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CSS-12 & MD-12

The Polish aircraft industry suffered heavily during WW2. Almost all its factories were destroyed by the bitter fighting at the Eastern front, and there was not much left to start from anew. Nevertheless, the industry began to revive in the late 1940s and took up several projects. One of them was the CSS-12, a short-range transport for ten passengers designed by Leszek Duleba from the Centralny Studium Samolotów (CSS) experimental design bureau. The aircraft was powered by two Argus As 411A-1 piston engines which had been left over from the German occupation of Poland.

The prototype flew first on 22 November 1950. Unfortunately, trials were suspended in October 1951 when the CSS was closed down as part of a restructuring of the Polish aircraft industry. Trials finally resumed on 30 March 1955 by the Instytut Lotnictwa (I.L.) aviation institute. These lasted until 10 November 1955, and as a result the aircraft received new tail surfaces. Trials continued then from 28 September until 20 December 1956. Although the CSS-12 was considered a successful design and recommended for series production, the insufficient number of wartime Argus engines prevented this. Also there was a much reduced perceived demand for an aircraft of this category. Apart from that, the Polish aircraft industry had to concentrate on military types at that time and did not have enough free capacities to build civil transports. The sole CSS-12 was cancelled in 1960 and scrapped. Its cockpit section was handed over to the NOT technical museum in Warsaw and was passed on in February 1967 to the MLIa aviation museum in Kraków where it remains in storage. The rest of the aircraft went as a 'children's plaything' to the WSM Sady Zoliborskie area of Warsaw, and was presumably scrapped long ago!

1 CSS-12 prototype built by WSK Warszawa-Okecie at Okecie in 1950

1	SP-BAR (1) SP-BAR (1)	CSS-12 CSS-12	CSS Inst. Lotnictwa	f/f	22nov50	no CoFR and thus no rgd; trials suspended oct51; stored; trials resumed 30mar55, completed 20dec56; established world record 28dec56; canx 03oct60 as scrapped; cockpit section to NOT technical museum in Warsaw, passed on to MLIa museum in Kraków feb67; rest of the aircraft as 'children's plaything' to WSM Sady Zoliborskie area of Warsaw, presumably scrapped
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At the end of 1954, the Instytut Lotnictwa under the direction of Franciszek Misztal produced preliminary designs for two twin-engined airliners, the FM-11 and FM-12. The former was to carry 12 passengers using two 450 h.p. Narkiewicz WN-5 engines, whereas the larger FM-12 for 16 passengers was to be powered by two 615 h.p. Shvetsov ASH-21s. Neither was built and the design team now headed by Leszek Duleba was absorbed into the I.L. and a new project, the MD-12, emerged. Information obtained from the trials of the CSS-12 was applied in the design process, and although the MD-12 was initially a twin-engined design, the lack of ASH-21 engines forced a change to four indigenous Narkiewicz WN-3s as used in the TS-8 "Bies" trainer. With more power available the design was enlarged to carry 20 passengers or 1,900 kg of cargo.

After completion of a static test airframe, the first flying prototype of this short-range airliner and transport made its maiden flight on 21 July 1959. The second aircraft built was the passenger version MD-12P, first flying on 7 January 1961. This last Polish-designed airliner underwent trials with LOT on the Warsaw-Rzeszów route in September 1961 and was also chartered by LOT for the Poznan-Warsaw route during the Poznan International Trade Fairs in 1961 and 1962. However, the MD-12P never entered full service with the airline and was scrapped after an accident in 1965. The third aircraft was built as an aerial survey version MD-12F. It had a crew of seven and was equipped with four cameras and a dark room. Although the MD-12F was also demonstrated in Hungary and Romania, this version did not enter production either. When the prototype MD-12 crashed on 17 September 1963 due to tailplane flutter and structural failure all work on the type was eventually stopped.

2 MD-12 prototypes and 2 pre-production aircraft built by WSK Warszawa-Okecie at Okecie in 1959-62

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01	SP-PAL	MD-12	WSK Okecie	f/f	21jul59	prototype; no CoFR and thus no rgd; crashed 17sep63 due to tailplane flutter and structural failure; canx 25sep63
02	SP-PBD	MD-12P	WSK Okecie	f/f	07jan61	passenger version; rgd 18may61; trials with LOT on Warsaw - Rzeszów route 28aug/30sep61, also chartered by LOT for Poznan-Warsaw route during Poznan Intl. Trade Fairs in 1961 and 1962, but never entered full service; damaged in autumn 1965, wfu before 02may67 (inspection date); canx 14sep67 and scrapped
03	SP-PBL	MD-12F	WSK Okecie	f/f	21jul62	aerial survey version; no CoFR and thus no rgd; demos in Hungary and Romania; canx 02oct68, but already put on display at MLIa museum in Kraków (N50.07733 E19.99258) 19apr67; 1/n aug15, natural metal c/s without markings or titles and carries registration under its wing

PZL M-15 "Belphegor"

On 1 March 1971 an agreement was concluded in Warsaw between the Soviet and Polish governments regarding development and production of new aviation 'products' including agricultural aircraft, light helicopters and sailplanes. The USSR had not manufactured any specialised agricultural aircraft after transfer of An-2 production to Poland except for small number of An-2Ms.

As a consequence, the development of the M-15 was authorised together with associated agricultural and ground-support equipment. The Soviet government indicated a requirement for 3000 aircraft and an agreement was signed on 2nd December 1971 for large-scale production.

Design of the M-15 was undertaken at PZL Mielec by Soviet consulting engineer R.A. Ismailov and Polish designer K. Gocyla. The specialised agricultural equipment was jointly developed by the Aviation Institute in Warsaw and the Soviet Research Institute of Special & Utility Aviation at Krasnodar.

To test power-unit and equipment the Aviation Institute drastically modified an An-2 as LALA-1 (Latajace Laboratorium-1 = Flying Laboratory-1) which first flew on 10th February 1972. The M-15 is unique in configuration being a jet-powered biplane and a mock-up was approved in June 1972. A prototype which used wings and undercarriage from the An-14, (An-14s c/n 700301 CCCP-81569, c/n 601505 CCCP-81560 and c/n 601703 CCCP-81568 were canx as sold to Poland 03aug72) and designated LL-M15 (Latajace Laboratorium-M15) and was first flown on 27 May 1973. The full-size mock-up wore the spurious marks CCCP-1972. The first 'real' M-15 was flown on 9th January 1974.

A prototype reported as 1SP01-07 with spurious marks 'SP-1974' was shown at a Polish industrial exhibition in Moscow in 1974 commemorating the 30th anniversary of the post-war Polish state and an unidentified production aircraft was shown at the POLTRANSMAZ exhibition in Moscow in 1977. The type was also displayed at International Trade Fairs at Poznan in 1975 and 1976 and SP-DCA was at Paris in June 1977, the only time the type was shown in the 'west'. Extensive ag-aircraft trials took place at Ketrzyn-Wilamowo in 1975 and poor-quality photos show either 1SP01-03 or 1SP01-05 (or perhaps both), unregistered.

In April 1975 five pre-series aircraft went to the USSR for evaluation and Soviet acceptance tests were completed in 1976 and a provisional certificate of airworthiness was awarded, a full certificate being awarded later and marked by a ceremony in April 1979. Operating trials were conducted at Pyatigorsk, Voronezh, Poltava and Maykov and also in August 1979 at Damgarten, DDR. Far from the 3000 initially envisaged, no more than 165 production aircraft were completed and the type seems to have been withdrawn in 1983/84 if the data from Pyatigorsk is representative of other bases. Presumably it did not live up to the designers' expectations. There were a large number of unregistered trials airframes concerning which little is known and also a gap in production, blocks 10, 11 and 12 not being built.

The c/n is explained as follows: 1 indicates it is an aircraft (Polish production designation), S stands for M-15 (Polish production designation and is C in Cyrillic) followed by the three digit batch number and the two digit number in the batch. Remarkable is that most Soviet aircraft were officially registered several years after being delivered.

M-15 prototypes and pre-production aircraft

PP0-00	12832	LaLa-1	Polish Air Force	f/f	10feb72	technology demonstrator, converted from An-2 c/n 1G128-32
---	CCCP-1972	LL-M-15	Aeroflot c/s			full-size mock-up; photo in "Skrzydłata Polska" # 2/73
XM-15	no serial	LL-M-15	PZL	f/f	27may73	carried Polish Air Force checkerboards but no other marks
P01-01	--	M-15				static test airframe
P01-02	no reg	M-15-00				prototype; f/f 09jan74; flight-trials a/c
P01-03	no reg	M-15-01				spraying-equipment trials in Poland & USSR
P01-04	no reg	M-15-40				not flown, fireproof testing
P01-05	no reg	M-15				dusting-equipment trials in Poland & USSR
P01-06	no reg	M-15				general handling trials
P01-07	SP-1974	M-15				'SP-1974' at exhibition, Moscow 1974; photo in "Flieger-Revue" # 11/74 & "TLIA" # 11/77; aerodynamic trials; tested at TsAGI and Instytut Lotnictwa; supposedly renumbered to 1S001-01 later, a 'paperwork' exercise ?
P01-08	0108	M-15-00			photo	c/n also given as 1SP001-08; ready for certification test 30apr75; took part in state trials in USSR in 1975/76; was displayed at the '50 Years of PZL' exhibition in Warsaw sep78, no registration but c/n clearly visible; supposedly renumbered to 1S001-02 later, a 'paperwork' exercise ?

165 M-15 built by PZL Mielec from 1975 to 1982

1S001-01	not known	M-15	history unknown			ex c/n P01-07 to be confirmed
1S001-02	not known	M-15	history unknown			ex c/n P01-08 to be confirmed
1S001-03	not known	M-15	history unknown			
1S001-04	--	M-15-40		f/f	30dec75	prototype of this two-seater version; probably had no registration at time of f/f
	CCCP-15215	M-15-40	AFI/N.Kavkaz-Mai	toc	27oct76	resource (cycles) used up by sep82; soc 20may83 as life-time expired
1S001-05	--	M-15				dynamic test airframe for fatigue trials
1S001-05	--	M-15				dynamic test airframe for fatigue trials
1S002-01	0201	M-15-01		f/f	25apr75	first production M-15-01 with spraying equipment; ready for certification test 31may75

