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		PILOT INTERIOR INSPECTION / RESET CHECKL	101
əat	1.	LEFT and RIGHT ECL LEVERS	MIDDLE
Pilot Seat	2.	COLLECTIVE	DOWN
	3.	THROTTLE	FULLY LEFT
,	4.	COLLECTIVE EMERGENCY RELEASE BUTTON	COVERED
	5.	COLLECTIVE TACTICAL RELEASE BUTTON	COVERED
	6.	CYCLIC	CENTRED
,	7.	CYCLIC WHEEL BRAKE LEVER	LOCKED
,	8.	CYCLIC PC BUTTON	COVERED
,	9.	ROTOR BRAKE LEVER	UP
Ы 01	1.	ПРЕДОХРАНИТЕЛЬНЫЙ ВЫКЛЮЧАТЕЛЬ ВООРУЖЕНИЯ (Armament safety switch)	ВЫКЛЮЧЕН (Safe)
<u>ø</u> 07	The K	РАСНЫЙ ПОДСВЕТ panel manages the red lights.	
Oonsole	1.	ΓΡΥΠΠΑ 1 and ΓΡΥΠΠΑ 2 RHEOSTATS (Left Group 1/2 brightness)	FULLY CCW
90 Side	The K	ОНТРОЛЬ panel manages various engine tests.	
Left	2.	ANNUNCIATOR LIGHTS - PT ΠΕΒ PAGOTAET (LH engine temp regulator operating) - PT ΠΡΑΒ PAGOTAET (RH engine temp regulator operating) - CAPΠΠ PAGOTAET (SARPP data recorder operating)	OFF
	3.	КОНТРОЛЬ САРПП-12 SWITCH (SARPP-12 Mode switch)	ABTOM (Auto)
05	4.	SIGNAL FLARE POWER SWITCHES	ВЫКЛ (Off)
•	5.	SIGNAL FLARE BUTTONS	OUT
04	6.	АВТОМ СБРОС ВНЕШНЯЯ ПОДВЕСКА SWITCH (External Cargo Automatic Drop)	OFF / DOWN
	7.	ANNUNCIATOR LIGHTS - СИРЕНА ВКЛЮЧЕНА (Horn on) - ЗАМОК ОТКРЫТ (Shackle open) - СТВОРКИ ОТКРЫТЫ (Doors open)	OFF
03	8.	УСИЛ SWITCH (RI-65 Gain)	ВЫКЛ (Off)
	9.	МАСЛООПАСНО ВОЗДУХ GAUGE (Pneumatic system air pressure)	49 KΓ/CM ²
	10.	TOPMO3 GAUGE (Brake pressure)	31 KFC/CM ²
	11.	СТИРАН BUTTON (IFF Erase)	COVERED
	12.	БЕДСТВ SWITCH (IFF Disaster transponder)	OFF and GUARDED
02	13.	1 — 2 SWITCH (Transponder device mode)	1
	14.	ЗАПАСНОЙ-РАБ SWITCH (Transponder Reserve/Work device selector)	РАБ (Work)
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<u>£</u> 02	15.	TRANSPONDER MODE SELECTOR	ABT (Auto)
02 (cout.) 01 01	16.	ЗАПИСЬ ОСН ВКЛ-ОТКЛ SWITCH (CVR On/off)	ВКЛ (Off)
<u></u>	17.	ПОДСВЕТ KNOB (CVR Back-light brightness)	FULLY CCW
Left Triangular Panel	1.	СТЕКЛООЧИСТИТЕЛЬ SWITCH (Left windscreen wiper)	CENTRED
gular	2.	СПУУ — 52 SWITCH (SPUU-52 Power)	BыK (Off)
Trian	3.	ПЛАФОН SWITCH (Left ceiling light)	OFF / CENTRED
Left	4.	ВЕНТИЛЯТОР SWITCH (Fan power)	OFF / DOWN
	5.	АВИАГОРИЗ SWITCH (Left attitude indicator power)	OFF / DOWN
	6.	BK-53 SWITCH (Gyro correction cutout)	OFF / DOWN
	7.	РИ-65 SWITCH (Voice Warning System power)	BЫK (Off)
01 ge	The up	oper panel manages the pilot's SPU-9 intercom.	
Left Overhead Console	1.	ГРОМКОСТЬ ПРОСЛ and ОБЩАЯ KNOBS (Pilot Intercom Monitor and Master volume)	MIDDLE
erhe	2.	SPU-9 SOURCE SELECTOR	YKP (UHF)
Ŏ ₩	3.	CETЬ SWITCH (Net)	1
<u>۳</u>	4.	СПУ — РАДИО SWITCH (ICS / Radio)	РАДИО (Radio)
02	The У	ПРАВЛЕНИЕ СТРЕЛЬБОЙ PC section manages rocket launcher (PC) pods.	
	5.	ИЗ КАЖД БЛОКА SWITCH (Rocket quantity selector)	ПО 4 (4)
	6.	1-2-5-6 — ABT — 3-4 SWITCH (Rocket station selector)	ABT (Auto)
	7.	ЧПК — ПКТ — PC SWITCH (Weapon selector)	ПКТ (PKT Machine gun)
	The УI	ПРАВЛЕНИЕ СТРЕЛЬБОЙ ГУВ section manages GUV machine-gun and grenade launcher pod	ds.
,	8.	С ОГРАНИЧ — БЕЗ ОГР SWITCH (GUV burst cutoff)	БЕЗ ОГР (No cutoff)
	9.	УСТАНОВКА ДЛИНЫ ОЧЕРЕДИ DIAL (GUV burst length)	0,20 S (0.2 second short burst)
		AРИАНТЫ section manages GUV pod sub-weapon selection using their 9-A index number: 800 gnifies YakB 12.7 mm machine gun; 622 signifies GShG 7.62 mm machine gun.	signifies AP-30 30mm grenade launcher;
,	10.	ВАРИАНТЫ SWITCH (GUV Fire selector)	OFF / CENTRED
	11.	800 — 624/622+800 SWITCH (GUV Payload selector)	624/622+800 and GUARDED (Mixed)
,	12.	ПЕРЕЗАРЯДКА 624 ПИРОПАТРОНЫ ЛЕВ and ПРЕАВ SWITCHES (Left/Right YakB Charging)	OFF / CENTRED
	13.	ФКЛ SWITCH (Gun camera)	BЫK (Off)
03	The Π	РОТИВООБЛЕДЕНИТЕЛЬНАЯ СИСТЕМА panel manages the anti-icing system.	
	14.	ОБЩЕЕ РУЧН — ABTOM SWITCH (General manual/auto)	ABTOM (Auto)

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£ 03	15.	ДВИГ ПЗУ ЛЕВ SWITCH (Left engine inlet anti-ice)	БЫК (Off)
) e _l	16.	ДВИГ ПЗУ ПРАВ SWITCH (Right engine inlet anti-ice)	ABTOMAT (Auto)
osuo	17.	СТЕКОЛ SWITCH (Glass heater)	ABTOMAT (Auto)
ad C	18.	РИО-3 SWITCH (RIO-3 detector heating)	ABTOMAT (Auto)
Left Overhead Console (cont.)	19.	ENGINE HEATING ANNUNCIATOR LIGHTS - ОБЛЕДЕН (lcing) - ПОС ВКЛЮЧЕНА (Anti-icing operating) - ОБОГРЕВ ДВИГ ЛЕВ / ПРАВ (LH/RH PSS de-ice) - ЛЕВ / ПРАВ ПЗУ ПЕРЕДН (LH/RH fwd engine inlet de-ice) - ЛЕВ / ПРАВ ПЗУ ЗАДН (LH/RH aft engine inlet de-ice)	OFF
04	20.	ТОКИ ПОТРЕБИТЕЛЕЙ SELECTOR (Current consumers monitoring)	BЫK (Off)
_	21.	AMPEREMETER	0 A
	22.	ROTOR HEATING ANNUNCIATOR LIGHTS - 1 / 2 / 3 / 4 СЕКЦИЯ (Section 1-4)	OFF
05	23.	КОМАНД PC SWITCH (R-863 VHF radio FM/AM)	AM
06	24.	КАНАЛ SELECTOR (R-863 VHF Channel)	1
01 Jeu	1.	РУЛНЕЖНАЯ ФАРЫ SWITCH (Taxi lights)	BЫK (Off)
nt Pa	2.	ФАРЫ СВЕТ — ВЫК — УБРАНА SWITCH (Lights on/off/retract)	BЫK (Off)
eft Instrument Panel	3.	СТАТИЧЕСКАЯ СИСТЕМА ПВД VALVE (Static port selector)	ОБЪЕДИНЕННАЯ (Common)
			(5511)
02 Left	4.	РАДИОВЫС SWITCH (Radar altimeter power)	BЫK (Off)
U 02 02	4. 5.	РАДИОВЫС SWITCH (Radar altimeter power) RADAR ALTIMETER	· · · · · · · · · · · · · · · · · · ·
U 02 1			BЫK (Off)
reftin	5.	RADAR ALTIMETER	BЫК (Off) OM and FLAGGED
- Left	5. 6. 7.	RADAR ALTIMETER BAROMETRIC ALTIMETER	BЫК (Off) 0M and FLAGGED SET 0M
- Left	5. 6. 7. 8.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO	BHK (Off) OM and FLAGGED SET OM CHECK
- Land -	5. 6. 7. 8. 9.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source)	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9)
- 1 Helt	5. 6. 7. 8. 9.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK
- 1 Helt	5. 6. 7. 8. 9. 10.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR MAIN ROTOR PITCH ANGLE GAUGE	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK 1
- 1 Helt	5. 6. 7. 8. 9. 10. 11.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR MAIN ROTOR PITCH ANGLE GAUGE MAIN ROTOR TACHOMETER GAUGE	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK 1 0%
U	5. 6. 7. 8. 9. 10. 11. 12.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR MAIN ROTOR PITCH ANGLE GAUGE INDICATED AIRSPEED GAUGE	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK 1 0% <50
Petting in the state of the sta	5. 6. 7. 8. 9. 10. 11. 12. 13.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR MAIN ROTOR PITCH ANGLE GAUGE MAIN ROTOR TACHOMETER GAUGE INDICATED AIRSPEED GAUGE ATTITUDE INDICATOR	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK 1 0% <50 CAGED
Petturian in the pettur	5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR MAIN ROTOR PITCH ANGLE GAUGE MAIN ROTOR TACHOMETER GAUGE INDICATED AIRSPEED GAUGE ATTITUDE INDICATOR VERTICAL VELOCITY INDICATOR	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK 1 0% <50 CAGED 0
Petture in the second s	5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR MAIN ROTOR PITCH ANGLE GAUGE MAIN ROTOR TACHOMETER GAUGE INDICATED AIRSPEED GAUGE ATTITUDE INDICATOR VERTICAL VELOCITY INDICATOR ENGINE PRESSURE RATIO (EPR) GAUGE	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK 1 0% <50 CAGED 0 CHECK
Petty of the state	5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	RADAR ALTIMETER BAROMETRIC ALTIMETER DIRECTIONAL GYRO APK CB — APK YKB SWITCH (ADF source) HOVER and LOW SPEED INDICATOR MAIN ROTOR PITCH ANGLE GAUGE MAIN ROTOR TACHOMETER GAUGE INDICATED AIRSPEED GAUGE ATTITUDE INDICATOR VERTICAL VELOCITY INDICATOR ENGINE PRESSURE RATIO (EPR) GAUGE TWO-POINTER ENGINE TACHOMETER	BblK (Off) OM and FLAGGED SET OM CHECK APK CB (ARK-9) CHECK 1 0% <50 CAGED 0 CHECK N1 and N2 0%

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nent Panel (cont.)	19. LEFT ANNUNCIATOR LIGHT GROUP - ЗАСИР ТФ ЛЕВ / ПРАВ ДВИГ (LH/RH Fuel filter clogged) - СТРУЖНА ЛЕВ / ПРАВ ДВИГ (Chip in LH/RH engine oil) - ЛЕВ / ПРАВ ДВ ВИБР ПОВ (LH/RH engine vibration) - ПОЖАР (Fire) - ВЫКЛЮЧИ ЛЕВ / ПРАВ ДВ (LH/RH engine excursion limit)	OFF
Left Instrument	20. MIDDLE ANNUNCIATOR LIGHT GROUP - СЕТЬ ПИТ.ОТ АКК (Battery in use) - ОТАКАЗ 6201 (IFF System failure) - ПРЕВ ПС.Т. ЛЕВ / ПРАВ ДВИГ (LH/RH turbine overspeed) - МАЛО РМ ЛЕВ / ПРАВ ДВ (LH/RH low oil pressure) - ЧР ЛЕВ / ПРАВ ДВ (LH/RH emergency power) - ОТКЛ ЭРД ЛЕВ / ПРАВ ДВ (LH/RH electric governor off)	OFF
	21. RIGHT ANNUNCIATOR LIGHT GROUP - СТРУЖКА ГЛ. / ПРОМ / ХВ РЕДУК (Chips in Main / Intermediate / Tail Rotor gearbox)	OFF
	END	

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<u>ə</u> 01	1.	TRANSMISSION OIL PRESSURE/TEMP GAUGE	0 / -50
Sons	2.	TRANSMISSION TEMPERATURE GAUGE	-5
Centre Console	3.	LH ENGINE OIL PRESSURE/TEMP GAUGE	0/-50
O	4.	RH ENGINE OIL PRESSURE/TEMP GAUGE	0 / -50
02	5.	AUTOPILOT TRIM INDICATORS	CHECK
03	The u	pper panel marked КОНТРОЛЬ manages the SPUU-52 rotor pitch limiter system.	
'	6.	PITCH LIMIT INDICATOR	CHECK
	7.	ОТКЛ. LAMP (SPUU-52 failure)	OFF
	8.	p — O — t SWITCH (SPUU-52 test)	O (Off)
04	The K	ОМАНД PC panel manages R-863 VHF/UHF radio manual/preset settings.	
	9.	ЗУ — НУ SWITCH (Preset — manual)	НУ (Manual)
05	The A	ВТОПИЛОТ panel manages the AP-34B Autopilot system)	
	10.	ALL LIGHTS	OFF
	11.	НАПРАВЛЕНИЕ, КРЕН, ТАНГАЖ SCALES (Yaw, roll, pitch position-signal mismatch)	0
06	12.	CETH HA BY SWITCH (Net on rectifier)	ВЫКЛ and GUARDED (Off)
	13.	ТРАНСФ ДИМ SWITCH (36V Transformer)	OCHOB (Main)
	14.	ΠΡΟΒΕΡΚΑ SWITCH (Lamps/Flasher)	OFF / CENTRED
07	15.	AΠ and PK SWITCHES (Emergency receiver / ADF)	OFF / DOWN
	16.	ПШ SWITCH (Squelch noise)	ON/UP
	17.	FREQUENCY ROTARY	AS REQUIRED
08	18.	LH and RH 3PA SWITCHES (LH/RH engine EEC)	ВКЛ (On)
	19.	LH and RH YP SWITCHES (LH/RH engine ER)	ВКЛ (On)
	20.	LH and RH КОНТРОЛ СТ1 — РАБОТА — КОНТРОЛ СТ2 (LH/RH engine governor ST1 channel check, work, ST2 channel check)	РАБОТА
	21.	КОНТРОЛ ТК ПРАВ — РАБОТА — КОНТРОЛ ТК ЛЕВ (Governor CT check right, work, check left)	РАБОТА
<u>e</u> 01	The Γ	РОТИВОПОЖАРНАЯ СИСТЕМА panel manages fire protection systems.	
Centre Overhead Console	1.	ANNUNCIATOR LIGHTS - ПОЖАР ЛЕВ ДВ (Left engine fire) - ПОЖАР ПРАВ ДВ (Right engine fire) - ПОЖАР КО-50 (KO-50 kerosene-combustion heater fire) - ПОЖАР РЕД.АИ-9 (Main rotor AN-9 fire) - 1 ОЧЕРЕДЬ (First order extinguishing – one per system) - 2 ОЧЕРЕДЬ (Second order extinguishing – one per system)	OFF
02	The K	ОНТРОЛЬ ДАТЧИКОВ panel manages fire protection system tests.	
	2.	КОНТРОЛ ДАТЧИКОВ LIGHT (Signal device check)	OFF

