

Ka-50 III Checklist

Чёрная акула

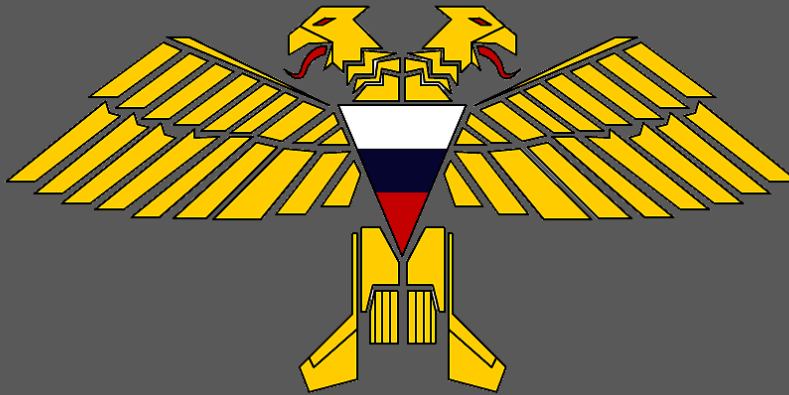


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PRE-START

DOOR ----- CLOSED
BAT SWITCH 1&2 ----- ON
INV SWITCH ----- CHECK AUTO
INTCOM SWITCH ----- ON
R-828 VHF-1 SWITCH ----- ON
R-800 VHF-2 SWITCH ----- ON
DL-TLK SWITCH ----- ON
VHF-TLK SWITCH ----- ON
SA-TFL SWITCH ----- ON
EKTRAN HYD. TRANS. PWR. SWITCH ----- ON
MASTER CAUTION PUSH-LIGHT ----- RESET

Accelerated INU Alignment (3-5 MIN)*

PVI-800 NAV MODE SELECTOR ----- SET OPER
INU SWITCH ----- ON
INU HEAT SWITCH ----- ON
PVI-800 NAV SWITCH ----- ON
SAI SWITCH ----- ON
ABIRS SWITCH ----- ON
K-041 TARGETING SYSTEM SWITCH ----- ON

INTERIOR & EXTERIOR LIGHTS ----- AS REQUIRED
FUEL-QTY SWITCH ----- ON
FIRE EXTINGUISHER SWITCH ----- SET OPER
EJECT-SEAT-SYS SWITCH ----- ON

*NOTE:

! MAY USE ALTERNATE INU ALIGNMENT METHODS INSTEAD (PAGE 5)



ENGINE START

ROTOR BRAKE -----	DISENGAGE
FWD & AFT FUEL PUMP SWITCHES -----	ON
APU FUEL SHUTOFF VALVE -----	OPEN
START MODE SELECTOR SWITCH -----	START
START SELECTOR SWITCH -----	SET APU
START BUTTON -----	PRESS 2-3 SEC
> WAIT FOR APU EGT TO STAB. (600°C)	
> WAIT FOR APU OIL P. NORM & APU ON LIGHTS TO LIGHT	
ANTI-COLLISION BEACON SWITCH -----	ON
LEFT FUEL SHUTOFF VALVE -----	OPEN
LH EEG SWITCH -----	ON
START SELECTOR SWITCH -----	LEFT ENG
START BUTTON -----	PRESS 2-3 SEC
> WAIT FOR ENGINE 1 RPM TO REACH ~20%	
LH ENGINE CUT-OFF VALVE LEVER -----	OPEN
> WAIT FOR ENGINE 1 RPM TO REACH ~70%	
RIGHT FUEL SHUTOFF VALVE -----	OPEN
RH EEG SWITCH -----	ON
START SELECTOR SWITCH -----	RIGHT ENG
START BUTTON -----	PRESS 2-3 SEC
> WAIT FOR ENGINE 2 RPM TO REACH ~20%	
RH ENGINE CUT-OFF VALVE LEVER -----	OPEN
> WAIT FOR ENGINE 2 RPM TO REACH ~70%	
THROTTLE LEVERS -----	AUTO
APU SHUTOFF BUTTON -----	PRESS
APU FUEL SHUTOFF VALVE -----	CLOSED



