

LOG BOOK

AIRCRAFT BE - 103 № 3303
manufacturer's number



Beginning of operations 2003
date

2. MAIN TECHNICAL DATA
(to be filled out by the manufacturer)

The amphibious aircraft Be-103 manufactured of "KOMSOMOKSK-ON-AMUR AIRCRAFT PRODUCTION ASSOCIATION"
satisfies the requirements of Certificate basis developed on the basis FAR-23 and has:

TYPE CERTIFICATE issued by AVIATION REGUSTER of INTERSTATE AVIATION COMMITTEE
PRIMARY AIRCRAFT AIRWORTH; ness CERTIFICATE No dated issued by INDEPENDENT INSPECTION

Main technical data are provided in operation manual

3. INDIVIDUAL FEATURES

(to be filled out by the manufacturer, repair company)

Empty weight 1818 kg (Weight and Balance Report No W/N dated 13.07.03)

Center of gravity 29.2%

4. COMPLETENESS
(to be filled out by the manufacturer, operator and repair companies)

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Power plant		
MTV-Propeller	MTV -12 -D- C-F-R(M)/CFR183 - 17	03241
Thermo resistant vibration-proof pressure indicator	MCTB - 0,8	03240
Angular movement heat-resistant potentiometric sensor	МУ - 615 А series 1	56104
Unified special-purpose indicator	ИТП - 60 / 60 Б	56087
Unified special-purpose indicator	ИТ2П - 60 / 60 Б	0130017
Tachometer head	ДТ - 1М	1220627
Two-channel temperature transmitter	П - 109	61278
		60999
		1031026
		1031030
		235121744

4.1. Components and changes in components set

Description	Designation	Number
Two-channel temperature transmitter	П - 109	3
Hand fire extinguisher	ОП1 - 1.0 - 20 - 30	2.3.91211904
		0260031

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Fuel system		
Fuel shutoff valve with electric actuator	771700 MA	3050720142A
		3050850057A
		3050850074A
		3050850063A
		992001P
Transport pump	LUN 6285.84	992006
		48722724
		48722724
Overpressure alarm with leakproof contact chamber	C/II-0,2	48722719
		48722720
		-

Changes in components set during operation and repair

date of installation and No	date of installation and No	date of installation and No	date of installation and No	date of installation and No	Note
4	5	6	7	8	9

19/11/05
01/10/06
09/05/05
04/00/03

09/11/05
05/10/12
09/11/05
05/10/14

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Hydraulic system		
Pump motor package	PMP05VC-060-01	AP245
Filter 20 Bar iss 2	QA 07727	RL11-1892
Filter 200 Bar iss 2	QA 07728	RL10-4940
Direct-reading heat-resistant pressure gauge	HTM - 240	46111
Hydraulic storage battery	A103.5353.100	23003
Charge valve	804600	02100
		02098
		93356
		02089
Thermo resistant pressure indicator	MCT-15 A	86564

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Thermo resistant pressure indicator	MCT - 15 A	86572
Single-sided throttle	A103.5353.880	13006
Hydraulic tank	A103.5353.010	13005
Three-position four-way hydraulic distributor with electromagnetic control	KЭ 92	23003
		0330021

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Landing gear		
Aircraft tires	7.00 - 6 / 8 / 120	2246U00490
Main landing gear down-lock cylinder	A103.4102.010	2248U00198
Cylinder of retraction-extension of main LG	A103.4153.050	23006
Cylinder of retraction-extension of nose LG	A103.4253.050	23005
Shock strut	A103.4201.200	13006
Damper	A103.4210.100	23003
Folding strut	A103.4102.000.001	23003
Folding strut	A103.4102.000.002	23005
		23006

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Shuttle valve	A103.4253.090	23003
Shock absorber	A103.4101.250	13005
Landing gear lock	A103.4204.000.001	23009
Landing gear lock	A103.4204.000.002	13004
Nose landing gear down-lock	A103.4202.000	23003
Landing gear	A.103.4101.000.001	23005
Landing gear	A103.4101.000.002	23006

