DO NOT USE FOR FLIGHT

ABOUT THIS MANUAL

VERSION: 08 JUNE, 2006.

WARNING: THIS MANUAL IS DESIGNED FOR MICROSOFT® FS2004 USE ONLY. DO NOT USE FOR FLIGHT.

THIS 'AC-130 MODEL' MANUAL COVERS ONLY THE <u>AC-130 MODEL EXPANSION PACKAGE</u> SPECIFIC DIFFERENCES.

For general information on the 'Legendary C-130' Pro Base Package please refer to the 'Legendary C-130' FLIGHT MANUAL:

Click START > Programs > Captain Sim >Legendary C-130 > Flight Manual >

Free copy of the 'Legendary C-130' Pro Base Package FLIGHT MANUAL Part I – Aircraft is available at:
http://www.captainsim.com/products/c130/manual.html

Adobe Acrobat® Reader Required

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'AC-130 MODEL' MANUAL

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AC-130 GUNSHIP

The AC-130 gunship's primary missions are close air support, air interdiction and force protection. Missions in close air support are troops in contact, convoy escort and urban operations. Air interdiction missions are conducted against preplanned targets or targets of opportunity. Force protection missions include air base defense and facilities defense.

These heavily armed aircraft incorporate side-firing weapons integrated with sophisticated sensor, navigation and fire control systems to provide surgical firepower or area saturation during extended loiter periods, at night and in adverse weather. The sensor suite consists of a television sensor, infrared sensor and radar. These sensors allow the gunship to visually or electronically identify friendly ground forces and targets any place, any time.

The AC-130E/H's call sign is "Spectre." The AC-130U's call sign is "Spooky. " The U-model is the third generation of C-130 gunships. All gunships evolved from the first operational gunship, the AC-47.

COMBAT HISTORY
- Vietnam war
- Operation 'Urgent Fury' in Grenada in 1983
- Operation 'Just Cause' in Panama in 1989
- Operation 'Desert Storm'
- Operations 'Continue Hope' and 'United Shield' in Somalia
- NATO ops in Bosnia-Herzegovina.
- Albania 1997
- Iraq 1998
- Operation 'Enduring Freedom'

General Characteristics:

Primary Function: Close air support, air interdiction and force protection
Builder: Lockheed/Boeing Corp.
Power Plant: Four Allison T56-A-15 turboprop engines
Thrust: 4,910 shaft horsepower each engine
Length: 97 feet, 9 inches (29.8 meters)
Height: 38 feet, 6 inches (11.7 meters)
Wingspan: 132 feet, 7 inches (40.4 meters)
Speed: 300 mph (Mach .4) (at sea level)
Range: Approximately 1,300 nautical miles; unlimited with air refueling.
Ceiling: 25,000 feet (7,576 meters
**Maximum Takeoff Weight:** 155,000 pounds (69,750 kilograms)
Armament: AC-130H/U: 40mm cannon and 105mm cannon; **AC-130U:** 25mm gun
Crew: AC-130U - Five officers (pilot, co-pilot, navigator, fire control officer, electronic warfare officer) and eight enlisted (flight engineer, TV operator, infrared detection set operator, loadmaster, four aerial gunners)
**Deployment Date: AC-130H**, 1972; **AC-130U**, 1995
Unit Cost: AC-130E/H, $132.4 million; **AC-130U**, $190 million (fiscal 2001 constant dollars)
**Inventory:** Active duty: **AC-130H**, 8; **AC-130U**, 13; Reserve, 0; ANG, 0

