

AIRFRAME LOG BOOK

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IAR 823 S/N 36

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1982.09.21

The IAR-823 airplane no.36 is sent for overhaul as per order no. D.T. 13148 of UM 02584 Y Bucharest, as a result of the expiry of the service life; the airplane did not show any significant damages.

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The engine serial no.L 16912-48A was removed from airplane as a result of the expiry of the service life in operation hours and the engine serial no.H 2047-48 was mounted instead.

Data concerning the engine replacement and testing on ground and in flight are to be found in the present log book, on page 329.

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The IAR-823 airplane No.32 is sent for overhaul at I.Av.Braşov, its service life in years being expired.

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The main legs type 823.06.401A-402A, serial no. 105 to 110 were dismantled from airplane and are sent to IRA Av Bacău for the application of the Service Bulletin no.12T. The main legs type 823-06-402A-401A, serial no.049 to 053 were mounted, with the upgrading Service Bulletin no.12T applied by IRA Av. Bacău. The mounting was carried out by IAR Braşov; emergency retractions and extensions were performed.

Landing gear operation : normal.

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05.1980

According to NT no.189/17.05.1980, for the IAR-823 airplanes to which the CO-14 Service Bulletin was applied by IAR-Braşov, the landing gear extension in flight is admitted. Behaviour during the flight test : normal.

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20.06.1980

The front leg serial no.053 was dismantled and the leg serial no.010 was mounted instead. The landing gear retraction and emergency extension were carried out. Behaviour:normal. The landing gear inspection after 50 landings was also performed.

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09.1980

The 25h inspection works were carried out to airplane, electric system and radio instruments.

The works specific for the airplane passing to winter time servicing conditions were carried out according to the applicable instructions.

The main legs serial no. 050 and 049 were dismantled for service life expiry and the legs serial no. 058 and 096 were mounted instead.

The ground test was performed - behaviour : normal.

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05.06.1981

The braking pump of the right seat left side was replaced because of leakage.

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22.09.1981

The right leg serial no.096 was replaced with the leg serial no.191 and the front leg serial no.060 was replaced with the leg serial no.129.

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The compability for fire detector was carried out as per Service Bulletin no. CO 28.

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1982.04.23

Service Bulletin no.CR 38 was applied. The ignition switches protection was mounted.

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The Service Bulletin no.CO-39 was applied : mounting of rudder control pulleys protection.

21.05.1982

The airplane and its installations were tested on ground and in flight after the application of the Service Bulletins no.22,30,31 and 32.

Airplane behaviour : airworthy.

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10.06.1983

The priming pump type A 10014-C44 serial no. 0965 was dismantled because of bakage to the control valve and the priming pump type B10000-F serial no.15795 was mounted instead.

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09.08.1983

The upgrading Bulletin no. YIE-007-82 was applied : warning of starter operation during engine start.

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04.05.1984

The engine serial no. L 16912-48A was dismantled from airplane in view of using the airplane as test bench for the re-preservation of the spare engines. Five spare engines were mounted on/dismounted from this airplane between 4.05.1984 and 31.05.1984.

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1. Avco-Lycoming engine serial no. L-16912-48A - manufactured on 22.08.1987.
2. The engine was mounted on the IAR-823 airplane S/N 36 on 06.07.1984.

Reason of engine dismantling : the airplane was used as starting bench for engines restorage.

The engine mounting was checked by Mr.Constantin Ionel.

3. The engine operation capacity was checked by Lt.Turcu Dorel for 30 min..

Check results for oil and fuel filters after test: no. ~~beings~~ or other impurities were found. *facings*

The anomalies occurred during the test flight were remedied by :

4. - the remarks made by the test pilot: The operation of the airplane and engine was normal.
5. The IAR-823 airplane S/N 36 equipped with Avco-Lycoming engine serial no. L-16912-48A is airworthy.

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03.04.1987

The airplane and its systems were de-stored and checked.

The specific works for passing to summer time servicing were performed and then the airplane and its systems were stored for 3(three) months.

03.07.1987

The airplane, it electric system, board instruments, radio installation and armament system were de-stored and checked according to the de-storage technology of the IAR-823 airplan with the approval no.628/18.06.1985

15.08.1987

The AC 186 propeller and L-16912 engine were dismantled from airplane. The AC 186 propeller, the pitch governor serial no. B 2309T engine serial no. L.12047-48 with injector serial no.64477 were mounted on airplane.