POST ENGINE START

LH & RH AC SYS GEN SWITCHES ----- ON
 W-SYS SWITCH ----- ON
 IFF SWITCH ----- ON
 STANDBY ADI ----- UNCAGED
 BAROMETRIC ALTIMETER ----- SET PRESSURE
 ENG ANTI-ICE / DUST SWITCH ----- SET DUST
 > SET ICE IF OAT \leq 0°C
 ROTOR ANTI-ICE SWITCH ----- AS REQUIRED
 > ON IF OAT \leq 0°C
 UV-26 CMD POWER SWITCH ----- SET OPER
 L-140 LWS POWER SWITCH ----- ON
 PVI-800 DATALINK POWER SWITCH ----- ON
 DATALINK MODE KNOB ----- AS REQUIRED
 DATALINK ID-NO KNOB ----- AS REQUIRED
 BANK, PITCH & HDG HOLD CHANNELS ----- ON
 VOICE WARN CON SWITCH ----- AS REQUIRED
 CMD SIDE SELECT SWITCH ----- AS REQUIRED
 CMD PROGRAM ----- AS REQUIRED
 ODS MODE SWITCH ----- AS REQUIRED



INU ALIGMENT

Normal Alignment (~15 MIN)

- PVI-800 NAV MODE SELECTOR ----- SET OPER
- INU NORM BUTTON ----- ON
- INU SWITCH ----- ON
- INU HEAT SWITCH ----- ON
- PVI-800 NAV SWITCH ----- ON
- SAI SWITCH ----- ON
- > ИKB/YB INU INDICATOR SHOW ON HUD
- > ~3 MIN. ELAPSED INDICATOR WILL FLASH
- > ~9 MIN. ELAPSED INDICATOR WILL SWITCH TO ИKB/HB
- > ~15 MIN. ELAPSED, INU NORM BUTTON WILL FLASH AND
ALIGMENT COMPLETE
- INU NORM BUTTON ----- OFF

Precise Alignment (~20 MIN)

- PVI-800 NAV MODE SELECTOR----- SET OPER
- INU PREC BUTTON ----- ON
- INU SWITCH ----- ON
- INU HEAT SWITCH ----- ON
- PVI-800 NAV SWITCH ----- ON
- SAI SWITCH ----- ON
- > ИKB/YB INU INDICATOR SHOW ON HUD
- > ~3 MIN. ELAPSED INDICATOR WILL FLASH ИKB/ВГП
- > ~12 MIN. ELAPSED INDICATOR WILL SWITCH TO ИKB/ТВ
- > ~20 MIN. ELAPSED INU PREC BUTTON WILL FLASH AND
ALIGNMENT COMPLETE
- INU PREC BUTTON ----- OFF



INU ALIGNMENT (CONT.)

INU Restart (IN-FLIGHT)

- > REQUIRED IF HUD INDICATOR FLASHING OTKA3/MKB
- > FLY AIRCRAFT IN UNIFORM HORIZONTAL PATH AND HOLD

INU RESET BUTTON ----- PRESS

- > MKB/YB WILL SHOW ON HUD
- > RESET COMPLETE WHEN ABOVE INDICATOR DISAPPEARS
- > CAN RELEASE FROM UNIFORM HORIZONTAL PATH

Heading Course Correction (DESIRED HEADING)

- > METHOD CAN ONLY BE USED ON GROUND

MAGNETIC DECLINATION ENCODER ----- INPUT TRUE HEADING

MAN-GYRO-MH SWITCH ----- SET MANUAL

MAN-GYRO-MH SWITCH ----- SET GYRO

MAGNETIC DECLINATION ENCODER ----- INPUT MAGNETIC
DECLINATION

Heading Course Correction (MAGNETIC HEADING)

- > METHOD CAN ONLY BE USED IN-FLIGHT

MAGNETIC DECLINATION ENCODER ----- INPUT MAGNETIC
DECLINATION

MAN-GYRO-MH SWITCH ----- SET MH

MAN-GYRO-MH SWITCH ----- SET GYRO



WEAPON PREP AND USAGE

Weapon Prep

MASTER ARM SWITCH ----- ARMED
WEAPON BURST LENGTH SWITCH ----- AS REQUIRED
CANNON ROUND SELECTOR SWITCH ----- AS REQUIRED
CANNON FIRE RATE SWITCH ----- AS REQUIRED
ASC KNOB ----- AS REQUIRED
LASER SWITCH ----- SET LAS
HMS SWITCH ----- AS REQUIRED

Selector Setting	Weapon	Type
0	S-8KOM	ANTI-TANK/ANTI-PERSONNEL ROCKET
___*	S-80M	ILLUMINATION ROCKET
1	S-8TsM	ORANGE SMOKE ROCKET
2	S-130F	BUNKER BUSTING ROCKET
4	S-800FP2	HIGH EXPLOSIVE ROCKET
5	UPK-23	GUNPODS
7	FAB-250	STANDARD HE BOMB
8	FAB-500	STANDARD HE BOMB
9	KMGU AO-2.5RT	CLUSTER BOMB, FRAGMENTATION
10	KMGU PTAB-2.5KO	CLUSTER BOMB, ANTI-TANK