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GENERAL ARRANGEMENT
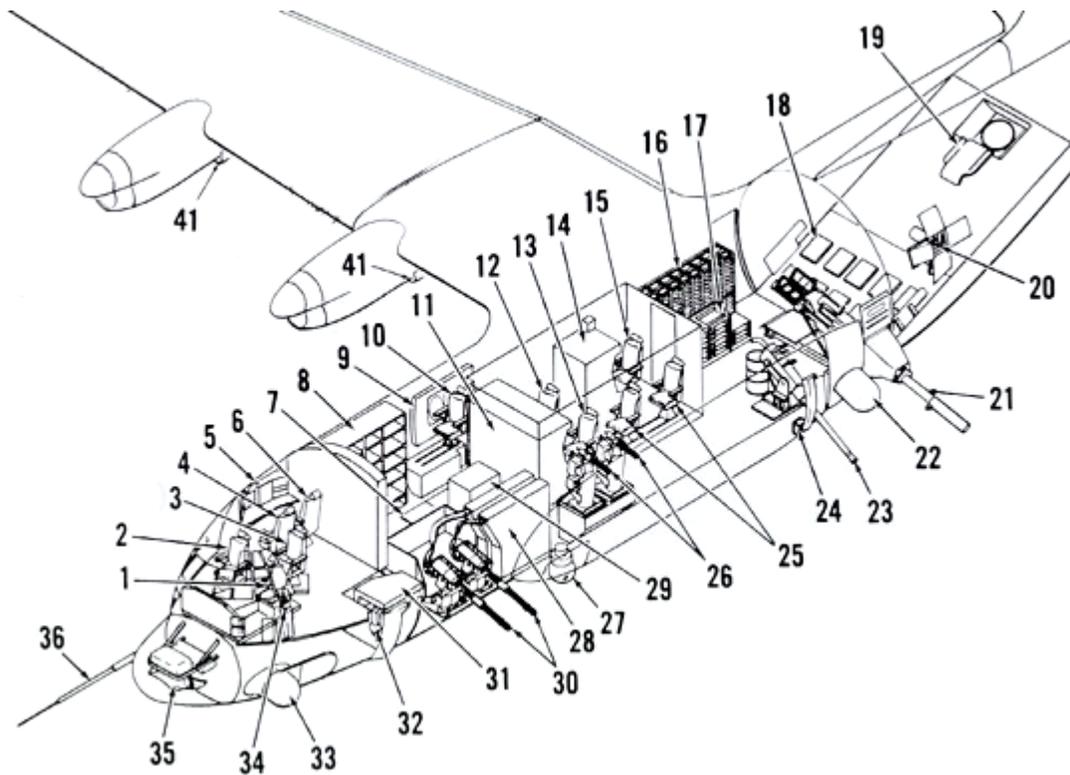
1. Pilot's Seat	22. Beacon Tracking Radar
2. Copilot's Seat	23. 40 MM Automatic Gun
3. Flight Engineer	24. ALE-20 Dispenser (2 Places)
4. Navigator's Seat	25. Crew Rest Seats
5. Navigator and FCO Console	26. 7.62 Miniguns
6. Fire Control Officer's Seat	27. Infrared Reconnaissance Set
7. Crash Seats	28. 20 MM ammo Rack
8. Cargo Comp. Electronics Equipment Rack	29. 105 MM Ammo Rack (Fwd)
9. Scanner/Observer Window (Egress)	30. 20 MM Guns
10. Scanner/Observer's Seat	31. Flight Deck Extension
11. IR and EWO Console	32. Multi-Sensor Platform (TV/Laser Platform)
12. EWO's Seat	33. Black Crow Randome
13. IR Operator's Seat	34. Pilot's Gunsight
14. TV Console	35. APN-598 Radar
15. TV Operator's Seat	36. Pitot Static Boom
16. 40 MM ammo Rack	37. ECM Pods
17. 105 MM Ammo Rack (Aft)	38. SUU-42A/A Dispenser
18. Crash Seats	39. Flare Launcher LAU-74A
19. Illumination Operator Bench	40. 40KVA Illuminator Light Set
20. 2kw Illuminator	41. Infrared Shield
21. 105 MM Gun	

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MULTI-SENSOR PLATFORM (TV/LASER PLATFORM)
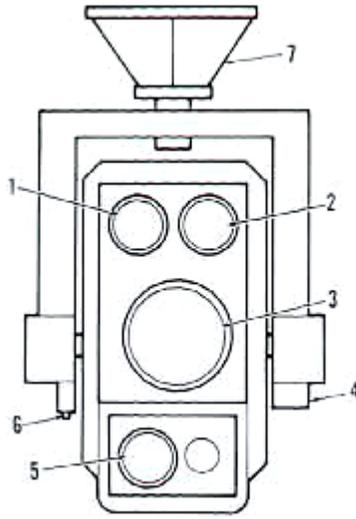
1. Wide Angle TV Lens
2. Laser Illuminator
3. Narrow Angle TV Lens
4. Elevation Dog Release
5. LTD/R
6. LN$_2$ Vent Port
7. Azimuth Dog Release