	0201	M-15-01	VNII Skh	toc	unknown	on charge as of 01jan75 (but date from MGA document is earlier than the f/f); was not yet paid for by the MGA to the GUSANT although it to took part in state trials by the MGA in USSR in 1975/76; photo exists; according to Russian sources this aircraft became CCCP-15598, but not mentioned as such in any documents; see c/n 1S005-06
15002-02	0202	M-15-01	AFL/GosNII GA	toc	01sep75	took part in state trials in 1975/76
15002-03	CCCP-15599 CCCP-15216	M-15-01 M-15-00	AFL/N.Kavkaz-Pya AFL/N.Kavkaz-Mai	trf toc	unknown 27oct76	on charge as of 01oct78; f/n Pyatigorsk 1978; soc 20may83 as life-time expired took part in state trials in the USSR in 1976; took part in critical angle of attack trials in Poland (later ?); useful lifetime expired sep82; soc 20may83 as life-time expired
15002-04	0204	M-15-00	AFL/GosNII GA		photo	ready for certification test 30jun75; took part in state trials in USSR in 1975/76
15002-05	CCCP-15217	M-15-00	AFL/N.Kavkaz-Mai	toc	27oct76	took part in state trials in the USSR in 1976; useful lifetime expired sep82; soc 28jun83 as life-time expired
15003-01	CCCP-15218	M-15-00	AFL/Centr.Reg.-VOZ	toc	21oct76	rgd 06jun79; soc 18mar83 as life-time expired
15003-02	CCCP-15219	M-15-00	AFL/Ukraine-PLV	mfd	28feb76	toc 19oct76; opb 102 LO; w/o 09sep77 on a crop-spraying flight from the airstrip of the "Sovkhoz im. Goloborodko" state farm (Karlovka district of the Poltava region) when the pilot forgot to extend the flaps before take-off (or the flaps retracted uncommandedly), the pilot forced the aircraft to lift off at a speed of 115 km/h but it fell back to the runway twice, the pilot then decided to abort the take-off but rethought soon after and applied full power, the aircraft crashed at a speed of some 75-85 km/h into bushes and trees behind the runway, nosed over and caught fire, pilot killed; t/t 36 hours and 77 cycles; soc 18nov77
15003-03	CCCP-15220	M-15-00	AFL/Centr.Reg.-VOZ	toc	21oct76	rgd 06jun79; soc 18mar83 as life-time expired
15003-04	CCCP-15221	M-15-00	AFL/Ukraine-PLV	toc	19oct76	rgd 07dec79; photo exists; soc 19apr83 as life-time expired
15003-05	CCCP-15222	M-15-00	AFL/N.Kavkaz-Mai	toc	27oct76	registration in Soviet register without c/n and rgd; resource (cycles) used up by sep82; soc 20may83 as life-time expired
15003-06	CCCP-15223	M-15-00	AFL/N.Kavkaz-Mai	toc	27oct76	registration in Soviet register without c/n and rgd; resource (cycles) used up by sep82; soc 20may83 as life-time expired
15003-07	CCCP-15224	M-15-00	AFL/Ukraine-PLV	toc	19oct76	rgd 09jan80; soc 19apr83 as life-time expired
15004-01	CCCP-15225	M-15-00	AFL/Centr.Reg.-VOZ	toc	21oct76	rgd 06jun79; soc 18mar83 as life-time expired
15004-02	CCCP-15226	M-15-00	AFL/Centr.Reg.-VOZ	toc	21oct76	rgd 06jun79; soc 18mar83 as life-time expired
15004-03	CCCP-15227	M-15-00	AFL/Ukraine-PLV	toc	19oct76	rgd 09jan80; soc 19apr83 as life-time expired
15004-04	CCCP-15228	M-15-00	AFL/Ukraine-PLV	toc	19oct76	rgd 09jan80; soc 19apr83 as life-time expired
15004-05	CCCP-15229	M-15-00	AFL/N.Kavkaz-Pya	toc	13oct76	rgd 13feb80; soc 20may83 as life-time expired
15005-01	CCCP-15230	M-15-00	AFL/Centr.Reg.-VOZ	toc	21oct76	rgd 13aug80; became a dynamic test airframe for fatigue trials feb78; transferred 16jun82 to the Riga aviation institute (RKIIGA) and became a ground instructional airframe; soc 18oct84 as worn out; scrapped in 1991
15005-02	CCCP-15231	M-15-00	AFL/N.Kavkaz-Pya	toc	13oct76	rgd 13feb80; soc 20may83 as life-time expired
15005-03	CCCP-15232	M-15-00	AFL/N.Kavkaz-Pya	toc	22apr77	rgd 13feb80; soc 20may83 as life-time expired
15005-04	CCCP-15233	M-15-01	AFL/N.Kavkaz-Mai	toc	29may78	rgd 13aug80; resource (cycles) used up by sep82; soc 28jun83 as life-time expired
15005-05	CCCP-15234	M-15-01	AFL/N.Kavkaz-Pya	toc	21jan77	rgd 13feb80; soc 20may83 as life-time expired
15005-06	CCCP-15598	M-15-01	GosNII	toc	22jan78	short-nosed version; photo in "Skrzydlata Polska" # 52-53/1978; see remark with c/n 1S002-01
15006-01	not known	M-15-40	AFL/Central Region	trf	06jun80	soc 18mar83 as life-time expired
15006-02	not known	M-15-03		f/f	19jul76	broken up; tail used for the repair of c/n 1S006-03
	SP-DFA (2)	M-15-03	p	h. 0	9nov14	brochure photo as '0602'; photo at Fort Rogowo dec06; photo at Wolin jul11; remains seen at the Muzeum Narodowe Rolnictwa (Agricultural Museum) at Szreniawa 06apr12, fully covered, fuselage and wings separated; photo 19jul14 at the ag-museum Szreniawa being assembled
15006-03	no reg	M-15-03		f/f	09oct76	reserved at the Muzeum Narodowe Rolnictwa (Agricultural Museum) at Szreniawa (N52.312513 E16.794792) with this fake registration; see c/n 1S008-05; l/n aug18 in good condition
15007-01	--	M-15-00				never registered; arrived at Muzeum Lotnictwa in Krakow 14jul81 (was damaged during transport and repaired with the tail of c/n 1S006-01) and preserved there since, l/n aug17
15007-02	CCCP-15100	M-15-00	VNII PANKh	toc	03jun77	to USSR, probably for trials or spares
15007-03	CCCP-15100 CCCP-15101	M-15-00 M-15-00	AFL/N.Kavkaz-Mai AFL/N.Kavkaz-Mai	trf toc	23jan81 19jul77	in Aeroflot c/s; took part in trials at Krasnodar in 1977/78 rgd 21jan80; soc 20may83 as life-time expired
15007-04	CCCP-15102	M-15-00	AFL/N.Kavkaz-Pya	toc	08jun77	force-landed at Khmelnytsky during ferry flight from Lviv to Maikop 23jun77 due to an electronic malfunction; damaged 02aug78 on a crop-spraying flight by bird-strike, had to force-land; CoFR renewal 17dec81; resource (cycles) used up by dec82; soc 20may83 as life-time expired
15007-05	CCCP-15103	M-15-00	AFL/N.Kavkaz-Pya	toc	08jun77	rgd 12feb80; soc 20may83 as life-time expired
15007-06	CCCP-15104	M-15-00	AFL/N.Kavkaz-Mai	toc	15jul77	rgd 13feb80; soc 20may83 as life-time expired suffered an electronic malfunction on the ferry flight to Maikop; opb Maikopski OAO; dbr 29jun78 on a positioning flight to Maikop when a sensor failed, resulting in a fake indication that the braking system was not working, the pilot planned a landing without using the brakes but made a mistake in calculating the touch-down point so that the aircraft came down very hard and suffered substantial damage, no casualties; soc 27dec78
15007-07	SP-DCA	M-15-00	WSK-Mielec	rgd	23may77	f/n LBG jun77; canx 12jul77 but restored 14jul77; canx 16jun82
15007-08	CCCP-15106	M-15-00	AFL/N.Kavkaz-Pya	toc	19jul77	rgd 13feb80; this aircraft (or possibly CCCP-15103) was w/o 01feb77 when the hatch of the chemicals reservoir opened while the aircraft was flying at low altitude, became uncontrollable, the pilot was seriously injured in the crash; soc 25feb81
15007-09	CCCP-15107	M-15-00	AFL/Ukraine-PLV	toc	unknown	on charge as of 01jul78; rgd 07dec79; soc 19apr83 as life-time expired
15007-10	CCCP-15108	M-15-00	AFL/Ukraine-PLV	toc	unknown	on charge as of 01jul78; rgd 07dec79; soc 19apr83 as life-time expired
15008-01	CCCP-15109	M-15-00	AFL/N.Kavkaz-Mai	toc	29may78	rgd 17dec81; last flight jun83; soc 28jun83 as life-time expired
15008-02	CCCP-15110	M-15-00	AFL/N.Kavkaz-Mai	toc	29may78	was equipped with a special sprayer which emitted small droplets; rgd 19feb81; partially disassembled sep82 when the technical condition of the M-15 park was assessed; soc 20may83 as life-time expired
15008-03	CCCP-15111	M-15-00	AFL/N.Kavkaz-Mai	toc	29may78	rgd 10feb81; soc 20may83 as life-time expired
15008-04	CCCP-15112	M-15-00	AFL/N.Kavkaz-Mai	toc	29may78	rgd 27may80; soc 20may83 as life-time expired
15008-05	SP-DFB (1)	M-15-00	WSK-Mielec	rgd	25jul77	canx 02jan79 after accident, details unknown; see c/n 1S006-02
15008-06	SP-DFA	M-15-00	WSK-Mielec	rgd	30aug77	under trials at ACZ Damgarten (East Germany) 20apr/03aug79; photo SXF jun79; canx 03jun82
15008-07	CCCP-15115	M-15-00	AFL/N.Kavkaz-Mai	toc	05jun78	rgd 27may80; aborted take-off 05may82 when one of the wheels almost came off the amortisator leg; soc 20may83 as life-time expired
15008-08	CCCP-15116	M-15-00	AFL/N.Kavkaz-Mai	toc	05jun78	rgd 27may80; soc 20may83 as life-time expired
15008-09	CCCP-15117	M-15-00	AFL/N.Kavkaz-Mai	toc	05jun78	was equipped with a special sprayer which emitted small droplets; rgd 13nov81; last flight jun83; soc 28jun83 as life-time expired
15008-10	SP-DFC	M-15-00	CNPSZ-ZUA	rgd	13oct77	canx 16jun82
15009-01	CCCP-15119	M-15-00	AFL/N.Kavkaz-Mai	toc	09jun78	rgd 10feb81; wfu sep82 because of corrosion; soc 20may83 as life-time expired
15009-02	CCCP-15120	M-15-00	AFL/N.Kavkaz-Mai	toc	09jun78	rgd 17dec81; soc 20may83 as life-time expired
15009-03	SP-DFD	M-15-00	Zaklad Uslug Agro.	rgd	28nov77	canx 16jun82
15009-04	CCCP-15122	M-15-00	AFL/N.Kavkaz-Mai	toc	09jun78	rgd 17dec81; soc 28jun83 as life-time expired
15009-05	CCCP-15123	M-15-00	AFL/N.Kavkaz-Mai	toc	05jun78	rgd 17dec81; soc 20may83 due to its poor technical condition
15009-06	CCCP-15124	M-15-00	AFL/N.Kavkaz-Mai	toc	05jun78	rgd 17dec81; soc 28jun83 as life-time expired
15009-07	CCCP-15125	M-15-00	AFL/N.Kavkaz-Mai	toc	09jun78	rgd 17dec81; soc 20may83 as life-time expired
15009-08	CCCP-15126	M-15-00	AFL/N.Kavkaz-Mai	toc	09jun78	rgd 17dec81; soc 28jun83 as life-time expired
15009-09	CCCP-15127	M-15-42	AFL/N.Kavkaz-Mai	toc	30sep80	improved two-seater version; rgd 20oct80; soc 19apr83 as life-time expired
15009-10	CCCP-15128	M-15-00	AFL/N.Kavkaz-Mai	toc	25sep78	rgd 17dec81; soc 20may83 as life-time expired
15013-01	CCCP-15105	M-15-01	AFL/N.Kavkaz-Pya	toc	26jun80	rgd 28jul80; soc 27dec83 as life-time expired; preserved in the Air Force museum at Monino (N55.833287 E38.188010) since aug83, l/n aug15
15013-02	CCCP-15113	M-15-01	AFL/N.Kavkaz-Mai	toc	25sep78	first M-15-01 with improved corrosion protection; rgd 03jan80; soc 28jun83 as life-time expired
15013-03	CCCP-15114	M-15-01	AFL/N.Kavkaz-Mai	toc	25sep78	was equipped with a special sprayer which emitted small droplets; rgd 17dec81; last flight jun83; soc 23nov83 as life-time expired
15013-04	CCCP-15118	M-15-01	AFL/N.Kavkaz-Mai	toc	28mar78	had a thicker layer of paint for experimental reasons; rgd 03jan80; last flight jun83; soc 23nov83 as life-time expired
15013-05	SP-DFE	M-15-01	Zaklad Uslug Agro.	rgd	22mar78	canx 30jan79 as to the military; fate unknown
15013-06	CCCP-15121	M-15-01	AFL/N.Kavkaz-Mai	toc	09may79	rgd 20jun79; soc 20may83 due to its poor technical condition
15013-07	CCCP-15129	M-15-01	AFL/N.Kavkaz-Mai	toc	09may79	rgd 20jun79; soc 28jun83 due to its poor technical condition
15013-08	CCCP-15130	M-15-01	AFL/N.Kavkaz-Mai	toc	09may79	rgd 09jul79; right slit damaged 21apr80 when collided on the ground with CCCP-15154; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15013-09	CCCP-15131	M-15-01	AFL/N.Kavkaz-Mai	toc	09may79	rgd 20jun79; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15013-10	CCCP-15132	M-15-01	AFL/N.Kavkaz-Mai	toc	09may79	rgd 20jun79; soc 28jun83 as life-time expired
15013-11	CCCP-15133	M-15-01	AFL/N.Kavkaz-Mai	toc	15jul79	damaged 07may79 when a screw-nut from the windscreen wiper was sucked in by the engine; rgd 24sep79; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15013-12	CCCP-15134	M-15-01	AFL/N.Kavkaz-Mai	toc	25may79	rgd 20jun79; had to force-land 27sep80 because of engine surging as residues of dry chemicals had accumulated on the compressor blades; soc 28jun83 as life-time expired
15013-13	CCCP-15135	M-15-01	AFL/N.Kavkaz-Mai	toc	25may79	rgd 09jul79; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15013-14	CCCP-15136	M-15-01	AFL/N.Kavkaz-Mai	toc	06jul79	rgd 21sep79; partially disassembled sep82 when the technical condition of the M-15 was assessed; soc 28jun83 as life-time expired
15013-15	CCCP-15137	M-15-01	AFL/N.Kavkaz-Mai	toc	25may79	rgd 09jul79; soc 21sep83 as life-time expired
15014-01	CCCP-15138	M-15-01	AFL/N.Kavkaz-Mai	toc	10jun79	rgd 20jun79; had to force-land on a rice-field 04jul80 because of engine problems as residues of chemicals had accumulated in the fuel system; resource (cycles) used up by sep82; soc 28jun83 as life-time expired
15014-02	CCCP-15139	M-15-01	AFL/N.Kavkaz-Mai	toc	10jun79	rgd 09jul79; resource (cycles) used up by sep82; soc 28jun83 as life-time expired
15014-03	CCCP-15140	M-15-01	AFL/N.Kavkaz-Mai	toc	10jun79	rgd 09jul79; resource (cycles) used up by sep82; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15014-04	CCCP-15141	M-15-01	AFL/N.Kavkaz-Mai	toc	10jun79	rgd 20jun79; resource (cycles) used up by sep82; soc 28jun83 due to its poor technical condition
15014-05	CCCP-15142	M-15-01	AFL/N.Kavkaz-Mai	toc	10jun79	rgd 20jun79; had to force-land 15aug80 because the electrical system failed in-flight; soc 28jun83 due to its poor technical condition
15014-06	CCCP-15143	M-15-01	AFL/N.Kavkaz-Mai	toc	10jun79	rgd 09jul79; had to force-land at Krasnodar 20may80 because the braking system failed; soc 28jun83 as life-time expired
15014-07	CCCP-15144	M-15-01	AFL/N.Kavkaz-Mai	toc	10jun79	rgd 09jul79; had to force-land 09jul80 because of a technical malfunction; was officially under repair until sep82 when it was officially wfu; soc 28jun83 due to its poor technical condition
15014-08	CCCP-15145	M-15-01	AFL/N.Kavkaz-Mai	toc	06jul79	rgd 21sep79; had to force-land 04feb81 when the engine power dropped in flight because of a malfunction in the fuel system; soc 28jun83 due to its poor technical condition

15014-09	CCCP-15146	M-15-01	AFI/N.Kavkaz-Mai	toc	06jul79	rgd 21sep79; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15014-10	CCCP-15147	M-15-01	AFI/N.Kavkaz-Mai	toc	06jul79	rgd 21sep79; soc 20may83 as life-time expired
15014-11	CCCP-15148	M-15-01	AFI/N.Kavkaz-Mai	toc	06jul79	rgd 21sep79; damaged 18may80 on a crop-spraying flight by bird-strike; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15014-12	CCCP-15149	M-15-01	AFI/N.Kavkaz-Mai	rgd	21sep79	on charge as of 01oct79; damaged by fire 06aug80 when fuel spilled from the tank into the engine core as the aircraft was parked on an incline; was officially under repair until sep82 when it was officially wfu; soc 28jun83 due to its poor technical condition
15014-13	CCCP-15150	M-15-01	AFI/N.Kavkaz-Mai	rgd	21sep79	on charge as of 01oct79; soc 28jun83 due to its poor technical condition
15014-14	CCCP-15151	M-15-01	AFI/N.Kavkaz-Mai	toc	29jul79	rgd 21sep79; soc 21sep83 as life-time expired
15014-15	CCCP-15152	M-15-01	AFI/N.Kavkaz-Mai	toc	29jul79	rgd 21sep79; soc 28jun83 as life-time expired
15014-16	CCCP-15153	M-15-01	AFI/N.Kavkaz-Mai	toc	29jul79	rgd 21sep79; soc 28jun83 as life-time expired
15014-17	CCCP-15154	M-15-01	AFI/N.Kavkaz-Mai	toc	09sep79	rgd 24sep79; damaged 21apr80 when was hit by CCCP-15130 whilst parked, left aileron damaged; last crop-spraying flight jun83; soc 23nov83 as life-time expired; was ferried to Ulyanovsk 23/24aug83 and preserved in the Museum of Civil Aviation (N54.289909 E48.233100) since and seen there sep93/apr18
15014-18	CCCP-15155	M-15-01	AFI/N.Kavkaz-Mai	toc	25sep79	rgd 11nov79; collided with a hangar while taxiing, date unknown; was officially under repair until sep82 when it was officially wfu; soc 28jun83 as life-time expired
15014-19	CCCP-15156	M-15-01	AFI/N.Kavkaz-Mai	toc	29jul79	rgd 21sep79; resource (cycles) used up by sep82; soc 28jun83 as life-time expired
15014-20	CCCP-15157	M-15-01	AFI/N.Kavkaz-Mai	toc	29jul79	rgd 21sep79; damaged on a crop-spraying flight when fire broke out in the APU compartment, date unknown; was officially under repair until sep82 when it was officially wfu; soc 28jun83 as life-time expired
15015-01	CCCP-15158	M-15-01	AFI/N.Kavkaz-Mai	rgd	25jun80	on charge as of 01jul80; was equipped with a special sprayer which emitted small droplets; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15015-02	CCCP-15159	M-15-01	AFI/N.Kavkaz-Mai	toc	25sep79	rgd 11nov79; soc 21sep83 as life-time expired
15015-03	CCCP-15160	M-15-01	AFI/N.Kavkaz-Mai	toc	25sep79	rgd 11nov79; soc 28jun83 as life-time expired
15015-04	CCCP-15161	M-15-01	AFI/N.Kavkaz-Mai	toc	25sep79	rgd 11nov79; damaged 05apr82 when the left main wheel came off the amortisator leg during the take-off run; soc 28jun83 due to its poor technical condition
15015-05	CCCP-15162	M-15-01	AFI/N.Kavkaz-Mai	toc	25sep79	rgd 11nov79; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15015-06	CCCP-15163	M-15-01	AFI/N.Kavkaz-Mai	toc	25sep79	rgd 11nov79; wfu sep82 because of corrosion; soc 28jun83 due to its poor technical condition
15016-01	CCCP-15164	M-15-42	AFI/N.Kavkaz-Mai	toc	03oct79	rgd 05dec79; suffered an electronic malfunction 16nov81; soc 28jun83 as life-time expired
15016-02	CCCP-15165	M-15-42	AFI/N.Kavkaz-Mai	toc	03oct79	rgd 05dec79; soc 28jun83 due to its poor technical condition
15016-03	CCCP-15166	M-15-42	AFI/N.Kavkaz-Mai	toc	03oct79	rgd 05dec79; soc 28jun83 due to its poor technical condition
15016-04	CCCP-15167	M-15-42	AFI/N.Kavkaz-Pya	toc	24apr80	rgd 02jun80; soc 16nov84 as worn out
15016-05	CCCP-15168	M-15-42	AFI/Ukraine	toc	08jun80	rgd 18sep80; soc 27aug85 as life-time expired
15017-01	CCCP-15169	M-15-01	AFI/N.Kavkaz-Pya	toc	14may80	rgd 05jun80; soc 28jun83 due to its poor technical condition
15017-02	CCCP-15170	M-15-01	AFI/N.Kavkaz-Mai	toc	03nov79	rgd 05dec79; last flight jun83; soc 28jun83 as life-time expired
15017-03	CCCP-15171	M-15-01	AFI/N.Kavkaz-Mai	toc	03nov79	rgd 05dec79; resource (cycles) used up by sep82; soc 28jun83 as life-time expired
15017-04	CCCP-15172	M-15-01	AFI/N.Kavkaz-Mai	toc	03nov79	rgd 05dec79; resource (cycles) used up by sep82; soc 28jun83 as life-time expired
15017-05	CCCP-15173	M-15-01	AFI/N.Kavkaz-Pya	toc	24apr80	rgd 02jun80; soc 20may83 as life-time expired
15017-06	CCCP-15174	M-15-01	AFI/N.Kavkaz-Pya	toc	14may80	rgd 05jun80; soc 20may83 as life-time expired
15017-07	CCCP-15175	M-15-01	AFI/N.Kavkaz-Pya	toc	24apr80	rgd 02jun80; soc 20may83 as life-time expired
15017-08	CCCP-15176	M-15-01	AFI/N.Kavkaz-Pya	WAW	nov79	toc 14may80; rgd 05jun80; soc 20may83 as life-time expired
15017-09	CCCP-15177	M-15-01	AFI/N.Kavkaz-Pya	toc	jun80	rgd 16jul80; wfu aug83; soc 21feb84 as life-time expired
15018-01	CCCP-15193	M-15-42	AFI/N.Kavkaz-Pya	toc	01dec80	rgd 05jun81; wfu aug83; soc 18jun84 as worn out
15018-02	CCCP-15194	M-15-42	AFI/Kazakhstan	rgd	18dec80	on charge as of 01apr81; improved two-seater version; soc 18oct85 as life-time expired
15018-03	CCCP-15195	M-15-42	AFI/Kazakhstan	rgd	18dec80	on charge as of 01apr81; soc 18oct85 as life-time expired
15018-04	CCCP-15196	M-15-42	AFI/N.Kavkaz-Mai	rgd	23apr81	on charge as of 01oct81; last flight jun83; soc 23nov83 as life-time expired
15018-05	CCCP-15197	M-15-42	AFI/Ukraine	toc	12mar81	rgd 10jun81; soc 02dec85 as life-time expired
15018-06	CCCP-15198(1)	M-15-42				reported in a Mielec listing, but not on the Soviet register or MGA document and possibly crashed before delivery; see c/n 15020-01
15019-01	CCCP-15178	M-15-01	AFI/N.Kavkaz-Pya	toc	jun80	rgd 16jul80; soc 20may83 as life-time expired
15019-02	CCCP-15179	M-15-01	AFI/N.Kavkaz-Pya	toc	jun80	rgd 16jul80; soc 28jun83 due to its poor technical condition
15019-03	CCCP-15180	M-15-01	AFI/Ukraine	toc	24jun80	rgd 18jul80; soc 27may85 as life-time expired
15019-04	CCCP-15181	M-15-01	AFI/N.Kavkaz-Pya	toc	jun80	rgd 16jul80; wfu aug83; soc 21feb84 as life-time expired
15019-05	CCCP-15182	M-15-01	AFI/N.Kavkaz-Pya	toc	26jun80	rgd 28jul80; wfu aug83; soc 21feb84 as life-time expired
15019-06	CCCP-15183	M-15-01	AFI/N.Kavkaz-Pya	toc	26jun80	rgd 28jul80; wfu aug83; soc 21feb84 as life-time expired; was preserved near building 10 of the Kuibyshev Aviation Institute (later Samara State Aerospace University), seen 1993/aug10; scrapped in late 2010
15019-07	CCCP-15184	M-15-01	AFI/N.Kavkaz-Pya	toc	jun80	rgd 04aug80; wfu aug83; soc 27dec83 as life-time expired
15019-08	CCCP-15185	M-15-01	AFI/Ukraine-OZH	toc	18may80	rgd 14jul80; soc 18mar85 as life-time expired
15019-09	CCCP-15186	M-15-01	AFI/Ukraine	toc	18may80	rgd 14jul80; soc 18mar85 as life-time expired
15019-10	CCCP-15187	M-15-01	AFI/Ukraine-LWO	toc	01nov80	rgd 20nov80; t/t 13 hours; donated to Hungary in autumn 1983; soc 18mar85 as life-time expired; f/n Budakeszi 15aug89; seen in poor condition at Budaörs in 1992, later went to Csepel; was preserved in Repüléstörténeti Múzeum (Aircraft Museum) at Szolnok, l/n feb01; seen at Szolnok-Szandaszőlös airfield oct01, no registration or titles; finally mounted on a 'pole' (N47.151258 E20.195226) f/n may03, l/n sep10; was to leave Szolnok around 17mar14 for PZL-Mielec for static display there and an official unveiling ceremony was held 28aug15 at the factory after rebuild
15019-11	CCCP-15188	M-15-01	AFI/Ukraine	toc	11sep80	rgd 26sep80; soc 27aug85 as life-time expired
15019-12	CCCP-15189	M-15-01	AFI/Ukraine	toc	07aug80	rgd 28aug80; soc 27aug85 as life-time expired
15019-13	CCCP-15190	M-15-01	AFI/Ukraine	toc	07aug80	rgd 28aug80; soc 27aug85 as life-time expired
15019-14	CCCP-15191	M-15-01	AFI/Ukraine	toc	11sep80	rgd 26sep80; soc 27aug85 as life-time expired
15019-15	CCCP-15192	M-15-01	AFI/Ukraine	toc	01nov80	rgd 20nov80; soc 27aug85 as life-time expired
15020-01	CCCP-15198(2)	M-15-01	AFI/Ukraine	toc	04nov81	rgd 19nov81; soc 23dec85 as life-time expired; see c/n 15018-06
15020-02	CCCP-15199	M-15-01	AFI/Ukraine	toc	04nov81	rgd 19nov81; soc 23dec85 as life-time expired
15020-03	CCCP-15050	M-15-01	AFI/Ukraine	toc	12mar81	rgd 15jun81; soc 23dec85 as life-time expired
15020-04	CCCP-15051	M-15-01	AFI/Ukraine	toc	12mar81	rgd 09jun81; soc 23dec85 as life-time expired
15020-05	CCCP-15052	M-15-01	AFI/Ukraine-OZH	toc	12mar81	rgd 09jun81; soc 23dec85 as life-time expired
15020-06	CCCP-15053	M-15-01	AFI/Ukraine	toc	12mar81	rgd 09jun81; soc 23dec85 as life-time expired
15020-07	CCCP-15054	M-15-01	AFI/Ukraine	toc	12mar81	rgd 15jun81; soc 23dec85 as life-time expired
15020-08	CCCP-15055	M-15-01	AFI/Ukraine	toc	12mar81	rgd 09jun81; soc 02dec85 as life-time expired
15020-09	CCCP-15056	M-15-01	AFI/Ukraine	toc	12mar81	rgd 15jun81; soc 02dec85 as life-time expired
15020-10	CCCP-15057	M-15-01	AFI/Ukraine	toc	12mar81	rgd 09jun81; soc 02dec85 as life-time expired
15020-11	CCCP-15058	M-15-01	AFI/Ukraine	toc	12mar81	rgd 10jun81; soc 14feb86 as life-time expired
15020-12	CCCP-15059	M-15-01	AFI/Ukraine	toc	12mar81	rgd 10jun81; soc 14feb86 as life-time expired
15020-13	CCCP-15060	M-15-01	AFI/Ukraine-OZH	toc	12mar81	rgd 09jun81; soc 14feb86 as life-time expired
15020-14	CCCP-15061	M-15-01	AFI/Ukraine	toc	12mar81	rgd 10jun81; soc 14feb86 as life-time expired
15020-15	CCCP-15062	M-15-01	AFI/Ukraine	toc	12mar81	rgd 10jun81; soc 26mar86 as life-time expired
15020-16	CCCP-15063	M-15-01	AFI/N.Kavkaz-Mai	toc	unknown	on charge as of 01oct81; rgd 26oct81; soc 28jun83 as life-time expired
15020-17	CCCP-15064	M-15-01	AFI/N.Kavkaz-Mai	toc	unknown	on charge as of 01jan82; rgd 05nov81; soc 21jul83 as life-time expired
15020-18	CCCP-15065	M-15-01	AFI/Ukraine	toc	04nov81	rgd 19nov81; soc 29oct86 as life-time expired
15020-19	CCCP-15066	M-15-01	AFI/Ukraine	toc	04nov81	rgd 19nov81; soc 29oct86 as life-time expired
15020-20	CCCP-15067	M-15-01	AFI/Ukraine	toc	04nov81	rgd 19nov81; soc 29oct86 as life-time expired
15020-21	CCCP-15068	M-15-01	AFI/N.Kavkaz-Mai	toc	unknown	on charge as of 01oct81; rgd 26oct81; soc 21jul83 as life-time expired
15020-22	CCCP-15069	M-15-01	AFI/Ukraine	toc	04nov81	rgd 19nov81; soc 29oct86 as life-time expired
15020-23	CCCP-15070	M-15-01	AFI/Ukraine	toc	04nov81	rgd 19nov81; soc 29oct86 as life-time expired
15020-24	CCCP-15071	M-15-01	AFI/Ukraine	toc	12apr82	rgd 05may82; soc 26nov86 as life-time expired
15020-25	CCCP-15072	M-15-01	AFI/Ukraine	toc	12apr82	rgd 05may82; soc 26nov86 as life-time expired
15020-26	CCCP-15073	M-15-01	AFI/Ukraine	toc	12apr82	rgd 05may82; soc 31dec86 as life-time expired
15020-27	CCCP-15074	M-15-01	AFI/Ukraine	toc	09jun82	rgd 14jul82; soc 31dec86 as life-time expired
15020-28	CCCP-15075	M-15-01	AFI/Ukraine	toc	09jun82	rgd 14jul82; soc 25mar87 as life-time expired
15020-29	CCCP-15076	M-15-01	AFI/Ukraine	toc	09jun82	rgd 14jul82; soc 25mar87 as life-time expired
15020-30	CCCP-15077	M-15-01	AFI/Ukraine	toc	09jun82	rgd 14jul82; soc 25mar87 as life-time expired

