornet is a twin-engine carrier-based multirole fighter aircraft variant based on the McDonnell Douglas F/A-18 Hornet. The F/A-18E single-seat and F/A-18F tandem-seat variants are larger and more advanced derivatives of the F/A-18C and D Hornet. The Super Hornet has an internal 20 mm gun and can carry air-to-air missiles and air-to-surface weapons. Additional fuel can be carried in up to five external fuel tanks and the aircraft can be configured as an airborne tanker by adding an external air refuelling system.

General characteristics
Crew: F/A-18E: 1, F/A-18F: 2
Length: 60 ft 1¼ in (18.31 m)
Wingspan: 44 ft 8½ in (13.62 m)
Height: 16 ft (4.88 m)
Wing area: 500 ft² (46.5 m²)
Empty weight: 32,081 lb (14,552 kg)
Loaded weight: 47,000 lb (21,320 kg) (in fighter configuration)
Max. takeoff weight: 66,000 lb (29,937 kg)
Power plant: 2 × General Electric F414-GE-400 turbofans Dry thrust: 13,000 lbf (62.3 kN) each
Thrust with afterburner: 22,000 lbf (97.9 kN) each

Internal fuel capacity: F/A-18E: 14,400 lb (6,780 kg), F/A-18F: 13,550 lb (6,354 kg)
External fuel capacity: 5 × 480 gal tanks, totalling 16,380 lb (7,381 kg)

Performance
Maximum speed: Mach 1.8+[13] (1,370 mph, 1,915 km/h) at 40,000 ft (12,190 m)
Range: 1,275 nmi (2,346 km) clean plus two AIM-9s[13]
Combat radius: 390 nmi (449 mi, 722 km) for interdiction mission[118]
Ferry range: 1,800 nmi (2,070 mi, 3,330 km)
Service ceiling: 50,000+ ft (15,000+ m)
Rate of climb: 44,882 ft/min[119] (228 m/s)
Wing loading: 94.0 lb/ft² (459 kg/m²)
Thrust/weight: 0.93
Design load factor: 7.6 g[45]

PROLOGUE

For quite a while I have been working on F/A-18 add-on so it can be used in ARMA game engines. When I started to work on Franze's F/A-18 my main goal was to make look like the vanilla in game aircraft, so they share the same ammo, look similarly textured when put next to each other and use/share same functions that ArmA offers. During last year I have found a friend and a talented 3D artist assisting me on this project - Saul, also Franze mentoring me thru the development process helped to shape this add-on to a stage where we are now with fully working ArmA 2 and ArmA 3 versions. This is the point where Saul is taking over project lead on ArmA 3 version, and I'll focus on development of these bad boys to a next stage.