INFRARED DETECTING SET
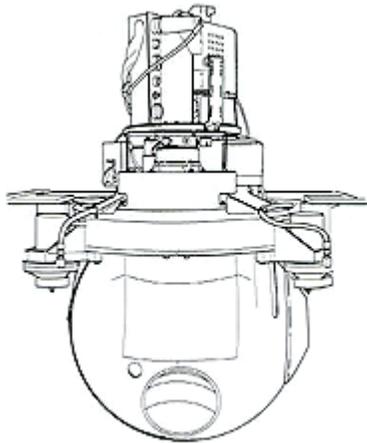
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20 MM GUNS (M61)
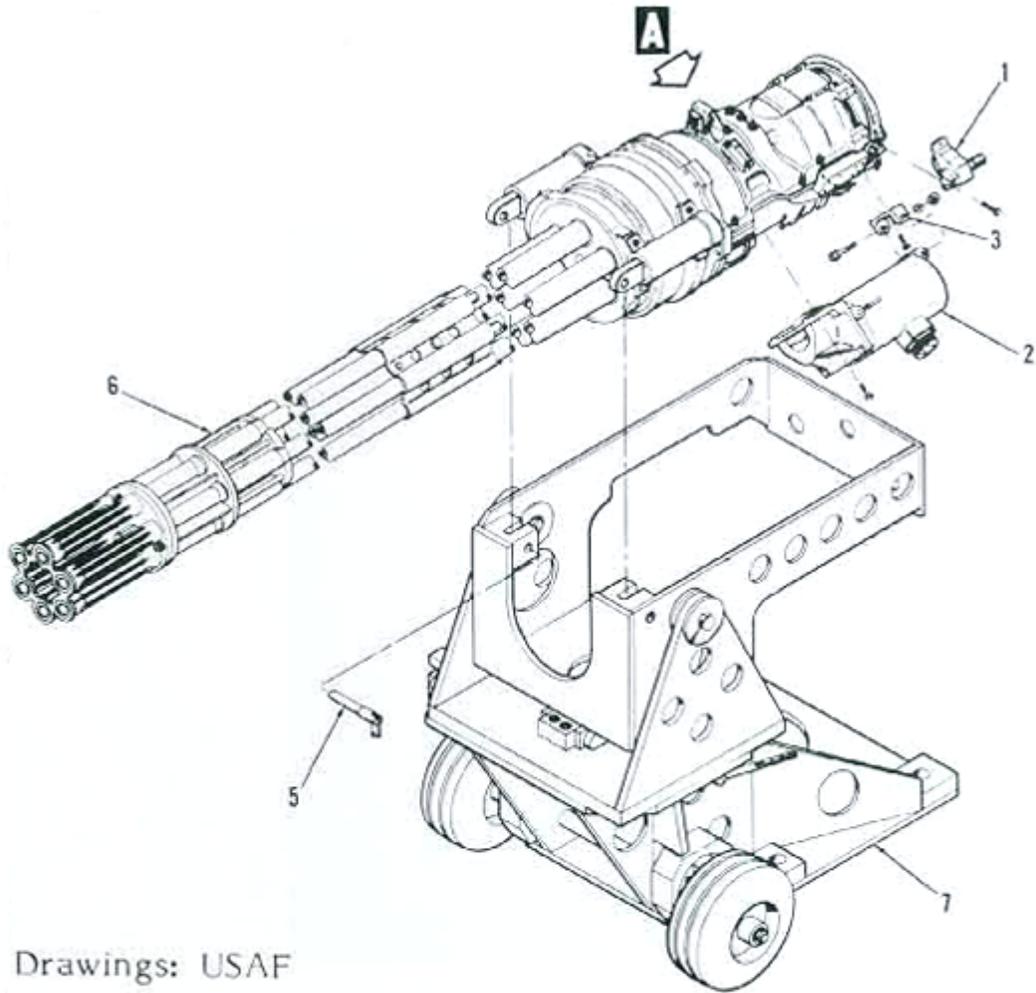
Drawings: USAF
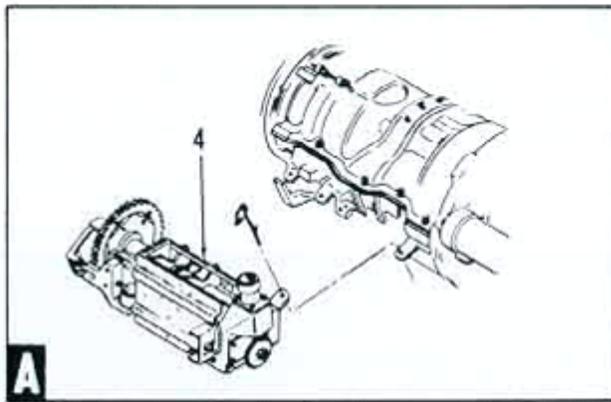
1. Actuator Booster Assembly
2. Gun Drive Assembly
3. Drive Motor Bracket
4. M2A1 Feeder Assembly
5. Quick Release Pin
6. 20 MM automatic Gun, M61
7. Gun Stand Assembly