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Aircraft control system		
Angular movement heat-resistant potentiometric sensor	MY - 615A series 1	1220611
		1220637
		0130067
		0130024
		1220647
		221023
Indicator	ИТРН	221034
Indicator	ИТЭ	13005
Spring loader of stabilizer	A103.5131.100	

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Body		
Key insert	82.02.000	0880801248
		0880702611
		0880702610
		0880702613

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Anti-icing system		
Visual unified indicator of icing	BYO - Y - 1	2943005

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Bailout equipment		
Pilot seat	A103.7501.010.030	23006
		23005
Pilot seat	A103.7501.010.050	23003
Passenger seat	A103.7502.010.030	23006
Passenger seat	A103.7502.010.050	23005
AC-2000 life Preserver	63600 - 173	L 316878

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Electric equipment		
Special switch for landing gear extension and retraction of type	ППЗ	232 122 004
Power supply unit	БП - 73	5240430814
		5240430823
		5240430819
		5240430818
		5240430825
		5240430820
Square stationary land/taxi lamp	АППФ - 2	232044014
		232044001
Power supply	A490A-TSCF14/28NWO	16605

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Power supply	A490A-TSCF14/28NWO	16603
Navigation light	АНО 3 – Бл	1024021
Anchor light of type	ОЯГ – 1	618043003
Strobe head	A650 – PR – 28	N/A
Strobe head	A650 – PG – 28	N/A
Pulse transmitter	ДИ – 1А	0332901

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Integrated Flight and Navigation System		
Quartz clock	MD - 90L	E 23514
Air data system	CBA-103 BM	3640430069
Pilot-static tube	NBA-Kd	3640230049
Angle of attack transmitter	AY-19	3640330134
Pilot-static tube heating monitoring unit for helicopter	BK NBA	3640330094
Indicator limit angles of attack	CKYA-d-1	3640330070

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Flight data recorder БУР-ЛК		
Flight data recorder	БУР - ЛК	0255
Single-component compensating accelerometer	АДИС - 2 - 3	320012
Induction pressure transmitter	ДДИА - 400 - 830	09111
Induction pressure transmitter	ДДИИ - 0,16	04013
Induction pressure relay	РДИИ-0,16-0,01-3	08255

4.1. Components and changes in components set

Description	Designation	Number
1	2	3
Radio equipment		
Radio station	P-855A1	2944
Relay of autocontrol	(Unit 31) P-862	155316
Item	APM-406AC1	452.5354152

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			Description of parameter	Value
1	2	3	4	5
Power plant				
Engine	IO - 360ES (4)	357669 (LH) 357667 (RH)	hour/years	-
Switch	80827	251288 249946	hour/years	-
Valve	1H19 - 5	N/A N/A	hour/years	-
Ignition switch	10-357200-1	N/A	hour/years	-
Dual CHT/EGT	2DA1	2258 2266	hour/years	-
Dual OP/OT instrument 2-1/4", square, 12/24 VDC, white on black dial, oil pres: 0-80# for use with 387-100KV pres transducer/oil temp: 100-260F	2DA3 KV	1172 1173	hour/years	-
Limit switch mechanism	MKB - 48K	463402013	hour/years	5000/5

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			Description of parameter	Description of parameter
1	2	3	4	5
Limit switch mechanism	MKB - 48K	763402014	hour/years	5000/5
		763402012		5000/5
		763402006		5000/5
Linear mechanism	MII 10 C6A 04	763402008	hour/years	5000/5
		763402009		5000/5
		763402017		5000/5
		763402016		5000/5
Manifold pressure indicator	6331	187852	hour/years	-
		187853		-
K" wire EGT sender 1-5/8 " to 2-1/2" clamp, 1" tip, 4' lead, steel braid, grounded	712 - 2 DWK	N/A	hour/years	-
		N/A		-
		N/A		-
		N/A		-