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1. Engine type: Avco-Lycoming. Serial no : L 12047-48. Manufacturing date : 01.01.1974. Repair date : 06.05.1987.
2. Storage date: 12.12.1986 - stored for 6 months. The storage was carried out at I.Av.-Bucharest. De-storage date: 05.08.1987. The de-storage was carried out by Ilie Gheorghe.
3. The engine was mounted on the airplane no.32 on 05.08.1987.
Reason of the old engine dismounting : expiry of the service life in hours
Service life left : 10 h 23 min. The mounting works were carried out by Ilie Gheorghe. the check of engine mounting was carried out by Matei Aurelian.
4. The engine was tested by Turcu Dorel for 30 min.
Check results for oil and fuel filter: no facings or other impurities were found.
5. Flight test - permitted : Turcu Dorel
Date of flight test : 12.08.1987. The flight test was carried out by Mr. Nagy Iuliu.

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The engine serial no. L-16912-48A was mounted.
The Service Bulletin F.M. 108/1978 was applied.

The oil pressure pipe at engine inlet, P/N NP15M14-2 was dismounted from airplane and a new pipe was mounted with the same part number NP 15M14-2 : 8-78-6-79.

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The Service Bulletin N823 CO-19 was applied. Subject:location of the Bendix radio installation power supply unit.

The Service Bulletin IAR-823 CO-14 was applied. Subject : landing gear.
The flight with retracted landing gear is possible.

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The travel limiting buffers (max.and min.) of the elevator, aileron and rudder controls were checked. The limiting buffer for up elevator was replaced.

The Service Bulletin EO no.2 was applied.

Left and right wing - dismounted.

The FM 06 was applied.

Left and right wing - mounted.

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Application of Service Bulletin CR 38

1. Mounting of ignition switch protection
2. Replacement of the starter button 205K with 204K

The following Service Bulletins were applied :

1. S.B.22 - landing gear mechanical indicators
2. S.B.30 - replacement of seat cushions
3. S.B.31 - replacement of throttles
4. S.B.32 - doors jettisoning

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The points 10,11,25,36 of the task plan accomplished by the S-200 workshop no.241 were applied.

The points no.6,7 and 14 of the task plan were applied.

The Service Bulletins 13 and 19 were applied.

The S.B. CR 20, CR 21 and CR 36 were applied.

The points no.40 and 3 of the task plan were applied.

The airplane can perform aerobatic flight.

Date: 24.12.1982.

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Check of rudder fitting P/N 823-05.116 and fitting P/N 823-05.119 - normal condition.

The check was carried out according to the Technical Note issued by IAR Braşov which guarantees the flight for a limited period of 25 flight hours from the check date, inspecting the fittings after each flight.

The S.B. CR48 concerning the rudder fitting replacement was applied.

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1983.08.10

The limiter support of the elevator control was replaced. The deflection angles of elevator were checked. The angle stiffener of the elevator control support was replaced.

1983.10.14

The S.B. CR 66 concerning the replacement of the inadequate placards on airplane was applied.

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1983.11.15

The application of point 34 from the task plan was checked - application carried out.

1984.01.23

The S.B. CO-108 was applied (replacement of fuel hoses 823-12-422 and oil hoses 823-12-423).

1984.06.05

The reinforcement of right door frames was carried out.

1984.08.07

The following upgrading bulletins (points of the task plan) were found not-applied during the check carried out by the IAR representatives Urugiuc Benone and Turcu Dorel:

CR 56; CR 36; CR 40; CR 44; CR 51; CR 54; CO28; CR49; CR50; CR41; CR49; CR52; CR55; CR57; CR58, S.B.46; S.B.101; S.B. 102; S.B. 103; S.B.104; CR 33.

Beginning with this date, the application of the other upgrading bulletins was certified.

1984.08.28

The reinforcement of the left door was carried out (S.B. CR67) and the closing system lock was replaced (S.B.CR68 and S.B.CR69).

1985.02.06

The hoses part no.823.10.506; 823.10.507; NP 17M-14800; 823.10.511, 823.12.424; and 823.12.425 were replaced because of the service life expiry and recorded in the enclosed hose service life limit sheet.

1985.02.20

The airplane leveling sheet.