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2KW SEARCHLIGHT SYSTEM (AN/AVQ-17)
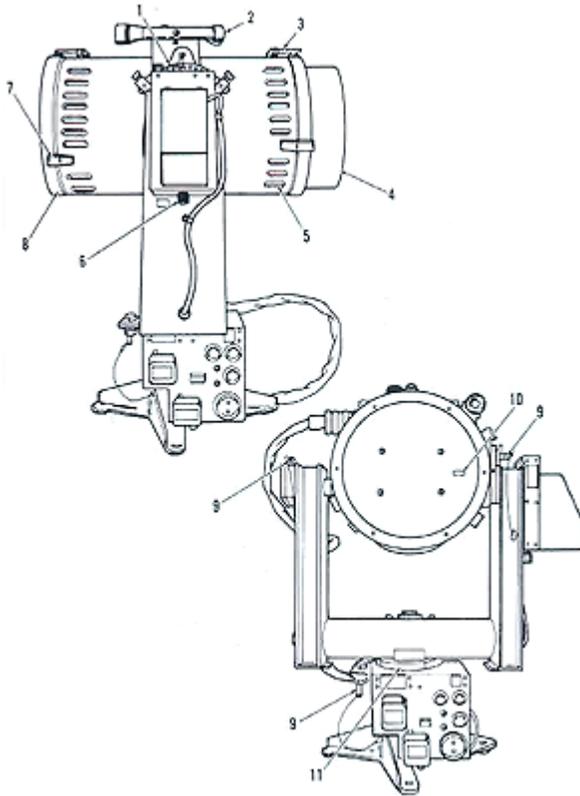
1. Elevation Index Plate
2. Telescope
3. Latch
4. IR Filter Assembly
5. Air Exhaust Duct
6. Gimbal Lock
7. Air Intake Duct
8. Visual Cover Assembly
9. Caging Lock Pin
10. Elapsed Time Indicator
11. Azimuth Index Plate