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02 °.	3.	ОГНЕТУШЕНИЕ — КОНТРОЛЬ ДАТЧИКОВ SWITCH (Fire extinguishing / Systems test)	КОНТРОЛЬ ДАТЧИКОВ (Systems test)
sole (4.	ПИРОПАТРНОВ SWITCH (Extinguishing pyro test)	I (DOWN)
Con	5.	FIRE CIRCUIT TEST SELECTOR	BЫK (Off)
Centre Overhead Console (cont.)	6.	ΤΕΜΠΕΡ ΓΑ3ΟΒ ΑΓΡΕΓΑΤ ΑͶ-9B GAUGE (APU Exhaust Gas Temperature)	0°C
entre O	7.	ДАВЛ ВОЗДЫХА АГРЕГАТ АИ-9В GAUGE (APU Air Pressure)	0 KΓ/CM ²
04	The 3	АПУСК ТУРБОАГРЕГАТА and ЗАПУСК ДВИГАТЕЛЕЙ panel manages the APU and engine start.	
	8.	ЗАПУСК — ПРОКРУТ — ЛОЖНЫЙ ЗАПУСК SWITCH (Start / Crank / False start)	ПРОГРУТ (Crank)
_	9.	APU ANNUNCIATOR LIGHTS - АВТОМАТ ВКЛЮЧЕН (APU Autostart) - ДАВЛ.МАЦЛА НОРМА (APU Oil Pressure Normal) - ОБОРОТЫ НОРМАЛ (APU RPM Normal) - ОБОРОТЫ ПРЕДЕЛ (APU RPM Overspeed)	OFF
_	10.	ΠΕΒ <-> ΠΡΑΒ SWITCH (Left / Right engine selector)	OFF / CENTRED
_	11.	ЗАПУСК — ПРОКРУТ SWITCH (Start / Cold crank)	OFF / CENTRED
_	12.	ENGINE START ANNUNCIATOR LIGHTS - ABTOMAT ВКЛЮЧЕН (Ignition autostart) - CTAPTEP PAБOTAET (Engine starter on)	OFF
	13.	ПРОВЕРКА ЗАЖИГАН SWITCH (Ignition check)	OFF / CENTRED
05	The To	ОПЛИВНАЯ СИСТЕМА panel manages the fuel system.	
_	14.	ПЕРЕКРЫВ КРАНЫ and ЛЕВЫЙ ПРАВЫЙ SWITCHES (Left / Right Shutoff Valves)	3AKP and GUARDED (Closed)
_	15.	КОЛЬЦЕВ БАКОВ SWITCH (Cross-feed valve)	OTKP and GUARDED (Open)
	16.	ΠΕΡΕΠΥCK SWITCH (Bypass valve)	3AKP and GUARDED (Closed)
	17.	FUEL VALVE ANNUNCIATOR LIGHTS - ЛЕВЫЙ and ПРАВЫЙ ЗАКРЫТ (LH / RH Valve closed) - КОЛЬЦЕВ ОТКЛ (Crossfeed Valve Closed)	OFF
	18.	3AHΠAP — KOHTP SWITCH (Refuel / Check)	OFF / CENTRED
	19.	HACOCЫ БАКОВ SWITCHES - РАСХОД (Feed tank pump) - ЛЕВЫЙ (Left tank pump) - ПРАВЫЙ (Right tank pump)	OFF / DOWN
	20.	PUMP ANNUNCIATOR LIGHTS - РАСХОД, ЛЕВЫЙ, ПРАВЫЙ РАБОТАЕТ (Feed / LH / RH Tank pump in operation)	OFF
06	21.	MAIN HYDRAULIC PRESSURE GAUGE	0 KΓ/CM ²
	22.	BACKUP HYDRAULIC PRESSURE GAUGE	0 KΓ/CM ²

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(r) 07		ИДРОСИСТЕМА panel manges the hydraulic system.	
00) (23.	OCHOBH SWITCH (Main system)	ВКЛ (On)
COC (cont.)	24.	HYDRAULIC SYSTEM ANNUNCIATOR LIGHTS - ОСНОВН ВКЛЮЧ (Main system active) - ДУБЛИР ВКЛЮЧ (Backup system active)	OFF
	25.	ДУБЛИР SWITCH (Backup system)	ВКЛ and GUARDED (On)
ළ 01 	1.	OCTAHOB ДВИГ ЛЕВ and ПРАВ LEVERS (Left and Right Fuel shutoff)	CLOSED (AFT) and LOCKED
Left Circuit Breaker Console 0	1.	ARMAMENT ANNUNCIATOR LIGHTS - БД1, 2, 3, 4, 5, 6 ЗАГРУЖ (Station 1–6 loaded) - АВАР ВЗРЫВ (Jettison Armed) - ПУС-1, 3, 4, 6 ВЗВЕДЕН (FCU 1-6 armed) - СЕТЬ РС ВКЛЮЧ (Unguided rockets circuit on) - ФКН ВКЛЮЧЕН (Gun camera on) - СЕТЬ ГУВ ВКЛЮЧЕНА (GUV Gun pod circuit on)	OFF
<u>5</u> 02	The A	ВАРИЙНЫЙ РЕЖИМ panel manges the storage jettison system.	
Lef	2.	ВЗРЫВ SWITCH (Jettison arm)	BЫK and GUARDED (Off)
	3.	СБРОС БОМБ БЛ ГУБ SWITCH (Emerg. jettison)	DOWN and GUARDED
	The FJ	ПАВНЫЙ ВЫКЛЮЧ panel holds the main on/off controls for armament systems.	
	4.	ГЛАВНЫЙ ВЫКЛЮЧ МВ (Mine-laying master arm)	BЫK (Off)
	5.	ГЛАВНЫЙ ВЫКЛЮЧ РС ГУВ SWITCH (Rockets/GUV master arm)	BЫK (Off)
03	6.	ΓΥΒ ΒΗΥΤΡΕΗ 622 (Inner 7.62mm GUV)	PER LOADOUT
	7.	ΓΥΒ BHYTPEH 624-800 (Inner 12.7mm GUV/left UPK)	PER LOADOUT
	8.	ГУВ ВНЕШН 800 (30mm grenades or right UPK)	PER LOADOUT
04	9.	GROUP 1 C.B:s БОМБОВОЕ ВООРУЖЕНИЕ (Bomb armament) - ЭСБР (ESBR Electronic release) - ВЗРЫВ БОЕВОЙ (Explosives armed) - УПРАВЛЕНИЕ (Weapons control) - ИНЖЕНИЕР ОБОРУТ (Engineering equipment) ВООРУЖЕНИЕ РС ГУВ (Rocket/GUV-1 armament) - СТРЕЛЬБА (Rocket/GUV-1 fire control) - СИГНАЛИЗАЦ (Rocket/GUV-1 warning systems) - ОБОГРЕВ ФКЛ ЭСБР (ESBR Heating)	BЫK (Off)
05	10.	GROUP 2 C.B:s - 311 (Unknown) FYB BHEШH (Outer GUV-1 pod) - 800 ЛЕВ (Left AP-30 Grenade Launcher) - 800 ПРАВ (Right AP-30 Grenade Launcher) FYB ЛЕВ ВНУТР (Inner Left GUV-1 pod) - 9-A-622 ЛЕВ (Left GShG-7.62 Machine Gun) FYB ПРАВ ВНУТР (Inner Right GUV-1 pod) - 9-A-622 ЛЕВ (Left GShG-7.62 Machine Gun) FYB ПРАВ ВНУТР (Inner Right GUV-1 pod) - 9-A-622 ЛЕВ (Left GShG-7.62 Machine Gun) - 9-A-622 ПРАВ (Right GShG-7.62 Machine Gun)	BЫK (Off)

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NON-FUNCTIONAL SUB-STEP

		FLIGHT ENGINEER INTERIOR INSPECTION / RESE	TOTILORLIST
LCBC (cont.)	11.	ЭЛЕКТРОСПУСК (Electric firing) - 800; 9-A-624 ЛЕВ (Left AP-30 / YakB-12.7 Machine Gun) - 800; 9-A-624 ПРАВ (Right AP-30 / YakB-12.7 Mahine Gun) - ПКТ (Nose PKT Machine Gun) АВАРИЙНЫЙ СБРОС (Emergency Jettison) - БОМБ БЛ ГУВ (Bombs and GUV) - СИЛОВОЙ (Jettison Power) - ВЗРЫВ (Jettison Armed) - РАКЕТЫ СИРЕНА (Signal Flares)	BЫK (Off)
Right Circuit Breaker Console	1.	GROUP 4 C.B:s 3AПУСК (Start) - ТУРБОАГРЕГАТ ЗАПУСК (APU Start) - ТУРБОАГРЕГАТ ЗАЖИГАН (APU Ignition) - УПРАВЛ ОБОРОТЫ (RPM Control) - (Unlabelled) УПРАВЛЕНИЕ ОТКР ЗАМКА (Lock Opening Control) - ОСНОВН (Main) - ДУБЛИР (Reserve) - УКАЗАТ ПОВОРОТ (Turn indicator)	BыK (Off)
02	2.	GROUP 5 C.B:s ТОПЛИВНАЯ СИСТЕМА (Fuel System) - КРАН ПЕРЕНУС (Bypass Valve) - ПЕРЕКРЫВ КРАНЫ ЛЕВЫЙ (Left Fuel Valve) - ПЕРЕКРЫВ КРАНЫ ПРАВЫЙ (Right Fuel Valve) - ТОПЛИВОМЕР (Fuel Meter) - НАСОСЫ ТОПЛИВН БАКОВ РАСХОД (Centre Tank Pump) - НАСОСЫ ТОПЛИВН БАКОВ ЛЕВОГО (Left Tank Pump) - НАСОСЫ ТОПЛИВН БАКОВ ПРАВОГО (Right Tank Pump) - (Unlabelled, T-819) - СПУУ-52 (SPUU-52 Rotor Pitch Limiter)	BЫK (Off)
03	3.	GROUP 6 C.B:s ΦΑΡЫ (Lights) - ЛЕВАЯ УПРАВЛ (Left Search/landing Light Control) - ЛЕВАЯ СВЕТ (Left Search/landing Light Bulb) - ПРАВАЯ УПРАВЛ (Right Search/landing Light Control) - ПРАВАЯ СВЕТ (Right Search/landing Light Bulb) - АНО (Navigation Lights) - СТРОЕВ ОГИН (Formation Lights) - ПРОВЕРК ЛАМП МИГАЛКА (Flash Circuit) СВЕТ ПРФ-4 (RPF-4 Strut Lights) - ЛЕВ (Left Strut Light) - ПРАВ (Right Strut Light)	BыK (Off)

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

<u> </u>	GROUP 7 C.B:s	ВЫК (Off)
Right Circuit Breaker Console (cont.)	АВТОПИЛОТ (Autopilot)	, ,
) ele	- OCHOBH (Main)	
nsc	- ФРИКЦ (Friction)	
Ö	- ЭЛЕКТРОМЫФТЫ (Electric Clutches)	
æ	ГИДРОСИСТ (Hydraulics System) - ОСНОВН (Main)	
eal	- ОСНОВН (Main) - ДЫБЛИР (Backup)	
Ť Ď	РАДИО (Radio)	
jno	- СПУ (Intercom)	
Ö	- BЫCOTOMEP (Radar Altimeter)	
ght	- КОМАНД PC (Radio Command)	
<u> </u>	- 6201 (IFF Responder)	
05 5.	GROUP 8 C.B:s	ВЫК (Off)
	ПРОТИВОПОЖАРНАЯ СИСТЕМА (Fire Protection System)	
	- СИГЛАНИЗАЦ (Fire Warning Signals)	
	- 1 ОЧЕРЕДЬ (Main Discharge System)	
	- 2 ОЧЕРЕДЬ (Alternate Discharge System)	
	РАДИО (Radio)	
	- KOMΠAC CB (ARK-9 ADF)	
	- KOMNAC YKB (ARK-UD VHF Homing ADF)	
	- ДИСС (DISS-15 Doppler Navigation) - (Unlabelled, Radio Meter)	
06 6 .	,	DI III (o.c.
⁰⁶ 6.	GROUP 9 C.B:s	ВЫК (Off)
	ПРОТИВООБЛЕДЕНИТ СИСТЕМА (Anti-icing System) - УПРАВЛЕНИЕ (Anti-icing Control)	
	- ЯТГ АВЛЕТИЕ (Anti-icing Control) - ПЗУ ДВИГАТ ЛЕВОГО (Left Engine Anti-ice)	
	- ПЗУ ДИВГАТ ПРАВОГО (Right Engine Anti-ice)	
	- РИО-3 (RIO-3 Anti-ice)	
	- CTEKOЛ (Glass Anti-icing)	
	CTEКЛООЧИСТ (Windscreen Wipers)	
	- ЛЕВЫЙ _(Left Wiper)	
	- ПРАВЫЙ (Right Wiper)	
	- (Unlabelled, RIO-3 Ice Sensor)	
	- KO-50 (KO-50 Combustion Heater)	
≥ 02 The k	РАСНЫЙ ПОДСВЕТ panel manages the red lights.	
^m 1.	ГРУППА 1 and ГРУППА 2 RHEOSTATS	FULLY CCW
• • • • • • • • • • • • • • • • • • • •	(Centre Group 1/2 brightness)	
	END	