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			Description of parameter	Description of parameter
1	2	3	4	5
K" wire EGT sender 1-5/8 " to 2-1/2" clamp, 1"tip, 4' lead, steel braid, grounded	712 - 2 DWK	N/A	hour/years	-
		N/A		
		N/A		
		N/A		
		N/A		
		N/A		
		N/A		
		N/A		
		N/A		
		N/A		
«J» wire CHT probe 3/8-24 thread, 3/16" OD, 2-1/2" TIP, 4' lead, steel braid (Lycoming- continental)	712 - 7DK	N/A	hour/years	-
		N/A		
		N/A		
		N/A		
		N/A		

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			Description of parameter	Description of parameter
1	2	3	4	5
«J» wire CHT probe 3/8-24 thread, 3/16" OD, 2-1/2" TIP, 4' lead, steel braid (Lycoming-continental)	712 - 7DK	N/A	hour/years	-
		N/A		-
		N/A		-
		N/A		-
		N/A		-
		N/A		-
		N/A		-
Pressure transducer 1/8 NPT	387 - 100KV	N/A	hour/years	-
		N/A		-
Temperature sender 5/8-18 thread, 1" tip, 4' lead, with crush washer	399S9	N/A	hour/years	-
		N/A		-
RPM Instrument	R - 1 - 6	60845		
		6084A		

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			Description of parameter	Description of parameter
1	2	3	4	5
Fuel system				
Fuel pump	2B6 - 84	5AW3	hour/years	-
		5AW4		-
Fuel reserve measuring system	СИТ9 - 4А	130013	hour/years	1,000/5
Fuel quantity transmitter	ДТ49-5	420068	hour/years	1,000/5
		420070		1,000/5
Fuel quantity transmitter	ДТ49-8	420072	hour/years	1,000/5
		420073		1,000/5
Fuel quantity transmitter	ДТ49-9	420108	hour/years	1,000/5
		420110		1,000/5
Fuel quantity transmitter	ДТ49-10	420135	hour/years	1,000/5
		420137		1,000/5
Signaling sensor with magnetically operated contacts	ДСМК 21-5	420430	hour/years	1,000/5

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			Description of parameter	Description of parameter
1	2	3	4	5
Landing gear				
Non-brake wheel with tire of size 380x150-5	KH 52	0430016	landing/years	1250/6
Wheel with tire of size 476x178-6	KT 239.010	0430043	landing/years	1250/6
		0430040		1250/6
Tubeless tire 400x150 - 5 model 1A	H-002024-000	11999003380	Acc to operating condition	
Brake	KT 239.030-1	0430043	landing/years	1250/6
Brake	KT 239.030-2	0430040	landing/years	1250/6
Landing gear lock	A103.4207.000.001	23009	landing on ground/landing on water/years	150/200
		23011		150/200
Landing gear lock	A103.4207.000.002	13004	landing on ground/landing on water/years	150/200
Nose landing gear down-lock	A103.4202.000	23003	landing on ground/landing on water/years	150/200
Landing gear	A103.4101.000.001	23005	landing on ground/landing on water/years	150/200
Landing gear	A103.4101.000.002	23006	landing on ground/landing on water/years	150/200

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			description of parameter	description of parameter
1	2	3	4	
Integrated Flight and Navigation System				
Turn & slip indicator	9551B	9913	hour/years	-
AUTOMATIC DIRECTION FINDER	KR87	77424	hour/years	-
Antenna	KA 44B	79046		-
ADF Indicator	KI 227-01	42923		-
Magnetic Compass	C2400L4VT	N/A	hour/years	-
NAV/COM	KX 165	64415	hour/years	-
TRANSPONDER	KT 70	16012	hour/years	-
Antenna	KA 60	2123055		-
GPS NAV system	KLN89B	10787	hour/years	-
Antenna	KA 92	44060		-
VERTICAL SPEED	7040-C.28	304429	hour/years	-
Airspeed INDICATOR	8000 B.446	181861	hour/years	-
Attitude indicator	A1-330(c)	7008 7010	hour/years	-