PZL M-20 "Mewa"

The "Mewa" (Polish for 'seagull') is a licence-built version of the 1975 Piper PA-34-200T "Seneca" II. Piper and Pezetel signed a co-operation agreement in January 1977 envisaging the production of parts for the "Seneca" in Poland in exchange for the documentation and licence for this twin-engined business and utility aircraft. PZL Mielec was granted the right to produce the aircraft, to sell it in Eastern Europe and to improve its construction. The Poles decided to adapt the six-seater to local conditions; the most important change being the replacement of the original Continental TSIO-360 engines with the PZL-Franklin F-6A-350-C1 / F-6AS-350-A. All modifications were carried out by a team led by Krzysztof Piwek.

The first prototype M20-00 made its maiden flight on 25 July 1979. It was one of five aircraft assembled from "Seneca II" kits delivered by Piper, but later "Mewas" were built completely from parts manufactured by PZL Mielec. There are several versions of the M20 (the designation of which was written as M-20 until the 1990s): The M20-01 which flew first on 22 September 1982 did not leave the prototype stage (five were built), while the M20-04 with a take-off weight increased to 2,156 kg was never completed. The first series-production model was the M20-02 with modernised electrical installation; it flew first on 10 October 1985. This version was replaced by the M20-03 with Teledyne Continental TSIO/LTSIO-360-KB engines (as used on the PA-34-220T "Seneca" III) as there were problems with the production of the PZL-Franklin at Debica. The M20-03 flew first on 13 October 1988 and is a dedicated ambulance aircraft developed to replace the ageing L-200 fleet of Poland's medical aviation (Lotnictwo Sanitarne).

PZL Mielec tried to sell the M20 worldwide starting in the 1990s, but without much success. The "Mewa" was considerably cheaper than the "Seneca" IV or V, but it was no longer state-of-the-art, and its quality does not reach the standard of its US counterpart. 18 M20s had been built by 1993, but afterwards production stagnated. There were plans to develop a new model called "Mewa" 2000 featuring a modified engine cowling, new avionics kit and undivided windshield, and which could optionally be

powered by SMA Morane-Renault MR 250 diesel engines. However, nothing has come of this. As far as is known, no new "Mewas" have been completed within the past few years.

The c/n is of conventional PZL Mielec format, with the figures simply representing the batch number followed by the number in the batch. This is prefixed by '1AH' where 1 stands for aircraft and AH for M20 (34rd product built by PZL Mielec), respectively by '1AHP' where AH stands for M20 and P indicates prototype.

Some 30 M20 built by PZL Mielec at Mielec from 1979 to 1997

1AHP 01-01	SP-PKA	M-20-00	OBR Mielec	f/f	25jul79	first prototype; assembled from kit delivered by Piper, but Piper c/n unknown; construction started in spring 1978; rgd 06aug79
	SP-DMA	M-20-00	OBR Mielec	rgd	11jan84	converted to, see next line
	SP-DMA	M-20-02	OBR Mielec	f/f	10oct85	version with modernised electrical installation
	SP-DMA	M-20-02	Kido	rgd	23apr90	
	SP-DMA	M-20-02	Aerogryf	rgd	23mar93	in white c/s with rainbow cheatline, small 'Aerogryf' titles and large 'PZL M20' titles on fin; l/n SZZ 29apr09; arrived in the Kraków museum 26aug11 with a CofA valid till 12sep11; canx 29sep11 as to the Kraków museum; l/n there aug15
1AHP 01-02	SP-PKB	M-20-00	OBR Mielec	rgd	08apr80	second prototype; assembled from kit delivered by Piper, but Piper c/n unknown
	SP-TUA	M-20-00	OSPL Rzeszów	rgd	21may84	converted to, see next line
	SP-TUA	M-20-02	OKL Rzeszów	RZE	26sep96	in white c/s with blue/red/blue cheatline, no titles; CofA expired 15aug00; canx 03nov05 as sold to Ukraine
1AHP 01-03	SP-PKC	M-20-00	OBR Mielec	rgd	30may80	assembled from kit delivered by Piper, but Piper c/n unknown
	SP-PKC	M-20	WSK Mielec	rgd	20mar81	
	SP-KMA	M-20	WSK Rzeszów	rgd	02apr84	converted to M20-03 25mar92
	SP-FMD	M-20-03	Aerotechnika	rgd	14apr92	owned by Jerzy Domicz of Poznan; in white/blue c/s, no titles; damaged at Okęcie 20jun95, but repaired; l/n Kolobrzeg-Bagicz 09jul10
1AHP 01-04	SP-PKD	M-20-01	WSK Mielec	rgd	11aug80	assembled from kit delivered by Piper, but Piper c/n unknown; f/n FAB sep80 in white c/s with cheatline in three shades of grey, no titles; converted to M20-03 19apr93
	SP-TUB	M-20-01	OSPL Rzeszów	rgd	16jul84	converted 19apr93 to, see next line
	SP-TUB	M-20-03	OKL Rzeszów	RZE	26sep96	in white c/s with light green/dark green/black cheatline, no titles; l/n Kraków Pobiednik Wielki 26jun15 active
1AH 002-01	--	M-20	PZL Mielec			static test airframe
1AH 002-02	SP-PKE	M-20-01	OBR Mielec	f/f	22sep82	first newly-built M20-01; rgd 26oct82
	SP-TUC	M-20-01	OSPL Rzeszów	rgd	27oct83	converted 22aug91 to, see next line
	SP-TUC	M-20-03	OKL Rzeszów	RZE	26sep96	in white c/s with cheatline in 3 shades of blue, no titles; l/n as such Mielec 31aug97; seen WRO 08dec00 in white c/s with green/ white/blue cheatline, no titles; l/n operational RZE 21may07; used as a ground instructional airframe by the Aviation Training Centre of the Rzeszów Technical University, seen may09/aug18; canx 30oct09 as wfu
1AH 002-03	SP-MRA	M-20-01	Huta Stalowa Wola	rgd	23jan84	converted 20dec88 to, see next line
	SP-PRA	M-20-03	Huta Stalowa Wola	no	reports	test-reg used briefly at Mielec after '03' conversion, entry in Mielec flight-test log
	SP-MRA	M-20-03	SkyTaxi	rgd	21jul00	registered to Aeroklub Stalowa Wola; in yellow c/s with black/blue cheatline, no titles; f/n Opole-Polska Nowa Wies sep00; seen with 'HSW' titles WRO 21jul03; reserved for SkyTaxi Sp. z o.o. 16mar05; l/n Wrocław-Szymanow 26ag17
1AH 002-04	SP-TUD	M-20-01	OSPL Rzeszów	rgd	27oct83	converted 21feb90 to, see next line
	SP-TUD	M-20-03	OKL Rzeszów	RZE	26sep96	in white c/s with cheatline in 3 shades of blue, no titles; l/n POZ 23jul09, flying; CofA expired 19sep09; canx 30oct09 as wfu
1AH 002-05	SP-PUE	M-20-01	OBR Mielec	rgd	15may85	converted 02dec88 to, see next line
	SP-TUE	M-20-03	OBR Mielec		photo	photo evidence for usage (presumably at Mielec), but not in register; was stored at the factory most of the time 1985/89
	SP-NEA	M-20-03	KGHM	rgd	19may89	in white c/s with red/green/black cheatline, no titles; seen Lubin 23sep96
	SP-NEA	M-20-03	Pol-Miedz-Trans	rgd	07feb97	in white c/s with red/green/black cheatline, no titles; seen Lubin 11jul99
	SP-NEA	M-20-03	KGHM Polska S.A.	rgd	18oct00	in white c/s with green/black/orange stripes on fin and titles; f/n WRO 14nov02; l/n as such WRO 21aug07; seen WRO 22jan10 with 'Bisec' titles on the tail; canx 19jul16 sold to Ukraine
1AH 002-06	SP-PKF	M-20-01	WSK Mielec	rgd	25mar87	in white c/s with light blue/dark blue/black cheatline, no titles; canx 24may90; seen at the factory at Mielec, wfu in ever- deteriorating condition 27sep96; l/n 26mar07, derelict; fuselage only seen jul08
	SP-FFB	M-20-03	PPU "Kido"	ntu		never delivered, see previous line
1AH 002-07	YU-BPK	M-20-03	Villas Trading			export date 26jul90; painted-up, but never registered; stored; photo at PortoroP dated 1989 (?), in all-white c/s with black titles
	SL-BPK	M-20-03	Villas Trading	rgd	18jun92	registered for ferry flight to Graz (Austria); canx 30jun92
	SP-FME	M-20-03	FFC Inc.	rgd	14may93	in all-white c/s, no titles, 'ffc' badge on fin; f/n Lubin 23sep96
	SP-FME	M-20-03	A. Konarzewski	rgd	09sep98	based at Bydgoszcz
	SP-FME	M-20-03	Ramsat Telesystem	WAW	jun03	rgd by apr03; in white c/s with dark blue/red/dark blue cheatline, no titles but badge on fin; l/n Mielec 26jan17, active
1AH 002-08	SP-DMB	M-20-03	WSK Mielec	rgd	07sep90	
	SP-MXA	M-20-03	CZLS	rgd	22apr91	based at Warsaw; f/n Warsaw-Bemowo 10aug99; trf to ZLS Kraków may01; in white c/s with blue cheatline and Red Cross, no titles; l/n WRO 22jun04
	SP-MXA	M-20-03	Lotn. Pogot. Rat.	KRK	06mar05	renamed officially already 03mar00; in white c/s with red cheatline, blue ambulance symbol and titles; l/n Kolobrzeg-Bagicz 28feb08
1AH 002-09	SP-MCA	M-20-03	P.W. "BISEK"	rgd	28may09	in the same basic c/s as above; f/n WRO 21oct09; l/n as such Wrocław 01dec12, active
	SP-FMI	M-20-03	Instalbud	rgd	30nov90	in white c/s with three-coloured cheatline; l/n KRK apr93
	SP-MXD	M-20-03	CZLS	rgd	20jan94	in white c/s with light blue/dark blue/black cheatline and Red Cross, no titles; f/n WRO 20oct00; dbr 28may02 on landing at Okęcie, no casualties; CofA expired 05jun02; canx 13jul04 as scrapped
1AH 002-10	SP-DMC	M-20-03	OBR Mielec	rgd	13mar91	in white c/s with olive/orange/brown cheatline, no titles; f/n POZ 24aug91
	SP-FMF	M-20-03	K. Janiszewski	rgd	28sep93	in silvery/dark grey c/s, no titles; based at Poznan; converted to increased weight M20-03 version 18oct94; f/n THF 30may94; l/n WAW 26sep99
	SP-FMF	M-20-03	Aerotechnika	POZ	20sep04	owned by Jerzy Domicz of Poznan; in same c/s as above, no titles; l/n POZ 09jul09
1AH 002-11	SP-DMD	M-20-03	OBR Mielec	rgd	05nov91	in white c/s with red/black/red cheatline; l/n Mielec 1992
	N333GA	M-20-03	Aeronaut. Systems	rgd	04nov92	in white c/s with red/black/red cheatline; l/n LBG jun93
	N2114	M-20-03	Aeronaut. Systems	rgd	28jul93	sold via Denver Air Center
	N2114	M-20-03	Sancap Aircraft	rgd	24jun94	in white c/s with red/brown/red cheatline; offered for sale on the internet by Canton Aircraft Sales with t/t 850 hours
1AH 002-12	SP-MXB	M-20-03	T.A. Patterson	rgd	10aug16	
	SP-MXB	M-20-03	CZLS	rgd	11dec91	in white c/s with cheatline in 3 shades of blue and Red Cross, no titles; f/n Mielec 27sep96; l/n SZZ 18feb03
	SP-MXB	M-20-03	Lotn. Pogot. Rat.	rgd	31aug00	renamed officially already 03mar00; in white c/s with red cheatline, blue ambulance symbol and titles; f/n WAW 08mar04; l/n flying Rzeszow 23dec06; seen stored/wfu in photo Bemowo sep09/aug15; CofA expired 04feb08; canx 22feb11
1AH 002-13	SP-KFE	M-20-01	PZL Rzeszów	rgd	22jun95	in white c/s with cheatline in 3 shades of blue, 'WSK PZL Rzeszów S.A.' titles; f/n RZE 26sep96
	SP-KFE	M-20-01	IBEX-Uslugi Lotn.	rgd	31oct01	owned by Malkom S.C.; in same c/s as above, no titles; f/n Warsaw-Bemowo 11nov03; l/n Mielec 13sep15, operational
1AH 002-14	SP-MXC	M-20-03	CZLS	rgd	29jul93	in white c/s with cheatline in 3 shades of blue and Red Cross, no titles; f/n Warsaw-Bemowo 02jul97; l/n POZ 28jun05
	SP-MXC	M-20-03	Lotn. Pogot. Rat.	rgd	18dec00	renamed officially already 03mar00; aircraft never repainted; l/n active GDN 24jul05; CofA expired 21may07; canx 03feb10; stored at Warsaw-Bemowo, l/n mar10
1AH 002-15	215	M-20-03	Polish MoI	i/s	1995	Polish Ministry of Interior and Administration; opb 103. pl NJW MSW at Warsaw-Bemowo; in white c/s with white/red/yellow cheatline, black code; damaged 24oct95 in an accident at Warsaw-Bemowo, but repaired; f/n BZG 30aug97; l/n Radom-Sadków 10sep00
	PL-50YG	M-20-03	Pol. Border Guard	trf	21dec00	opb Morski Oddział at GDN; in white c/s with yellow/red/yellow belt around the fuselage; l/n Pruszcz Gdanski 24aug03
	SN-50YG	M-20-03	Pol. Border Guard		30aug03	at Radom-Sadków; opb Morski Oddział at GDN; in the same c/s as above; l/n GDN 18jan10; damaged on landing at GDN 08mar10 when the crew forgot to lower the gear, all 3 occupants escaped unhurt
	SP-VSA	M-20-03	Pol. Border Guard	rgd	11may11	f/n Gdansk-Rebeciow 07may11, probably on roll-out/presentation after major overhaul at Krosno; in silver c/s with red bands fuselage/wings, round Polish checkerboard, 'Border Guard' titles in English & Polish; canx 31dec13, restored 08jan14 and canx 09jan14
1AH 002-16	SN-50YG	M-20-03	Pol. Border Guard	GDN	12aug18	
	SP-KAS	M-20-03	Elektrim S.A.	rgd	04sep96	in white/blue c/s; f/n KRK 23apr97
	SP-KAS	M-20-03	Plus Discount	rgd	29apr98	in same c/s as above, no titles; f/n WRO 23feb01
	SP-KAS	M-20-03	Teng Sp.z o.o.	rgd	12jun03	
	SP-KAS	M-20-03	Teng Air Sp.z o.o.	rgd	11may04	f/n KRK 26jul04 in the same c/s as above, no titles; l/n KRK 23jan07; advertised for sale sep11 reportedly sitting at Wrocław Strachowice
	SP-KAS	M-20-03	Egeria Sp.z.o.o.	rgd	22jun07	for sale on planecheck.com by Skyfleet Aviation Consulting, still same white/blue c/s; current 31dec11; l/n WRO 08SEP17; canx 12oct17 as to Turkey
1AH 002-17	D-GHCH	M-20-03	Flugdienst Parchim	rgd	08jun95	delivered to Parchim 08sep95 without permit to fly which was only issued 06oct95
	D-GHCH	M-20-03	H.C. Hummelbrunner	rgd	28dec95	Hummelbrunner was PZL sales agent; based at Karlshofen and later at Lübeck; in white c/s with white/red/yellow stripe and trim; f/n SXF may96 with exhibition number '181'
	D-GHCH	M-20-03	Deckers-Giese	rgd	jan97	l/sf Leasinggesellschaft der Sparkasse; based at Hildesheim; in all-blue c/s with yellow trim; f/n HAJ 29mar97; no ownership info after aug99 due to German data-protection laws !; l/n DRS 08jun11
1AH 003-01	--	M-20-04	PZL Mielec	no	reports	prototype of version M20-04 (with increased take-off weight); never completed; scrapped ?
1AH 003-02	--	M-20				stored incomplete; scrapped ?
1AH 003-03	--	M-20				stored incomplete; scrapped ?
1AH 003-04	--	M-20				stored incomplete; scrapped ?
1AH 003-05	--	M-20				stored incomplete; scrapped ?
1AH 003-06	D-GFGP	M-20	Flugdienst Parchim	res	08jun95	seen Mielec 27sep96 incomplete; never delivered; scrapped ?