NORMAL STEP

FULL PROCEDURE STEP

CONDITIONAL STEP

NON-FUNCTIONAL STEP

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

		COPILOT INTERIOR INSPECTION / RESET OF	LOKLIOT
eat	1.	COLLECTIVE	DOWN
Co-pilot Seat	2.	THROTTLE	FULLY LEFT
0-00	3.	COLLECTIVE RPM GOVERNOR SWITCH	OFF / CENTRED
	4.	CYCLIC	CENTRED
	5.	CYCLIC PC BUTTON	COVERED
<u>ə</u> 01	1.	P-828 SWITCH (R-828 FM Radio power)	BЫK (Off)
Right Auxiliary Panel O	2.	P828 SWITCH (R-828 Mode)	СВЯЗЬ (Comms)
uxillia 	3.	YB-26 SWITCH (UV-26 Countermeasure panel power)	ОТКЛ (Disabled)
d trg 02	4.	FOPT SWITCH (Dispenser)	LEFT
Ē	5.	НАЛИЧ — ПРОГР SWITCH (Counter / Program)	НАЛИЧ (Counter)
03	The le	oft panel manages the R-828 FM Radio.	
	6.	КАНАЛ SELECTO (Radio channel)	1
	7.	FPOMK KNOB (Volume)	FULLY CW
	8.	ПШ SWITCH (Squelch noise)	ON/UP
	9.	HACTP LIGHT (Tuning)	OFF
04	The ri	ght panel manages the YaDRO-1A HF Radio.	
	10.	ПШ KNOB (Squelch noise)	ON / RIGHT
	11.	NACT LIGHT (Tuning)	OFF
	12.	ABAP LIGHT (Emergency)	OFF
	13.	FPOMK KNOB (Volume)	MIDDLE
	14.	ЯДРО-1A FREQUENCY SELECTOR	AS REQUIRED
	15.	ЯДРО-1 MODE KNOB	ВЫКЛ (Off)
© 01	1.	DOPPLER NAVIGATOR MODE SWITCH	RAБОТА (On)
Back Wall	2.	KOHTP. LIGHT (Doppler test)	OFF
Ba	3.	PAGOTA LIGHT (Doppler is working)	OFF
	4.	ПОДСВЕТ ГРУППЫ 5,5В (5,5V light brightness)	FULLY CCW
<u>ø</u> 01	The Γ	СТОЯННЫЙ ТОК section displays DC power readings.	
ONSC	1.	DC VOLTMETER	0 V
Right Rear Console	2.	I and II TOK AKKYM (DC Battery 1 and 2 ammeters)	0 A
ht B	The Γ	ЕРЕМЕННЫЙ ТОК section displays AC power readings.	
<u>E</u>	3.	I, II and III ТОК ВЫПРЯМИТЕЛЕЙ (AC Rectifier 1–3 voltmeters)	0 A
	4.	AC GENERATOR VOLTMETER	0 V
	5.	I and II ΤΟΚ ΓΕΗΕΡΑΤ (AC Gen. 1 and 2 ammeters)	0 A
	-		

NORMAL STEP FI

FULL PROCEDURE STEP

CONDITIONAL STEP

NON-FUNCTIONAL STEP

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

<u>02</u>	The Π	EPEMEHHЫЙ ТОК panel manages AC power controls.	
(coni	6.	AC VOLTAGE CONTROL SELECTOR	BЫK (Off)
Might Rear Console (cont.) 0 . .	7.	I and II РЕГУЛИРОВАНИЕ НАПРЯЖЕНИЯ ROTARIES (AC Voltage control 1 and 2)	BY THE 'M' MARKING
Jear (8.	ГЕНЕРАТОРЫ I and II SWITCHES (Generator 1 & 2)	BЫK (Off)
	9.	АЭРОДР ПИТАН SWITCH (Ground power)	ВЫК (Off)
ľ	10.	ΠΟ-500A ~115 SWITCH (36V AC Inverter)	ВЫК (Off)
	11.	ПТ-200Ц ~36 SWITCH (115V AC Inverter)	ВЫК (Off)
	12.	AC SYSTEM ANNUNCIATOR LIGHTS - ΓΕΗΕΡ I and II ΟΤΚΑЗΑΛ (AC Generator 1 and 2 failure) - ШРΑΠ-400-3Φ (SHRAP-400-3F connection) - ΠΟ-500 ΒΚΛΙΌΥΕΗ (Single-phase 115 VAC inverter on)	OFF
<u>n</u> 201	The KI	РАСНЫЙ ПОДСВЕТ panel manages the red lights.	
903 01 908 00 909 02	1.	ΓΡΥΠΠΑ 1 and ΓΡΥΠΠΑ 2 RHEOSTATS (Right Group 1/2 brightness)	FULLY CCW
Ö D D D D D D	2.	TOK ΓΕΗ.ΑΗ-9B GAUGE (APU Generator load)	0 A
Ē 03	The Π	ОСТОЯННЫЙ ТОК panel manages DC power controls.	
-	3.	DC VOLTAGE CONTROL SELECTOR	BЫK (Off)
-	4.	AKKYM I and II SWITCHES (Battery 1 and 2)	BЫK (Off)
_	5.	PE3EPBH ΓEHEPAT SWITCH (Starter generator)	BЫK (Off)
_	6.	РЕГУЛИР НАПРЯЖ ROTARY (DC Voltage control)	BY THE '6' MARKING
	7.	ВЫПРЯМИТЕЛИ I, II and III SWITCHES (Rectifier 1–3)	BЫK (Off)
-	8.	АЕРОД ПИТАН SWITCH (Ground power)	BЫK (Off)
	9.	ПРОВЕРКА ОБОРУД SWITCH (Equipment test)	BЫK (Off)
-	10.	DC SYSTEM ANNUNCIATOR LIGHTS - ВКЛЮЧН ВИПР-I, II and III (Rectifier 1–3 disconnected) - ШРАП-500К (SHRAP-500K connected) - ПРОВЕРКА ОБОРУД (Equipment test on)	OFF
04	The lo	wer panel manages various light and electrical systems.	
-	11.	ОСВЕЩЕНИЕ ДЕЖУРН and ОБЩЕЕ SWITCHES (Cargo cabin duty and common lights)	BЫK (Off)
-	12.	AHO SWITCH (Navigation lights)	OFF / CENTRED
-	13.	ОГИН CTPOEB SWITCH (Formation lights)	OFF / CENTRED
_	14.	ОГИН КОНТУР SWITCH (Blade tip lights)	BЫK (Off)
	15.	ПРОВЛЕСК МАЯК SWITCH (Strobe light)	BЫK (Off)
-	16.	ПЗУ ДВИГАТ ЛЕВ and ПРАВ SWITCHES (Left and Right engine dust protection)	BЫK (Off)

NORMAL STEP FULL PROCEDURE STEP CONDITIONAL STEP NON-

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL STEP
NON-FUNCTIONAL SUB-STEP

£ 04	17.	ОБОГРЕВ ПВД ЛЕВ and ПРАВ SWITCHES	BЫK (Off)
RSC (cont.)		(Left and Right pitot heating)	DI III (o.e.
HS(ОБОГРЕВ ЧАСОВ SWITCH (Glass heating)	BЫK (Off)
		ОБОГРЕВ AKKYM SWITCH (Battery heating)	BЫK (Off)
	20.	МИГАЛКА SWITCH (Flasher)	BЫK (Off)
	21.	ТАБЛО SWITCH (Panel lights)	ДЕН (Day)
Right Triangular Panel	1.	СТЕКЛООЧИСТИТЕЛЬ SWITCH (Right windscreen wiper)	OFF / CENTRED
gular	2.	ПОДСВЕТ 5, 5B SWITCH (5.5V Lights)	BЫK (Off)
Trian	3.	ЛАРИНГ SWITCH (Larynx microphone)	BЫK (Off)
Right	4.	БЛОКИРОВ АРК-УД SWITCH (VHF/ADF interlock)	BЫK (Off)
	5.	ДИСС SWITCH (DISS-15 Doppler panel lighting)	BЫK (Off)
	6.	CB93HA9 PC SWITCH (Yadro-1A panel lighting)	BЫK (Off)
	7.	ΓΜΚ-1 SWITCH (Gyrocompass power)	BЫK (Off)
	8.	АВИАГОРИЗ SWITCH (Right attitude indicator power)	BЫK (Off)
	9.	ВЕНТИЛАТОР (Fan power)	BЫK (Off)
	10.	ПЛАФОН (Right ceiling light)	OFF / CENTRED
	11.	ОБОГРЕВ ИСПРАВЕН LIGHT (Heater OK)	OFF
02	The bo	ombs control panel (below the right triangular panel) manges bomb and pod selection and arming.	
	The A	ВАРИЙНЫЙ РЕЖИМ section manages emergency jettison systems.	
	12.	ABAP B3PыВ LIGHT (Jettison armed)	OFF
	13.	ВЗРЫВ SWITCH (Jettison armed)	OFF and GUARDED
	14.	СБРОС БОМБ SWITCH (Emergency bomb release)	OFF and GUARDED
03	15.	STATION ANNUNCIATOR LIGHTS - БД 1, 2, 3, 4, 5, 6 ЗАГРУЖ (Station 1–6 loaded)	OFF
	16.	ГЛАВНЫЙ ВЫКЛЮЧ БВ SWITCH (Bombs master)	вык
	17.	ВАРИАНТЫ ПОДВЕСКИ SELECTOR (Payload profile)	I
	18.	ОБОГРЕВ ЭСБР SWITCH (ESBR Heating)	вык
01	The up	oper panel manages the co-pilot's SPU-9 intercom.	
BC .	1.	ГРОМКОСТЬ ПРОСЛ and ОБЩАЯ KNOBS (Co-pilot Intercom Monitor and Master volume)	MIDDLE
	2.	SPU-9 SOURCE SELECTOR	YKP (UHF)
	3.	CETЬ SWITCH (Net)	1
	4.	СПУ — РАДИО SWITCH (ICS / Radio)	РАДИО (Radio)

NORMAL STEP

FULL PROCEDURE STEP

CONDITIONAL STEP

NON-FUNCTIONAL STEP

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

~02	The le	ft panel manages the ARK-9 automatic direction finder (ADF).	
Right Overhead Console (cont.)	5.	SIGNAL POWER GAUGE	CHECK
sole	6.	MODE SELECTOR	BЫK (Off)
Cor.	7.	PAMKA SWITCH (Loop)	OFF / CENTRED
erheac	8.	ГРОМК KNOB (Volume)	FULLY CW
t Ove	9.	ТЛФ — ТЛГ SWITCH (Voice – CW)	ТЛФ (Voice)
Righ	10.	PE3 and OCH ПОДСТР. KNOBS (Main and Reserve frequency tuning)	0
	11.	РЕЗЕРВНЫЙ / Б and ОСНОВНОЙ / Д KNOBS (Main / Right and Reserve / Left frequency)	150 КГЦ (150 kHz)
03	The A	РК-УД panel manages the ARK-UD VHF homing set.	1
	12.	ЧУВСТВ SWITCH (Sensitivity)	Б (High)
	13.	MODE SELECTOR	ВЫКЛ. (Off)
_	14.	УКВ — ДЦВ SWITCH (VHF / UHF band)	YKB (VHF)
	15.	КАНАЛЫ SELECTOR (VHF channel)	1
04	The C	ИСТЕМА KO-50 panel manages the KO-50 combustion heater.	1
_	16.	KO-50 ANNUNCIATOR LIGHTS - ПОДОГРЕВАТЕЛЬ (Pre-heater) - ЗАЖОГАНИЕ (Ignition) - KO-50 PAБОТАЕТ (KO-50 is working)	OFF
	17.	РУЧН — ABTOM SWITCH (Manual / Auto)	NEUTRAL / CENTRED
_	18.	ЗАЛИВКА — ПОЛН РЕЖИМ — СПЕДН РЕЖИМ SWITCH (Prime / High / Medium output)	ПОЛН РЕЖИМ (High output)
	19.	ВЕНТИЛ SWITCH (Fan)	ВЫК
05	20.	ЗАДАТЧИК т ⁰ KO-50 KNOB (KO-50 Temperature)	15
	21.	Б — Д SWITCH (Left / Right ADF channel)	Б
06	The rig	ght panel manages the GMK-1 gyromagnetic compass.	T
-	22.	CEB — ЮЖН SWITCH (North / South hemisphere)	CEB
	23.	ЗАВАЛ ГА LIGHT (Bank correction)	
-	24.	MK - ΓΠK - AM (Magnetic / Gyro mode)	MK
	25.	KOHTP SWITCH (Test selector)	OFF / CENTRED
	26.	ШИРОТА KNOB (Latitude)	PER POSITION
	27.	3K SWITCH (Assigned course)	CENTRED
요 01	The P	KT control box manages the chin-mounted PKT machine-gun (not installed)	I
<u> </u>	1.	TKT SWITCH (Pilot control selector)	ЛЕТЧНИК (Pilot)
02	2.	BAROMETRIC ALTIMETER	SET 0M
	3.	DIRECTIONAL GYRO	CHECK

NORMAL STEP FULL PROCEDURE STEP

CONDITIONAL STEP

NON-FUNCTIONAL STEP

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

(j. 02	4. INDICATED AIRSPEED GAUGE	<50
Right Instrument Panel (cont.)	5. ATTITUDE INDICATOR	CAGED
Pane	6. VERTICAL VELOCITY INDICATOR	0
ment	7. MAIN ROTOR TACHOMETER GAUGE	0%
nstru	8. ДИСС ОТКАЗАЛ LIGHT (Doppler failure)	OFF
ight I	9. TWO-POINTER ENGINE TACHOMETER	N1 and N2 0%
ш.	10. CLOCK	SET
_	11. FUEL LOW LIGHT	OFF
_	12. FUEL METER SELECTOR	PACX. (Service cell)
_	13. FUEL GAUGE	0 L
_	14. DOPPLER GROUND SPEED / DRIFT GAUGE	0/BARBERPOLE
_	15. K — P SWITCH (Test / Operate mode)	P (Operate)
_	16. C — M SWITCH (Land / Sea mode)	C (Land)
_	17. DOOPLER DIGITAL DISPLAY UNIT	0
	18. COCKPIT TEMPERATURE GAUGE	-6
03	19. CBET — ВЫК — УБРАНА SWITCH (Co-pilot landing/search light)	BЫK (Off)
04	The ЭCБP-3Π/A Electrical release control box manages sequential bomb and weapon store releases	
-	20. ESBR SETTINGS KNOB	\
• • • • • • •	21. СБРОС БОМБ SWITCH (ESBR Power)	ВЫКЛ. (Off)
	END	