4.3. Replacement life items

Description	Designation	Manufacturer's number	Service life, time	
			description of parameter	description of parameter
1	2	3	4	5
Altimeter	5934 PAM 3	432161	hour/years	-
ENCODING ALTIMETER	KEA 130A	33516	hour/years	-
Distance measuring equipment	KN 63	24401	hour/years	-
Indicator	KDI 572	29455	-	-
Antenna	KA 60	2123053	-	-
Air data system	СВВД - 103БМ	3640430069	hour/years	500/2
Pilot-static tube	ПВД-К2	3640230049	hour/years	500/2
Angle of attack transmitter	ДАУ-19	3640330134	hour/years	500/2
Pitot-static tube heating monitoring unit for helicopter	БК ПВД	3640330094	hour/years	500/2
Indicator limit angles of attack	СКУА-2-1	3640330040	hour/years	500/2
Davtron OAT gauge	307FC	A 04398	hour/years	-
Horizontal situation indicator	KI 525A	89545	hour/years	-
Directional gyro	KG 102A	45212	hour/years	-

5. Acceptance Test Data
(to be filled by Manufacturer)

5.1 Aircraft Ground Test Acceptance Statement

The technical data obtained in the course of testing the aircraft, engine (s), systems and equipment on the ground comply with the effective technical documents.

Head of QID

(sing here)

14.07.03.

(date before first flight)

5.2 Conclusion of Manufacturer Test Pilot

The aircraft, engine (s), systems and equipment have been tested for proper functioning in flight.
The aircraft is found fit for service.

Test pilot

(sing here)

15.07.03.

(last date of flight)

6. TIME LIMITS AND THEIR CHANGES

(to be filled out by the manufacturer)

6.1. Time limits

First assigned aircraft service life is 1000 flight hours, 600 landings on ground, 600 landings on water.

One landing on unpaved aerodrome is equal to four landings on concrete runway ($\sigma \geq 5 \text{ kgf/cm}^2$).

Life time is 6 years.

Service life is extended step by step.

The above-said service lives, life times valid provided that the user observes conditions and instructions of storage, transportation and operations, prescribed in operation documentation.

7. ACCEPTANCE STATEMENT

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The aircraft – amphibian Be-103 № 3303 has been manufactured and accepted in compliance with the effective technical documentation and has been determined to be in airworthy condition.



Head of inspection department

signature

21.07.03.

date

BE 103, S/N 3303

II. PERFORMANCE OF SCHEDULED MAINTENANCE ACTIVITIES

(to be filled out by the operator and repair companies)

Description of scheduled maintenance activities	Operating time, h (calendar time, cycles, activation's, landings)	Authority (description, No. and date of document)	Signatures and surname	
			performed by	checked by
	Total time <u>30.1</u>	Date <u>4-20-05</u>		
	I certify that this Airframe has	been inspected in accordance with a		
	<u>Manual</u>	inspection and was		
	determined to be in	airworthy condition.		
	<u>Be-103</u>	<u>AP 2961896 IA</u>		
EIT DO Installed at TAD	Time	All checks and service		
Performed with	Be-103	scheduled maintenance manual, and FAR 43.13D		
checked lights, Pilot Heat and	Stell wangs	Performed landing Car		
Restrictions and	Extension	checked wings, empennage,		
Fuselags, lubed Airframe	and Flight controls.	Repacked all wheel bearings		
checked Batteries,	Severiced Reservoir,	Reinstalled Battery. Serviced		
Fuel system, cleaned fuel screens,	checked	ops of Fuel valves.		
all checks and operations.	Checked	Good		

