vJaBoG 66 "High Rollers"

<u>C-101EB</u> NORMAL PROCEDURES



PUBLIC RELEASE APPROVED



Revision 5

Letzte Änderung 20.12.2023

Änderungsübersicht

Rev 1	07.06.2020	-	Initiale Version
Rev 2	29.05.2021	-	Formatierung geändert FOR INTERNAL USE ONLY entfernt - PUBLIC RELEASE APPROVED hinzugefügt
Rev 3	23.10.2021		Geändert: <u>COCKPIT INTERIOR INSPECTION - TWO PILOTS</u> Geändert: <u>ENGINE START</u> Umbenannt: "MISSED APPROACH" in <u>GO AROUND / TOUCH & GO</u> Diverse Spalten-/Seitenumbrüche angepasst
Rev 4	16.06.2022	- -	Geändert: <u>AFTER TAKEOFF</u> Geändert: <u>CLIMB (10,000 FT)</u>
Rev 5	20.12.2023	- - -	Geändert: <u>ENGINE START</u> Geändert: <u>TAXI</u> Geändert: <u>SHUTDOWN</u>

Gültigkeitsbereich

Dieses Dokument ist für das Flugmuster C-101EB des vJaBoG 66 gültig.



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VORWORT

Das normalen Prozeduren für das Muster C-101EB des virtuellen Jagdbombergeschwaders 66 wurde nach bestem Wissen und Gewissen erstellt.

Die einzelnen Teilbereiche wurden, soweit möglich, anhand von realen Vorbildern und Dokumenten erstellt und niedergeschrieben. Wenn keine realen Dokumente zur Verfügung standen oder wenn der Geschwaderstab entschieden hat, Abstriche für die Praktikabilität oder das Gameplay zu machen, dann sind die hier dargestellten Prozeduren nach unserem besten Wissen über die militärische und zivile Luftfahrt ausgearbeitet worden.

Sollten Rechtschreibfehler oder Fehler inhaltlicher Natur gefunden werden, meldet diese bitte dem Geschwaderstab.

vJaBoG 66, Geschwaderstab Raku, Borin, Yurgon



Until ENGINE START, mandatory items are shown in black font.

Optional, non-mandatory and check-only items are shown in light-gray font.

From ENGINE START onwards, every item is mandatory.



BEFORE ENTERING COCKPIT

- 1. All hardware devices Tested
- 2. Additional external programs On and tested
- 3. Screen Cleaned
- 4. Flight publications Check

NOTE

Make sure your joystick, throttle, rudder pedals, TrackIR, MFDs, screens and other peripheral hardware devices are functioning properly, your screen is cleaned, every necessary software like Helios, SRS, Teamspeak, SSA is up and running and that you have all necessary documents/flight publications with you.

5.	Beverages - Tested and quantity checked

6. Internal water tank - Check max quantity 10%

COCKPIT INTERIOR INSPECTION - SOLO FLIGHT

- 1. Kneeboard Check
- 2. Fuel quantity Check / as briefed

NOTE

If necessary, refuel as briefed or as required.

REAR COCKPIT

- 3. Ejection seat safety pin IN
- 4. Emergency pitch trim guard CLOSED
- 5. Ignition switch OFF
- 6. Fuel transfer pump switches ANT
- 7. Landing lights FRONT
- 8. Parking brake IN
- 9. UHF ON / Set
- 10. Interior lights OFF
- 11. VOR ON / Set

12. Intercom selector - INT

- 13. VHF ON / Set
- 14. Oxygen supply CLOSED
- 15. Oxygen pressure warning FRONT
- 16. Rear canopy CLOSED / LOCKED

FRONT COCKPIT

Check the front cockpit as described in COCKPIT INTERIOR INSPECTION - TWO PILOTS.

COCKPIT INTERIOR INSPECTION - TWO PILOTS

NOTE

Items marked with an asterisk (*) are checked in the front cockpit only, because either they are not duplicated in the rear cockpit or the check in the front cockpit is sufficient. Items marked with two asterisks (**) are checked in the rear cockpit only, because they are not duplicated. Every other item is to be checked in both cockpits.