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

PREFLIGHT INSPECTION CHECKLIST

Pilot Seat	1.	FLASHLIGHT If flying at night.	ON
Pii	2.	ROTOR BRAKE	DOWN
	3.	CYCLIC	CENTRED
	4.	COLLECTIVE	DOWN
-	5.	THROTTLE	FULLY LEFT
	6.	ECL LEVERS	MIDDLE
CE 01	7.	ОСТАНОВ ДВИГ ЛЕВ and ПРАВ LEVERS	CLOSED (AFT)
03	8.	BRAKING SYSTEM LEAK FREE - Brakes - TOPMO3 brake pressure gauge - BOЗДУХ bottle pressure	CHECK Engage Steady at 31–34 κг/см² Decreases with each use
LIP/RIP	9.	BAROMETRIC ALTIMETER	SET
•	• • • • •	END	

	BEFORE APU START CHECKLIST						
Right Side Console	1.	BATTERIES - AKKYM I and II - DC Voltage Control selector - DC Voltmeter (RRC01)	ON ВКЛ / Up (On) ШИНЫ АКК (Batt bus) ≥24 V				
Right Si	2.	BATTERY POWER - ΑΕΡΟДΡ ΠИΤΑΗ - DC Voltage Control selector - ΑΚΚΥΜ II - Any boost pump (COC05 + RCBC02) - DC Voltmeter (RRC01) - ΑΚΚΥΜ I - ΑΚΚΥΜ II - DC Voltage Control Selector - DC Voltmeter (RRC01) - ΑΚΚΥΜ I and II - Boost pump switches - DC Voltage Control Selector	CHECK BЫК / Down (Off) AKKYMЛ I (Batt 1) BЫК / Down (Off) On ≥24 V BЫК / Down (Off) BКЛ / Up (On) AKKYMЛ II (Batt 2) ≥24 V BКЛ / Up (On) Off ШИНЫ АКК (Batt bus)				
	3.	ΟΕΟΓΡΕΒ ΑΚΚΥΜ If operating in a cold environment.	ВКЛ / UP				
	4.	GROUND POWER If required АЭРОД ПИТАН (On DC Control Panel, RSC03) - АЭРОДР ПИТАН (On AC Control Panel, RRC02)	CONNECTED ВКЛ / Up ВКЛ / Up				
	5.	GROUND POWER DC SUPPLY If connected to ground power АЭР ПИТ ВКЛЮЧЕНО light - DC Voltage Control selector - DC Voltmeter (RRC01)	CHECK Illuminated AЭР ПИТ (Ext Pwr) 27-29 V				

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

BEFORE APU START CHECKLIST

		BEI ONE AFO STANT OTEOREIST	
<u>ə</u> 02	6.	GROUND POWER AC SUPPLY If connected to ground power.	CHECK
Right Rear Console		- АЭР ПИТ ВКЛЮЧЕНО light - AC Voltage Control selector	On АЭРОДРОМ ПИТАН I-III, III-II
nt Rea		- AC Voltmeter (RRC01)	and II-I (Ext Pwr) 200–205 V for each bus
Righ		- АЭРОДР ПИТАН - ПО ~115 and ПТ ~36	ВКЛ / Up <i>(On)</i>
		- ВЫПРЯМИТЕЛИ I, II and III (RSC03)	ABTOMAT / Down (Auto) BKЛ / Up (On)
		- DC Voltage Control selector (RSC03) - DC Voltmeter (RRC01)	ШИНЫ ВЫПР (Rect Buses) 27–29 V
		- AC Voltage Control selector- ΠΟ ~115	~115 PYYHOE / Up <i>(Manual)</i>
_	_	- AC Voltmeter (RRC01)	115 V
	7.	ПО ~115 - ПО-500 ВКЛЮЧЕН light	PYYHOE / UP Illuminates
		- ВКЛЮЧИ РИ-65 light <i>(LTP)</i>	Illuminates
	8.	□ T ~36 If connected to ground power.	РУЧНОЕ / UP
		NOTE	DLUK (Office and View
1	 	If starting from batteries, it is recommended to leave the 36V Inverter in the neutral until generators are operating to prevent the batteries from draining qu	
	9.	ГЕНЕРАТОРЫ I and II	BЫK / DOWN
Right C.B. Console	10.	GROUP 4, 5, 6, 7, 8, 9 CIRCUIT BREAKERS - КД lamp (LSC02)	ON Illuminates
90 G		- СЕТЬ ПИТ.ОТ АКК, ОТАКАЗ 620, ОТКЛ ЭРД ЛЕВ and ОТКЛ ЭРД ПРАВ ДВ lights <i>(LIP02)</i>	Illuminate
t O.E		- ОТКЛ lamp <i>(CC03)</i>	Illuminates
Righ		- КОНТРОЛЬ ДАТЧИКОВ light <i>(COC02)</i> - ЛЕВЫЙ and ПРАВЫЙ ЗАКРЫТ lights <i>(COC05)</i>	Illuminates Illuminate
06	11.	ПРОТИВООБЛЕДЕНИТ СИСТЕМА C.B:s Unless weather conditions demand anti-icing to be on.	OFF
<u>a</u> 04	12.	INTERNAL and EXTERNAL WORK LIGHTS	ON
Right Side Console 90		IF FLYING AT NIGHT Left, centre, and right ΓΡΥΠΠΑ 1 and 2 knobs (LSC07, BW02, RSC01)	
ide (- ОСВЕЩЕНИЕ ДЕЖУРН and ОБЩЕ	As required
ght S		- АНО, ОГИН СТРОЕВ - ОГИН КОНТУР, ПРОБЛЕСК МАЯК, МИГАЛКА	ВКЛ / Up ТУСКЛО / Up
, B		- ПОДСВЕТ 5,5B <i>(RTP)</i>	BKЛ/Up
		- ПЛАФОН <i>(LTP and RTP)</i> - ПОДСВЕТ ГРУППЫ 5,5B knob <i>(BW01)</i>	ВКЛ / Up KPACH / Up
			As required
& LTP	13.	СПУУ-52 Ensure centre console red ОТКЛ light is illuminated.	ВЫК / DOWN
RTP	14.	РИ-65 Ensure ВКЛЮЧИ РИ-65 light is illuminated	BыK / DOWN
	15.	PILOT and CO-PILOT WINDSCREEN WIPERS	CHECK
		- ПУСК - СБРОС	Press to operate Press to return
			i iess to ietuiii

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

BEFORE APU START CHECKLIST

BEFORE APU START CHECKLIST								
ROC 01	16. PILOT and CO-PILOT SPU-9 ICS - SPU-9 Source selector - Volumes	CHECK As required Set						
요 02	17. FUEL - Fuel Meter selector - Fuel Meter selector - Fuel Meter selector	CHECK Ππ then Ππρ to check balance PACX. then CYMMA to check main and total amounts. PACX.						
Centre Console	 18. ANNUNCIATOR LAMP SYSTEM Μ/ΓΑ/ΙΚΑ (RSC04) - ΠΡΟΒΕΡΚΑ - Vibration warning light (LIP02); Icing warning lights (LOC03); Hydraulics warning (COC07); fire warning light (COC01); and Generator warning lights (RRC02). - ΠΡΟΒΕΡΚΑ - All other annunciator lights. - ΠΡΟΒΕΡΚΑ 	CHECK ВКЛ / Up МИГАЛКИ Flashing СИГНАЛ ЛАМП Illuminate Centred / Off						
Centre Overhead Console &	19. FIRE PROTECTION SYSTEM - Fire Circuit Test selector - МИГАЛКА (RSCO4) - РАДИО КОМАНД РС circuit breaker (RCBPO4) - ОГНЕТУШЕНИЕ — КОНТРОЛЬ ДАТЧИКОВ - КОНТРОЛЬ ДАТЧИКОВ light - КОНТРОЛ ПИРОПАТРОНИВ - 1 and 2 ОЧЕРЕДЬ lights (COCO1) - ОГНЕТУШЕНИЕ — КОНТРОЛЬ ДАТЧИКОВ - КОНТРОЛЬ ДАТЧИКОВ light - Fire Circuit Test selector, while watching warning lights	CHECK BЫК BKЛ / Up BЫК / Down OГНЕТУШЕНИЕ Off II / Up then I / Down Stay off KOHTPOЛЬ ДАТЧИКОВ Illuminates Turn through КАНАЛЫ 1–6						
	КАНАЛЫ ПОЖАР (LIP02) ПОЖАР ЛЕВ ДВ ПОЖАР ПОЖАР ПОЖАР КО-50, РЕД. А 1, 2 • • • • 3 • • • • 4, 5, 6 • • • •							
	- Fire Circuit Test selector - РАДИО КОМАНД РС circuit breaker (RCBP04) - ОГНЕТУШЕНИЕ — КОНТРОЛЬ ДАТЧИКОВ ВЫК ВКЛ / Up ОГНЕТУШЕНИЕ							
	WARNING During Fire Protection System checks, follow the above order very closely and at all times, ensure that ДАТЧИКОВ switch is in the downward КОНТРОЛЬ ДАТЧИКОВ position and that the КОНТРОЛЬ ДА moving the Fire Circuit Test selector out of the ВЫК position. Moving the Fire Circuit Test selector when the system is the operating mode (ОГНЕТУШЕНИЕ) will fire affected systems with extinguishing agent.	АТЧИКОВ light is illuminated before						
Left Side Console	20. ENGINE SENSORS - КОНТРОЛЬ ИВ-500E button - ЛЕВ ДВ ВИБР ПОВ, ПРАВ ДВ ВИБР ПОВ, ВЫКЛЮЧИ ЛЕВ ДВ and ВЫКЛЮЧИ ПРАВ ДВ lights (LIP02) - ЗЕМЛЯ button - EGT Needles - РТ ДВИГАТЕЛЕЙ ЛЕВОГО and ПРАВОГО button - PT ЛЕВ РАБОТАЕТ and РТ ПРАВ РАБОТАЕТ light	CHECK Press Illuminate Press Move toward 960°C Press Illuminate						
• • • • • • • •		• • • • • • • • • • • • • • • • • • • •						

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

APU START CHECKLIST

02 FIRE PROTECTION SYSTEM **ACTIVATE Sentre Overhead Console** - Fire Circuit Test selector вык - ОГНЕТУШЕНИЕ — КОНТРОЛЬ ДАТЧИКОВ ОГНЕТУШЕНИЕ 05 2. РАСХОД НАСОСЫ БАКОВ ON / UP - PACXOД PAБOTAET light Illuminates MAIN TANK BOOST PUMPS ON If connected to ground power. - ЛЕВЫЙ, and ПРАВЫЙ НАСОСЫ БАКОВ On / Up - ЛЕВЫЙ, and ПРАВЫЙ РАБОТАЕТ lights Illuminate NOTE If starting using batteries, it is recommended to leave boost pumps off until APU generator or rectifiers are operational. **FUEL SHUTOFF VALVES** OPEN OTKP / Up and Guarded - ПЕРЕКРЫВ КРАНЫ ЛЕВЫЙ and ПРАВЫЙ - ЛЕВЫЙ and ПРАВЫЙ ЗАКРЫТ lights Off 04 START-UP REQUESTED 5. NOTE Make note of ATC wind check as wind direction affects the engine starting procedure. ЗАПУСК — ПРОКРУТ — ЛОЖНЫЙ ЗАПУСК ЗАПУСК / UP 7. ЗАПУСК ВИТТОМ **PRESS** For 2-3 seconds. - ABTOMAT ВКЛЮЧЕН light Illuminates - ДАВ МАСЛА and ОБОРОТЫ HOPMA lights Illuminate 03 8. APU PARAMETERS **CHECK** - PE3EPBH FEHEPAT switch (RSC03) BЫK / Down - APU accelerates. To idle in <20 seconds - ТЕМПЕР ГАЗОВ АГРЕГАТ АИ-9В <700°C - ДАБЛ ВОЗДУХА АГРЕГАТ АИ-9В 1.3-2.0 кг/см² - Monitor for consistency 1 minute NOTE In case of an inadvertent shut-down of the APU, press the BЫΚЛ ΑΝ-9B button for 2-3 seconds to cut off fuel supply. The procedure can also be used to abort the APU start manually. In case of an unsuccessful or aborted APU start, crank the APU as follow: • ЗАПУСК — ПРОКРУТ — ЛОЖНЫЙ ЗАПУСК switch to ПРОКРУТ (Crank). Press the 3ΑΠΥCK button for 2–3 seconds. • Check that the ABTOMAT ВКЛЮЧЕН and ДАВ МАСЛА HOPMA lights illuminate. • Press the ВЫКЛ АИ-9В button to stop the crank **⊘** CAUTION Restart attempts must be 3 minutes apart. Three attempts can be made, after which a 15 minute shutdown/cool-down period must be observed before attempting another start. **NOTE** Continuous APU operation is limited to 30 minutes. **⊘** CAUTION

END

In PE3EPBH rehepat (standby generator) mode, the APU cannot operate beyond 30 minutes, after which a 15 minute shut-down/cool-down period must be observed.

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

ENGINE START CHECKLIST

Centre Overhead Console

⊘ CAUTION

Three consecutive attempts to start the engine using APU bleed air are allowed. The duration of each bleed air cycle should not exceed 45 seconds, with intervals between each cycle of no less than 1 minute, during which the APU is run at idle speed.

The continuous running time of the APU in this condition should not exceed 13 minutes, followed by a 15 minute shut-down/cool-down period.

WARNING

Do NOT start the engines with the APU in DC generator mode (PE3EPBH ΓΕΗΕΡΑΤ set to BK/I / Up on the RSC)

NOTE

The engine starting order depends on the wind direction. The engine on the downwind side is started first.

3. ЗАПУСК ВИТТОМ

For 2–3 seconds.

- Monitor Two-point Engine Tachometer (LIP02)Left or right Fuel shut-off lever (CE01)
- ABTOMAT ВКЛЮЧЕН and CTAPTEP PAБOTAET lights

N1 / Left or N2 / Right needle.
Fwd as needle rises.
Illuminate

PRESS

NOTE

If N1/N2 needles do not respond to the starter button press and the starter light do not illuminate, check the Rotor Brake lever to ensure it is not engaged and keeping the engine from starting.

eft Instrument Panel

7.

4. ENGINE PARAMETERS

- N1 / Left engine or N2 / Right engine RPM
- EGT Gauge
- ABTOMAT BKЛЮЧЕН light (COC04)
- ОТКЛ ЭРД ЛЕВ or ПРАВ ДВ light, and CTAPTEP PAБOTAET lights (COC04)
- Engine to idle RPM (70–75%)

REPEAT PROCESS

- Main rotor RPM with both engines running

CHECK

Steady rise to idle RPM <700°C

Off after 30 seconds

Out at 60-75% RPM Within 60 seconds 55-70%

FOR SECOND ENGINE

NOTE

Unusual thumps or impact noises during engine run-up indicate the main rotor blade droop limiters are hitting their stops. Carefully adjust cyclic until the noise is eliminated.