11. PERFORMANCE OF SCHEDULED MAINTENANCE ACTIVITIES
(to be filled out by the operator and repair companies)

Date	Description of scheduled maintenance activities	Operating time, h (calendar time, cycles, activation's, landings.	Authority (description, No. and date of document)	performed by	checked by
10/03/06	C/W AD 2006-05-05 MT.PROP. PROP Polyurethane NO STRIPS INSTALLED HAS ETC. De-icing BOOTS INSTALLED SB 8 A C/W ON 11-05	Total time 22.4 I certify that this <u>APR 23 06</u> has been inspected in accordance with a ANNEX inspection and was determined to be in airworthy condition.	Date 10-23-06		
	INSR AND LUB FLIGHT CONTROLS CHECKED LIGHTING PERFORMED GEAR RETRACTION TEST AND LUB, INSP LANDING GEAR, BALANCE ELECT BATTERY EXP. 1/08 SERVICE HEAD ACCUMULATOR RT. LT wing FUEL PUMPS C/W SB BE-103-09980 REPLACEMENT OF RT. LT wing FUEL PUMPS SERVICE GASOLATORS, HYD SYSTEMS. INSP ADD LUB FLIGHT CONTROLS Run-up A & Vent		For <u>APR 23 06</u> ANNEX inspection and was determined to be in airworthy condition.		

11. PERFORMANCE OF SCHEDULED MAINTENANCE ACTIVITIES

(to be filled out by the operator and repair companies)

Date	Description of scheduled maintenance activities	Operating time, h (calendar time, cycles, activation's, landings)	Authority (description, No. and date of document)	Signatures and surname	
				performed by	checked by
	<p>N30KL CENTRAL FLORIDA AVIONICS & INSTRUMENTS I certify that the altitude reporting system was tested as required by FAR 91.413. System is certified for VFR use only. Transponder Make KING Model KT-70 S/N 16012 was tested and found to meet FAR Part 43 App. E Par (C).</p>				

[Signature]
 (Authorized Signatory)
 FAA Approved Repair Station # F4LR560Y
 8812 Airport Blvd. Suite 2, Leesburg, FL 34788

5/21/09

Date

BE 103, S/N 3303

12. PERFORMANCE OF ACTIVITIES AS PER SERVICE BULLETINS AND INSTRUCTION

12.1. Performance of activities as per Service Bulletins

(to be filled out by the operator and repair companies)

Serial No. of Service Bulletin	Brief contents	Performed by	Prescribed time of performance	Date of performance of activities as per Service Bulletin	Signature and (or) stamp	
					performed by	checked by
103-0015Y	Installation of the dual controls on the be-103 airplane	Qoqucharko (KNAAPO official)		30.12.03	Qoqucharko	Mont Jimin
101-0045Y	INSTALLED NEW WING BOLTS	Minzar (KNAAPO official)		5.08.04	Minzar	Mont Jimin
101-0035Y	STRENGTHENED BOTTOM OF FUSELAGE	Minzar (KNAAPO official)		5.08.04	Minzar	Mont Jimin
101-0095Y	REVERSE PITCH PROPELLERS INSTALLED	Baryukov (KNAAPO official)		25.04.05	Baryukov	Mont Jimin

BE 103, S/N 3303

12.1. Performance of activities as per Service Bulletins
(to be filled out by the operator and repair companies)

United No. of Service Bulletin	Brief contents	Performed by	Prescribed time of performance	Date of performance of activities as per Service Bulletin	Signature and (or) stamp performed by	checked by
1	2	3	4	5	6	7
103-006 57	STRENGTHENED PYLONS	Barsukov (KnAAPD official)		11.05.05		
103-014-5A	WING TANKS RE-PLACEMENT OF PUMP	Barsukov (KnAAPD official)		13.05.05		
	LUN 6285.84 TO PUMP					
	LUN 6285.84 WITH STARTING UNIT LUN					
	6287.80 AND CHANGED SEALED LEAD-OUT					

16. OPERATIONAL AND STORAGE NOTES

To ensure aircraft operation in all-climatic conditions, an additional corrosion protection of aircraft inner surfaces is provided by applying preventive compounds and periodic reconditioning of this protection in accordance with Maintenance schedule in the zones and using technologies as designed in Maintenance Manual (section)

(The following area is a large grid for technical drawings or diagrams, which is mostly blank in this image.)