WEAPON PREP AND USAGE (CONT. 1)

9A4172 Vikhr ATGM (SHKVAL)

BANK, PITCH, HDG & ALT HOLD CHANNELS - AS REQUIRED

MASTER ARM SWITCH ----- CHECK ON

K-041 TARGETING SYSTEM SWITCH ----- CHECK ON

LASER SWITCH ----- CHECK ON

WEAPON SELECTION ----- SELECT OUTWARD
STATIONS

9M342 Igla AAM

BANK, PITCH, HDG & ALT HOLD CHANNELS - AS REQUIRED

MASTER ARM SWITCH ----- CHECK ON

WEAPON MODE ----- SELECT A/A MODE

CAUTION:

! IGLA HAS A LIMITED POWER SUPPLY USE IGLAS BEFORE 55 SECOND HUD TIMER RUNS OUT

! PRESS BUTTON TARGETING MODE RESET TO PREVENT POWER USE



WEAPON PREP AND USAGE (CONT. 2)

2A42 30mm Cannon (SHKVAL)

BANK, PITCH, HDG & ALT HOLD CHANNELS – AS REQUIRED

MASTER ARM SWITCH ----- CHECK ON

K-041 TARGETING SYSTEM SWITCH ----- CHECK ON

LASER SWITCH ----- CHECK ON

WEAPON SELECTION ----- SELECT GUN STATION

S-3/S-13 Rockets (SHKVAL)

BANK, PITCH, HDG & ALT HOLD CHANNELS – AS REQUIRED

MASTER ARM SWITCH ----- CHECK ON

K-041 TARGETING SYSTEM SWITCH ----- CHECK ON

LASER SWITCH ----- CHECK ON

WEAPON SELECTION ----- SELECT OCCUPIED
STATION



EMERGENCY PROCEDURES

SINGLE ENGINE FAILURE

COLLECTIVE -----	MAINTAIN 85% RPM
EMERGENCY JETTISON -----	PRESS
ATGM JETTISON -----	PRESS & HOLD
> ONLY REQUIRED IF EQUIPPED WITH VIKHR	
AIRSPEED -----	> 70 KPH, NOMINALLY 130KPH
THROTTLE LEVERS -----	SET MAX
FAILED ENGINE CUT-OFF LEVER -----	CLOSED
FAILED ENGINE FUEL SHUTOFF VALVE -----	CLOSED
FIRE EXTINGUISHER -----	AS REQUIRED
CROSSFEED VALVE -----	OPEN
RUNNING ENGINE RPM & EGT -----	MONITOR FOR NOMINAL VALUES
IN-FLIGHT ENGINE RESTART CHECKLIST ---	IF NO ENGINE FIRE
RETURN TO BASE -----	AS REQUIRED

CAUTION:

- ! DO NOT ATTEMPT RTB WITH ONBOARD FIRE
- ! DO NOT ATTEMPT RTB IF UNABLE TO MAINTAIN ALTITUDE
- ! DO NOT ATTEMPT ENGINE RESTART AFTER FIRE
- ! MAINTAIN ALTITUDE AND AIRSPEED FOR AUTOROTATION IN EVENT OF REMAINING ENGINE FAILURE
- ! LAND IMMEDIATELY IF UNABLE TO RTB
- ! EJECT IF UNABLE TO EXECUTE SAFE LANDING



EMERGENCY PROCEDURES

DUAL ENGINE FAILURE

- COLLECTIVE ----- MAINTAIN 85% RPM
- EMERGENCY JETTISON ----- PRESS
- ATGM JETTISON ----- PRESS & HOLD
- > ONLY REQUIRED IF EQUIPPED WITH VIKHR
- AIRSPEED ----- > 70 KPH, NOMINALLY 130KPH
- LH & RH ENGINE CUT-OFF LEVERS ----- CLOSED
- LEFT & RIGHT FUEL SHUTOFF VALVES ----- CLOSED
- FIRE EXTINGUISHERS ----- AS REQUIRED
- LANDING GEAR LEVER ----- DOWN
- AUTOROTATE TO LANDING SITE ----- FLARE AT 30M AGL, 100KPH

CAUTION:

! EJECT IF UNABLE TO EXECUTE SAFE LANDING



EMERGENCY PROCEDURES

FAILED ENGINE START

ENGINE CUT-OFF LEVERS ----- CLOSED
ENGINE SHUTOFF VALVES ----- CLOSED

CONTINUE IF NO FIRE INDICATIONS

ENGINE STARTER MODE ----- SET CRANK START
ENGINE SELECTOR SWITCH ----- SELECT ENGINE
ENGINE START BUTTON ----- PRESS

VERIFY FOLLOWING:
START VLV LIGHT ON
SELECTED ENGINE RPM INCREASING
EGT REMAINS AT AMBIENT TEMPERATURE

VERIFY AFTER ~40 SECONDS:
START VLV LIGHT OFF
SELECTED ENGINE RPM FALLS TO 0

ENGINE STARTER MODE ----- SET NORMAL START
ENGINE START ----- REPEAT



EMERGENCY PROCEDURES

IN-FLIGHT ENGINE RESTART

FORWARD & AFT FUEL PUMPS ----- ON
APU FUEL SHUTOFF VALVE ----- OPEN
STARTER MODE SWITCH ----- START
ENGINE SELECTOR SWITCH ----- SET TO APU
ENGINE START BUTTON ----- PRESS

VERIFY FOLLOWING:
APU OIL PRESS NORM LIGHT ON
APU EGT INCREASES
APU ON LIGHT IS ON WITHIN 30 SECONDS

APU EGT ----- MONITOR

SELECTED ENGINE THROTTLE ----- IDLE
ENGINE SELECTOR SWITCH ----- SELECTED ENGINE
ENGINE START BUTTON ----- PRESS

VERIFY FOLLOWING:
START VLV LIGHT ON
ENGINE RPM INCREASING PAST 15%

SELECTED ENGINE CUT-OFF VALVE ----- OPEN

VERIFY FOLLOWING:
ENGINE EGT INCREASING

SELECTED ENGINE EGT AND RPM ----- MONITOR
APU SHUTOFF BUTTON ----- PRESS
APU SHUTOFF VALVE ----- CLOSED
ENGINE SELECTOR SWITCH ----- SET TO APU



SCRAMBLE CHECKLIST

NOTE: GROUND POWER MUST BE AVAIALBLE

- > EXT DC SWITCH ON
- > BATTERY 1 ON
- > BATTERY 2 ON
- > EXT AC SWITCH ON
- > FWD FUEL PUMP ON
- > AFT FUEL PUMP ON
- > FUEL GAUGE POWER ON
- > HYDRAULICS/EKRAN POWER OPER.
- > LEFT FUEL SHUTOFF VLV OPEN
- > RIGHT FUEL SHUTOFF VLV OPEN
- > APU FUEL SHUTOFF VLV OPEN
- > ENGINE START PRESS
- > NAV SYSTEM POWER ON
- > K-041 POWER ON
- > ROTOR BRAKE OFF
- > WEAPON SYSTEM POWER ON
- > ABRIS POWER ON
- > INU HEATER ON
- > INU POWER ON
- > DOOR CLOSE
- > LH EEG ON
- > RH EEG ON

! CONTINUE IF "APU ON" LIGHT IS ON

- > ENGINE SELECTOR TO LH ENG
- > ENGINE START BUTTON PRESS
- > LH ENGINE CUTOFF VLV OPEN
- > FORMATION LIGHTS 100%
- > VHF-1 RADIO ON
- > BLADE TIP LIGHTS ON
- > NAVIGATION LIGHTS 100
- > EJECTION SYSTEM 1, 2, 3 SWITCH ON
- > ANTI-COLLISION ON
- > INTERCOM ON
- > VHF-2 RADIO ON
- > VHF-TLK ON
- > DATALINK ON
- > SA-TFL ON

! CONTINUE IF "START VLV" LIGHT OFF

- > ENGINE SELECTOR TO RH ENG
- > ENGINE START BUTTON PRESS
- > RH ENGINE CUTOFF VLV OPEN
- > NAV DATALINK POWER ON
- > PVI MODE OPER.
- > L-140 ON
- > DATALINK MODE SET
- > FLIGHT DIRECTOR ON
- > FIRE EXTINGUISHER MODE WORK
- > UV-26 OPER.
- > ALTITUDE CHANNEL ON
- > BANK CHANNEL ON
- > PITCH CHANNEL ON
- > HEADING CHANNEL ON

! CONTINUE IF "START VLV" LIGHT OFF

- > THROTTLE TO AUTO
- > LEFT GENERATOR ON
- > RIGHT GENERATOR ON
- > EXT DC OFF
- > EXT AC OFF
- > APU SHUTOFF BUTTON PRESS
- > APU FUEL SHUTOFF VALVE CLOSED
- > TEST EKRAN VOICE SYSTEM

CAUTION

HUD, ABRIS AND NAVIGATION SYSTEMS MAY NOT BE ONLINE YET.

FOLLOW DIRECTION OF FLOW IN ORDER