⊘ CAUTION

Excessive EGT or RPM indicates that the throttle ECL lever(s) are not in the middle/idle position and/or that the collective throttle is not fully left. Adjust immediately to avoid over-stressing the engine or unbalancing the aircraft.

S S 03 **CONSUMERS TO STANDBY GENERATOR** CONNECT If starting on battery power. - PECEPBH FEHEPAT BKЛ/Up - ПРОВЕРКА ОБОРУД BKЛ/Up - ПРОВЕРКА ОБОРУД light Illuminates 04 ПЗУ ДВИГАТ ЛЕВ or ПРАВ 6. BKЛ/UP Per the engine being started. - ЛЕВ or ПРАВ ПЗУ ВКЛЮЧЕН Illuminates in 30 seconds

NORMAL STEP FULL PROCEDURE STEP CONDITIONAL STEP

NON-FUNCTIONAL STEP

	FULL PROCEDURE SUB-STEP CONDITIONAL SUB-STEP NON-FUNCTIONAL SUB-STEP ENGINE and HYDRAULICS WARM-UP and RESPONSE CHECKLIST					
ad Console 90	1.	APU If connected to ground power APU cool-down at idle - ВЫКЛ АИ-9В button	SHUT DOWN For 30–60 seconds Press			
oft Overhe	lf usi	NOTE ng battery power to start the engines, the APU is used as a back-up generator to feed power const the engines have been warmed up and are feeding the main generate				
Centre and Left Overhead Console 9	2.	MAIN TANK BOOST PUMPS If starting on battery power ЛЕВЫЙ, and ПРАВЫЙ НАСОСЫ БАКОВ - ЛЕВЫЙ, and ПРАВЫЙ РАБОТАЕТ lights	ON On / Up Illuminate			
06	3.	CONTROLS At idle engine power - Move cyclic and pedals individually Main hydraulic pressure	CHECK Confirm smooth motion 45±3 – 65±2 κг/см²			
nent Panel 00 % 00		throttle can be set from full left to full right to accelerate engines out of idle power once the engine nd the main gearbox oil temperature reaches at least -15°C. Monitor Transmission Oil Pressure/Temperature gauges (CC01). Engine warm-up sho	mperature, LH Engine Oil Pressure/			
Central Console and Left Instrument Panel $^\circ$ $^\circ$ $^\circ$ $^\circ$	4.	ELECTRONIC ENGINE GOVERNOR At idle engine power, once engine is warmed up - ЭРД ЛЕВ and ПРАВ - Left КОНТРОЛЬ СТ1 — РАБОТА — КОНТРОЛЬ СТ2 - Throttle - ПРЕВ ЛЕВ ДВИГ light (LIP02) - Throttle - ПРЕВ ЛЕВ ДВИГ light (LIP02) - Left КОНТРОЛЬ СТ1 — РАБОТА — КОНТРОЛЬ СТ2 Repeat for the CT2 position and then for right EEG	CHECK BKЛ Hold in KOHTPOЛЬ CT1 Right to increase N1 RPM Illuminates at 91.5±2% RPM Left to reduce RPM by 5–7% Off as RPM decreases Release to PABOTA			
	5.	THROTTLE Once engine is warmed up.	FULLY RIGHT			
	6.	ENGINE RESPONSE - Throttle - Two-point Engine tachometer - Throttle - Throttle - Time until tachometer returns to previous RPM ±1.5%	CHECK Fully right for 1 minute Note RPM Fully left Fully right after 2 seconds 3–6 seconds.			
	7.	ROTOR PITCH TRIM - Collective - Collective N2 Trim ("Adjust free RPM") switch Main Rotor RPM	CHECK Up until 3° rotor pitch Down Sottles at 91 + 394			

- Main Rotor RPM
- Collective N2 Trim switch
- Main Rotor RPM
- Collective N2 Trim switch
- Collective

Settles at 91±2%

Up

Settles at 96-99% Set RPM to 94-95%

Fully down

⊘ CAUTION

If lightly loaded, the pitch trim test may induce enough lift to move the aircraft. Use cyclic and pedals, and set trim to counteract all movement. If full test RPM cannot be achieved, warm up transmission oil to 40-60° then repeat.

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

ELECTRICS and AVIONICS CHECKLIST

<u>ə</u> 02	1.	ГЕНЕРАТОРЫ I and II	ВКЛ / UP	
902 03 03	2.	ВЫПРЯМИТЕЛИ I, II and III	ВЛК / UP	
20 Rear	3.	ПО ~115 and ПТ ~36 - ПО-500 ВКЛЮЧЕН light	ABTOMAT / DOWN Off	
Right Side Console and	4.	APU and BACK-UP GENERATOR If starting on battery power ПРОВЕРКА ОБОРУД light - ПРОВЕРКА ОБОРУД - РЕСЕРВН ГЕНЕРАТ - ВЫКЛ АИ-9В button (COC04)	Off BЫK / Down BЫK / Down Press	
Sign -	5.	GROUND POWER If connected to ground power АЭРОД ПИТАН (On DC Control Panel, RSC03) - АЭРОДР ПИТАН (On AC Control Panel, RRC02) - АЭР ПИТ ВКЛЮЧЕНО lights	DISCONNECTED BЫK / Down BЫK / Down Off	
 		NOTE electrical, avionics, communications, and navigation systems can be set up while on ground power ing time and save on fuel consumption. However, some systems should be checked while on engir engine output and this use needs to be monitored as part of the testi	e generators since their use will affect	
02	6.	AC POWER SUPPLY - AC Voltage Control selector - AC Voltmeter (RRC01) - AC Voltage Control selector - AC Voltmeter (RRC01)	СНЕСК Turn through all ПЕРВЫЙ and ВТОРОЙ ГЕНЕРАТ modes. 200–205 V for each. ~115 115 V	
03	7.	DC RECTIFIERS - DC Voltage Control selector - DC Voltmeter (RRC01)	CHECK ШИНИЫ ВЫПР 27–29 V	
04	8.	SYSTEM HEATING If operating in a cold environment - ОБОГРЕВ ПВД ЛЕВ and ПРАВ - ОБОГРЕВ ЧАСОВ - ОБОГРЕВ АККУМ	ACTIVATE BKЛ / Up BKЛ / Up BKЛ / Up	
Left Overhead Console &	9.	ANTI-ICING SYSTEMS If operating in a cold environment, at full engine power - AII ПРОТИВООБЛЕДЕНИТ СИСТЕМА С.В:s (RCBC06) - AII ПРОТИВООБЛЕДЕНИТ СИСТЕМА switches - EGT Gauge - Two-point Engine tachometer - КОНТР ОБОГР РИО-3 button - ОБОГРЕВ ИСПРАВ light - ТОК ПОТРЕБИТЕЛЕЙ selector (LOC04)	ACTIVATE and CHECK BKЛ / Up BKЛ and РУЧНОЕ <60° increase within 25–45s <1.5% increase within 25–45s Press Illuminates Turn through consumers	
		ТОК ПОТОРЕВИТЕЛЕЙ (LOC04) ЛОПАСТИ НЕСУЩ 1–5 XBOCT ВИНТ СТЕКОИ ПЗ Amperemeter (LOC04): 7 A 13 A 8 A	У <u>ЛЕВ and ПРАВ</u> 9.5 A	
		- ТОК ПОТРЕБИТЕЛЕЙ selector (LOC04) - All ПРОТИВООБЛЕДЕНИТ СИСТЕМА switches - BЫК button - КОНТРОЛЬ ОБОГРЕВА ПВД buttons (LTP and RTP) - Coresponding ОБОГРЕВ ИСПРАВ light (LTP and RTP)	BЫК BЫК and ABTOMAT Press Press Illuminates	

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

ELECTRICS and AVIONICS CHECKLIST

- СПУУ-52 C.B. (RCBC02) - СПУУ-52 switch - ОТКЛ. warning lamp (CC03) - Pitch limiter control test — this test requires extensive cooperation between pilot and flight engineer. Refer to operating manual for complete procedure. 15. BK-53 SWITCH BKЛ / UP 16. ABMAГОРИЗ SWITCH Also activate on co-pilot Right Triangular Panel 17. COCKPIT ENVIRONMENTAL SYSTEMS - Pilot and co-pilot BEHTИЛАТОР switches (LTP and RTP) - Pilot and co-pilot windows BKЛ / UP ACTIVATE As desired As desired	С	
SECTIVATE SEC		
13. PU-65 VOICE ALERT SYSTEM - PU-65 switch - PU-65 switch - BK/II/Up - PU-65 switch - BK/II/Up - PIPOBEPKA button (LSC03) - YCU/II gain switch (LSC03) - OTK/I button (LSC03) - OTK/I button (LSC03) - CΠ/YY-52 ROTOR PITCH LIMITER SYSTEM - CΠ/YY-52 ROTOR PITCH LIMITER SYSTEM - CΠ/YY-52 switch - OTK/I. warning lamp (CC03) - Pitch limiter control test — this test requires extensive cooperation between pilot and flight engineer. Refer to operating manual for complete procedure. 15. BK-53 SWITCH - ABMAΓΟΡИЗ SWITCH - Also activate on co-pilot Right Triangular Panel 17. COCKPIT ENVIRONMENTAL SYSTEMS - Pilot and co-pilot BEHTI/I/IATOP switches (LTP and RTP) - Pilot and co-pilot windows - ACTIVATE - As desired - As desired - As desired - As desired		
PM-65 switch - BKЛЮЧН РИ-65 warning light - ПРОВЕРКА button (LSC03) - УСИЛ gain switch (LSC03) - ОТКЛ button (LSC03) 14. СПУУ-52 ROTOR PITCH LIMITER SYSTEM - СПУУ-52 ROTOR PITCH LIMITER SYSTEM - СПУУ-52 switch - ОТКЛ. warning lamp (CC03) - Pitch limiter control test — this test requires extensive cooperation between pilot and flight engineer. Refer to operating manual for complete procedure. 15. BK-53 SWITCH - ABMAГОРИЗ SWITCH - Also activate on co-pilot Right Triangular Panel 17. COCKPIT ENVIRONMENTAL SYSTEMS - Pilot and co-pilot BEHTUЛATOP switches (LTP and RTP) - Pilot and co-pilot windows		
14. CПУУ-52 ROTOR PITCH LIMITER SYSTEM - СПУУ-52 C.B. (RCBC02) - СПУУ-52 switch - ОТКЛ. warning lamp (CC03) - Pitch limiter control test — this test requires extensive cooperation between pilot and flight engineer. Refer to operating manual for complete procedure. 15. BK-53 SWITCH ABMAFOPM3 SWITCH Also activate on co-pilot Right Triangular Panel 17. COCKPIT ENVIRONMENTAL SYSTEMS - Pilot and co-pilot BEHTMATOP switches (LTP and RTP) - Pilot and co-pilot windows ACTIVATE As desired AS desired AS desired	HECK	
16. ABИAГОРИЗ SWITCH Also activate on co-pilot Right Triangular Panel 17. COCKPIT ENVIRONMENTAL SYSTEMS - Pilot and co-pilot BEHTИЛАТОР switches (LTP and RTP) - Pilot and co-pilot windows - Pilot and co-pilot windows - Pilot and co-pilot windows	BKJ / Up Off Performed	
Also activate on co-pilot Right Triangular Panel 17. COCKPIT ENVIRONMENTAL SYSTEMS - Pilot and co-pilot BEHTИЛАТОР switches (LTP and RTP) - Pilot and co-pilot windows - Pilot and co-pilot windows - As desired - As desired		
17. COCKPIT ENVIRONMENTAL SYSTEMS - Pilot and co-pilot BEHTИЛАТОР switches (LTP and RTP) - Pilot and co-pilot windows - Pilot and co-pilot windows - As desired - As desired		
- KO-50 C.B. (RCBC06) - PYЧН — ABTOM switch - Required temperature, if in auto/ABTOM mode (ROC05) - ЗАЛИВКА — ПОЛН РЕЖИМ — СРЕДН РЕЖИМ switch, if in manual/ PУЧН mode - ЗАПУСК button, if using the KO-50 to heat the cabin ВЕНТИЛ switch, if using the KO-50 to cool the cabin ПОДОГРЕВАТЕЛЬ light - ЗАХИГАНИЕ light - КО-50 РАБОТАЕТ light - КО-50 РАБОТАЕТ light - ВКЛ / Up - ПОДОГРЕВАТЕЛЬ light - ВКЛ / Up - Illuminates while heati	жим ing fuel econds	
18. УВ-26 COUNTERMEASURES SYSTEM - УВ-26 switch (<i>RAP01</i>) ВКЛ / Right - НАЛИЧ — ПРОГР switch ПРОГР / Right - Release program Set		
Виtton 0 1 2 3 4 5 6 7 8 9 СЕРИЯ (# of sequences)		
- НАЛИЧ — ПРОГР switch HАЛИЧ / Left		

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

NAVIGATION EQUIPMENT CHECKLIST

	NAVIGATION EQUIPMENT CHECKLIST						
D 02	1.	FRONT WINDOW MAGNETIC COMPASS	CHECK				
Left Instr. Panel	2.	RADAR ALTIMETER - ВИСОТОМЕР С.В. (RCBC04) - РАДИОВИС switch - Self-test - Low Altitude Warning bug - Low Altitude Warning light	ACTIVATE BKЛ / Up BKЛ / Up Runs for 1–2 minutes Set Illuminates if bug set >5m				
Right Triangular Panel	3.	 ΓMK-1 GYROMAGNETIC COMPASS SYSTEM CEB — ЮЖН (CEB=North, ЮЖН=South) switch (ROC06) ШИРОТА knob (ROC06) MK — ΓΠΚ — AM switch (ROC06) ΓΜΚ-1 switch 3K switch (ROC06) HSI Compass card (RIP02 or LIP02) MK — ΓΠΚ — AM switch (ROC06) 	ACTIVATE As required To current latitude MK / Left BKЛ / Up Press to align Confirm alignment FTIK / Centred once aligned				
	4.	ДИСС-15 DOPPLER NAVIGATION SYSTEM - ДИСС С.В. (RCBC04) - ДИСС switch - PAБОТА light (BW01)	ACTIVATE ВКЛ / Up ВКЛ / Up Illuminates				
strument Panel 0 % 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5.	ДИСС-15 SYSTEM FUNCTIONALITY - Doppler Mode selector - KOHTP., M and B warning lights - Π and ДИСС ОТКАЗАЛ lights (RIP02) - Doppler Mode selector	CHECK ΠΑΜЯΤЬ Illuminate Illuminate Step through mode 1–3				
Back Wall and Right Instrument Panel	The the v	values displayed on the Doppler Hover / Low Speed indicator (LIP02) and Doppler Ground Speed / values indicated on the ДИСС control panel by each mode. Hover indicator Ground Speed / Hover ind	nd speed indicator UAC CHOC eed Drift				
		- With Doppler Mode selctor in 3, C — M switch - Doppler Ground Speed - ВКЛ button - ПУТЬ КМ reading - БОКОВОЕ ЫКЛОНЕНИЕ КМ reading - ОТКЛ button - Doppler Digital Display values - К — P switch - Doppler Ground Speed - Doppler Mode Selector - Doppler Ground Speed - C — M switch - K — P switch - Doppler Mode Selector - KOHTP., M and B warning lights - П and ДИСС ОТКАЗАЛ lights	M / Right Increases by 3km/h Press To ВПЕРЁД 11 within 5 min. Remains at 0 Press Reset to 0 K / Left 306±3.5 km/h, 15±1° drift ПАМЯТЬ Changes by <±9km/h, <±3° As required by route P / Right PAБОТА Off				
	6.	ВКЛ BUTTON To start Doppler Navigation System tracking ВКЛЮЧЕНО light	PRESS Illuminates				