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105 MM CANNON (M102)
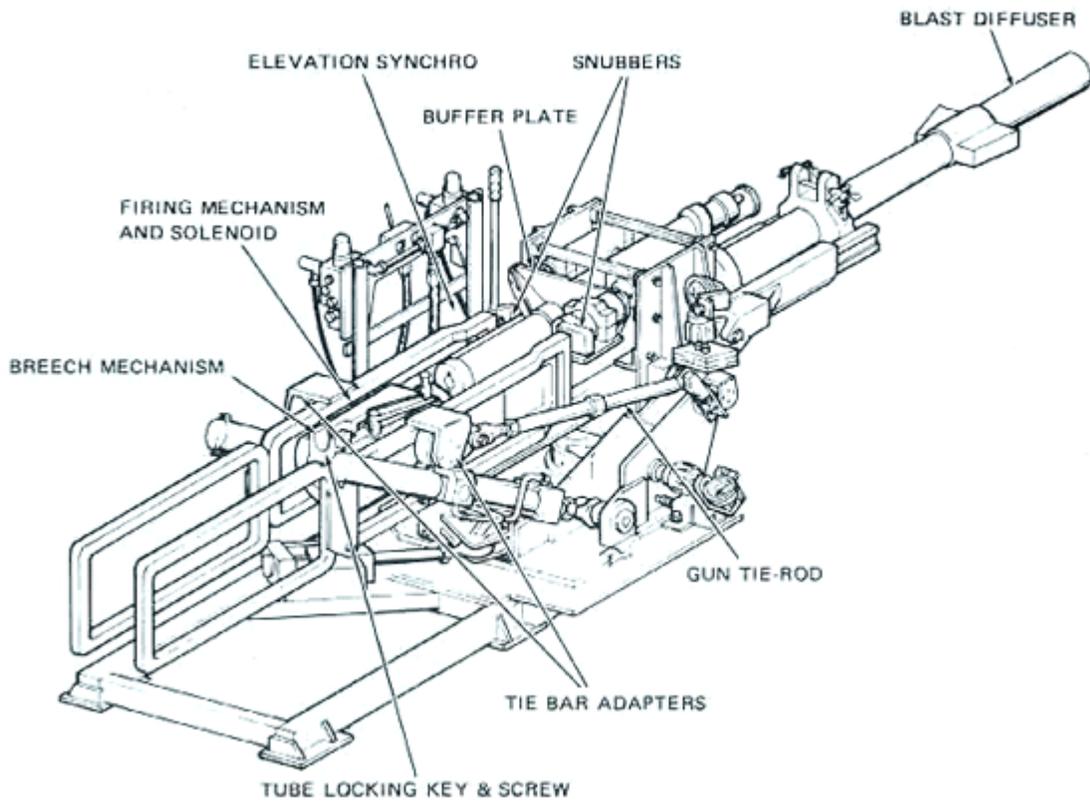
EMERGENCY EQUIPMENT (TYPICAL)
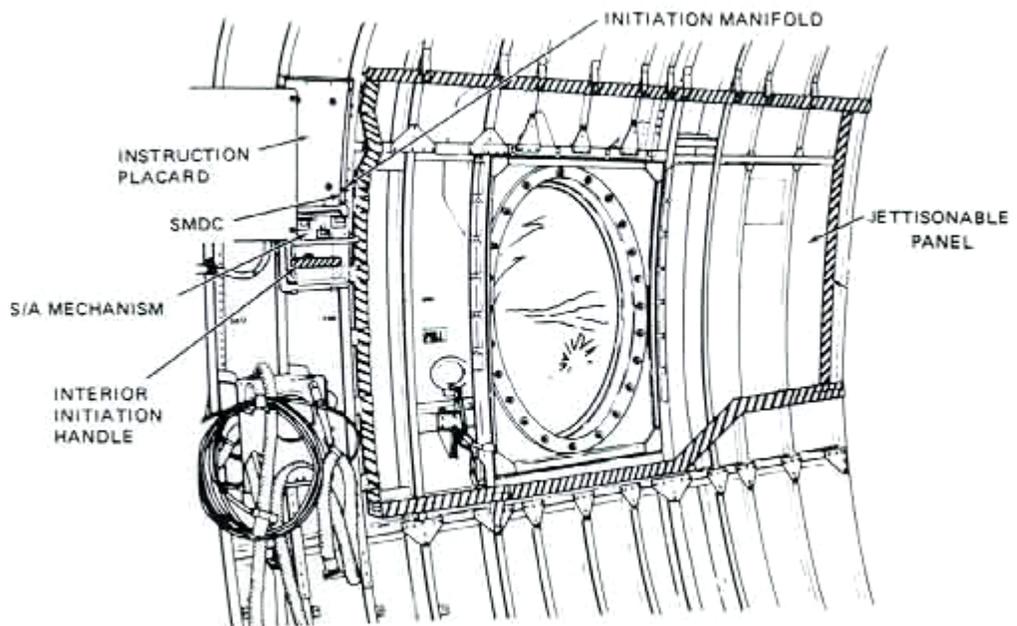
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'AC-130 MODEL' PACKAGE CONTENT OVERVIEW

The 'AC-130 Model' package is available at www.captainsim.com as an expansion to the **'Legendary C-130'** base package.

The **'AC-130 Model'** is a separate product and can be installed to default MS FS2004 without any other C-130 product pre-installed. The C-130 Base Package is highly recommended but not required.

IF THE 'AC-130 MODEL' IS INSTALLED WITHOUT C-130 BASE PACKAGE BEING PREINSTALLED

User gets the following AC-130 setup:
- Original Captain Sim C-130 Flight Model (aircraft.cfg and .air files)
- Original Captain Sim set of AC-130 Models
- Sound - Alias to default Beech King sound
- Panel - Alias to default B747 panel
- No textures in VC
- No gauges in VC

MODELS AND LIVERIES

MODELS

Upon installing the **AC-130 'Hercules'** aircraft will appear under Captain Sim manufacturer in the MS FS9 Aircraft Select Menu.

