

American deliveries of DC-3s to the Soviet Union

C/n	Type	Del	Notes (Sold via)	Civil registrations
1589	DC-3-196	11.36	Amtorg (X-Cello)	URSS-M132
1974	DC-3-227	8.37	Mongolian Transport Co	
1987-1988	DC-3-227	9.37	Mongolian Transport Co	
2031-2033	DC-3-196A	5.38	Northeastern	URSS-M136, M135
2034-2035	DC-3-196	5.38	Without engines as subassemblies	
2042-2047	DC-3-196A	6-9.38	Northeastern	URSS-M137
2096-2101	DC-3-260	1-2.39	Far East Fur Trading, Mongolia	MT-16 to MT-21, CCCP-JI3403, JI3402
2112-2117	DC-3-196B	3-4.39	Northeastern	CCCP-JI3407

Note: C/ns 1589, 1974, 1987, 1988, 2031-2033 and 2042-2047 were test-flown in the USA with the identity mark "F-2" and c/ns 2112-2117 used the mark "F-6".

Aeroflot DC-3s

Reg	Reg Date	C/n	Notes
URSS-M132	25.6.1937	1589	To URSS-A
URSS-M135	13.8.1938	2032	To URSS-B
URSS-M136	13.8.1938	2031	Hamiata. To URSS-M
URSS-M137	13.8.1938	2043	Hamiata. To URSS-N
CCCP-JI3402	25.6.1939	2097	To URSS-G
CCCP-JI3403	29.6.1939	2096	To URSS-D
CCCP-JI3407	20.1.1940	2114	Cx 3.4.41
URSS-A	5.5.1939	1589	Ex URSS-M132
URSS-B	5.4.1939	2032	Ex URSS-M135. Cx 8.41
URSS-C	21.1.1940	2047	
URSS-D	3.1.1940	2096	Ex CCCP-JI3403
URSS-G	3.1.1940	2097	Ex CCCP-JI3402
URSS-H	21.1.1940	2046	
URSS-K	9.3.1940	2098	Cx 8.41
URSS-M	1940	2031	Ex URSS-M136. Hamiata
URSS-N	1940	2043	Ex URSS-M137. Hamiata. Cr 6.6.43
URSS-B	6.3.1943	2035	



The PS-84 (later Li-2) was produced by Factory No 84, first located in Moscow and then moved to Tashkent in 1941. Deliveries to Aeroflot started in 1939-40.

In September 1936 the first group of Russian specialists, including B P Lisunov and A A Sen'kov from Factory No 39, visited Douglas. Sen'kov became the chief designer of Factory No 84 at Khimki near Moscow, where production of the DC-3 was to be located, and Lisunov became chief engineer. In March 1937 a special design bureau (SKB) for the DC-3 was organised under V M Myasishchev, who came from AGOS TsAGI and was appointed chief designer for DC-3. Factory No 84 was being adapted especially for the DC-3.

The first drawings were received on 19 November 1936, but the first ones adapted from inch to meter system came in May-July 1937. Eight designers and five production engineers were sent to Douglas in April 1937 and another six engineers followed them in November. By July 1938, 27 engineers had been sent to the USA.

Lisunov, who spent almost two years at the Douglas factory in 1938-39, was to supervise production of the Soviet version of the DC-3, which was designated PS-84 after the numerical designation of the factory. The PS-84 was built from heavier materials than the original DC-3. The design had been recalculated and altered with consideration to Soviet strength norms and metric measures. When Myasishchev was arrested early in 1938 the responsibility for this task was taken over by Sen'kov.

Production of details started in the summer of 1937, but in 1938 dural sheets for 40 aircraft and pressed profiles for 60 were ordered from the USA to speed up production. In August 1938 the two US-built sets of finished parts (c/ns 2034 and 2035) arrived and from these details one aircraft was assembled and it was reported ready on 7 November 1938. In the meantime a half-scale mock-up had been inspected in February 1938.

On 13 February 1938 it had been decided that Factory No 84 was to deliver five PS-84s to the GVF and five to the VVS in 1938, but only the first example was completed in time. Subassemblies for two aircraft made from indigenous detail production was completed by the

end of 1938 and in 1939 production got under way. Six PS-84s were completed, of which four were delivered to Aeroflot: URSS-M138 (c/n 841) and CCCP-JI3400 (c/n 1) in May, CCCP-JI3401 (c/n 2) in June and CCCP-JI3404 (c/n 3) in September.

The first PS-84s had Wright Cyclone G2s, but starting with c/n 3 the 820-1,000 hp M-62IR (later redesignated ASh-62IR) radial engine, driving an AV-7N-161 or AV-7NE-161 propeller, was fitted. The M-62 was a development of the M-25, the licence-built version of the Wright SGR-1820-F, which had powered the DC-2. The PS-84 was more than 400 kg heavier than the DC-3. With



Aeroflot's first DC-3, URSS-M132 (c/n 1589), later changed to URSS-A, was registered in June 1937. It is seen here in Moscow.

a maximum fuel load of 2,320 kg it had a 2,500 km range, but normal range was 1,100 km (with 1,200 kg of payload). Cruising speed was 220 km/h. The first variant of the PS-84 had accommodation for a crew of four, including a stewardess, and seated 14 passengers, but the number of passenger seats was later increased to 21. Variants with 15 and 24 seats existed as well.

The GUGVF had first expected to receive 35 PS-84s in 1939 and 19 had been ordered. As already mentioned only six were delivered. The VVS had ordered 11 and received two, and the Navy (VMF) had ordered two as well. C/n 841 was possibly the second aircraft assembled mainly from American subassemblies. One of the PS-84s built from American parts, probably c/n 841, was tested at the NII GVF between 3 September and 17 December 1939, when 166 flights were made. The PS-84 was recommended for large-scale production and at the end of 1939 the factory had completed sub-assemblies for another six aircraft.



DC-3 URSS-H (c/n 2046) served with Aeroflot on its international routes from January 1940.