1AH 003-07	D-GELB	M-20-03	H.C. Hummelbrunner	rgd	22apr97	seen Mielec 27sep96 incomplete; ferried from factory apr97; in all-blue c/s with yellow trim; f/n FDH apr97; lsf KG CDL-Leasing since sep98; at SXF 10jun00 with exhibition number '162'; seen FNB 27dec12/aug14 in all-silver c/s
1AH 003-08	--	M-20				fuselage seen Mielec 30aug97; an uncompleted M-20 was on sale end 2018 at Lotniskowa in all primer with "308" painted on probably being the last three digits of the c/n
1AH 003-09	--	M-20				fuselage seen Mielec 30aug97; scrapped ?
1AH 003-10	--	M-20				
1AH 003-11	--	M-20				
1AH 003-12	--	M-20				fuselage seen Mielec 30aug97; scrapped ?

Aircraft with unknown construction numbers include

---	--	M-20-03	PZL Mielec	f/f	13oct88	with TSIO/LTSIO-360-KB engines
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PZL-44 "Wicher"

The "Wicher" (Polish for 'gale') was a twin-engined passenger aircraft designed by Wswielodol Jakimiuk in 1936/37. It was powered by two Wright "Cyclone" GR-1820-G2 engines and could carry 14 passengers. The prototype flew first on 20 March 1938 and was handed over to LOT for service trials in December of the same year. Upon completion of the trials in April 1939, the airline refrained from an order as the price of the "Wicher" was much higher than that of the comparable Lockheed L-14 "Super Electra", five of which had already been delivered by that time. For lack of a customer, the planned production run of ten aircraft had to be cancelled. The prototype ended up in the Soviet Union in September 1939, but was probably never put into service.

1 PZL-44 prototype built by PZL at Warsaw-Okecie in 1938

---	SP-BPJ	PZL-44	PZL	f/f	20mar38	prototype; rgd mar38 ?; underwent trials with ITL until oct38; displayed at the XVI Salon de l'Aviation at Paris nov/dec38; underwent service trials with LOT dec38/apr39; canx apr39 ?; photo with this registration exists, but the aircraft is devoid of all markings on most photos
	SP-WHR	PZL-44	LOT	rgd	apr39 ?	no photo with this registration known; evacuated from Grójec to Lwów-Sknilów (now Lviv-Skniliv) 04sep39 (or 01sep39), but was abandoned due to damage to the landing gear; captured by Soviet troops around 19sep39 and transported to Moscow; was to be repaired and test-flown
	no reg	PZL-44	GVF	no	reports	was on charge of Eskadriya osobogo naznacheniya GU GVF (Special Duty Squadron of the Main Directorate of the Civil Air Fleet) by 01jul40, but was probably never put into service as it was not on the Soviet civil aircraft register; fate unknown, but probably just scrapped

PZL SM-2

89 SM-2 built by WSK "PZL Swidnik" at Swidnik

Regarding the SM-2s: The first flying helicopter was c/n S201002 on 18 November 1959, wearing serial 'S2-002' as seen on some photos. The first production machine was c/n S201004 and 89 were built, mostly for the Polish military, with four delivered to Romania and one each going on to the Polish and Czechoslovakian civil registers. Most were delivered to the Polish Air Force and their original serial is unknown and later changed to 4-digit serials which correspond to the construction number.

S2 01 001	--	SM-2	WSK Swidnik			static test airframe
S2 01 002	no reg	SM-2	WSK Swidnik	f/f	18nov59	marked 'S2-002'
S2 01 003	not known	SM-2	history unknown			
S2 01 004	not known	SM-2	Polish Air Force	toc	09mar61	soc 30mar63 after an accident
S2 01 005	1005	SM-2	Polish Air Force	mfd	09mar61	toc mar61; soc 24oct78; last flight 15jul78 (to Drzonów); preserved in Lubuskie Muzeum Wojskowe at Drzonów, l/n mar15
S2 01 006	1006	SM-2	Polish Air Force	toc	23jan62	soc 21dec77
S2 01 007	1007	SM-2	Polish Air Force	toc	31jan62	soc 21dec77
S2 01 008	not known	SM-2	Polish Air Force	toc	22mar62	soc 08nov67 after an accident
S2 01 009	1009	SM-2	Polish Air Force	toc	23mar62	soc 21dec77
S2 01 010	1010	SM-2	Polish Air Force	toc	23mar62	soc 24oct78
S2 02 001	2001	SM-2	Polish Air Force	toc	10apr62	soc 31dec76
S2 02 002	2002	SM-2	Polish Air Force	toc	09apr62	soc 03sep73
S2 02 003	2003	SM-2	Polish Air Force	toc	11apr62	soc 31dec76
S2 02 004	2004	SM-2	Polish Air Force	toc	13apr62	soc 24oct78
S2 02 005	not known	SM-2	Polish Air Force	toc	28may62	soc 24sep62 after an accident
S2 02 006	2006	SM-2	Polish Air Force	toc	10apr62	soc 24oct78
S2 02 007	--	SM-2	--			not built
S2 02 008	--	SM-2	--			not built
S2 02 009	2009	SM-2	Polish Air Force	toc	14apr62	soc 24oct78
S2 02 010	--	SM-2	--			not built
S2 02 011	2011	SM-2	Polish Air Force	toc	14apr62	18apr66
	SP-SXY	SM-2	ZLS	rgd	29apr66	crashed 02feb73 and canx 26apr74
S2 02 012	not known	SM-2	Polish Air Force	toc	11apr62	soc 16jan67 acc. ?
S2 02 013	2013	SM-2	Polish Air Force	toc	11apr62	soc 24oct78
S2 02 014	2014	SM-2	Polish Air Force	toc	17apr62	soc 31dec76
S2 02 015	not known	SM-2	Polish Air Force	toc	14apr62	soc 18apr66
	SP-SXZ	SM-2	ZLS	rgd	29apr66	canx 20nov75
S2 02 016	SP-SAP	SM-2	WSK Swidnik	rgd	30apr64	had probably either a different identity before or was unregistered; canx 20apr72; del 27aug75; preserved in Muzeum Lotnictwa Polskiego at Kraków with '504032' stencilled on boom, seen sep09/sep15
S2 02 017	2017	SM-2	Polish Air Force	toc	14apr62	soc 27nov71
S2 02 018	2018	SM-2	Polish Air Force	toc	08may62	soc 18aug76
S2 02 019	2019	SM-2	Polish Air Force	toc	11apr62	soc 01oct79; reported Seckowo (N54.34724, E16.54123) mar11 but no serial worn !
S2 02 020	--	SM-2	--			not built
S2 02 021	2021	SM-2	Polish Air Force	toc	11apr62	soc 28sep81
S2 02 022	2022	SM-2	Polish Air Force	toc	07jun62	soc 30jan74
	SP-SCA	SM-2	ZLS	rgd	03apr74	canx 31jan76
S2 02 023	2023	SM-2	Polish Air Force	toc	28may62	soc 18aug76
S2 03 001	3001	SM-2	Polish Air Force	toc	08jan63	soc 24oct78
S2 03 002	3002	SM-2	Polish Air Force	toc	12dec62	soc 31dec76
S2 03 003	3003	SM-2	Polish Air Force	toc	12dec62	soc 16sep70
S2 03 004	3004	SM-2	Polish Air Force	toc	31dec62	soc 21dec77
S2 03 005	3005	SM-2	Polish Air Force	toc	12dec62	soc 28apr72
S2 03 006	05	SM-2	Polish Air Force	toc	12dec62	soc 16dec74; possibly re-serialled to 3006; preserved in the Helicopter Museum at Weston-super-Mare from 10jun91, l/n jul13
S2 03 007	3007	SM-2	Polish Air Force	toc	12dec62	soc 21dec77
S2 03 008	3008	SM-2	Polish Air Force	toc	31dec62	soc 08nov67 after an accident
S2 03 009	OK-BYK (2)	SM-2	Czech MoI (LO MV)	rgd	12jan63	toc 14jan63; in dark green c/s with light blue underside; wfu 08apr70; canx 13apr70; see MI-1 OK-BYK (1) with unknown c/s
S2 03 010	OK-RUV	SM-2	Slovaik	rgd	13apr70	canx 04oct77; stored with the aviation museum at Prague-Kbely, seen sep92/oct17
	3010	SM-2	Polish Air Force	toc	09jan63	soc 21dec77; arrived in the Kolobrzeg museum 07mar78, but it is not known when it was repainted with false serial '417'
	417	SM-2	Polish Air Force	ph.	apr92	preserved with this fake serial in Muzeum Orzeza Polskiego at Kolobrzeg, seen apr92/jun01
S2 03 011	3011	SM-2	Polish Air Force	ph.	11aug08	preserved (now with its correct serial) in Muzeum Orzeza Polskiego at Kolobrzeg, seen aug08/may16
S2 03 012	3012	SM-2	Polish Air Force	toc	17dec62	soc 31dec76 after an accident on 27jul72
S2 03 013	3013	SM-2	Polish Air Force	toc	08jan63	soc 18aug76
S2 03 014	3014	SM-2	Polish Air Force	toc	10jan63	soc 30dec72
S2 03 015	3015	SM-2	Polish Air Force	toc	31dec62	soc 21dec77
S2 03 016	16	SM-2	Romanian Air Force	mfd	23dec62	soc 31dec76
S2 03 017	17	SM-2	Romanian Air Force	mfd	22dec62	probably initially opb Regimentul 99 Aviatie Transport at Otopeni; opb Regimentul 94 Elicoptere at Alexeni from sep65; overhauled in Poland 15sep70/02jul71; struck off charge probably in 1975
S2 03 018	3018	SM-2	Polish Air Force	toc	10jan63	probably initially opb Regimentul 99 Aviatie Transport at Otopeni; opb Regimentul 94 Elicoptere at Alexeni from sep65; overhauled in Poland 23may69/29apr70; struck off charge probably in 1975
	SP-SFA	SM-2	ZLS	rgd	26may72	soc 13nov71
S2 03 019	3019	SM-2	Polish Air Force	toc	12jan63	canx 15nov78
S2 03 020	3020	SM-2	Polish Air Force	toc	20jan63	soc 21dec77
S2 03 021	3021	SM-2	Polish Air Force	toc	20jan63	soc 02feb74 after an accident on 17nov73
S2 03 022	3022	SM-2	Polish Air Force	toc	27jan63	soc 21dec77
S2 03 023	3023	SM-2	Polish Air Force	toc	20jan63	soc 21dec77
S2 03 024	3024	SM-2	Polish Air Force	toc	27jan63	soc 21dec77
S2 03 025	3025	SM-2	Polish Air Force	toc	20jan63	soc 31dec76
						soc 18aug76; used as a ground instructional airframe at Warsaw-Bemowo, l/n aug93; preserved at Lodz; l/n jul00; reported in a hangar at Goraszka (just south-east of Warsaw) oct01 for rebuild and to be made