The model is available in the following variations:

- Clean (no exterior fuel tanks)
- With 2 exterior fuel tanks
- No dynamic shine (for matte liveries)
- With dynamic shine
- Flight Deck and wing view
- Combat Deck and wing view
- EICAS equipped cockpit
- Classic 'steam gauge' cockpit

In total, 12 model variations are available. See 'ACE Utility' section of the 'Legendary C-130' Pro Base Package manual for details.

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HOW IS THE 'AC-130' MODEL DIFFERENT FROM THE 'C-130E' MODEL

EXTERIOR MODEL

2KW Illuminator	Animated 20MM Guns (2)	Animated 105MM Gun
Modified Aft Door Windows	New Antennas (7)	Beacon Tracking Radar
Black Crow Radome	Infrared Reconnaissance Set	Removable Engine IR Shields (4)
Reconnaissance Set Cooling Airintake	Reconnaissance Set Cooling Exhaust	Animated Multi-sensor Platform
Animated Radome Shield	Illuminator Operator Canopy	Pitot Static Booms (3)
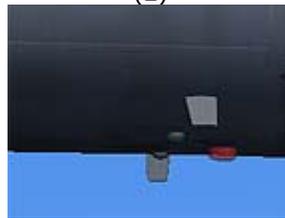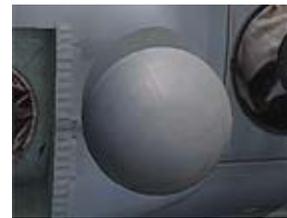
Minigun Loopholes (2)

Modified Animated Emergency Exit and Scanner/Observer Window

Ground Maintenance Gear Doors position

Animated 40MM Automatic Gun

Used 40MM Brass Collector Tun

Consoles Operators Compartment

## VIRTUAL COCKPIT (COMBAT DECK)

20MM Guns (2)

40MM Automatic Gun

Ammo Rack (FWD)
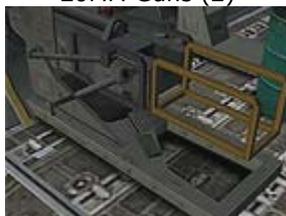
105MM Gun

Illuminator Operator Bench
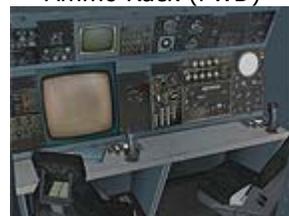
IR and EWO Console

Animated Multi-sensor Platform

Modified Emergency Exit

TV Console

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Cargo Compartment Rack	Scanner/Observer's Seat	EWO's Seat
IR Operator Seat	Crew Rest Seats (2)	TV Operator Seat
Ammo Rack	Illuminator Operator Canopy	Scanner/Observer Window
Removable Engine IR Shields (4)	Used Brass Collector Tun	Modified Aft Door Windows

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LIVERY

PACKAGE LIVERY

The USAF 919th SOW livery is included in the package.

Note

The AC-130 model textures are compliant with C-130E model textures. You can install and any C-130E livery (package or freeware) to use with AC-130 model.

REPAINT KIT

No special AC-130 model Repaint Kit required. Please use the C-130E (base package) Repaint Kit.

FREE LIVERIES

Many freeware liveries for the C-130 are available online in Free Downloads Section.

MISCELLANEOUS FEATURES

CONTROL PANEL DIFFERENCES
Shift+2

The AC-130 Model features the following Control Panel differences:

	A	B	C	The icons legend:	Keys
9					
10				10C - Exhaust IR shield ON-OFF	
11				11C - Radome Shield animation	Spoilers
12				12B - Fire Control Panel	
				12C – VC views Control Panel	

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VC VIEWS CONTROL PANEL
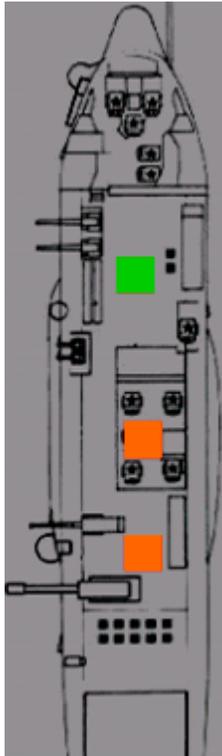
The VC VIEWS CONTROL PANEL provides easy switch between three preset viewpoints on the Combat Deck.