John Spartan

Only in the past few months have I worked with John on the F-18 and I have to say every minute of my free time was worth it. It's been rough rebuilding the aircraft from the ground up but our goal is to create the best aircraft available for the community. John is a talented scripter and modder and I look forward to working with him in the future.
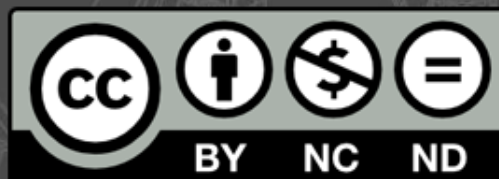
Saul
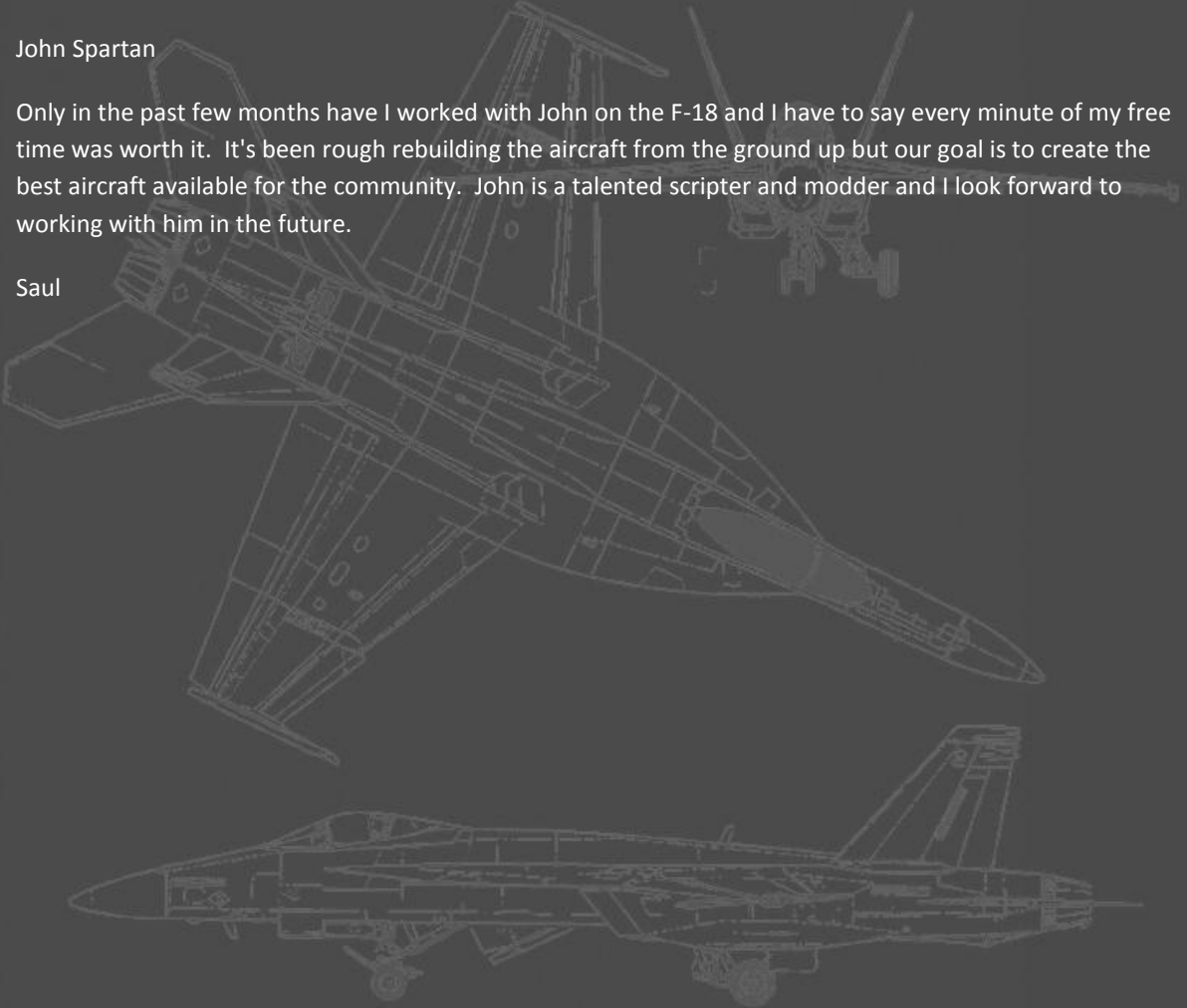
END USER LICENCE AGREEMENT

DISCLAIMER

You are permitted to install and use this software for personal entertainment purposes only. This add-on is meant for ARMA 3 game platform by Bohemia Interactive only. Any commercial or military use is strictly forbidden without permission from the author.

This add-on is the property of Saul, Franze and John_Spartan with loads of hard work invested in it, please respect that.

The authors take no responsibility for any damages this program may cause, use at your own risk.

THE ADDON AND FEATURES

VERSIONS

This add-on represents real life F/A-18 E/F Super Hornet operators in various paint schemes/versions.

United States Navy
- ARMA NAVY GREY [F/A 18E and F/A 18F]
- USN Pacific Fleet
  VFA-14 "Tophatters" [F/A 18E]
  VFA-41 "Black Aces" [F/A 18F]
  VFA-27 "Royal Maces" [F/A 18E]
  VFA-154 "Black Knights" [F/A 18F]
- USN Atlantic Fleet
  VFA-31 "Tomcatters" [F/A 18E]
  VFA-103 "Jolly Rogers" [F/A 18F]