						airworthy, tailboom carried serial '3026' altered to read '3025' (boom of 3026 ?), l/n jan04; seen aug05 in immaculate condition seemingly airworthy, l/n oct09; seen in a hangar at Goraszka jun12
S2 03 026	3026	SM-2	Polish Air Force	toc	20jan63	soc 21dec76
S2 03 027	3027	SM-2	Polish Air Force	toc	27jan63	soc 18aug76
S2 03 028	3028	SM-2	Polish Air Force	toc	20jan63	soc 21dec77
S2 03 029	3029	SM-2	Polish Air Force	toc	27jan63	soc 01oct79
S2 03 030	3030	SM-2	Polish Air Force	toc	27jan63	soc 21dec77
S2 04 001	4001	SM-2	Polish Air Force	toc	27jan63	soc 31dec76
S2 04 002	4002	SM-2	Polish Air Force	toc	27jan63	soc 21dec77
S2 04 003	4003	SM-2	Polish Air Force	toc	29jan63	soc 21dec77
S2 04 004	4004	SM-2	Polish Air Force	toc	22jan63	soc 18aug76
S2 04 005	4005	SM-2	Polish Air Force	toc	22jan63	soc 24oct78
	405	SM-2	Polish Air Force	ph.	apr92	preserved with this fake serial in Muzeum Sil Powietrznych at Deblin, seen apr92/jun01
	845	SM-2	Polish Air Force	ph.	may06	preserved with this fake serial in Muzeum Sil Powietrznych at Deblin, seen may06/nov14
S2 04 006	4006	SM-2	Polish Air Force	toc	21mar63	soc 01oct76
S2 04 007	4007	SM-2	Polish Air Force	toc	21mar63	soc 18aug76
S2 04 008	4008	SM-2	Polish Air Force	toc	19mar63	soc 31dec76
S2 04 009	not known	SM-2	Polish Air Force	toc	26mar63	soc 14aug68 after an accident
S2 04 010	4010	SM-2	Polish Air Force	toc	22mar63	soc 06feb81
	no serial	SM-2	PZL Swidnik			preserved at PZL Swidnik; initially in green c/s, l/n as such 2010; repainted in white c/s with red and blue trim, no markings apart from 'SM-2'; f/n as such jun11
S2 04 011	4011	SM-2	Polish Air Force	toc	22mar63	soc 24oct78
S2 04 012	4012	SM-2	Polish Air Force	toc	21mar63	soc 18aug76
S2 04 013	4013	SM-2	Polish Air Force	toc	22mar63	soc 24oct78
S2 04 014	4014	SM-2	Polish Air Force	toc	26mar63	soc 01oct79
S2 04 015	4015	SM-2	Polish Air Force	toc	26mar63	soc 11jan80
S2 04 016	4016	SM-2	Polish Air Force	toc	26mar63	soc 01oct79
S2 04 017	4017	SM-2	Polish Air Force	toc	06may63	soc 31dec76
S2 04 018	not known	SM-2	Polish Air Force	toc	03apr63	soc 03oct68; crashed 26jul68
S2 04 019	not known	SM-2	Polish Air Force	toc	03apr63	soc ?
S2 04 020	4020	SM-2	Polish Air Force	toc	03apr63	soc 29jul72
S2 04 021	4021	SM-2	Polish Air Force	toc	06may63	soc 18aug76
S2 04 022	4022	SM-2	Polish Air Force	toc	29mar63	soc 01oct79
S2 04 023	4023	SM-2	Polish Air Force	toc	17apr63	soc 21dec77
S2 04 024	4024	SM-2	Polish Air Force	toc	29mar63	soc 31dec76
S2 04 025	4025	SM-2	Polish Air Force	toc	17apr63	soc 21dec77
S2 04 026	4026	SM-2	Polish Air Force	toc	08may63	soc 21dec77
S2 04 027	4027	SM-2	Polish Air Force	toc	03apr63	soc 16dec74 after an accident on 13aug74
S2 04 028	4028	SM-2	Polish Air Force	toc	27may63	soc 29jul72
S2 04 029	29	SM-2DC	Romanian Air Force	mfd	28mar63	probably initially opb Regimentul 99 Aviatie Transport at Otopeni; opb Regimentul 94 Elicoptere at Alexeni sep65/14may74; overhauled in Poland 15sep70/02jul71
						modified by Baza de Reparatii at Craiova to a dual control version 14may74/19oct74; opb Scoala Militara de Ofiteri de Aviatie from 19oct74; in dark green c/s with light blue underside; struck off charge in 1975; hulk stored in poor condition with Muzeul National al Aviatiei Romane in Bucharest, seen sep10/dec17
S2 04 030	30	SM-2	Romanian Air Force	mfd	29mar63	probably initially opb Regimentul 99 Aviatie Transport at Otopeni; opb Regimentul 94 Elicoptere at Alexeni from sep65; in dark green c/s with light blue underside; overhauled in Poland 15sep70/02jul71; struck off charge probably in 1975
---	27	SM-2	Polish MoI	photo		in dark green c/s with light blue underside, white/blue ring around tailboom

PZL Swidnik "Kania"

The "Kania" (Kitty Hawk) is a follow-up to the Mi-2 developed for the US market. The GTD-350 engines were replaced by the Allison 250-C20B, avionics were changed, the forward fuselage was re-shaped and interior re-arranged. Work started in the late 1970s, and the prototype first flew on 3 June 1979. Certification according to FAR-29 was obtained, but the programme was not a success. The c/n consists of three pairs of numbers giving the version, batch number and number in the batch. A further development called "Taurus" was intended to use more powerful Allison 250-C28 engines. These required a modified and enlarged air-intake. A full-size mock-up was completed in 1980; however, no prototype was built. This mock-up still existed in external storage at Swidnik by 1996.

19 PZL "Kania" built by PZL Swidnik from 1979 to 2006

90 01 01	no reg	Kania	PZL Swidnik	f/f	03jun79	later used for ground testing
90 01 02	SP-PSA	Kania	PZL Swidnik	f/f	03jun79	rgd 31jan80
	SP-SSC	Kania	PZL Swidnik	r/r	13jun86	ditched near Lungi, Sierra Leone, 18sep88; canx 02jan89
90 01 03	SP-SSA	Kania	PZL Swidnik	rgd	15sep82	f/n HAJ 25may84; l/n ZIA 16aug92; canx 02mar98
	OK-MIK	Kania	Helicopter S.R.O.	rgd	18mar98	l/n KLV 13nov03; canx 06feb06 as to Poland and stored at Swidnik and still stored Swidnik oct07/jul17
90 01 04	SP-SSB	Kania	Heliseco/PZL	rgd	21apr83	did wear 'Kon Tiki Tours' and named 'Stanley' from its time in Sierra Leone in the late 1980s and was in blue/green/white c/s; CoFA expired 10oct88, seen Swidnik may90 dismantled; canx 06sep96 used for ground tests/trials, noted Swidnik 30sep96; l/n Swidnik 27oct07 stored, 'Kon Tiki Tours' and named 'Stanley' were still visible
90 02 01	SP-SSD	Kania	PZL Swidnik	rgd	09mar88	canx 11aug90 ?; sported a green/white/blue c/s; ditched near Freetown 14jul90
90 02 02	SP-SSE	Kania	PZL Swidnik	rgd	09jun88	seen PRG 21nov91; canx 21jan93
	B-3211	Kania	Czech MoI (LS FPS)	h/o	13apr92	letecká služba Federálního policejního sboru; c/n checked; leased from PZL Swidnik; underwent trials with LS FPS 01sep92/01aug93; l/n PRG sep92; l/n PRG oct92
	B-3211	Kania	Czech Police	trf	01jan93	underwent trials with LS FPS 01sep92/01aug93
	SP-SSE	Kania	PZL Swidnik	rgd	26aug93	canx 24aug94
	OM-TFA	Kania	Bel Air	rgd	24aug94	f/n KRK 21feb95; l/n BTS 21may95
	OM-TFA	Kania	Air Trp Europe	BRQ	05jun98	initially in white/blue c/s; l/n as such TAT 11oct07; repainted in mainly red c/s with white trim, as such on undated photo; canx mid-2010; seen TAT 28nov11 in good condition but without rotor; preserved on the premises of Craemer Slovakia at Liptovský Mikuláš (N49.068092 E19.646054), seen 2013/aug15
90 02 03	SP-SSF	Kania	PZL Swidnik	rgd	19jul89	canx 29aug90
	YV-633CP	Kania	Helicaribe	d/d	1990	owner reported as Comercializadora Aeropolka in 1996, was it Helicaribe first ??; photo 09dec90 in red/white c/s, no titles
	YV-862C	Kania	Helicaribe	Swd	30sep96	but no certificate of registration, so no canx date; del to Czech Republic the same date, 23jan97
	SP-SSF	Kania	PZL Swidnik	rgd	23jan97	d/d 22feb97; crashed in KrkonouE mountains 30sep97; canx 19oct98
	OK-WIM	Kania	Helicopter S.R.O.	rgd	02feb97	at Kalo Lakatamia 26mar95; seen PFO nov01/oct06, serial painted out and no rotors
90 02 04	204	Kania	Cyprus Nat. Guard	e/d	13jun90	at Kalo Lakatamia 26mar95; seen PFO nov01/oct06, serial painted out and no rotors; seen with rotors at the fire dump at PFO feb14/sep18, abeam the threshold RW11 (N34.720611 E32.47112) and has just '205' painted on
90 02 05	205	Kania	Cyprus Nat. Guard	e/d	11jun90	carried also code/call-sign '32-01'; based at Poznan; in blue/light grey c/s with white cheatline and 'Policja' titles; f/n Deblin-Irena 30aug98; l/n KRK 16oct98
90 03 01	PL-51XP	Kania	Polish Police	d/d	nov96	carried also code/call-sign 'U020'; in blue/light grey c/s with white cheatline and 'Policja' titles; f/n POZ 19jun04; f/n with new code 'G020' KRK 10jul09; l/n Krakow museum aug14, active
	SN-51XP	Kania	Polish Police	r/r	03dec02	carried also code/call-sign '18-01'; based at Kraków; in blue/light grey c/s with white cheatline and 'Policja' titles; f/n KRK 16oct98; l/n KRK 26jun02
90 03 02	PL-52XP	Kania	Polish Police	d/d	nov96	carried also code/call-sign 'G-002'; in blue/light grey c/s with white cheatline and 'Policja' titles; f/n KRK 01apr05; l/n at the Kraków Museum Police unit base aug14, stored, rotorless
	SN-52XP	Kania	Polish Police	r/r	03dec02	call-sign SG-01; crashed Bialystok 14apr98 and seen there wrecked 28sep98
90 03 03	PL-21XG	Kania	Pol. Border Guard	d/d	nov96	painted as such
90 03 04	PL-22XG	Kania	Pol. Border Guard	rgd	10may96	for ILA Berlin, in full Polish Border Guard c/s with titles; canx 03jul96
	SP-SSG	Kania	PZL Swidnik	del	nov96	call-sign SG-02; l/n Swidnik 07may02, on overhaul
	PL-22XG	Kania	Pol. Border Guard	Rad	30aug03	call-sign SG-02; l/n Lublin 22apr07
	SN-22XG	Kania	Pol. Border Guard	rgd	16dec11	f/n Bialystok 18jan12; l/n Bialystok 03apr12; canx 31dec13
	SP-VSG	Kania	Pol. Border Guard	rgd	19jul96	seen OSR 31dec97; current jan04; seen jun07/jun09 Hosin, no rotors, stored in a hangar
90 03 05	OK-VIL	Kania	Helicopter S.R.O.	Swd	05jul00	stored incomplete (pod only); handed over 30dec02; photo at Bieszczady 12jan06, operational
90 04 01	SN-23XG	Kania	Pol. Border Guard	res	may11	rgd 16dec11; canx 31dec13
	SP-VSH	Kania	Pol. Border Guard	Swd	05jul00	stored incomplete (pod only), l/n as such 07may03; seen Swidnik 24feb06 ready for delivery; l/n Swidnik 02jul11, active
90 04 02	SN-24XG	Kania	Pol. Border Guard	rgd	09nov11	canx 31dec13
	SP-VSI	Kania	Pol. Border Guard	Bia	15mar15	
	SN-24XG	Kania	Pol. Border Guard	Swd	05jul00	stored incomplete (pod only), l/n as such 07may03; seen Swidnik 24feb06 ready for delivery; l/n Ketrzyn 30apr11
90 04 03	SN-25XG	Kania	Pol. Border Guard	Swd	05jul00	canx 31dec13
	SP-VSK	Kania	Pol. Border Guard	rgd	04aug12	
	SN-25XG	Kania	Pol. Border Guard	GDN	22mar14	
	SP-VSK	Kania	Pol. Border Guard	rst	mid14	
90 04 04	SN-25XG	Kania	Pol. Border Guard	Swd	05jul00	f/n Bialystok-Krywlany 24jun14
						stored incomplete (pod only), l/n as such 07may03; seen 24feb06 nearing completion; opb Podlaski Oddzial SG at Bialystok-Krywlany; in white c/s with yellow/red/yellow band around fuselage, 'Straz Graniczna' and 'Polish Border Guard' titles; f/n Bialystok-Krywlany 26may06; l/n Bialystok-Krywlany 26aug09; w/o 31oct09 on a border patrol flight from Bialystok to Mielnik when crashed in fog near Klukowicze on the Polish-Belarusian border (200 metres into Belarusian territory), all 3 crew killed

PZL Swidnik W-3 "Sokol" (Eagle).

Work on the "Sokol" commenced in 1973 initially in co-operation with the Mil Design Bureau and was considered as a Mi-2 derivative. However, the resultant design was much larger and heavier and almost on a par with the Mi-8. Development was rather protracted and the widely-quoted first flight of 16 November 1979 was in fact no more than a brief 'hop'. The real first flight occurred on 6 May 1982, but trials and development proceeded very slowly; first customer deliveries, to Aeroflot, not taking place until the late 1980s. The Polish type certificate for the W-3 was awarded on 26 September 1988, the Russian one on 17 December 1992 and the FAA type certificate (according to FAR-29) for the W-3A on 31 May 1993.

The W-3s delivered to Aeroflot machines saw little service and all, except two lost in accidents, returned to Poland in 1992/1993 with very few hours flown. They never appeared on the Soviet or Russian Federation registers that we have received. Soviet exploitation trials (with ten helicopters) took place on the base of the Kotlas Flight Unit of the Arkhangelsk CAD between 28 October 1988 and 15 July 1990.

Large numbers were delivered to the Polish Air Force, Army and Navy. Other military customers are Myanmar and the Czech Republic, with small civil sales having been made to South Korea. The Heliseco company in Poland operates the ex-Aeroflot machines in addition to others, offering helicopter services world-wide.

The c/n consists of three pairs of numbers giving the version (30 - W-3 prototypes, 31 - W-3 and W-3T versions certified to Russian standards, 32 - W-3R version 'with optional equipment' (or ambulance version ?), 33 - military version for Myanmar, 34 - version 'with optional equipment', 35 - military version 'with specialised equipment' (W-3RR "Procion" ?), 36 - W-3W, W-3WA, W-3WARM, W-3ASRR-10 and W-3U versions for the Polish military, 37 - W-3A, W-3AM and W-3A2 version certified to FAR-29 requirements, 38 - W-3PPD-2 "Gipsówka" command version, 39 - W-3RM "Anakonda" maritime SAR version), batch number and number in the batch.