- 1. Kneeboard Check
- 2. Fuel quantity Check / as briefed
- 3. Ejection seat safety pin IN
- **4. Ejection seat priority lever AS REQUIRED

NOTE

If the front pilot initiates ejection, only the front pilot will eject.

With the ejection seat priority lever in the ON position and the rear pilot initiating ejection, the rear pilot will eject first. The front pilot will automatically be ejected 0.3 to 0.4 seconds later.

With the ejection seat priority lever in the OFF position and the rear pilot initiating ejection, only the rear pilot will be ejected.

- 5. Seat harness ADJUSTED
- 6. Pedals ADJUSTED



LEFT CONSOLE

1. Circuit breakers - IN

- 2. Emergency pitch trim guard CLOSED
- *3. Pitch trim breaker IN
- 4. Throttles Check
 - a. Set FULL OPEN
 - b. CHECK FRICTION
 - c. Set OFF
- 5. Ignition switch OFF
- 6. Starter mode switch NORMAL
- 7. Fuel transfer pump switches OFF(*) / ANT(**)
- 8. GPU CONNECT

INSTRUMENT PANEL

- *1. Stall warning power OFF
- 2. Parking brake SET
- 3. Accelerometer RESET
- 4. UHF OFF
- *5. UHF Antenna Selector AUT
- 6. TARSYN Mode Select COMPASS
- 7. Altimeter SET

8. Clock - SET

- 9. Standby ADI CAGED
- *10. IFF OFF
- *11. Inverter OFF
- *12. Generator OFF
- *13. Bus tie switch OFF
- *14. Batteries OFF

RIGHT CONSOLE

- *1. Cabin pressure Check airfield elevation
- 2. Interior Lights OFF
- *3. Exterior lighting Set
 - a. Anti-collision beacon ON
 - b. Nav lights OFF
 - c. Formation lights OFF
 - d. Landing lights RETRACT(*)/FRONT(**)
- 4. VOR OFF
- *5. TACAN OFF
- 6. Oxygen supply OPEN
- 7. VHF OFF
- **8. Oxygen pressure warning BOTH ("AMBAS")
- 9. Audio panel As required

*10. Air conditioning panel

- a. Air conditioning master switch OFF
- b. Temperature mode AUT
- c. Flow selector CPT
- d. Temperature selector 12 o'clock
- e. Emergency ventilation OFF



BEFORE ENGINE START

- 1. Batteries ON
- 2. Voltmeter Check 24V
- 3. GPU ON
- 4. Bus tie switch ON
- 5. Inverter STANDBY
- 6. Audio selector INT
- 7. Seat height Adjust
- 8. Engine ignition light TEST
- 9. Computer ON (light off)
- 10. Fuel panel
 - Fuel tank indicators L/C/R Check (green: fuel tank not empty; red: fuel tank empty)
 - b. Fuel transfer pumps Check

Set each fuel transfer pump switch with a green fuel tank indicator one after another to AUT, then MAN, then OFF. Check green pressure light for each pump in AUT and MAN.

NOTE

The MAN mode is not a normal operation mode and is reserved for the case a transfer pump is de-energized due to a fault in the low-level circuit breakers. Routine operation of fuel transfer pumps in MAN mode can considerably shorten the

lifespan of the fuel transfer pump, since they are designed to operate in a vacuum.

NOTE

Depending on environmental conditions, it may be necessary to accelerate the engine up to 50% N1 to gain positive pressure from any fuel transfer pump.

c. Fuel quantity selector - Check

If fuel quantity selector is ON (FUS light on), the fuel quantity indicator shows the content of the fuselage tank. If positive pressure from at least one fuel transfer pump is set and fuel quantity selector is OFF (FUS light off), the fuel quantity indicator shows the content of the fuselage tank and the center wing tanks. d. Fuselage tank pump - OFF

NOTE The fuselage pump is energized by moving the throttle out of the STOP position.

- e. Fuel switch OFF
- 11. Stall warning power ON
- 12. Stall warning TEST
- 13. Fire warning button PRESS / CHECK

Check red fire warning button illumination and red FIRE warning on the warning and caution lights panel.

- 14. Voltmeter Check 28V
- 15. Fuel flow CHECK

With depressed check button, fuel flow should indicate 1.200 lbs/h. Total fuel used should rise by 10 lbs every 30 seconds.