1985.04.02

The hoses part no. 823.11.403, 823.12.424-425 and NPIFNL4800 were dismantled for check at IAR Braşov.

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1985.04.02

The hoses part no.403, 800, 424, 425 were dismantled for checking and extension of service life.

1985.04.28

The hoses part no. 403, 800, 424, 425 with extended service life as per service life as per service life limit sheet were mounted.

1985.09.27

The S.B. CO-71 was applied.

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1987.01.27

The propeller serial no.AC-110 with expired service life in operation years was replaced with the propeller serial no. AC 186.

1987.02.12.

The pitch governor serial no.A-2290T was replaced with the overhauled pitch governor serial no.C-508T.

1987.02.12.

The pitch governor serial no.C-508T was replaced with the pitch governor serial no.B-2309T.

1987.08.07

The upgrading bulletin Y3E/1985 concerning the introduction of enriching unit handle blocking was applied.

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Accomplishment of the works for : bringing to serviceable condition, covering the control surfaces with fabric (ailerons, elevators, rudder), pickling, painting with white point as per F.T. 823.0007.

OVERHAUL

The IAR-823 airplane S/N 36 was manufactured in December 1977.

The airplane was built in compliance with the documentation issued by IMFCA-Bucharest and IAR Braşov.

Service life : 1,000 flight hours or 4,000 landings until overhaul

Warranty : 100 flight hours or 12 months for the assemblies and items manufactured by IAR Braşov. For the equipment acquired from vendors, the warranty granted by the suppliers is valid.

The warranty begins from the delivery date.

OVERHAUL No.2 /04.1988

The IAR-823 airplane registration no.32 was overhauled according to the technology of IAR Braşov.

No upgrading bulletins were applied during overhaul.

The following assemblies and units were replaced: front left serial no.079(with serial no.141), main left leg serial no.044 (with serial no.183); main right leg serial no.041 with serial no.134.

The Lycoming engine serial no.12047-48 and the Hartzell propeller serial no. AC-186 were mounted on airplane.

The service life until the next overhaul established under the OG 15/1987 is of 800h⁻¹⁰⁰ or 5^{-0,5} years.

The following components are exceptions :

- engine - as per OG15/1987: 1,200 H:since putting into operation 1570h55min. from last overhaul:6h52min; service life left:1,194h32min.

- propeller: 5 years or 2,000 operation hours if the airplane is hangered; 2 years or 1,000 operation hours for the non-hangered airplane.

The TBO of the pitch regulator is of 2,000h or 5 years as per SS 66L/1986.

OVERHAUL

The IAR-823 airplane registration no. 36 was revitalized according to the IAR technology.

The revitalizing works began on October 1988 and ended on August 16, 1990. The Lycoming engine serial no. L-22454-48A and the Hartzell propeller serial no. AC-238 were mounted on airplane.

The service life after revitalization is of 800⁻¹⁰⁰ flight hours or 5^{-0,5} years as per DM 9/90.

The warranty after revitalization is of 100 flight hours or 12 months and begins from the delivery date.

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ICA Braşov

27.11.82

The IAR 823 airplane registration no. 32 was overhauled according to the technology of ICA Braşov.

The airplane overhaul began on 22.09.82 and ended on 27.11.1982.

The AVCO-Lycoming engine S/N L-16912 and the Hartzell propeller S/N AC-98 were mounted on airplane.

The service life after overhaul is of 1,000 flight hours or 6 years as per S.B. IAR 823 ER-35.

The warranty after overhaul is of 100 flight hours or 12 months and begins from the delivery date.