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

NAVIGATION EQUIPMENT CHECKLIST

02 Right Overhead Cosnsole

7. **APK-9 ADF SYSTEM**

- CПУ and KOMПAC CB circuit breakers (RCBC04 and 05)
- СПУ source selector (ROC01)
- СПУ РАДИО switch (ROC02)
- APK CB APK YKB switch (LIP02)
- APK-9 mode selector
- ТЛФ ТЛГ switch
- -Б-Дswitch
- Left / Inner Frequency selector
- APK-9 mode selector
- Left and Right HSI (RIP02 and LIP02)
- With switch in Д position and Right / Outer Right receiver
- ТЛФ ТЛГ switch
- СПУ source selector (ROC01)

ACTIVATE and TUNE

BKЛ/Up PK1

РАДИО / Down

APK CB

AHT ΤЛФ

Б/Left

Set, listen for tone

КОМП

Check thin needle deflection Repeat process

As required by NDB type

УKР

NOTE

The ARK-9 radio is a low-frequency receiver. If no NDB:s in the 150-1300 kHz AM range are available in the operating area, the ARK-9 system cannot be used for navigation purposes and should be left off to reduce power draw during preparation and flight.

03 8. APK-УД VHF HOMING SYSTEM

If beacon is available, otherwise first activate and tune R-828 radio to check system against available preset radio sources.

- CПУ and KOMПAC YKB circuit breakers (RCBC04 and 05)
- СПУ source selector (ROC01)
- СПУ РАДИО switch (ROC02)
- APK CB APK YKB switch (LIP02)
- APK-УД mode selector
- KAHAЛЫ selector, if homing on a preset beacon.
- P828 switch, if using the R-828 radio for homing.
- Left HSI (LIP02)

ACTIVATE and CHECK

BKЛ/Up PK2

РАДИО / Down АРК УКВ

УΠ

As required KOMΠAC / Up

Check thin needle deflection

Standard channel frequency presets for the ARK-UD homing system are as follows:

Channe

	1	2	3	4	5	6
Frequency (MHz)	114.166	114.333	114.583	121.5	123.1	124.1

NOTE

The ARK-UD is not programmable in flight, nor is the R-828 radio it can be slaved to. If no NDB:s are operating on the preset frequencies, and no units are using the prerequisite homing beacons within the operating area, the ARK-UD system cannot be used for navigation purposes and should be left off to reduce power draw during preparation and flight.

9. APK CB — APK YKB SWITCH LIP02

05

10. CYCLIC AUTOPILOT OFF BUTTON

11. KPEH ТАНГАЖ ВКЛ. LAMP BUTTON

AS REQUIRED

PRESS

PRESS

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

COMMUNICATION EQUIPMENT CHECKLIST

) 05 9	1.	SIGNAL FLARE SYSTE - РАКЕТЫ СИРЕНА С.В. (LC) - Upper and lower flare power	BC06)	hes								В	CTIVATE КЛ/Up КЛ/Up
	This	s allows for immediate release of a sign first	nal flare , and the				spondir					ease, the f	lares can be selecte
04 8 07 07	2.	P-863 VHF/UHF RADIC - 3Y — HY, if using preset ch - KAHAΠ selector, if using pre - Frequency selector, if using - KOMAHД PC, if using FM b	annels eset ch manua	s nanne al tun	els (LOC	C06)						As As	CTIVATE BY / Up required required HM / Up
		Standard o	hannel f	requer	ncy pres	sets for	the R-8	63 radio	system	n are as	follows:		
		КАНАЛ	1	2	3	4	5	6	7	8	9	10	
		Frequency MHz AM			136	127	125	121	141	128	126	133	
		КАНАЛ		12	13	14	15	16	17	18	19	20	
		Frequency MHz AM	130	129	123	131	134	132	138	122	124	137	
01 & 03	3.	3. P-828 LVHF FM RADIO SYSTEM - P-828 switch - P828 switch, if using for APK-УД homing - KAHAЛ selector - HACTP lamp							ı	KON As	CTIVATE KJ / Up MJAC / Up required es while tuning		
	Standard channel frequency presets for the R-828 radio system are as follow							follows:					
-		КАНАЛ		2	3	4	5	6	7	8	9	10	
		Frequency MHz FM	21.5	25.7	27	28	30	32	40	50	55.5	59.9	
	The	e R-828 radio cannot be programmed used for navigation or communio					are oper						
04	4.	ЯДРО-1A HF RADIO S - СВЯЗНАЯ РС - ВЫКЛ — ОМ — AM switch - ВЫКЛ — ОМ — AM switch - Frequency selector	, if usir	ng sir			d					OM At As	CTIVATE KЛ / Up / Centred M / Right required es while tuning
		- HACT light				NOTE The YaDRO-1A is a high frequency radio. If no units or stations in the operating area use the 2–18 M system cannot be used for communication purposes and should be left off to reduce power drawn that the communication purposes are should be left off to reduce power drawn.							
1	1	The YaDRO-1A is a high frequency rad				ns in th	e opera						
01	5.	The YaDRO-1A is a high frequency rad	nication SOU	purpo RCE	ses and	ns in the should	e opera I be left ORS	off to re				g prepara	
01		The YaDRO-1A is a high frequency rad system cannot be used for commu	SOU R-828	ригро RCE 8 FM; \ДИ	SES and SEL KP =	ns in the dishould should shou	e opera I be left ORS O-1 H	off to re				g prepara	ation and flight.

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

ARMAMENTS GROUND PREPARATION CHECKLIST

04	1.	ARMAMENT CONTROL - БОМБОВОЕ ВООРУЖЕНИЕ УПРАВЛЕНИЕ С.В. - ВООРУЖЕНИЕ РС ГУВ СТРЕЛЬБА С.В. - ВООРУЖЕНИЕ РС ГУВ СИГНАЛИЗАЦ С.В. - ГЛАВНЫЙ ВЫКЛЮЧ РС ГУВ switch (LCBC02) - БД1, 2, 3, 4, 5, 6 ЗАГРУЖ light (LCBC01 and RTP03) - СЕТЬ РС ВКЛЮЧ ог ГУВ ВКЛЮЧЕНА light, depending on position of payload selector (LCBC01)	ACTIVATE BKЛ / Up BKЛ / Up BKЛ / Up BKЛ / Up Illuminate per load-out Illuminates
02	2.	Б-8B20 ROCKET PODS Firing 20 × S-8 unguided rockets ВЗВЕДЕНИЕ ПУС button	ACTIVATE If carried Press to arm FCS
03	3.	УПК-23-250 GUN POD Firing GSh-23L 23mm twin-barrel auto-cannon ГУВ ВНУТРЕН 624-800 and ГУВ ВНЕШН 800 counters	ACTIVATE If carried Display LH/RH 23mm rounds
05 & 06	4.	 FYB-1 AΓ-17A GRENADE LAUNCHER POD Firing AP-30 (9-A-800) automatic grenade launcher. - ГУВ ВНЕШН ЛЕВ and ПРАВ С.В:s, if carrying AP-30 pods on outer stations (1 & 6). - ЕЛЕКТРОСПУСК 800; 9-A-624 ЛЕВ and ПРАВ С.В:s, if carrying AP-30 pods on inner stations (2 & 5) - ГУВ ВНУТРЕН 624-800 counter if not also carrying UPK gun pods (LCBC03) - ГУВ ВНЕШН 800 counter, if not also carrying UPK gun pods (LCBC03) 	ACTIVATE If carried BKЛ / Up BKЛ / Up Displays 30mm grenade total for inner pods Displays 30mm grenade total for outer pods
05 & 06	5.	ГУВ-1 ЯКБ-12.7 + ГШГ-7.62 GUN POD Firing YakB 12.7mm (9-A-624) or dual GShG 7.62mm (9-A-622) rotary machine guns ГУВ ЛЕВ ВНУТР 9-A-622 ЛЕВ and ПРАВ С.В:s - ГУВ ПРАВ ВНУТР 9-A-622 ЛЕВ and ПРАВ С.В:s - ЕЛЕКТРОСПУСК 800; 9-A-624 ЛЕВ and ПРАВ С.В:s - ГУВ ВНУТРЕН 622 counter (<i>LCBC03</i>) - ГУВ ВНУТРЕН 624-800 counter (<i>LCBC03</i>)	ACTIVATE If carried BKЛ / Up BKЛ / Up BKЛ / Up Displays 7.62mm rounds tota Displays 12.7mm rounds tota
04	6.	ФАВ or CAБ BOMBS Firing free-fall 100 kg, 250 kg, 500 kg or cluster bombs. - БОМБОВОЕ ВООРУЖЕНИЕ ЭСБР С.В. - БОМБОВОЕ ВООРУЖЕНИЕ ВЗРЫВ ОБОРУД С.В. - ВООРУЖЕНИЕ РС ГУВ ОБОГРЕВ ФКП ЭСБР С.В., if operating in a cold weather environment - ГЛАВНЫЙ ВЫКЛЮЧ БВ switch (RTP03) - СЕТЬ БВ ВКЛЮЧЕНА light (RTP03) - ОБОГРЕВ ЭСБР switch, if in a cold environment (RTP03)	ACTIVATE If carried BKЛ / Up BKЛ / Up BKЛ / Up BKЛ / Up Illuminates BKЛ / Up
06	7.	ЕМЕRGENCY JETTISON SYSTEM - АВАРИЙНЫЙ СБРОС БОМБ БЛ ГУВ С.В. - АВАРИЙНЫЙ СБРОС СКЛОВОЙ С.В. - АВАРИЙНЫЙ СБРОС ВЗРЫВ С.В - АВАРИЙНЫЙ РЕЖИМ ВЗРЫВ switches (LCBC02, RTP02) - АВАРИЙНЫЙ РЕЖИМ СБРОС БОМБ ВЛ ГУВ switches (LCBC02 and RTP02)	ACTIVATE BKЛ / Up BKЛ / Up BKЛ / Up BЫКЛ / Down and Guarded BЫКЛ / Down and Guarded
04	8.	GUN CAMERA SYSTEM - ΟΕΟΓΡΕΒ ΦΚΠ ЭСΕΡ C.B., if operating in cold weather ΦΚΛ switch (LOC02)	ACTIVATE ВКЛ / Up ВКЛ / Up

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

TAXI CHECKLIST

AVI CHECKLICT

1. GROUND POWER	DISCONNECTED
2. FUEL PUMPS	ON
3. APU	SHUT DOWN
4. GROUP 4–6 CIRCUIT BREAKERS Except ПРОТИВООБЛЕДЕНИТ СИСТЕМА unless operating in a cold-weather environment.	ON
5. GROUP 1–3 CIRCUIT BREAKERS Per armament load-out	ON
6. TAXI CLEARANCE	REQUESTED
7. TAXI ROUTE CLEAR OF OBSTRUCTIONS	CHECK
8. THROTTLE	FULL RIGHT
9. ПЗУ PARTICLE SEPARATORS	ON
10. MAIN ROTOR RPM	95±2%
11. WHEEL BRAKES	RELEASED
12. COLLECTIVE	UP Establish 2° rotor pitch
13. CYCLIC	FORWARD To start rolling

NOTE

Maintain weight on the wheels during taxi. If the surface prevents safe taxiing, perform hover taxi at low speed and altitude.

⊘ CAUTION

Taxi speed should not exceed 15–20 km/h.

Perform taxi turns using smooth pedal input and small moving the Cyclic to side of turn.

Avoid completely unloading weight off the nose wheel shock strut.

Wind speed during taxi must not exceed 15 m/s. In crosswind conditions, the helicopter tends to turn into the wind. Correct any uncommanded turning tendency with slight opposite pedal and any uncommanded roll with slight opposite cyclic.

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

HOVER CHECKLIST

⊘ CAUTION

The following maximum hover altitude limitations apply depending on helicopter gross weight (GW):

• GW≤11,100kg: 10m

• GW>11,100 kg: 5 m

Hover altitudes greater than above limitations are allowed when carrying external sling loads or if dictated by tactical requirements.

Yaw rate in hover must not exceed 12°/sec.

1.	POSITION HELICOPTER	INTO WIND
2.	THROTTLE	FULL RIGHT
3.	COLLECTIVE	UP Establish 3° rotor pitch
4.	MAIN ROTOR RPM Adjust using N2 Trim switch as necessary.	95%
5.	CYCLIC AUTOPILOT OFF BUTTON	PRESS
6.	AUTOPILOT КРЕН-ТАНГАЖ CHANNEL	ON
7.	CYCLIC and PEDALS	TRIM FOR ZERO PITCH, ROLL and YAW

NOTE

During hover lift-off, the helicopter tends to drift forward and to the left while yawing to the left.

In stable hover, the cyclic stick deflection is approximately:

- 1/4 stick travel aft when helicopter CG is at normal to aft limit position
 - 1/2 stick travel aft when helicopter CG at the forward limit position
 - 1/4 stick and pedal travel right regardless of CG position

8. COLLECTIVE Allow for at least 5 seconds to attain take-off power. GRADUALLY UP Until positive lift.

NOTE

Depending on load-out and airfield altitude, the ECL levers may need to be adjusted to full take-off power position (fully up) in order to allow for hover flight. The ECL levers should be returned to the idle power (middle) position once forward flight has been established and the helicopter is receiving aerodynamic lift.

9. DESIRED ALTITUDE	MAINTAIN
10. MAIN ROTOR RPM	92-94%

NOTE

Shifts and hops at low altitude may be performed for training purposes, special purpose operations, and in cases where the ground surface conditions do not allow for safe ground taxi.