- 16. Total Fuel Used Reset
- 17. Warning lights TEST

Check MASTER WARNING, MASTER CAUTION and every light on the warning and caution lights panel illuminates. Repeat test for DIM and BRIGHT lamp setting.

- 18. ESS BUS ON, then OFF
- 19. Inverter NORMAL



ENGINE START

- 1. Area Clear (see Figure 1)
- 2. Voltmeter Check minimum 24V and no less than 15V during engine start cycle
- 3. Fuel Switch ON
- 4. Fuselage tank pump ON

Check amber FUEL PRESS warning extinguished.

- 5. Ignition START, hold for 2s
- 6. Throttle from STOP to IDLE when reaching 10% N2

Check ignition light illuminated.

NOTE

The engine computer automatically enriches the fuel until ignition. Below -18°C outside air temperature, a manual

enrichment using the manual enrichment button is recommended. In this case, hold the button until reaching ITT 300-400 $^\circ\text{C}$

- 7. ITT Check rising within 10 seconds
- 8. N1 Check rising within 20% N2
- 9. Oil pressure Check rising within 10 seconds
- 10. Fuel flow Check indication



Abort engine start when:

- a. No ITT indication 10 seconds after moving throttle from STOP to IDLE
- b. N2 does not rise continuously, but rapidly up until 24%
- c. N1 does not rise until N2 reaches 20%
- d. ITT reaches limit or rises rapidly
- e. No positive oil pressure within 10 seconds of ignition

Abort engine start with the following procedure:

- a. Throttle STOP
- b. Abort switch HOLD ABORT

- 11. Ignition light Extinguishes when N2 reaches 50%
- 12. Engine instruments Check
 - a. N1 32-37%
 - b. N2 58-71%

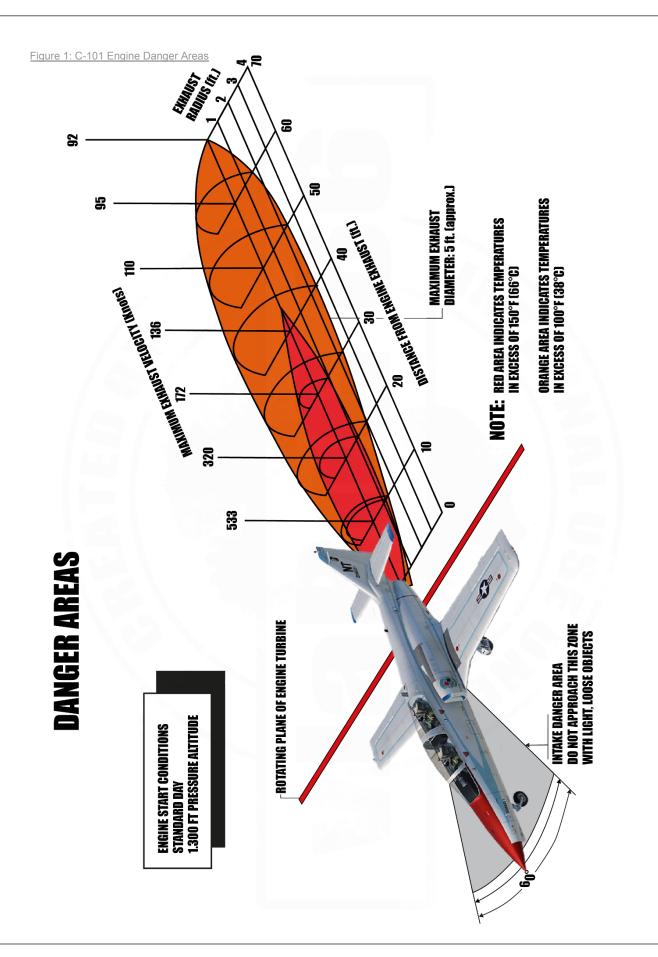


The following times are not to be exceeded:

From 10% N2 to ignition: 10 seconds. From ignition to idle: 50 seconds.

In case of exceeding the aforementioned times, abort the engine start. Find and fix the problem, before attempting another engine start.





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BEFORE TAXI

- 1. GPU OFF
- 2. GPU Disconnect
- 3. GPU Check light extinguished
- 4. Generator RESET, then ON

Check GENERATOR warning light extinguishes

5. Generator test - GF (ground fault), then 0V.

Check red GENERATOR warning light illuminates. Set generator switch to RESET, then ON.