Registration	Version	Manufacturer	Status	Date	Notes
---	SP-ELF	W-3	PZL Swidnik	mfd	1976 full-size mock-up
30 01 01	--	W-3	PZL Swidnik	mfd	1978 static test airframe
30 01 02	SP-	W-3	PZL Swidnik	mfd	summ.79 prototype for ground trials; registration SP-PSA quoted by PZL Swidnik, but no hard evidence that it was ever used, photos show only 'SP-' painted on (it is likely that SP-PSA was reserved, but without the old reservation books it is hard to prove); completed the ground resonance trials with a hovering 26oct79; stored in orange/green c/s without markings at Swidnik, seen sep07/jul15
30 01 03	SP-PSB	W-3	PZL Swidnik	rgd	25feb82 first flying prototype; f/f 06may82; damaged on a test flight 12sep86, trying to land with only one engine working, when both engines went to idle and the helicopter came down so hard that the tailboom broke off, both pilots escaped unhurt; canx 15may87; repaired, but relegated to ground duties; used as a ground trainer (marked 'W3-TR') at Swidnik, seen as such 30sep96
30 01 04	SP-PSC	W-3	PZL Swidnik	f/f	24jul84 second flying prototype; rgd 31aug84; canx 10nov89; seen Swidnik sep96/oct07 in poor condition; photo 10feb14, wreck at Kochice (N50.694461 E18.685062)
30 01 05	SP-PSD no reg	W-3	PZL Swidnik	f/f Swd	04jun84 12oct95 third flying prototype; rgd 26jun84; took part in 'high & hot' trials in the Pamir Mountains aug/sep90
30 01 06	SP-PSE	W-3	PZL Swidnik	f/f	26nov84 fourth flying prototype; rgd 30nov84; took part in 'high & hot' trials in Tajikistan aug/sep85 and in 'cold' trials in Yakutiya; CoFA expired 31dec95; seen stored at Swidnik aug00/jun01; canx 04mar02
30 02 01	SP-PSF SP-SUC SP-SUC	W-3 W-3 W-3WA	PZL Swidnik PZL Swidnik Heliseco	f/f rgd rgd	29nov86 15may91 03apr97 the first series-production W-3; rgd 02jun87; took part in state trials 13dec88/31may89
	SP-SUC	W-3WA	Hispanica de Avn	ph.	24jul15 initially in white c/s with red trim; seen with '81 Bombers' titles QSA 24jun07 & 20jul08; seen with 'M.A.R.M.' titles Cascais 16oct08; seen without titles near Algete 06may09; seen with 'D.G.P.C.' titles Embalse de Navacerrada 22jul09 & Bustarviejo de la Sierra 18aug09; repainted in yellow c/s with grey trim; with titles; seen with additional 'D.G.P.C.' titles La Iglesia 06apr12; seen with additional 'MAGRAMA' titles León-Base de Camposagrado 17sep12
31 02 02	SP-PSH CCCP-04101	W-3 W-3	PZL Swidnik AFL/Arkhangel.-KSZ	rgd	09jan88 10aug88 near Valdemorillo (Spain); in yellow c/s with grey trim and 'HASA' titles; operated for the BRIF (Brigada de Refuerzo de Incendios Forestales) on the Spanish island of La Palma in 2015/16, based at Puntagorda; l/n SPC 04aug16; dbr 10aug16 on a fire-fighting mission at Puente Roto at the foot of the volcano El Cabrito near Tegalate (Mazo) when the tail rotor touched a tree on the slope of the volcano and the helicopter crashed, coming to rest on its left side, both pilots slightly injured
31 02 03	SP-PSG 203	W-3 W-3RR	PZL Swidnik Polish Army	rgd d/d	02oct87 1995 canx 10aug88 dbr 13jan89 on a flight from Ukhta to Kotlas when crash-landed near Yaryensk and turned over; used as ground instructional airframe by the Vyborg technical school, seen jul06/jul13, rear part of tailboom and rotors missing but otherwise intact
31 02 04	CCCP-04102 SP-SYA SP-SYA	W-3 W-3 W-3	Aeroflot Aviazakaz Heliseco	LWO rgd lsd	aug88 04jun93 23jun95 took part in state trials 13dec88/31may89 and in check tests 07/27jul90; canx 25sep95
31 02 05	SP-PSI CCCP-04103 SP-SUH SP-SUH EC-LMO	W-3 W-3 W-3 W-3AS W-3AS	PZL Swidnik Aeroflot Aviazakaz Heliseco Hispanica de Avn	rgd rgd rgd rgd	09jan88 27may93 31dec96 31may11 owned by Ministry of Defence; prototype of the W-3RR "Procion" Elinit version; f/n Swidnik sep96; modernised from "Procion-2" to "Procion-3" standard in 2005; l/n Tomaszów Mazowiecki 05may10; reported Tomaszów Mazowiecki 08sep12 as '0203'
31 02 06	CCCP-04104 SP-SUY SP-SUY	W-3 W-3 W-3AS	Aeroflot Aviazakaz Heliseco	LWO rgd rgd	aug88 04jun93 20dec96 and later rgd 31dec96; l/n TFN 01aug07 with large M.M.A. titles; l/n la Palma 21feb11; crashed 24feb11 in the Caldera de Taburiente national park on the island of La Palma
	SP-SUY EC-JPC	W-3AS W-3AS	HIHA Hispanica de Avn	ACE rgd	08jul05 30may06 canx 23jan06 as to Spain
31 02 07	CCCP-04105 RA-04105 SP-SUZ SP-SUZ	W-3 W-3 W-3 W-3AS	Aeroflot Aeroflot Aviazakaz Heliseco	photo rgd rgd	18jun93 31dec96 seen GRO 06jun96, no titles
	EC-LUV	W-3AS	Hispanica de Avn	rgd	13feb13 seen Swidnik 07may03 under modification to W-3AS; l/n off-airport at Combarro, Spain, 13aug10; canx 11feb13 as to Spain
31 02 08	SP-SUA SP-SUA	W-3 W-3	PZL Swidnik Heliseco	rgd KLV	10jan89 21oct05 temporary registration; full rgd 06may13; f/n active near Madrid 09jul13 yellow/silver c/s, small 'Proteccion Ciudadana Incendios Forestales' inscription, large black reg; l/n Navas del Rey 07jul18
31 02 09	0209	W-3T	Polish Navy	toc	28jul89 and KLV 13oct06; seen Minsk Mazowiecki 19may07, with only 'MMA' titles on the engines; l/n Swidnik 08nov13, three-tone blue/white c/s, active
32 02 10	SP-SZS SP-FXA SP-SUE SP-SXU SP-SXU	W-3 W-3 W-3 W-3 W-3	PZL Swidnik Cen. Cardio. Hosp. PZL Swidnik Polish Air Rescue Heliseco	rgd r/r rgd rgd OSR	14oct88 14mar89 29may91 11feb94 06nov99 equipped with an LPG-150M winch; l/n QYD 04apr01; the hulk was seen 17apr14 traveling on a flatbed loader; converted to W-3WA in 2015/1016; seen Swidnik 12may16 active in grey and dayglo c/s l/n PED 03jun18
	SP-SSU EC-JP3	W-3 W-3A	Hispanica de Avn Hispanica de Avn	rgd rgd	26jun05 30may06 ambulance version
31 03 01	SP-PUI SP-SUI SP-SUI	W-3 W-3 W-3AS	PZL-Inst. Laczn. Telecom Institute Heliseco	rgd r/r rgd	03sep90 03apr92 24feb95 belonged to the Cardiological Centre at Zabrze
31 03 02	CCCP-04106 SP-SUK SP-SUK SP-SUK	W-3 W-3 W-3 W-3	Aeroflot PZL Swidnik/ZEUS Aviazakaz Heliseco	rgd rgd rgd rgd	02jun92 05may93 31dec96 f/n Poznan aug91; l/n SXF 19jun92
	EC-KBG	W-3AS	Hispanica de Avn	rgd	20jun07 f/n Lublin 26aug95
31 03 03	CCCP-04107 SP-SUL SP-SUL SP-SUL SP-SUL SP-SUL	W-3 W-3 W-3 W-3 W-3AS	Aeroflot PZL Swidnik/ZEUS Aviazakaz Heli Sureste Heliseco	rgd rgd rgd lsd rgd	08jun92 05may93 1995 18feb97 never rgd to Heliseco, probably leased to them and sub-leased in Spain; f/n Lublin-Radawiec 05jul00; CoFA expired 13dec99; canx 13jul04 as 'scrapped' ! but sold to Hispanica de Aviación at Madrid 30jun05
					canx 23jan06 as to Spain
					l/n La Guancha Heliport, Tenerife, 14jul07 with large 'BRIFOR' titles (Forest Fire Brigade); l/n Tenerife Island 19jul10; canx 24mar17 as to Italy; l/n stored Lublin 27jul17
					operated for Panstwowa Inspekcja Radiowa i Telekomunikacji; equipped with a special retractable aerial mast
					seen Swidnik 07may03 under modification to W-3AS; seen WRO 21oct08, with additional 'WARM' titles; l/n as such WRO 06jun09; crashed after take-off for a forest inspection flight at Tabuyo del Monte, Leon, 18jun11
					l/n Swidnik 05jul00; canx 11mar02; seen stored at Swidnik nov04; modified to W-3AS and restored 01jul05 to Hispanica de Aviación; sold to Spain mid-2006, still operating with this registration for Hispanica; current dec06; canx 02feb07
					f/n Base forestal de Valdemorillo 30aug08 in yellow/grey c/s, with additional 'Comunidad de Madrid' titles; l/n Embalse de Navacerrada 22jul09, as such; current nov14
					canx 23jan06 as to Spain
					l/n LUJ 14oct04; sold to Hispanica de Aviación at Madrid 30jun05; canx 23jan06 as sold to Spain

	EC-JPA	W-3AS	Hispanica de Avn	rgd	29may06	photo 31mar08, location unknown, in yellow/grey c/s, with additional 'M.M.A.' titles (Ministry of the Environment); l/n LCG 01apr12; canx 24mar17 as to Italy
31 03 04	0304	W-3T	Polish Navy	toc	31aug89	equipped with an LPG-150M winch; l/n Babie Doly 30jun13; converted to W-3WA in 2015/1016; l/n Inowroclaw 20may17
31 03 05	CCCP-04108	W-3	Aeroflot	rgd	03jun92	
	SP-SUM	W-3	PZL Swidnik/ZEUS	rgd	27may93	
	SP-SUM	W-3	Aviazakaz	lsd	1995	
	SP-SUM	W-3AS	Heli Sureste	rgd	22jul97	opb Helicsa in Spain during the 1996 fire season according to official document
	EC-LVE	W-3AS	Hispanica de Avn	rgd	08mar13	f/n Swidnik 07may03 as W-3AS, titles not noted; l/n PED 16oct03; seen WRO 21oct07 with 'MMA' titles; l/n as such Colmar, France, 07jun08; seen KLV 04jun10 with 'MARM' titles; canx 05mar13 as to Spain
31 03 06	CCCP-04109	W-3	Aeroflot	rgd	03jun92	a temporary 3-month registration; finally registered 09may13; seen Santo Domingo, Chile, 07jan17, no titles; seen again Avila Puerto el Pico with titles 07jul18
	SP-SUN	W-3	PZL Swidnik/ZEUS	rgd	10may93	seen Madrid-Cuatro Vientos 02oct95, opb ICONA, coded '10'
	SP-SUN	W-3AS	Aviazakaz	rgd	22jul97	seen Swidnik 07may03 under modification to W-3AS in full Heliseco c/s, titles not visible as panels removed
	SP-SUN	W-3AS	Swidnik Poland	WRO	06oct06	titles as reported; l/n Swidnik 27oct07, titles not reported; l/n WRO 20jun08
	EC-LQA	W-3AS	Hispanica de Avn	rgd	24feb12	a temporary 3-month registration till 24may12; f/n LCG 01apr12 with additional MARM titles; finally registered 14may12; photo 22aug12; current nov14
31 03 07	CCCP-04110	W-3	Aeroflot	rgd	08jun92	
	SP-SUT	W-3	PZL Swidnik/ZEUS	rgd	24jun93	
	SP-SUT	W-3	Aviazakaz	ph.	1993	
	SP-SUT	W-3AS	Aeroflot	lsd	1995	taken in Spain in all-white c/s with blue trim, no titles
	SP-SUT	W-3	Heli Sureste	lsd	1995	
	SP-SUT	W-3AS	Heliseco	rgd	22jul97	
	SP-SUT	W-3AS	SG Equipment Leas.	rgd	12dec07	photo 10jun01 in Heliseco c/s with old 'Helicsa' titles; l/n KLV 21oct05
31 03 08	EC-LUQ	W-3AS	Hispanica de Avn	rgd	31jan13	opb LPU Heliseco; seen WRO 21oct07 no titles; l/n WRO 06jun09 with 'MARM' titles; arrived disassembled Melilla Airport, Montevideo, ' in jan12 and fully assembled in photos 20jan12, yellow c/s, silver bands, black 'M.A.R.M.' titles plus black 'Z2' code and small 'Heliseco' titles; l/n as such Angel S Adami 12jan12; canx 30jan13 as to Spain
	CCCP-04111	W-3	Aeroflot	Ykm	03jul92	a temporary 3-month registration; finally registered 24apr14
	SP-SUF	W-3	Aviazakaz	rgd	29jun93	
	SP-SUF	W-3AS	Heliseco	rgd	01apr98	opb Helicsa in Spain during the 1996 fire season according to official document
31 03 09	EC-MGJ	W-3AS	Heliseco	rgd	27apr15	seen Swidnik 07may03 under modification to W-3AS; l/n WRO 06oct07; l/n Swidnik 27oct07 titles not reported; l/n Sandomierz 29may10; canx 23apr15 as exported to Spain
	EC-MIP	W-3AS	Heliseco Espana	rgd	nov15	was a three-month temporary registration and was ntu as such
	CCCP-04112	W-3	AFL/Far East-Kor	mfd	02feb90	received another three-month temporary CoFR on 30oct15; seen 01feb17 in tenerife harbour being shipped was to be opb Severokamchtskoye AO Kamchatavii at Korf-Tilichiki; w/o 23jul90 on the leg from Olyokminsk to Yakutsk-Magan of its delivery flight from Kremenchug to Korf-Tilichiki with the MTOW exceeded by 800 kg and the speed exceeding the limitations, leading to a dramatic decrease of the useful life of the push rods of the main rotor so that one push rod failed while the helicopter was flying at a height of some 2,000 metres along the river Lena, the respective rotor blade collided with the tailboom and the helicopter crashed on Udarnik Island in the river (N61°06' E126°22'), all 3 crew and both passengers (aircraft mechanics) killed; t/ 90 hours on charge as of 01jan93
31 03 10	CCCP-04113	W-3	Kamchatavia	rgd	24jun93	opb Helicsa in Spain during the 1996 fire season according to official document
	SP-SYB	W-3	Aviazakaz	lsd	23jun95	later rgd 31dec96; l/n KLV 08oct98, opb Heliseco; sold to Hispanica de Aviacion, Madrid 30jun05; photo in white/red c/s with small 'Helicsa' titles and large D.G.C.N titles; canx 23jan06 as to Spain
	SP-SYB	W-3AS	Heliseco	rgd	30may06	f/n TFS 27apr06, see rgd date !; in yellow/grey c/s with additional large 'BRIFOR' titles (Forest Fire Brigade); l/n Base forestal de Puerto el Pico 30aug08; canx 23may17 as 'change of owner' and seen stored Lublin 27jul17
31 03 11	CCCP-04114	W-3	Kamchatavia	rgd	18jun93	on charge as of 01jan93
	SP-SYC	W-3	Aviazakaz	rgd	31dec96	l/n Igualada Odena, Spain, 08jun07, with large '80 Bombers' titles; seen WRO 06jun09, red/white c/s, no titles
	SP-SYC	W-3AS	Heliseco	ph.	01sep10	at Laza, near Ourense, northern Spain, all yellow c/s with red bands now painted silver and with 'MARM' titles; canx 23apr15 as exported to Spain
31 03 12	EC-MGR	W-3AS	Heliseco	rgd	13may15	owned by Abanca Corporacion Bancaria S.A
	CCCP-04115	W-3	Kamchatavia	rgd	02jul93	on charge as of 01jan93
	SP-SYD	W-3	Aviazakaz	lsd	23jun95	and later rgd 11jun97; f/n GRO 26jun96, untitled; seen TFN 27jul07 with large 'M.M.A.' titles; l/n GRQ 15may10; canx 09may11 as sold to Spain
	SP-SYD	W-3AS	Heliseco	rgd	23may11	a temporary 3-month registration; finally registered 16sep11; f/n Tenerife Sur-Reina Sofia with small 'Heliseco' and large 'Magrama' titles; l/n at Tenerife 10aug16 win adverts on
31 03 13	CCCP-04116	W-3	Aeroflot	Ykm	03jul92	
	SP-SUG	W-3	Aviazakaz	rgd	02jul93	
	SP-SUG	W-3AS	Heliseco	rgd	01apr98	l/n GRO 26jun04; seen WRO 21oct07 with 'MMA'; l/n as such Lyon-Bron 08jun08; seen Wloclawek-Kruszyn 20may09, red/white c/s, 'MARM' logo/title plus small 'Poland Swidnik' and 'www.heliseco.lublin.pl', operational; L/N cASA rJUBIUA 22MAY18
31 03 14	SP-SUO	W-3	PZL Swidnik/ZEUS	rgd	15may92	on charge as of 01jan93; operator not confirmed, but confirmed was operated in the Far East of Russia
	CCCP-04117	W-3	Kamchatavia	rgd	27may93	
	SP-SUO	W-3	Aviazakaz	rgd	31dec96	seen GRO 05apr02, with titles; l/n Swidnik 07may03, titles not noted; canx 10nov04 as sold
	SP-SUO	W-3AS	Heliseco	rgd	05apr05	canx 28apr05
	SP-SYR	W-3AS	PZL Swidnik	rgd	16may05	d/d 01jun05; f/n Brig, Switzerland, 14nov08; l/n Monza 13sep09; canx 07may15
	I-SOKO	W-3AS	Eliwork	rgd	02apr90	opb 103. pl NJW MSW at Warsaw-Bemowo (disbanded 31dec00) for Straz Pozarna (fire brigade); equipped with Irencio "Leo-400" observation system in 1994; l/n Deblin-Irena 30aug98
31 03 15	315	W-3	Polish MoI	toc	09may01	carried also code/call-sign 'N-010'; based at Gdansk; in blue/light grey c/s with white cheatline and 'Policja' titles; l/n GDN 16may03
	PL-31XP	W-3	Polish Police	toc	03dec02	carried also code/call-sign 'N-010'; in blue/light grey c/s with white cheatline and 'Policja' titles; f/n Pruszcz Gdanski 23aug03; l/n Radom 26aug18
	SN-31XP	W-3	Polish Police	r/r	03dec02	
33 03 16	681	W-3	Myanmar Air Force	e/d	19nov90	
	6501	W-3	Myanmar Air Force	r/r	17mar90	prototype of the armed version W-3U "Salamandra"; owned by PZL Swidnik; underwent trials in 1991, but rejected by the Polish Air Force because of its Soviet-origin armament and equipment; l/n PRG 21nov91; converted to transport version
36 03 17	0317	W-3U	Polish Air Force	f/f	17mar90	from Gdynia
	695 ?	W-3UT	Myanmar Air Force	d/d	27may92	
	6515	W-3UT	Myanmar Air Force	r/r	29mar93	canx 21may93
36 03 18	SP-SUW	W-3K	PZL Swidnik	rgd	19jul93	converted to armed version by Kentron (a division of Denel) and underwent trials in South Africa in 1993/94; canx 09aug94
	ZU-AGU	W-3K	Denel Ltd.	rgd	12aug94	seen GRO jun06, no titles; used for trials of the HOT-3/VIVIANE anti-tank missile in 1999; l/n St. Petersburg-Gorskaya 15may04; canx 03feb06, reason ?; l/n Swidnik 27oct07, titles not reported
	SP-SUW	W-3WB	PZL Swidnik	rgd	12aug94	
31 03 19	CCCP-04118	W-3	Aeroflot	rgd	20may92	opb Helicsa in Spain during the 1996 fire season according to official document
	SP-SUP	W-3	PZL Swidnik/ZEUS	rgd	09jun93	and later rgd 01apr98; f/n seen GRO 26jun96 with additional 'Gobierno de Canarias' titles; seen KLV 20jun98 as Heliseco; photo 10jun01 in Heliseco c/s plus 'Castilla la Mancha' titles; canx 10nov04 as sold to Helibravo of Portugal; l/n Swidnik jan06
	SP-SUP	W-3	Aviazakaz	lsd	23jun96	f/n Swidnik 24feb06, so before being registered !; l/n Igualada Odena 09jul06, in two-tone yellow c/s with white trim; canx 20jul07 as sold to Spain
	SP-SWA	W-3AS	Helibravo Avn SA	rgd	04apr06	f/n 17dec07 Mallorca-Son Bonet, small 'Sky Helicopteros' titles in two-tone yellow c/s with white trim; seen Lubria 24aug08, with additional 'M.A.R.M.' titles (Ministry of the Environment, Rural and Maritime Affairs); l/n Mallorca-Son Bonet 22oct10 as such; seen Mallorca-Son Bonet 30may14, no rotors, hangared and covered; l/n Mallorca-Son Bonet 14nov11, titles not reported
	EC-KIR	W-3AS	Helibravo Avn SA	rgd	07dec07	
31 03 20	CCCP-04396	W-3	Aeroflot	rgd	27may92	
	SP-SUR	W-3	PZL Swidnik/ZEUS	rgd	10may93	
	SP-SUR	W-3	Aviazakaz	rgd	unknown	
	SP-SUR	W-3AS	Heliseco	rgd	04may11	l/n Remolinos 21aug09; canx 28apr11 as sold to Spain
	EC-LMC	W-3AS	Hispanica de Avn	rgd	04may11	a temporary 3-month registration; seen over Tenerife 09sep11 with additional 'Brifor' titles; rgd 16sep11; l/n 06jun12 Tenerife-La Guancha Heliport, operational, typical silver/yellow c/s; current nov14
31 03 21	CCCP-04397	W-3	Aeroflot	rgd	11may92	
	SP-SUS	W-3	PZL Swidnik/ZEUS	rgd	29jun93	seen GRO 26jun96, untitled
	SP-SUS	W-3	Aviazakaz	rgd	01apr98	l/n KLV 21oct05; seen WRO 21oct07, no titles; l/n as such l/n Lyon-Bron 08jun08; canx 28apr11 as sold to Spain
	SP-SUS	W-3AS	Heliseco	rgd	04may11	a temporary 3-month registration; finally registered 19sep11; seen La Guancha-Tenerife 14jun12 in all-yellow c/s with silver trim/bands around the fuselage; l/n Tenerife Sur-Reina Sofia jul12; current nov14
33 03 22	682	W-3	Myanmar Air Force	e/d	16nov90	
	6502	W-3	Myanmar Air Force	r/r	13nov90	
31 03 23	683	W-3	Myanmar Air Force	e/d	14jan93	probably toc 05mar91
	6503	W-3	Myanmar Air Force	ph.	14jan93	in dark olive drab c/s; the photo shows the inscription 'We Did it! 6503 1000 hours 5.3.91 to 14.1.93'
	03 24	W-3	PZL Swidnik	--		cockpit section only, used as simulator; delivered to IAI in Israel
	03 25	W-3	PZL Swidnik	--		cockpit section only, used as simulator; delivered to PZL Warszawa
31 04 01	684	W-3	Myanmar Air Force	e/d	12nov90	