O CAUTION

Lateral and reverse hover flight speed may not exceed 10 km/h. Use the ground for visual reference and ensure that the flight path is clear of obstacles.

Forward hover flight altitude may not exceed 10 m and speed not exceed 20 km/h. Use the ground for visual reference and the stationary flight indicator of the Doppler system for precise flight control.

NOTE

With wind speeds of up to 10 m/s, shifts and hops at low altitude can be performed into the wind or at 90° to the wind. With wind speeds greater than 10 m/s, hover taxi should only be performed into the wind.

Perform low level flight over uneven terrain (gullies, ditches, drop-offs, etc.) at altitudes of no less than 20 m and speeds no less than 60 km/h.

NON-FUNCTIONAL STEP NORMAL STEP FULL PROCEDURE STEP CONDITIONAL STEP

CONDITIONAL SUB-STEP

BEFO	DE.	LVKE-	OFF	CHE	CKII	CT
BLFU		IANL-	OFF			

	1.	FLIGHT II	NSTRUMENTS			CI	HECK
	2.	NAVIGAT	ION INSTRUMENTS			CI	HECK
	3.	HEADING	SINDICATOR			TO CORR	ECT BEACON
_	4.	COMPAS	SSET				nd CORRECT ADING
_	5.	FLIGHT T	IMER			S	TART
			Take-off procedure should be chosen deper At <1500m / 4900' altitude				
			Vertical takeoff in ground effect	50 × 50m	_	Ü	
i			Vertical takeoff out of ground effect	50 × 120m	15m a	at outer edge*	
ij			Running takeoff, climb at low speed	50 × 160m	_		
1			Running takeoff, climb at low speed	$50 \times 200 \mathrm{m}$	15m a	at outer edge	
1			Nose-wheel takeoff, climb at high speed	50 × 300m	_		
1			Nose-wheel takeoff, climb at high speed	$50 \times 350 \text{m}$	15m a	at outer edge	
1			* At higher obstacle heights, the field size s to allow for more drift during the			cordingly	

6.	CYCLIC AUTOPILOT OFF BUTTON	PRESS
	AUTOPILOT KPEH-ТАНГАЖ CHANNEL	ON
••••		

VERTICAL TAKE-OFF IN GROUND EFFECT CHECKLIST

END

NOTE

A vertical take-off with acceleration in ground effect may be performed when the helicopter hovers at an altitude of no less than 3 m with the engines set to Take-off power and when there are no obstacles surrounding the take-off area.

1. POSITION HELICOPTER	INTO WIND
2. HOVER CHECK	COMPLETED
3. ECL LEVERS	TAKE-OFF POWER
 4. FORWARD FLIGHT - Altitude AGL - Cyclic - Collective, throttle, and N2 trim 	TRANSITION Drop to 0.5–1 m Forward Maintain >92% rotor RPM
5. ACCELERATE and CLIMB - IAS - Altitude AGL	IN GROUND EFFECT 60–70 km/h 20–30 m
6. CLIMB-OUT - IAS - Altitude AGL	TRANSITION 120 km/h 300 m
7. ECL LEVERS	IDLE POWER

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

VERTICAL TAKE-OFF OUT OF GROUND EFFECT CHECKLIST

	NOTE A vertical take-off out of ground effect must be performed when the obstacle:	s prevent safe acceleration in ground effect.
1.	POSITION HELICOPTER	INTO WIND
2.	HOVER CHECK - Altitude	COMPLETED 10m above obstacles
3.	ECL LEVERS	TAKE-OFF POWER
4.	FORWARD FLIGHT - Altitude AGL - Cyclic - Collective, throttle, and N2 trim	TRANSITION Maintain Forward Maintain >92% rotor RPM
5.	ACCELERATE and CLIMB - IAS - Altitude AGL	IN GROUND EFFECT 20–50 km/h Maintain
6.	CLIMB-OUT - IAS - Altitude AGL	TRANSITION 120 km/h 300 m
7.	ECL LEVERS	IDLE POWER

RUNNING TAKE-OFF CHECKLIST

END

NOTE A running take-off may be performed if the helicopter hovers at an altitude of no less than 1 m with the engines set to Take-off power.					
1.	HOVER CHECK	COMPLETED			
2.	COLLECTIVE Allow helicopter to rest on the ground with weight on the wheels, but not with collective fully down and 0° rotor pitch	DOWN Until Landed			
3.	ECL LEVERS	TAKE-OFF POWER			
4.	WHEEL BRAKES	OFF			
5.	CYCLIC	FORWARD To accelerate down runway			
6.	ACCELERATE TO TAKE-OFF SPEED	20–50 km/h			
7.	COLLECTIVE	GRADUALLY UP Until positive lift.			
	NOTE In the take-off run, the helicopter tends to lift off the main wheels first, followed by the nose wheel. Compensate for this tendency with slight pull aft of the cyclic at the moment of lift-off. The take-off run requires 250–300 m. If the take-off area is limited or blocked by obstacles, the				

transition to climb-out can be made at 50–60 kph. TRANSITION

- IAS	120 km/h
- Altitude AGL	300 m

9. ECL LEVERS IDLE POWER

END

8. CLIMB-OUT

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

RUNNING TAKE-OFF CHECKLIST

NOTE

A running nose wheel take-off may be performed to increase take-off performance with a high take-off weight or to reduce the distance of the take-off run on airfields that provide for a safe ground run.

9. CYCLIC TRIM BUTTON	PRESS
8. CYCLIC	FULLY AFT
7. AUTOPILOT KPEH-TAHFAЖ CHANNEL	ON
6. CYCLIC	FULLY FORWARD
5. CYCLIC AUTOPILOT OFF BUTTON	PRESS
4. WHEEL BRAKES	ON
3. COLLECTIVE	FULLY DOWN
2. HELICOPTER	LANDED
1. HOVER CHECK	COMPLETED

NOTE

The forward and aft deflection limits of the cyclic are determined by the absence of thumping noise as the main rotor blades strike against the flapping hinges of the rotor assembly.

10. ECL LEVERS	TAKE-OFF POWER
11. WHEEL BRAKES	OFF
12. COLLECTIVE	GENTLY UP Until main wheels lift off
13. CYCLIC While maintaining the nose wheel on the ground	SMOOTHLY FORWARD 1/2- 3/3 stick travel over 3-5s
14. ACCELERATE TO TAKE-OFF SPEED - Maintain nose-down attitude - Rotor disc blade tips	60–65 km/h -8° – -9° Aligned with horizon

NOTE

At approximately 40 kph the helicopter exhibits a tendency to pitch up and sink onto the main gear, followed by a reversal and an energetic pitch down. These tendencies must be countered with corresponding forward and aft cyclic control adjustments.

15. CLIMB-OUT	TRANSITION
- Accelerate to climb speed	70–80 km/h
- Climb out of ground effect	10 m
- Accelerate to flight speed	120 km/h
- Climb to altitude	300 m

NOTE

With a maximum take-off weight of 1300 kg, a ground run of 150 m is required for a paved runway or 340 m for a field airstrip. If the helicopter's CG is close to the aft limit, the ground run distance increases by a factor of 1.5.

16. ECL LEVERS	IDLE POWER
17. CYCLIC and PEDALS	TRIM AT LEVEL FLIGHT
18. CYCLIC AUTOPILOT OFF BUTTON	PRESS
19. AUTOPILOT CHANNELS	ON AS REQUIRED

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEF

CLIMB and ACCELERATION TRANSITION CHECKLIST

1. HOVER CLIMB - Collective Uр - Cyclic, to counter asymmetric lift Aft and right - Pedals, to counter increased torque Right

In a hover, the helicopter tends to drift forward and left while yawing to the left. As the collective is lifted in a climb, the left-yawing tendency will increase. As the helicopter climbs out of ground effect, the yawing motion will decrease.

TO FORWARD FLIGHT **HOVER TRANSITION** - Cyclic Forward - Collective, to counter loss of lift Up - Pedals, as helicopter accelerates Gradually left

As speed increases, aerodynamic forces will start to cancel out the yawing motion created by the tail. Pedal travel used to counter the hover yawing motion can successively be released to a neutral position as the helicopter reaches cruise speed.

When accelerating from a hover to 30-35 km/h, balancing the helicopter requires moving the cyclic control significantly forward. Maximum required deflection is reached at 40 km/h. When accelerating from 40-45 km/h to 90-100 km/h, balancing the helicopter requires pulling the cyclic aft from the forward position reached during initial acceleration from a hover.

3.	LEVEL FLIGHT	ACCELERATION
	- Cyclic	Forward
	- Collective, to counter loss of lift	Up
	- Pedals, as helicopter accelerates	Gradually neutral

In level flight, adjust controls to increase speed. As the acceleration is completed, the controls can be returned towards, but not fully at, their original position while maintaining speed and altitude, as the extra lift is no longer needed to keep accelerating. If the helicopter is already at speed, little pedal adjustment should be needed to counteract torque as increased aerodynamic forces will naturally tend to straighten the

Between 100 - 130 km/h, cyclic trim is almost unchanged. As airspeed increases beyond 120 km/h, balancing the helicopter requires progressive forward cyclic. Maximum required deflection is reached at maximum airspeed.

To execute horizontal acceleration at maximum rate, engine power must be increased within 9-10 sec to take-off power and helicopter pitch set to -15° to -20°. While accelerating at constant engine power, maintain level flight by simultaneously reducing the helicopter pitch angle. The acceleration time at maximum rate from 60 to 220 km/h is 26-36 sec. The maximum possible acceleration per second is 6-9 km/h.

4. CONSTANT SPEED	CLIMB
- Collective	Up
 Cyclic, to counter forward lift component 	Gradually aft
 Pedals, to counter increased torque 	Gradually right

If climbing while maintaining forward speed, aerodynamic forces from forward travel will remain the same, or even slightly decrease due to loss of atmospheric pressure at altitude. The increased torque from the rotor power creating the lift therefore has to be compensated using pedals.

NOTE

In a climb at maximum continuous power with a constant collective pitch angle, the main rotor RPM is automatically maintained at 95±2% up to a limited altitude. Further climb will result in the main rotor RPM drooping as engine power output is reduced due to compressor RPM limits imposed by the engine governor system. Maintain main rotor RPM above 92% by gradually reducing collective pitch as main rotor RPM begins to droop. The maximum continuous power limitations begin to affect main rotor RPM at 1000 - 1500 m.

In a climb at cruise power with a constant collective pitch angle, the main rotor RPM is automatically maintained constant up to an altitude of 2000 - 2500 m.

In a climb at take-off power with constant collective pitch angle, the main rotor RPM is not maintained automatically. Maintain main rotor RPM in the 92-94% range by gradually reducing collective pitch as altitude increases.

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

DESCENT and DECELERATION TRANSITION CHECKLIST

1. CONSTANT SPEED

- Collective

- Cyclic, to counter lost forward lift component

- Pedals, to counter decreased torque

DESCENT Down Gradually forward Gradually left towards neutral

The reduction in rotor torque and the increase in atmospheric pressure at lower altitudes will allow aerodynamic forces to straighten out the aircraft more easily, allowing for less pedal input to maintain an forwards-attitude flight.

NOTE

In a power-on glideslope descent, maintain main rotor RPM within 95±2% with collective input as required. Gradual reduction of collective pitch down to the minimum setting is permissible to maintain a desired descent rate as altitude decreases as long as main rotor RPM is maintained within limits.

> The recommended glide speed at altitudes below 2,000m is 120-180 km/h. The rate of descent at this speed should be 3-5 m/s.

2. LEVEL FLIGHT

- Cyclic

- Collective, to counter increased lift component

- Pedals, to counter reduced torque and aerodynamics

DECELERATION

Aft Down

Gradually left

In level flight, adjust controls to decrease speed. As the deceleration is completed, the controls can be returned slightly ahead of their original position as the more lift is needed not to keep decelerating. Little pedal adjustment should be needed unless transitioning below 40 km/h to a

Between 100 - 130 km/h, cyclic trim is almost unchanged. As airspeed decreases below120 km/h, balancing the helicopter requires progressive aft cyclic.

To execute a strong level flight deceleration from airspeeds close to maximum, increase the pitch angle of the helicopter by 10°-15° within 8-2 sec and simultaneously reduce collective pitch in order to maintain altitude. Collective pitch should be reduced by no more than 2.5°-3° on the collective pitch indicator. During deceleration, maintain level flight by controlling the pitch angle, and when minimum speed is approached at the end of deceleration, increase engine power and reduce helicopter pitch angle. The average time of horizontal deceleration from 220 to 60 km/h at maximum rate is 28 sec.

LEVEL FLIGHT TRANSITION 3.

- Cyclic
- Collective, to counter increase, then loss of lift
- Pedals, to counter increased torque

TO HOVER

Aft and right Down, then up Gradually right

Upon reaching airspeed of 50-60 km/h, the helicopter exhibits a tendency to descend. Counter this tendency by increasing collective. At airspeeds below 50 km/h, the helicopter develops vibrations, which disappear as airspeed is reduced further. At airspeeds below 40-20 km/h, the helicopter exhibits a tendency to yaw left. Timely application of cyclic and right pedal input is required to avoid uncommanded roll and left yaw in the transition to hover.

HOVER 4.

- Collective
- Cyclic, to counter asymmetric lift
- Pedals, to counter toruge and ground effect

DESCENT

Gradually down Aft and right Right

In a vertical descent from an altitude of 110 m down to 10 m, the descent rate may not exceed 3 m/s. If the descent rate increases beyond 3 m/s, smoothly increase collective to arrest the descent rate. If engine power is insufficient to arrest the descent and maintain main rotor RPM within limits, transition out of the vertical descent to a glideslope descend or forward flight to gain airspeed.

From an altitude of 10 m down to the ground, continually reduce the rate of descent so it does not exceed 0.2 m/s at touchdown.

NOTE

A power-on vertical descent from am altitude of 10 m down to the ground is permissible in all conditions. From an altitude of 110 m down to 10 m, a vertical descent is only permissible when a glideslope approach cannot be performed due to obstacles or out of tactical considerations. Descent from the helicopter's service ceiling down to 110 m must be performed on a glideslope and within airspeed limitations.