- 6. Radios As required
- 7. Navigation equipment As required
- 8. Standby ADI Uncaged
- 9. IFF Standby
- 10. Hydraulic pressure Check green (2.850 3.050 PSI).

Check red HYD PRESS warning light extinguished.

11. Speedbrake - Check

Open speed brakes, and while speed brakes are opening observe speed brake indication and pitch trim movement. When speed brakes are fully opened, speed brake indication shows OUT. Close speed brakes, and while speed brakes are closing observe speed brake indication and pitch trim movement. When speed brakes fully closed, speed brake indication shows IN.

12. Flaps - Check

Move flaps to TAKE-OFF. Check flap indicator. Move flaps to DOWN. Check flap indicator.

- 13. Flaps TAKE-OFF
- 14. Ailerons Check
- 15. Pitch trim breaker IN
- 16. Pitch trim Check

Check movement of trim in normal operation. Check movement of trim when actuating trimmer on the emergency panel.

- 17. Pitch trim SET -1.5
- 18. Roll trim Check and SET 0
- 19. Pitot heat and stall warning TEST and as required

- 20. Stall warning ON
- 21. Engine anti-ice Check

Depress button. Check amber ANTI-ICE caution light and MASTER CAUTION illuminate briefly. Depress button to turn engine anti-ice off.

NOTE

Anti-ice check has to be performed before each flight, regardless of ambient icing conditions.



If the ambient temperature is at or above 4°C, the engine anti-ice system cannot be activated longer than 10 seconds.

If de-icing is needed for engine start, activate the anti-ice system before N1 reaches start parameters.

- 22. Engine computer Check MAN mode
 - a. Throttle 75% N2
 - b. COMPUTER OFF

Check amber OFF light illuminates on button and amber COMPUTER caution light illuminates.

CAUTION

If the engine accelerates in an uncontrollable state, reconnect the computer and shut the engine down.

c. Throttle - Move slowly back to 75% N2. Check N2 response.



If N2 does not respond to throttle movement, shut the engine down.

d. COMPUTER - ON

Check amber OFF light extinguishes on button and amber COMPUTER caution light extinguishes.

23. Landing lights - Check

Front cockpit: Check illumination in TAXI and LANDING position. Set both switches to RETRACT.

Back cockpit: Check illumination in LANDING position. Set both switches to FRONT.



- 24. Interior lighting Check / Set
- 25. Exterior lighting Set
 - a. Anti-collision beacon ON
 - b. Nav lights BRIGHT
 - c. Formation lights BRIGHT (only at nighttime)
 - d. Landing lights TAXI

ΤΑΧΙ

- 1. Chocks Remove
- 2. Parking brake Release
- 3. N1 Set 50%
- 4. Brakes Check
- 5. Flight controls Check
- 6. Flight instruments Check
- 7. Engine instruments Check
- 8. Hydraulic pressure within limits
- 9. Fuel transfer pumps AUT
- 10. Fuselage tank pump Check ON
- 11. Fuel switch Check ON
- 12. Speed brake IN
- 13. Flaps TAKE-OFF
- 14. Air conditioning master switch ON
- 15. SAI Uncage and check
- 16. Warning lights all OFF
- 17. Gear indicator 3 green
- 18. Shoulder harness Check

BEFORE TAKEOFF

- 1. Canopies Closed and locked. Check red CANOPY warning light extinguished
- 2. Anti-skid ON
- 3. Pitot heat ON
- 4. Ignition CONTINUOUS
- 5. Exterior lighting Set
 - a. Anti-collision beacon ON
 - b. Nav lights BRIGHT
 - c. Formation lights BRIGHT (only at nighttime)
 - d. Landing lights LAND
- 6. Ejection seat safety pin OUT



TAKEOFF

- 1. Brakes Set
- 2. Throttle MAX
- 3. Engine instruments Check
- 4. Brakes Release
- 5. Acceleration Check
- 6. At rotation speed ROTATE

AFTER TAKEOFF

- 1. Landing gear UP (between 120 KIAS and 200 KIAS)
- 2. Flaps UP (between 125 KIAS and 190 KIAS)

CAUTION

Retracting the flaps will result in a pitch-up moment. The pilot has to anticipate and counter this by pushing the stick forward.