31 04 02	6504	W-3	Myanmar Air Force	r/r	14nov90	
	685	W-3	Myanmar Air Force	e/d		
	6505	W-3	Myanmar Air Force	r/r		
31 04 03	686	W-3	Myanmar Air Force	e/d	16nov90	
	6506	W-3	Myanmar Air Force	r/r		seen preserved in Defence Services Museum at Yangon oct00, l/n oct12; since moved to Defence Services Museum at Naypyitaw, l/n aug17
31 04 04	687	W-3	Myanmar Air Force	e/d	19mar91	
	6507	W-3	Myanmar Air Force	ph.	1998	preserved in the Defence Services Museum at Naypyitaw, l/n aug17
31 04 05	688	W-3	Myanmar Air Force	e/d	28jan91	
	6508	W-3	Myanmar Air Force	r/r		
33 04 06	689	W-3	Myanmar Air Force	e/d	13feb91	
	6509	W-3	Myanmar Air Force	r/r		
33 04 07	690	W-3	Myanmar Air Force	e/d	31jan91	
	6510	W-3	Myanmar Air Force	r/r		
30 04 08	--	W-3RM	PZL Swidnik			static test airframe for this version
33 04 09	691	W-3	Myanmar Air Force	e/d	08apr91	VIP version
	6511	W-3	Myanmar Air Force	r/r		
33 04 10	692	W-3	Myanmar Air Force	e/d	08apr91	VIP version
	6512	W-3	Myanmar Air Force	r/r		
39 04 11	0411	W-3RM	Polish Navy	r/r	apr91	prototype of the W-3RM "Anakonda" SAR version; owned by PZL Swidnik and leased to the Polish Navy; f/n ZIA 16aug92
	SP-SYG	W-3RM	PZL Swidnik	rgd	15sep95	seen Swidnik 07may03 in Heliseco c/s and with small 'PZL' logo; modified for ship-based operations in 2004; CofA expired 01jan07; seen Swidnik oct07/jul11, titles not reported
31 04 12	SP-SUB	W-3	PZL Swidnik	rgd	18jun91	seen during ILA at SXF jun92 in green/white German Police c/s with 'Polizei' titles, retained this c/s until at least 1996, but the registration had replaced 'Polizei' on the tail-boom
	SP-SUB	W-3	Heliseco	rgd	24feb97	seen GRQ 05oct02, with titles; l/n PED 16oct03; w/o 13jul05 when crashed on a fire-fighting mission at Concejo de Tineo (Asturias); finally canx 04feb10
31 04 13	SP-SUD	W-3	PZL Swidnik	rgd	03jun91	f/n LBG 21jun91 show number 'H340' in full Okada c/s including titles; l/n DRS 20sep91; canx 29nov91
	5N-UYI	W-3	Okada Air	e/d	02dec91	seen mar93 at BNI; Okada has no contact with the factory for many years and no spares were bought for this 1; l/n BNI 31may10, derelict
31 04 14	SP-SUU	W-3	PZL Swidnik	rgd	06jul92	canx 06nov92
	414	W-3	Polish MoI	toc	18aug93	VIP helicopter; opb 103. pl NJW MSW at Warsaw-Bemowo; used for the Pope's visit 22aug/12sep93; seen RIX 09sep93
	SP-SUU	W-3	PZL Swidnik	rgd	16jun94	canx again 21oct94; returned to Ministry of the Interior
	414	W-3	Polish MoI			re-converted to standard transport helicopter; opb 103. pl NJW MSW at Warsaw-Bemowo
	SP-SUU	W-3	Heliseco	rgd	21jun95	f/n Swidnik 12oct95; canx again 25oct95; returned to Ministry of the Interior
	414	W-3	Polish MoI	Bem	31mar96	opb 103. pl NJW MSW at Warsaw-Bemowo (disbanded 31dec00); l/n Warsaw-Bemowo 28sep99
	PL-30XG	W-3	Pol. Border Guard	trf	21dec00	f/n jan01; l/n Radom 07sep02
	SN-30XG	W-3	Pol. Border Guard	r/r	03dec02	f/n Radom 30aug03; modernised with PolyTech UF275-C observation system in 2004; l/n Gdansk-Rebiechowo 04aug10
	SP-VSM	W-3	Pol. Border Guard	rgd	01mar12	f/n Eblag 04jun12; l/n GDN 07sep12; canx 15feb13 as 'transferred to military'
	SN-34XP	W-3	Polish Police	Bem	18mar13	and 24apr13, full normal Border Guard c/s and titles, reg. taped on (suffix 'XP' is Police), identity quoted in photo caption and photo LCJ 14jun14 with 'Policja' titles but registration not visible; l/n Nowy Targ 15aug15; seen Kraków Rakowice 19aug16 now coded 'G002'; l/n as such seen Kraków Rakowice 05may18
31 04 15	0415	W-3T	Polish Air Force	toc	07jul93	l/n Minsk-Mazowiecki 11may14
31 04 16	SP-SXT	W-3	Tatrzańskie OPR	rgd	10feb93	photo at KRK 1993 with various sponsors titles painted on; w/o 11aug94 on SAR mission when crashed in the Dolina Olczyńska valley near Zakopane, all 4 crew killed; canx 07sep94
31 04 17	0417	W-3T	Polish Air Force	toc	07jul93	first W-3 commissioned by the Polish Air Force; f/n Laupheim 02jul94; converted for SAR duties; l/n Poznan-Krzyszewy 04oct11
31 04 18	0418	W-3T	Polish Air Force	toc	07jul93	converted by WZL-1 in 1995 to, see next line
	0418	W-3T (R)	Polish Air Force	KRK	29sep99	ambulance version; l/n Minsk Mazowiecki 30sep13
31 04 19	0419	W-3T	Polish Air Force	toc	07jul93	converted by WZL-1 in 1995 to, see next line
	0419	W-3T (R)	Polish Air Force	Now	30aug98	ambulance version; l/n Radom 26aug18
30 04 20	SP-PSK	W-3A	PZL Swidnik	f/f	28jul92	c/n also given as 310420; prototype of the W-3A version; rgd 30jul92; l/n LBG 15jun93; see rgd below
	SP-SSK	W-3A	PZL Swidnik	rgd	03jun93	canx 11jan94; sold to Ministry of the Interior 14jun94
	420	W-3A	Polish MoI	lsd	aug93	VIP helicopter; opb 103. pl NJW MSW at Warsaw-Bemowo; used for the Pope's visit 22aug/12sep93; seen RIX 09sep93; l/n SXF 04jun94; see dates above
	SP-SSK	W-3A	PZL Swidnik	rgd	09aug94	canx 16nov94
	420	W-3A	Polish MoI	rep	nov94	reconverted to standard transport helicopter; opb 103. pl NJW MSW at Warsaw-Bemowo; l/n jun95
	SP-SSK	W-3A	Heliseco	rgd	21jun95	seen in military colours Swidnik 12oct95; canx 25oct95
	420	W-3A	Polish MoI	rep	jan96	opb 103. pl NJW MSW at Warsaw-Bemowo (disbanded 31dec00); l/n aug96
	PL-32XP	W-3A	Polish Police	toc	09may01	carried also code/call-sign 'A-013'; based at Warsaw; in blue/light grey c/s with white cheatline and 'Policja' titles; l/n GDN 15may03
	SN-32XP	W-3A	Polish Police	r/r	03dec02	carried also code/call-sign 'A-013'; in blue/light grey c/s with white cheatline and 'Policja' titles; l/n KTW 28jun03; l/n Katowice 11feb17
31 05 01	0501	W-3T	Polish Air Force	toc	07jul93	converted by WZL-1 in 1998 to, see next line
	0501	W-3RL	Polish Air Force	LCJ	31aug98	used for SAR duties; l/n Swidwin 08aug16
31 05 02	0502	W-3T	Polish Air Force	toc	07jul93	converted by WZL-1 in 1998 to, see next line
	0502	W-3RL	Polish Air Force	Dbl	30aug98	opb 2. eltr for Lotnicze Górskie Pogotowie Ratunkowe for SAR duties; l/n Pruszcz Gdansk 29jun13
37 05 03	D-HSNA	W-3A	Polizei Sachsen	rgd	10mar94	based at Dresden; l/n Schönhagen 27sep09; canx 08oct10 as exported
	SP-SYT	W-3A	LPU Heliseco	rgd	09jun11	seen Tabuyo del Monte 20sep10; canx 09may12 as sold to Spain
	EC-LRO	W-3A	Heliseco	rgd	27sep12	operator Hispanica de Aviacion; photo 20aug12; seen active 25jul16 over the Canary Islands; l/n Santa Cruz de la Palma 04dec18
31 05 04	0504	W-3P	Polish Air Force	mfd	23may93	toc 07jul93; opb 36. split at WAW; l/n WAW 18apr98
	504	W-3P	Polish Air Force	r/r	dec98	opb 36. split at WAW (disbanded 31dec11); l/n WAW 31oct10; opb 1 BLT at WAW from 01jan12
	0504	W-3P	Polish Air Force	Swi	10apr13	l/n WAW 04jul14 with 'Republic of Poland' titles
39 05 05	0505	W-3RM	Polish Navy	toc	17jul92	opb 29 el MW at Darlowo; l/n Swidnik 27jul16
39 05 06	0506	W-3RM	Polish Navy	toc	17jul92	opb 29 el MW at Darlowo; l/n off airport aug18
37 05 07	SP-SYE	W-3A	PZL Swidnik	rgd	24may95	seen with 'United Indian Airways Ltd.' titles LBG 12jun95 show number 'H340'; l/n Swidnik 12oct95, still with these titles
	SP-SXZ	W-3A	Tatrzańskie OPR	rgd	25jan96	dbr 29jan03 in an auto-rotation landing at Murzasichle after both engines had failed; the remains went to the 'Ambulance' Museum at Kraków 09dec05, fuselage seen there oct09/aug17; canx only 05mar08; see c/n 370908
37 05 08	SP-SYO	(1)	W-3A2	res	12jun97	prototype of the W-3A2 version with Smith SN350 autopilot; not taken up
	SP-PSL	W-3A2	PZL Swidnik	rgd	15may98	f/n Swidnik 11may98; l/n Gorazka 17may03
	SP-SSL	W-3A2	Helibravo	rgd	10sep03	f/n KLV 19sep03; sold to Spain and departed Swidnik 19sep03 but seen again Gorazka 17apr04 without titles; photo Bustarviejo heliport 19sep04 with small Helibravo and Matinsa titles with additional 'Comunidad de Madrid' sticker; canx 13jun08 as to Spain
	EC-KSQ	W-3A2	Hispanía de Avn	rgd	31oct08	
	EC-KSQ	W-3A2	Sky Helicópteros	trf	dec09	rgd 12feb10 as leased from Banco Popular Español, S.A; f/n Mallorca-Son Bonet 21may10 in white/yellow c/s with additional 'M.A.R.M.' titles (Ministry of the Environment, Rural and Maritime Affairs); l/n Mallorca-Son Bonet 22oct10; seen Mallorca 05aug11 with large code 'H-01'; l/n as such Mallorca-Son Bonet 05sep14; l/n Mallorca-Son Bonet 11nov14, titles not reported
37 05 09	SP-SYH	(3)	W-3AM	mfd	28sep96	rgd 28sep96; canx 10oct96; photo exists taken at Swidnik wearing both SP-SYH and HL9256 with Daewoo titles
	HL9256	W-3AM	Daewoo	rgd	18nov96	
	HL9256	W-3AM	Heli Korea Ltd.	rgd	17oct01	l/n 21oct06 at Sacheon, South Korea; canx 14jun07
	N649LH	W-3A	Lloyd Helicopters	rgd	22jun07	canx 28jun07 as to Spain, version as such on FAA register
	EC-KHB	W-3AM	Hispanía de Avn	rgd	16nov07	f/n Madrid-Cuatro Vientos 16dec07 with additional 'DGB' titles; l/n AGP 30mar08 as such
	EC-KHB	W-3AM	Sky Helicópteros	trf	mar10	in full c/s Mallorca-Son Bonet 21may10, without registration and titles; reported Mallorca-Son Bonet 22oct10 as with registration and titles; seen Ibiza 28may11 with titles and coded 'H02'; El Beriel 08dec15 and 31mar16 no code; seen 01feb17 in Tenerife harbour being shipped
39 05 10	510	W-3RM	Polish MoI	toc	29apr93	opb 103. pl MSW; converted in 1998 to, see next line
	0510	W-3SP	Polish MoI	r/r	01jul98	official designation; opb GROM special forces unit; w/o 21aug98 when crashed on a training flight at Rembertów
39 05 11	0511	W-3RM	Polish Navy	toc	14apr93	l/n Babie Dolt 27feb13
39 05 12	0512	W-3RM	Polish Navy	toc	14apr93	dbr 12mar97 when ditched in the Baltic Sea
39 05 13	0513	W-3RM	Polish Navy	h/o	17oct96	funded and owned by LOTOS Petrobaltic; opb 1. dIMW (redesignated 28. eIMW 01jan03 and 43. BLOTM 01jan11) at Gdynia-Babie Doly from 17oct96; in white/red SAR c/s with 'Polish Navy' titles; l/n operational Gdynia-Babie Doly 19sep12; wfu 2014; sold to Ukraine in 2015; either this or c/n 370703 or 370704 was converted by Motor Sich to the MSB-6 demonstrator with MS-14V engines, seen in blue/white c/s with pink trim and with titles on the assembly line nov17
37 05 14	HL9220	W-3AM	Citi Air	rgd	18dec95	w/o 10jan97 when crashed near Yejujngbu City; canx 13mar97
37 05 15	SP-FSO	W-3AM	Daewoo Cars	res	21dec96	not taken up
	0515	W-3A	Polish Air Force	WAW	12may97	probably leased for Pope's visit
	SP-FSO	W-3A	Daewoo Cars	res	19oct98	not taken up; leased by Daewoo to Polish Air Force
	0515	W-3A	Polish Air Force	WAW	23feb99	see previous line 1
	SP-FSU	W-3A	PZL Swidnik	rgd	06jul00	already f/n Swidnik 05jul00; l/n Swidnik dec00; canx 13dec01
	101	W-3A	Ras al-Khaimah Pol	rgd	19dec01	arrived at Ras al-Khaimah on board II-76 EP-CFB and f/n there 22dec01; was only rgd 11jul04; f/n at Ras al-Khaimah Police HQ 22jul04; l/n sep04
	A6-SAA	W-3A	Saud bin Saqr	rgd	28dec04	full name Sheikh Saud bin Saqr al-Qasimi; delivered back to Swidnik apr05; canx 02may05; seen stored at Swidnik jun05/24feb06 in all-yellow c/s with only registration on
	SP-FSU	W-3A	Hispanía de Avn	rgd	21jun06	Hispanía de Aviación; opb Heliseco; seen Campiño Heliport 13aug06 with just 'MMA' titles on; canx 25oct06
	HL9298	W-3A	Helikorea	rgd	16nov06	canx jun07