FULL PROCEDURE SUB-STEP

- Descent rate

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

<3 m/s

VERTICAL LANDING FROM HOVER IN GROUND EFFECT CHECKLIST

1. AUTOPILOT YAW and ALTITUDE CHANNELS	OFF
2. GLIDESLOPE APPROACH	PERFORMED
- Airspeed	120 km/h
- Ending altitude	100m AGL
,	

NOTE

The minimum glideslope approach length:

- with GW \leq 11,100 kg is 1,000–1,200m at altitude of 100m and airspeed 100–120 km/h
- with GW > 11,100 kg is 1,400–1,500m at altitude of 100m and airspeed 100–120 km/h

3. DESCEND THROUGH ALTITUDE - Cyclic - Speed - Altitude 100 m Aft to decelerate 50–60 km/h at 50–60 m

⊘ CAUTION

Upon reaching airspeed of 50–60 km/h, the helicopter exhibits a tendency to descend. Counter this tendency by increasing collective. At airspeeds below 50 km/h, the helicopter develops vibrations, which disappear as airspeed is reduced further.

4.	DESCEND THROUGH ALTITUDE	5–8 m
	- Cyclic	Further aft to establish hover
	- Speed	0 km/h
	- Altitude	at 2–3 m
	- Descent rate	0 m/s

⊘ CAUTION

At airspeeds below 40–20 km/h, the helicopter exhibits a tendency to yaw left. Timely application of cyclic and right pedal input is required to avoid uncommanded roll and left yaw in the transition to hover.

5.	CONTROLS	TRIM TO HOVER
6.	COLLECTIVE	GRADUALLY DOWN
7.	VERTICAL SPEED ON TOUCHDOWN	≤0.2 m/s

END

VERTICAL LANDING FROM HOVER OUT OF GROUND EFFECT CHECKLIST

⊘ CAUTION

Perform a vertical landing from a hover out of ground effect only when obstacles make it impossible to perform a landing from a hover in ground effect.

The procedure for a vertical landing from a hover out of ground effect is identical to a vertical landing from a hover in ground effect, except that the altitudes are adjusted upwards to compensate for the obstacle height for steps 2–4:

2	2.	GLIDESLOPE APPROACH - Ending altitude	PERFORMED 100m above obstacle
	3.	DESCEND THROUGH ALTITUDE	60m ABOVE OBSTACLE
	4.	DESCEND THROUGH ALTITUDE - Establish hover	10m ABOVE OBSTACLE 2–3m above obstacle

NORMAL STEP FULL PROCEDURE STEP

CONDITIONAL STEP

NON-FUNCTIONAL STEP

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

POWER-ON RUNNING LANDING CHECKLIST

NOTE

A power-on running landing may be performed in cases where engine power is insufficient to ensure a hover and vertical landing (such as high gross weight, high altitude, high temperatures).

The landing can be performed on a prepared runway or a an unprepared area known to be safe for such an approach (must be sufficiently level and large) provided a clear approach path is available.

1.	GLIDESLOPE APPROACH - Airspeed - Ending altitude	PERFORMED 120 km/h 100m AGL
2.	GLIDESLOPE - Airspeed - Descent rate - Ending speed and altitude	MAINTAIN = Current altitude + 20 (e.g. 80 km/h @ 60m) <3 m/s 60 km/h @ 40m AGL
3.	GLIDESLOPE - Airspeed - Altitude - Descent rate	LEVEL OUT 40 km/h 1m AGL ≤0.2 m/s
4.	COLLECTIVE - Main gear - Nose gear	DOWN On the ground Lower to ground
5.	THROTTLE	FULLY LEFT

NOTE

Throttling down will reduce engine and rotor RPM to a level where the generators may no longer be able to operate. This will set off a number of warning annunciator and voice warnings. At the pilot's discretion if all systems are operating within limits, the RI-65 Voice Warning system may be turned off at the end of the initial approach to reduce pilot distraction during the landing procedures, and turned back on while taxiing.

WHEEL BRAKES

ON

NOTE

Anticipate a landing run of 20-30m. The total field distance for safe operations should be no less than 100m.

7. **THROTTLE**

FULLY RIGHT

Once helicopter has come to a complete halt.

O CAUTION

If the airfield dimensions do not allow for a landing run of 20 - 30 m, but it is necessary to perform a running landing, execute a running landing with a short landing run by reducing landing speed to 10-15 km/h.

Perform a landing deceleration manoeuvre so as to attain near take-off engine power at an altitude of 5–10 m with a ground speed of 20–40 kph. At an altitude of 5-10 m, push the cyclic forward to bring the helicopter to a landing attitude while avoiding a tail boom strike against the ground, but ensuring continued reduction of ground speed down to 10-15 km/h for touchdown. At an altitude of 5-10 m, raise collective at a rate of 2°-4°/sec to reduce the rate of descent such that it is no greater than 0.2 m/s at touchdown.

Quickly lower all wheels to the ground while applying wheel brakes, lowering collective, and setting throttle fully left.

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

SINGLE-ENGINE LANDING CHECKLIST

NOTE

Perform a single engine landing onto a flat landing area that provides for a clear approach or onto a prepared runway. The gross weight of the helicopter for a single engine landing may not exceed 10,000 kg.

Perform a single engine landing into the wind if possible or with a crosswind not exceeding 5 m/s.

1.	ENGINE ANTI-ICING and Π3Y SEPARATORS At 300m altitude, if active	OFF
2.	APU - ЗАПУСК — ПРОКРУТ — ЛОЖНЫЙ ЗАПУСК switch (COC04) - ЗАПУСК button (COC04) - АВТОМАТ ВКЛЮЧЕН light (COC04) - ДАВ МАСЛА and ОБОРОТЫ HOPMA lights (COC04)	START and CONFIRM 3AПУСК / Up Press for 2–3 seconds Illuminates Illuminate
3.	CONSUMERS TO STANDBY GENERATOR - PECEPBH ГЕНЕРАТ switch (RSC03) - ПРОВЕРКА ОБОРУД switch (RSC03) - ПРОВЕРКА ОБОРУД light (RSC03)	CONNECT ВКЛ / Up ВКЛ / Up Illuminates
4.	RUNNING LANDING APPROACH - Control collective pitch to maintain main rotor RPM - Engines able to attain emergency power - Maintain landing airspeeds - Anticipated landing run	PERFORM 95±2% Confirmed 20 km/h above normal 50–70m longer than normal

AUTOROTATION LANDING CHECKLIST

END

NOTE

For an autorotation landing with a 180° turn (with a roll angle of 15°) altitude must be at least 650m.

4	COLLECTIVE	FULLY DOWN
	OOLLLOIIVL	FOLLI DOWN
2.	MAIN ROTOR RPM	CHECK 95±5%
3.	CYCLIC and PEDALS	COUNTER INDUCED
		ROLL and YAW
4.	THROTTLE	FULLY LEFT
5.	FUEL SHUTOFF LEVERS and FUEL PUMPS	OFF
6.	ALL EXTERNAL STORES	JETTISON
7.	AIRSPEED and DESCENT RATE	CHECK
7.	AIRSPEED and DESCENT RATE - Above 100m AGL	CHECK 100–120 km/h, 10–12 m/s
7.		
	- Above 100m AGL - Below 100m AGL	100–120 km/h, 10–12 m/s
8.	- Above 100m AGL - Below 100m AGL	100–120 km/h, 10–12 m/s 70 km/h, 5–10 m/s
8.	- Above 100m AGL - Below 100m AGL COLLECTIVE	100–120 km/h, 10–12 m/s 70 km/h, 5–10 m/s MAINTAIN ROTOR RPM
8.	- Above 100m AGL - Below 100m AGL COLLECTIVE LOW-ALTITUDE FLARE PARAMETERS	100–120 km/h, 10–12 m/s 70 km/h, 5–10 m/s MAINTAIN ROTOR RPM CHECK
8.	- Above 100m AGL - Below 100m AGL COLLECTIVE LOW-ALTITUDE FLARE PARAMETERS - At 10–15m, to reduce descent rate - If descent rate remains high after 1.5s - Cyclic, to pitch helicopter up	100–120 km/h, 10–12 m/s 70 km/h, 5–10 m/s MAINTAIN ROTOR RPM CHECK Rotor pitch 7–8° for 1s Rotor pitch 12° Aft, to 5–7° pitch
8.	- Above 100m AGL - Below 100m AGL COLLECTIVE LOW-ALTITUDE FLARE PARAMETERS - At 10–15m, to reduce descent rate - If descent rate remains high after 1.5s	100–120 km/h, 10–12 m/s 70 km/h, 5–10 m/s MAINTAIN ROTOR RPM CHECK Rotor pitch 7–8° for 1s Rotor pitch 12°

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

ARMAMENT SELECTION and DEPLOYMENT CHECKLIST

The ВАРИАНТЫ ПОДВЕСКИ payload selector is used to select what pod types and/or stations are currently active, as illustrated by the ВАРИАНТ chart. In addition, the pilot's lower armament panel switches are used to select sub-weapons.

	Station		
	6-1 / ВНЕШН	5-2 / ВНУТРЕН	4-3
I	B-8V20	B-8V20	B-8V20
II	Bomb	Bomb	Bomb
III	Bomb	Bomb	B-8V20
IV		Heavy bomb	B-8V20
V		Heavy bomb	Bomb
ГУВ	GUV-1 (AP-30)	GUV-1 (AP-30 or YakB/GShG)	

With no "Heavy bombs" available for deployment, profile IV and V are mainly to be used for selective station jettison: profile IV will only jettison from the middle station; profile V only from the middle and inner station, or only from the inner station if profile IV has already been used to selectively jettison the middle station.

 1. Б-8B20 ROCKET PODS - ВАРИАНТЫ ПОДВЕСКИ selector (RTP03) - УПК — ПКТ — PC switch (LOC02) - ИЗ КАЖД БЛОКА switch (LOC02) - 1-2-5-6 — ABT —3-4 switch (LOC02) 	SELECT I PC As desired As desired
 УПК-23-250 GUN POD - ВАРИАНТЫ ПОДВЕСКИ selector (RTP03) - УПК — ПКТ — PC switch (LOC02) 	SELECT I YNK
3. ГУВ-1 АГ-17A GRENADE LAUNCHER POD - ВАРИАНТЫ ПОДВЕСКИ selector (RTP03) - УПК — ПКТ — PC switch (LOC02)	SELECT FYB PC BHYTP 800 BHEШH 624/622+800 and Covered 800 BHYTP ИЛИ 624 624/622+800 and Covered BHYTP 800 BHEШH 800 and Covered
4. ГУВ-1 ЯКБ-12.7 + ГШГ-7.62 GUN POD - ВАРИАНТЫ ПОДВЕСКИ selector (RTP03) - УПК — ПКТ — PC switch (LOC02) - 800 — 624/622+800 switch (LOC02) - С ОГРАНИЧ — БЕЗ ОГР switch (LOC02) If in C ОГРАНИЧ / burst cut-off mode: - УСТАНОВКА ДЛИНЫ ОЧЕРЕДИ dial (LOC02) To select YaKB-12.7 mm guns: - ВАРИАНТЫ switch (LOC02) To select GShG-7.62 mm guns: - ВАРИАНТЫ switch (LOC02) To unjam YaKB-12.7 mm guns: - ПЕРЕЗАРЯДКА 624 ПИРОПАТРОНЫ ЛЕВ and ПРЕАВ, for left and right gun respectively (LOC02)	SELECT FYB PC 624/622+800 and Covered As desired As desired 800 BHYTP ИЛИ 624 622 To next available number in sequence: I, II or III

NOTE

Engaging the ПЕРЕЗАРЯДКА 624 ПИРОПАТРОНЫ switches fires off a pyrotechnic charge in the respective YaKB-12.7 gun that clears the gun and feeds a new round of ammunition. Only three charges are available before the reloading/unjamming system has been depleted.

FULL PROCEDURE SUB-STEP

CONDITIONAL SUB-STEP

NON-FUNCTIONAL SUB-STEP

ARMAMENT SELECTION and DEPLOYMENT CHECKLIST

5. ФАВ or CAБ BOMBS

- ВАРИАНТЫ ПОДВЕСКИ selector (RTP03)
- ESBR Settings knob (RIP04)

SELECT

II, II or V, as required I for single release, II for pairs

In position I, the ESBR sends singular release signals to left and right stations, starting at the out-most and moving to the inner station in sequence: 6, 1, 5, 2, 4, 3. Individual stations can be selected manually by setting the CEPOC BOMB switch to BЫKЛ. and moving to the correct **preceding** position in the firing sequence (note that the number on the selector **does not** necessarily correspond to the station number): I = from station 6 - 1 = station 1 - 2 = station 5 - 3 = station 2 - 4 = station 3 = stat

In position II, the ESBR sends paired release signals from the out-most to the inmost station in sequence: 6+1, 5+2, 4+3. Here too, individual pairs can be selected manually by positioning the switch in the correct preceding position: II = from stations 6+1-2 = stations 5+2-4 = stations 4+3.

If the BAPUAHTЫ ПОДВЕСКИ selector is set to a profile where some stations do not carry bombs, or if the profile selected does not match the actual load-out of bombs, those stations that do not carry bombs will be skipped in the sequence.

1. ПРЕДОХРАНИТЕЛЬНЫЙ ВЫКЛЮЧАТЕЛЬ ВКЛЮЧЕН / UP BOOPУЖЕНИЯ HANDLE

2. ESBR If deploying bombs. - CБРОС БОМБ switch (RIP04)

ВКЛЮЧЕН / UP

ВКЛЮЧЕН / UP

ВКЛЮЧЕН / UP

⊘ CAUTION

Do not move the ESBR Settings knob when the CEPOC 5OM5 switch is in the BKΛ. / Armed position, as this will release the bombs prematurely. Always keep the C5POC 5OM5 in the BbIKΛ. position until the attack run begins.

3.WEAPON
- For B-8, UPK and GUV-1 pods: Cyclic PC button
- For FAB and SAB bombs: Bomb release buttonRELEASE
Uncover and Press
Press4.ESBR
If bombing run is completed.
- CБРОС БОМБ switch (RIPO4)SAFE
BЫКЛ.

END

STORES JETTISON CHECKLIST

NOTE

Both pilot and co-pilot can perform an emergency jettison by engaging the switches on their respective upper weapons control panels. The pilot's upper weapons control panel can also be accessed by the flight engineer. If activated from the pilot's position, all stores will be iettisoned. If activated from the co-pilot's position, the position of the payload selector determines what stores are iettisoned.

jettisoned. If activated from the co-pilot's position, the position of the payload selector determines what stores are jettisoned.					
1.	ВАРИАНТЫ ПОДВЕСКИ SELECTOR	AS REQUIRED			
	II Jettison all stations. IV Jettison middle station. III Jettison outer and middle stations. V Jettison middle and inner sta While not in a mission area, the selector should be kept in profile II position a				
2.	B3PыB SWITCH To also arm bombs as they are jettisoned ABAP B3PыB light	AS DESIRED Illuminates			
3.	СБРОС БОМБ SWITCH To jettison selected stores.	UNCOVER and UP			
4.	СБРОС БОМБ SWITCH	DOWN and COVERED			
END					