USMC
- ARMA USMC GREY [F/A 18E and F/A 18F]
- VMFA-225 "Vikings" [F/A-18F]
- VMFA-232 "Red Devils" [F/A-18E]
- VFA-314 "Black Knights" [F/A-18E]

Royal Australian Air Force
- ARMA RAAF GREY [F/A 18F]

FEATURES
- New model for E/F
- HD textures
- Full realistic set of weapons models
- Afterburner
- Foldable wings
- Canopy animation
- Flares and radar warning system
- Fuselage vapour effects
- Engine exhaust effect
- Working mirrors in pilot/ WSO views in both E/F
- Master arms "SAFETY" feature
- Fuel drop sequence and auxiliary fuel support
- Aerial refueling from F/A-18 F with "buddy pod"
- Ejection sequence simulation
- Collision Lights and Formation Lights
- Night Vision HUD for night flying and taxi
- ATFLIR pod laser designator for WSO
- Built in Service Menu for ordinance and aircraft paint scheme customization
- 19 Unit textures featuring CAG and LOW patterns from various USN, USMC, and RAAF units.

[F/A-18 E from VFA-14 "Tophatters" over Altis]

INSTALLATION AND SETUP

It is always recommend use mod folders to separate the custom content from the official game content to prevent problems. Place js_jc_fa18.pbo, js_jc_fa18_squads.pbo and relevant signature files in your mod/add-ons folder.

C:\Program Files (x86)\Steam\SteamApps\common\ArmA 3\@FA18\addons\js_jc_fa18.pbo
and in case you wish to use all custom skin library add
C:\Program Files (x86)\Steam\SteamApps\common \ArmA 3\@FA18\addons\ js_jc_fa18_squads.pbo

Add-on can be found under:
- NATO/ AIR/ - F/A-18 E and F/A-18 F

Setting up shortcut keys/joystick is curtail if you wish to be a successful pilot in ArmA 3. There are two new custom key shortcuts added with this add-on I would like to mention.
- Afterburner shortcut is "seagullfastforward" key
- Tail hook Up/Down shortcut is "seagullback" key

CONTROLS		Saul
KEYBOARD	MOUSE	CONTROLLER

SHOW: Development ∨

ACTION	ASSIGNED KEYS
Randomize	"R"
Brush Outer	"N"
Undo	"Left Ctrl+Z"
Redo	"Left Ctrl+R"
Create Object	"V"
Duplicate Selection	"C"
Remove Selection	"D"
Rotate X	"X"
Rotate Y	"Z"
Scale	"E"
Elevate	"W"
Seagull up	"Q", "Mouse down"
Seagull down	"Z", "Mouse up"
Seagull forward	"W", "UP"
Seagull back	"S", "DOWN"
Seagull fast forward	"E"

CANCEL   PRESETS   OK

WEAPONS AND LOADOUTS

F/A-18 Super Hornet can carry various weapons and equipment to suit mission role. In this add-on we have built in a set of custom weapon models to represent real life weapons carried by the F/A-18. All listed weapons are available to be used with built in User Interface for easy aircraft arming.

The AIM-9X Sidewinder is a short-range air-to-air missile. Missile is dependable on built in infra red homing system.

The AIM-120 Advanced Medium-Range Air-to-Air Missile, or AMRAAM, is a modern beyond-visual-range air-to-air missile. Designed as a fire-and-forget missile with active guidance.

The AGM-65 Maverick is an air-to-ground tactical missile designed for close air support. It is effective against a wide range of tactical targets, including armour, air defences, ships, ground transportation and fuel storage facilities.

The AGM-84 Harpoon is an all-weather, over-the-horizon, anti-ship missile system. The Harpoon uses active radar homing, and a low-level, sea-skimming cruise trajectory to improve survivability and lethality.

The GBU-12 PAVEWAY II laser-guided bomb is an American aerial bomb, based on the Mk 82 500-pound general-purpose bomb, but with the addition of a nose-mounted laser seeker and fins for guidance.

The Joint Direct Attack Munitions (JDAM) is a guidance kit that converts unguided bombs. JDAM-equipped bombs are guided by an integrated inertial guidance system coupled to a Global Positioning System (GPS) receiver.

The external fuel tanks can be equipped to increase operational range of aircraft. F/A18 Super Hornet can carry up to 5 external fuel tanks [480 gallon each].