HISTORY OF THE IAR-823 SECOND HAND AIRCRAFT

No	S/C	Airframe			Engine		Landings		Propeller Serial no.	Governor Serial no.
		Serial No.	Manufact. year/year of OH	Total flying hrs. since new	Flying hrs. since last overhaul	Manufact. year/serial no.	Flying hrs. since new / overhaul-year of OH	Total		
1.	03	1974	1974	1966 h 09'	0 h 48'	1974	925 h / 0 h 48' (OH-1986)	8367	AC 193	C 1334T
2.	07	1988	1974	2055 h 46'	4 h 41'	L12542-18A	4 h 41' (NEW)	9752	AC-267	DISM.
3	08	1988	1974	1858 h 22'	49 h 27'	L121938-48A	808 h 13' / 0 (OH-1987)	9034	AC 268	D2860TJ
4	10	1987	1977	1211 h 02'	5 h 02'	1984	5 h 02' (NEW)	5404	AC 263	C1375TJ
5	32	1987	1977	1025 h 42'	0	1974	1570 h 55' / 6 h 52' (OH-1987)	5228	DISM.	DISM.
6.	74	1987	1982	252 h 42'	13 h 0'	L122047-48A	7 h 38' (NEW)	921	DISM.	C1338T
7.	75	1987	1987	281 h 11'	8 h 0'	L22377-48A	4 h 24' (NEW)	838	AC 163	C1333T
8.	35	1988	1977	982 h 57'	3 h 42'	L22375-48A	3 h 42' (NEW)	4826	AC 266	C1409TJ
9.	36	1988	1977	1152 h 04'	4 h 02'	L22379-48A	4 h 02' (NEW)	5975	AC 238	D3399TJ
10.	27	1987	1976	1626 h 05'	4 h 24'	L22454-48A	4 h 24' (NEW)	7033	AC 243	C1339T

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HISTORY OF THE IAR-823 AIRPLANE S/N 36

1. The IAR-823 airplane S/N 36 was manufactured at IAR-S.A. Braşov (former ICA - Braşov) in December 1977.

2. Flight activity of the airplane :

1977.12.30	✦	1982.09.21	931 ^H 14'	4972 landings
1982.12.06	✦	1984.08.07	211 ^H 20'	968 landings
1987.08.12	✦	1987.09.02	5 ^H 28'	10 landings
1990.08.16	✦	1990.11.12	7 ^H 10'	25 landings
			<hr/>	<hr/>
			1155 ^H 12'	5976 landings

3. During its servicing, the airplane was maintained according to the Maintenance Manual and Inspection Guide, all the works being recorded and approved by authorized persons, in Section IX - „Regular Works Performance” in the airplane logbook.
4. In Section X - „Minor works and repairs performed during the airplane servicing” - in the airplane logbook, all the operations carried out in addition to the regular maintenance works are recorded, being approved by the authorized persons. These operations consists in applying the relevant Service Bulletins and replacing certain parts/equipment/assemblies.
5. During longer inactivity periods, the airplane was subjected to all the storage works provided in the constructive documentation, these being recorded and approved by authorised persons in Section IX and X of the airplane logbook and in Section „Periodical Inspections” in the engine logcard.
6. As the airplane logbook shows, the airplane did not suffer any accident or incident and had a normal behaviour during all the flight tests performed after various works.
7. On September 22, 1982, after 931^H14' and 4972 landings the airplane was subjected to overhaul at IAR - S.A. Braşov, due to the expiry of the service life until the first overhaul of 4 to 5 years.

8. On April 1988, after 1148^H2' and 5950 landings the airplane was subjected to overhaul at IAR-S.A. Braşov, due to the expiry of the service life between overhauls of 4 to 5 years.
9. After acquisition of the airplane by IAR - S.A. Braşov, a reconditioning of the aircraft was accomplished with a view to restore its airworthiness condition beginning with October, 1988. In this regard, the operations established by the Research & Development Department of IAR - S.A. Braşov in its capacity as design authority were applied. During these operations a new engine was installed on aircraft, namely Lycoming IO 540-G1D5, S/N 22454-48A, with 0^H operation hours.
10. For maintaining the airworthiness continuity of the airplane, on December 1999 some works specific for rendering the serviceable condition were performed at IAR-S.A. Braşov, according to the indications given by the Research & Development Department of IAR-S.A. Braşov.

CHIEF INSPECTION DEPARTMENT

KEREKES BÉLA



ENGINE LOG BOOK

IO 540G1D5 S/N L-22454-48A

PERIODICAL CHECKS

- 16.04.1989 The engine was stored for 2 years by the manufactures.
- 18.04.1986 The engine was de-stored, checked and re-stored with storage oil for 90 days.
- 18.11.1999 The storage accomplishment, inspection and recording between 09.1994 + 10.1999 were performed according to the instructions of IC 09.02 and Engine Operator's Manual.
- 02.12.1999 Performed de-storage for ground and flying tests.
- 02.12.1999 Engine storage for 6 months with NYCOPROTEC OS AIR 1503 oil type B-C 609 (made 09.98 - expire 09.2000).