HOW IT WORKS:

- Green square indicates your current viewpoints.
- Make sure you are in VC mode view.
- Click on desired viewpoint amber square. The square turns red – GETS ARMED.
- Click on the viewpoint RED square to confirm your selection.
- MSFS flight should reload a flight with new viewpoint.

Note:
If the viewpoint does not change after the flight reloads or MSFS does not reload the flight and viewpoint automatically, please reload the AIRCRAFT using MSFS AIRCRAFT > SELECT AIRCRAFT menu.

Do not use this feature inflight.

FIRE CONTROL PANEL
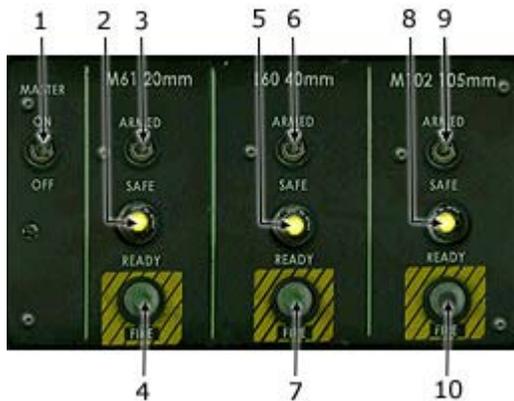
1. MASTER Switch. Must be ON to power the Fire Control Panel.

Note
On the ground the Fire Control circuit is blocked regardless of the MASTER Switch position.

2. 20MM Gun READY light
3. 20MM Gun ARMED-SAFE Switch
4. 20MM Gun FIRE Button
5. 40MM Gun READY light
6. 40MM Gun ARMED-SAFE Switch
7. 40MM Gun FIRE Button
8. 105MM Gun READY light
9. 105MM Gun ARMED-SAFE Switch
10. 105MM Gun FIRE Button

Notes:

- The Fire Control Panel is 2D panel. No fire controls are available in VC.

- The gunfire is a visual effect only and does not cause any damage to the FS9 objects.

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GUN FIRE EFFECTS

EFFECTS APPEARANCE

- Any complex effect is always a hit on the MSFS performance.
- Any visual effect appearance and quality depends on particular system performance.

Please make sure that your system specifications meet our system requirements:
http://www.captainsim.com/products/c130/sysreq.html

To adjust the guns fire effect quality, please go to MSFS menu, Options-> Settings -> Display ->
Scenery -> "Special effects detail " and set them to 'High'.

C-130 MODELS EXPANSIONS

The following C-130 Models are available** as separate commercial expansions to the 'Legendary C-130'
package:

1. C-130J
   - USAF
   - Italian AF
   - RAF
2. C-130H
   - French AF
   - Japan AF
3. KC-130 (tanker)
   - US Marines (grey camo)
4. C-130T (with JATO)
   - US NAVY Blue Angels (Fat Albert)
5. C-130H-30 (stretched version)
   - Dutch AF
6. L-100
   - UN
7. AC-130 'Spectre'
   - USAF
8. C-130A (3-blade props)
   - USAF (60-s bare metal)
9. LC-130H (on skis)
   - US NAVY (polar)
10. NC-130H (AEW&C)
    - US Space Command
11. CL-130 (on floats)
    - US Coast Guard

You can vote for your favorite model at: http://www.captainsim.com/cgi-bin/questionnaire.pl?id=8

** Please check www.captainsim.com for availability updates.

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CUSTOMER SUPPORT

TECHNICAL SUPPORT

Trouble with your game? Welcome to Technical Support Section:
http://www.captainsim.com/cgi-bin/kb.pl

ACCOUNT SUPPORT

Can't buy? Lost links, keys? Welcome to Account Support Section:
http://www.captainsim.com/support/acss/

DOWNLOADS

Looking for Free liveries, banners, etc... Welcome to Downloads Section:
http://www.captainsim.com/support/dl/

CONTACT US

For Press, Business and General Inquires please use Contact Us Section:
http://www.captainsim.com/company/contact.html

BUSINESS HOURS

Please use the online services or contact our team using the web forms that are available 24/7.

Our Office is happy to process hundreds of inquiries daily. But please note all inquiries are processed in European office. The office business hours are: Monday-Friday 7:00-16:00 GMT.

The support team usually responds within 24 business hours.

Thank you,

Enjoy your flight!

Captain Sim Customer Support Team
www.captainsim.com