The AN/ASQ-228 Advanced Targeting Forward-Looking Infrared (ATFLIR) is a multi-sensor, electro-optical targeting pod incorporating infrared, low-light television camera, laser rangefinder/target designator, and laser spot tracker.

USER INTERFACE

Within this add-on we have built in a flexible User interface to control various setting of this aircraft with an easy approach for users who like to have full freedom/customization over aircraft. So how does it works?

Once F/A-18 is parked near any in game soft/hardened hangar or NATO HEMTT Ammo support vehicle and the aircraft is at a complete stop the user action "Service Menu" becomes available. This menu opens the User interface with four choices:

- Loadouts customization and aircraft service menu
- Paint schemes customization menu
- General settings menu [will be updated with next releases]
- Pilots manual in game with some in-game tips

All aircraft in editor once placed will appear with default multirole loadouts and in generic ARMA grey paint schemes. Thru this menu you have full control over this aircrafts loadouts and visual looks with just and easy few clicks.

F/A-18 SUPER HORNET

MAIN MENU   CREDITS/EULA   CLOSE

ARMING MENU
use this menu to change aircrafts loadouts and service aircraft.

PAINTSCHEME LIBRARY
this menu allows customize visual appearance of this aircraft with many different built in paint schemes.

OPTIONS MENU
various settings and customizable options can be adjusted thru this menu to make sure this aircraft suits mission needs.

PILOTS MANUAL
all the information about this aircraft you need to become a successful pilot in ArmA.

EDITOR

In ArmA 3 game editor this aircraft can be set up to suit various mission designer needs. Aircraft is built with full customization of all main features in mind. So in game editor mission designer can use our seyup modules to easily create neded setup. You will find the modeules under MODULES/OBJECT MODIFIERS/FA18 E/F INIT/SETUP [by default press F7 to place a module]. Via the module you can:
- set wings folded/unfolded
- set a custom loadout
- set a paint scheme
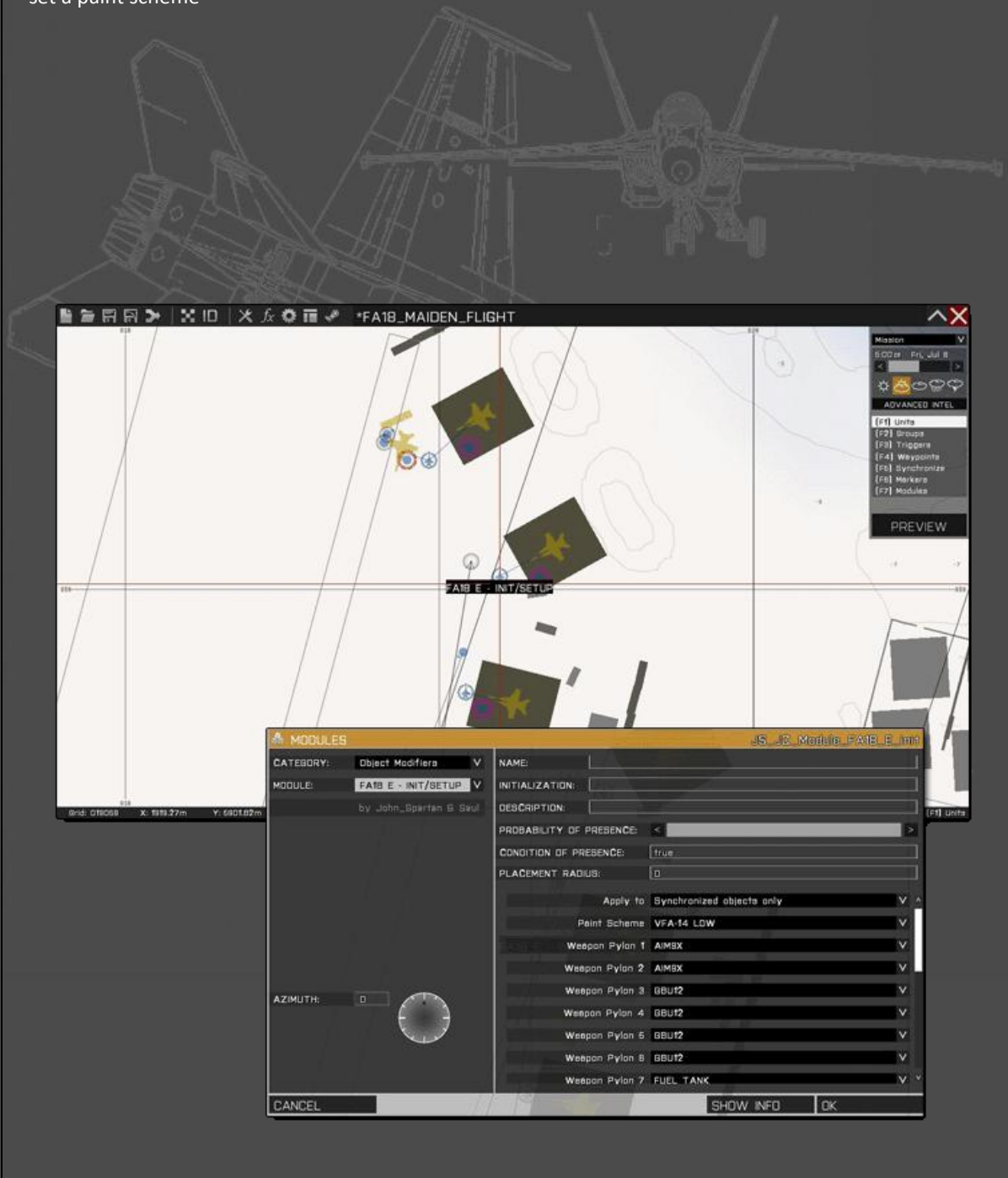
EDITOR   ...continued