- 3. Landing lights RETRACT (below 200 KIAS)
- 4. RPM, ITT, OIL TEMP, OIL PRESS, FUEL PRESS Check
- 5. Anti-ice As required (OAT < 10 °C)
- 6. Operating Limits:

Thrust	Temp	Time Max
Takeoff	833 °C - 860 °C	5 min
Max Climb	796 °C - 832 °C	30 min
Max Continuous	<= 795 °C	8

CLIMB (6,000 FT)

- 1. Ignition OFF
- 2. Altimeter As required

CLIMB (10,000 FT)

- 1. Oxygen Check
- 2. Fuel Check
- 3. Cabin altitude Check
- 4. Anti-ice As required

NOTE

Anti-ice required when any clouds are visible above or below the aircraft.

5. IFF - As required



FLIGHT

- 1. Oxygen Check
- 2. Cabin altitude Check
- 3. Fuel Check
- 4. Fuel Check fuel used, fuel flow and fuel quantity

NOTE

On ferry flights, deactivate the wing transfer pumps, when the wing tanks are empty. Leave center pumpts in AUT (ANT in rear cockpit).

5. Engine and navigation instruments - Check



DESCENT

- 1. Flow selector As required
- 2. Pitot heat ON
- 3. Anti-ice As required
- 4. Oxygen Check
- 5. Altimeter Set QNH
- 6. TARSYN Mode select Check COMPASS
- 7. Fuel Check

BEFORE LANDING

- 1. Ignition CONTINUOUS
- 2. Hydraulic pressure Check
- 3. Anti-skid ON

LANDING

All calculated landing data assumes flight over a 50 ft obstacle and landing with minimum required landing distance. For normal landings, where no such obstacle is present and

runway length is not a problem, it is recommended to pass the runway threshold at 110 KIAS and touch down at 95 KIAS. These values may be reduced if landing with a smaller gross weight.

Touch down should occur with the main wheels first. Hold the stick back towards you, to delay nose wheel touchdown.

While the speed decreases, pull the stick further back, until full deflection is achieved.

Wait until the nose wheel touches down.

Apply slight brake pressure and increase upon need.

To avoid loss of control during approaches with high wind gusts, increase approach speed by $\frac{1}{2}$ of mean measured gusts.

GO AROUND / TOUCH & GO

1. Throttle - MAX



When operating the engine computer in MAN mode, the engine compressor can stall if the throttle is moved too fast.

- 2. Speed brake IN
- 3. Trim As required

NOTE

Main wheel touchdown can be inevitable. Do not try to not touchdown, as this can result in a nose high attitude. Instead, let the aircraft touchdown and fly a normal takeoff.

- 4. Gear UP
- 5. Flaps UP

AFTER LANDING

- 1. Pitot heat OFF
- 2. Anti-ice OFF
- 3. Ignition OFF
- 4. Speed brake IN
- 5. Flaps UP
- 6. Ejection seat safety pin IN
- 7. Landing lights TAXI
- 8. IFF OFF
- 9. VOR OFF
- 10. TACAN OFF
- 11. Canopies As required

Check cabin altitude prior to opening canopy.



SHUTDOWN

- 1. Wheel chocks Set
- 2. Parking brake Set
- 3. Throttle Idle (for a minimum duration of 2 minutes)
- 4. Speed brake OUT
- 5. Flaps DOWN, then UP
- 6. Radios OFF
- 7. Fuselage tank pump OFF
- 8. Throttle STOP
- 9. Engine instruments Check shutdown time:

N2 - approx. minimum 15 seconds to 0% N1 - approx. minimum 50 seconds to 0%

- 10. Fuel valve OFF
- 11. Inverter OFF
- 12. Generator OFF
- 13. Bus tie OFF (down)
- 14. Battery OFF (when N1 is 0%)
- 15. Exterior lighting Set
 - a. Anti-collision beacon OFF
 - b. Nav lights OFF
 - c. Formation lights OFF (only at nighttime)
 - d. Landing lights RETRACTED
- 16. Oxygen CLOSED
- 17. Air conditioning master switch OFF