This is a list of weapon and magazine clasnames added with this add-on:

Weapon	Classname	Magazines
M61 Vulcan 20mm cannon	js_w_fa18_m61	js_m_fa18_m61
AIM9X Sidewinder AA missile	js_w_fa18_aim9xLaucher	js_m_fa18_aim9x_x1
AIM120 Amram AA missile	js_w_fa18_aim120cLaucher	js_m_fa18_aim120c_x1,
AGM-65 Maverick AG missile	js_w_fa18_MaverickLauncher	js_m_fa18_Maverick_x1
AGM-84 Harpoon AS missile	js_w_fa18_HarpoonLauncher	js_m_fa18_Harpoon_x1
GBU12 guided bomb	js_w_fa18_GBU12LGBLaucher	js_m_fa18_GBU12_x1
GBU31 2000 lb JDAM	js_w_fa18_GBU31BombLauncher	js_m_fa18_GBU31_JDAM_x1
GBU32 1000 lb JDAM	js_w_fa18_GBU32BombLauncher	js_m_fa18_GBU32_JDAM_x1
GBU38 500 lb JDAM	js_w_fa18_GBU38BombLauncher	js_m_fa18_GBU38_JDAM_x1
Fuel tanks	js_w_fa18_fueltank_holder	js_m_fa18_wing_tank_x1
Dual bomb rack	No weapon needed	js_m_fa18_bombrack_x1
Fake empty magazine	No weapon needed	js_m_fa18_empty
Buddy pod	No weapon needed	js_m_fa18_buddypod_x1
ALTFLIR targeting pod	No weapon needed	js_m_fa18_altflir_pod_x1
Master Arms - SAFE	js_w_master_arms_safe	No magazine needed

CREDITS

ARMA 3 game engine: **Bohemia Interactive**
Project lead: **Saul**
Author of original addon and concept: **Franze**
Model: **Saul** and **John_Spartan**
HD textures: **Saul**
Afterburner script originally by: **Lethal** and **Gnat**
GUI dialog by: **John_Spartan**
Config and scripts by: **John_Spartan**
Sounds by: **LordJarhead** [JSRS studio]
Advisers: **Franze, Gnat, Vengeance1, Iceman77, Rock**

Special thanks' goes to MSgt. **Don Welch (Retired, alias AV8R)** and **TF BLACKJACK** for help with MP/COOP testing, their advice on creating more realistic flight model and SP/ MP testing.

And of course all the community members for being so kind and posting valuable information/tutorials and solutions about how to mod this game.