	EC-KGT		W-3A	Hispánica de Avn	rgd	12nov07	Hispanica de Aviación; l/n Lugo 11aug11, in all-yellow c/s with silver trim/bands around the fuselage; current nov14
36 05 16	0516		W-3W	Polish Air Force	toc	12may94	used for training; l/n Tomaszów Mazowiecki 15jul13
36 05 17	0517		W-3W	Polish Air Force	toc	12may94	used for training; l/n Nowy Glinnik 24aug12; on temporary deployment to the Polish Navy in 2015
36 05 18	0518		W-3W	Polish Air Force	toc	12may94	used for transport; l/n Powidz 09jun15
36 05 19	0519		W-3W	Polish Air Force	toc	12may94	converted for SAR duties; l/n 07may03; l/n Swifnik 09jun18
36 05 20	0520		W-3W	Polish Air Force	toc	12may94	used for SAR; f/n Radom aug03; l/n Powidz 26jul12
36 06 01	0601		W-3W	Polish Army	h/o	02sep94	opb 47. Szkolny Pulk Smiglowców 02sep94/oct95 and by 7. Dywizjon Lotniczy from oct95; converted from jan12 to, see next line
	0601		W-3PL	Polish Army	Swd	28jul15	opb 56. Baza Lotnicza at Inowroclaw-Latkowo from late 2015 or early 2016; in olive drab c/s; l/n Kielce 07sep16
36 06 02	0602		W-3W	Polish Army	toc	sep94	opb 66. Dywizjon Lotniczy; l/n Gliwice 09may18
36 06 03	0603		W-3W	Polish Army	toc	sep94	opb 66. Dywizjon Lotniczy; l/n Tomaszów-Mazowiecki 20may14
36 06 04	0604		W-3W	Polish Army	toc	sep94	opb 66. Dywizjon Lotniczy; l/n Radom 23aug15
36 06 05	0605		W-3W	Polish Army	toc	sep94	opb 66. Dywizjon Lotniczy; l/n Tomaszów-Mazowiecki 20may14
36 06 06	0606		W-3W	Polish Army	h/o	02sep94	opb 47. Szkolny Pulk Smiglowców 02sep94/oct95 and by 7. Dywizjon Lotniczy from oct95; in dark green/dark brown camo c/s; l/n Minsk Mazowiecki 15aug08; converted from jan12 to, see next line
	0606		W-3PL	Polish Army	Lub	09oct14	opb 56. Baza Lotnicza at Inowroclaw-Latkowo from late 2015 or early 2016; in olive drab c/s; l/n Warsaw-Bemowo 08jul16; w/o 22jun17 on a flight from Rivotto (Italy) during the APROC exercise when the main gear box failed and a fire erupted in the engine compartment, the helicopter made a forced landing on a meadow of the Agriverde farm at Massanzago and burnt out, all 6 occupants escaped basically unhurt
36 06 07	0607		W-3W	Polish Army	toc	jan95	opb 66. Dywizjon Lotniczy; reportedly crashed 10aug96; used as ground instructional airframe at Olesnica, but seen Swidnik 07may03 and Tomaszów Mazowiecki 08apr09; l/n Deblin-Irena 12oct10
36 06 08	0608		W-3W	Polish Army	toc	jan95	opb 66. Dywizjon Lotniczy; l/n KRK 29oct09
36 06 09	0609		W-3W	Polish Army	h/o	20dec94	opb 47. Szkolny Pulk Smiglowców 20dec94/oct95 and by 7. Dywizjon Lotniczy from oct95; l/n Tomaszów Mazowiecki 05may10; converted to, see next line
	0609		W-3PL	Polish Army	Swd	28jul15	opb 56. Baza Lotnicza at Inowroclaw-Latkowo from late 2015 or early 2016; in olive drab c/s; l/n KRK 14jul16
36 06 10	0610		W-3W	Polish Army	toc	jan95	opb 66. Dywizjon Lotniczy; l/n Nowy Targ 18apr16
36 06 11	0611		W-3W	Polish Army	toc	1995	opb 66. Dywizjon Lotniczy; l/n Radom 23aug15
36 06 12	0612		W-3W	Polish Army	toc	1995	opb 66. Dywizjon Lotniczy; l/n Inowroclaw 16may15
36 06 13	0613		W-3W	Polish Army	toc	aug95	opb 66. Dywizjon Lotniczy; l/n Swidnik 27jul16
36 06 14	0614		W-3W	Polish Army	toc	aug95	opb 66. Dywizjon Lotniczy; l/n Tomaszów Mazowiecki 15jul13
36 06 15	0615		W-3W	Polish Army	h/o	03aug95	opb 47. Szkolny Pulk Smiglowców 03aug95/oct95 and by 7. Dywizjon Lotniczy from oct95; converted to, see next line
	0615		W-3PL	Polish Army	Swd	27jun16	opb 56. Baza Lotnicza at Inowroclaw-Latkowo from late 2015 or early 2016; in olive drab c/s; l/n Inowroclaw 19may18
36 06 16	0616		W-3W	Polish Army	toc	aug95	opb 66. Dywizjon Lotniczy; l/n Pobienik Wielki 04nov14
36 06 17	0617		W-3W	Polish Army	toc	aug95	opb 66. Dywizjon Lotniczy; l/n Bemowo 06jul16
36 06 18	0618		W-3WA	Polish Air Force	toc	1996	the first W-3WA (complying with FAA requirements); initially opb 47. SzPS; later opb 36. splt at WAW (disbanded 31dec11); opb 1 BLT at WAW from 01jan12; seen WAW 30jun14, with 'Republic of Poland' titles; l/n WRO 06sep18
36 06 19	0619		W-3WA	Polish Air Force	toc	1996	initially opb 47. SzPS; later opb 36. splt at WAW (disbanded 31dec11); opb 1 BLT at WAW from 01jan12; seen WAW 30jun14, with 'Republic of Poland' titles; l/n Lask 21oct17
36 06 20	0620		W-3WA	Polish Air Force	toc	1996	opb 47. SzPS; f/n Beauvechain 03sep99; l/n Powidz 09jun15
36 07 01	0701		W-3WA	Polish Air Force	rgd	11may96	opb 47. SzPS; converted for SAR duties; l/n Swidwin 29sep15
36 07 02	0702		W-3WA	Polish Air Force	SXF	11may96	opb 47. SzPS
	SP-SYK		W-3WA	PZL Swidnik	rgd	11may96	seen SXF 11may96 carrying this registration; 'paper' registration for ILA 1996, see date above; canx 04jun96
37 07 03	0702	(1)	W-3WA	Polish Air Force	Now	30aug98	opb 47. SzPS; l/n Powidz 23jul14; on temporary deployment to the Polish Navy in 2015
	SP-SYH		W-3AM	PZL Swidnik	mfd	25feb96	rgd 28feb96; first W-3AM (for operations over water); canx 12mar96 as sold to Korea
	HL9221		W-3AM	Citi Air	rgd	21feb96	before Polish cancellation date but confirmed by Korean CAA
	HL9221		W-3AM	Hanyang Aviation	rgd	03aug01	l/n GMP 06mar04; seen GMP 04feb10, no rotors; current oct14 but no longer current on the dec14 register; probably sold to Motor-Sich of Ukraine for re-engining in late 2014 or early 2015
37 07 04	0702	(2)	W-3AM	PZL Swidnik	mfd	19mar96	rgd 29mar96; canx 30mar96 as sold to Korea
	SP-SYH		W-3AM	Citi Air	rgd	03may96	l/n GMP 28oct98
	HL9222		W-3AM	Hanyang Aviation	rgd	03aug01	seen GMP 04feb10, no rotors; current oct14 but no longer current on the dec14 register; probably sold to Motor-Sich of Ukraine for re-engining in late 2014 or early 2015
37 07 05	0702		W-3AM	Heliseco	rgd	18jul96	l/n KLV 08oct98; see trf date below
	SP-SYI		W-3AM	Helizeco Aviacao	trf	20apr90	opb Heliseco; canx 26jun01; seen BZG 24aug06, in white/red c/s with Rescue titles, owner possibly PZL
	CS-HFA		W-3AM	Helizeco Aviacao	rgd	05jul01	f/n in Portugal 04aug05, coded '01 Bombeiros'
	I-SOKL		W-3AM	Eliwork	rgd	28aug06	f/n Monza sep06; l/n Talamona 18dec13, operational, mostly yellow/white c/s, red titles plus a couple smaller logos 'HA HELIBRAVO' and 'Matinsa'; canx 07may15
			W-3AS	Heliseco	rgd	13may15	see in Santa Cruz docks 02nov15; seen Helisuperficie de Operaciones de Respuesta Aérea Tenerife with just 'HASA' titles; l/n after a successful emergency landing on the beach of San Marcos in Icod de los Vinos, in the North of the island of Tenerife 29jun17
37 07 06	0702	(1)	W-3AM	PZL Swidnik	rgd	05sep96	canx 19sep96
	HL9255		W-3AM	Daewoo	rgd	15oct96	d/d 20sep96; w/o 08mar98 on a fire-fighting flight when crashed near Ponghwa-gun; canx 04may98
37 07 07	0702	(2)	W-3AM	PZL Swidnik	mfd	26sep96	rgd 28sep96; canx 18nov96
	HL9257		W-3AM	Daewoo	rgd	14jan97	
	HL9257		W-3AM	Heli Korea Ltd.	rgd	26oct01	
	EC-JUM		W-3AM	Hispánica de Avn	rgd	30oct06	seen in Spain off-airport at Puertecaldelas 08aug06, in white c/s with green top amnd blue stripes
	EC-JUM		W-3AM	Sky Helicópteros	trf	may08	f/n Mallorca-Son Bonet in white c/s with green top and blue stripes with small titles; seen Mallorca-Son Bonet 11feb09 coded 'H01' with small 'Govern de Les Illes Balears' titles in white/yellow c/s; l/n as such off airport-Sa Rapita 15mar11; w/d 25may10 as leased from Bancala; current 01sep17 l/n stored Lublin 27jul17
37 07 08	0709		W-3A	PZL Swidnik	rgd	26mar97	canx 18apr97
	D-HSNB		W-3A	Polizei Sachsen	Swd	sep96	finally rgd 10jul97; based at Dresden; badly damaged 05nov97 at Dresden Heliport, but repaired; new CoFA issued 18sep00; l/n DRS 23mar04; w/o 17jan05 when crashed in a wooded area near Thalheim (Saxony), 2 of the 5 policemen aboard killed; canx 31oct05
37 07 09	0710		W-3A	Czech Air Force	d/d	27sep96	l/n OSR 10jul18
37 07 10	0710		W-3A	Czech Air Force	d/d	27sep96	l/n BRQ 02may99; w/o 12feb01 while practising auto-rotation procedures when crashed near the village of Skvorec (19 km east of Prague), during recovery from auto-rotation the tail-rotor hit the ground, but the pilot lifted off again, climbing to around 50 m, at this point the helicopter became uncontrollable due to the tail-rotor damage and crashed back to the ground, all 3 crew seriously injured
37 07 11	0711		W-3A	Czech Air Force	d/d	01nov96	l/n Kbely 22jul17
37 07 12	0712		W-3A	Czech Air Force	d/d	01nov96	l/n Kraliky 18aug18
37 07 13	0713		W-3A	Czech Air Force	Kbe	mar97	l/n Hradec Kralove 12may18
37 07 14	0714		W-3A	Czech Air Force	Kbe	mar97	l/n KLV 04oct03; damaged 27feb02 in forced landing but repaired; l/n Kralovske Vinohrady hospital, Prague, 25nov15
37 07 15	0715		W-3A	Czech Air Force	Hrd	29aug98	l/n near Spicak 18feb16
37 07 16	0716		W-3A	Czech Air Force	POV	27aug98	l/n Hradec Kralove 14may16
37 07 17	0717		W-3A	Czech Air Force	Kbe	mar97	opb 233 VL; l/n Hradec Kralove 06sep13
37 07 18	0718		W-3A	Czech Air Force	BRQ	10may97	l/n Line 26aug98; reportedly crashed at Line 24sep02, obviously repaired; seen KLV 06apr04; l/n at a Prague hospital 18aug12
37 07 19	0719		W-3A	Czech Air Force	BRQ	10may97	opb 233 VL; l/n Bydgoszcz 20may16
36 07 20	0720		W-3RR	Polish Army	d/d	1998	"Procion-3" Elint version; owned by Ministry of Defence; underwent factory trials at Swidnik 1999/2001; l/n KRK 20jul16
31 08 01	--		W-3	for Daewoo	Swd	05jul00	green shell only, still present 07may03; order cancelled
	RA-10801		W-3	not known	mfd	31jul03	ordered by the administration of the Krasnodar region, but reportedly privately owned; left Swidnik for Russia 01aug03
	RA-04399		W-3	PANKh	rgd	12sep03	to the Krasnodar region; in white/blue/red c/s with 'PANKh' logo on the engine cowling; impounded 26jan06; f/n KRK 21sep06; not included in a Russian CAA listing 15oct13; l/n AER 22jan14, operational
37 08 02	--		W-3AM		Swd	05jul00	seen Swidnik aug01, incomplete (green shell only); intended for Polish Navy as 0802 but not delivered and order cancelled
	SP-SYP		W-3AM	PZL Swidnik	rgd	09nov01	for delivery flight 12nov01 to a ship in Bremerhaven (to be shipped to South Korea); canx 27nov01
	Daegu 002		W-3AM	Daegu Firefighting	rgd	21dec01	opb Daegu Fire-fighting Department; w/o 18jan03 when crashed into a water-reservoir near Tego (South Korea)
37 08 03	0720	(1)	W-3AM	PZL Swidnik	rgd	30may97	canx 31may97; registered for one day for delivery flight to a ship (to be shipped to South Korea)
	HL9259		W-3AM	Citi Air	mfd	01jul97	w/o 29oct00 when crashed shortly after take-off from Hyunpo Lighthouse; canx 08jan01
37 08 04	0720	(2)	W-3AM	PZL Swidnik	rgd	26jun97	rgd 27jun97; registered only for delivery flight to a ship (shipped to Vietnam); canx 27oct97; photo exists wearing 'TCT Bay Dich Vu Viet Nam' titles
	VN-417		W-3AM	TCT Bay Dich Vu	rgd	05jan98	owner also reported as N.S.F.C.; f/n HAN 1998
	HL9265		W-3AM	Daewoo	rgd	25dec98	rgd 10feb99; leased to Citi Air
	HL9265		W-3AM	Heli Korea Ltd.	rgd	17oct01	
	EC-JUN		W-3AM	Hispánica de Avn	rgd	30oct06	seen active off-airport at Puertecaldelas 08aug06 in white/yellow c/s with blue trim, with just 'MMA' titles
	EC-JUN		W-3AM	Sky Helicópteros	trf	may08	f/n Sant Llorenç des Cardassar (Mallorca) 14aug08 with 'Sky Helicópteros' titles, coded 'H02' with small 'Govern de Les Illes Balears' titles in white/yellow c/s with blue trim; repainted by mar09 in white/yellow c/s with same code and titles; rgd 20oct09 as leased from Sa Nostra; l/n Mallorca-Son Bonet 22oct10, with same c/s and titles; seen Santander 13mar11 with large 'MARM' and small 'Inaer' titles; crashed 02jul12 whilst assisting in tackling the forest fire at Cortes de Pallás; current nov14
37 08 05	0720	(3)	W-3AM	PZL Swidnik	mfd	27oct97	rgd 30oct97; canx 02dec97
	HL9262		W-3AM	Daewoo	rgd	07mar98	f/n SSN 26oct98; leased to Citi Air
	HL9262		W-3AM	Heli Korea Ltd.	rgd	17oct01	f/n dec04 on overhaul in Poland

	EC-JUL	W-3AM	Hispánica de Avn	rgd	jul06	photo as such exists; confirmed by Spanish CAA it had only a temporary registration and was never fully registered in Spain
	HL9296	W-3AM		rgd	25oct06	canx 14jun07
	N646LH	W-3A	Lloyd Helicopters	rgd	22jun07	canx 28jun07 as to Spain; version as such on FAA register
	EC-KHG	W-3AM	Hispánica de Avn	rgd	02jul07	temporary registration only (registration was not accomplished until 16nov07, so the operator filed another application); photo exists in red/white c/s with blue trim, with additional 'DGB' titles on engine cowling; canx 16nov07
	EC-KSI	W-3AM	Sky Helicópteros	rgd	23oct08	in same c/s as above, with large 'MARM' (Ministry of Agriculture) and small 'Sky Helicópteros' titles; arrived at Mallorca-Son Bonet oct08; repainted to white/yellow c/s; rgd 19oct09 as leased from Caixa D'Estalvis De Catalunya, S.A.; seen Mallorca-Son Bonet 05jun10, with additional 'M.A.R.M.' titles (Ministry of the Environment, Rural and Maritime Affairs); l/n Mallorca-Son Bonet 22oct10; canx 24mar17 as to Italy
36 08 06	0806	W-3WA	Polish Army	d/d	24sep97	opb 66. Dywizjon Lotniczy; l/n Nowy Targ 18apr16
36 08 07	0807	W-3WA	Polish Army	d/d	24sep97	opb 66. Dywizjon Lotniczy; l/n Tomaszów Mazowiecki 15jul13, stored
36 08 08	0808	W-3WA	Polish Army	d/d	24sep97	opb 66. Dywizjon Lotniczy; l/n Piotrkow Trybunalski 03jul16
36 08 09	0809	W-3WA	Polish Army	d/d	24sep97	opb 66. Dywizjon Lotniczy; l/n Tomaszów Mazowiecki 15jul13
36 08 10	0810	W-3WA	Polish Army	d/d	28oct97	opb 66. Dywizjon Lotniczy; l/n Tomaszów-Mazowiecki 20may14
36 08 11	0811	W-3WA	Polish Army	h/o	24sep97	opb 7 Dywizjon Lotniczy from 24sep97, by 56. Pulk Smiglowców Bojowych late 2010/31dec11 and by 56. Baza Lotnicza from 01jan12; converted to, see next line
	0811	W-3PL	Polish Army	Mis	09aug11	opb 56. Baza Lotnicza at Inowroclaw-Latkowo; in olive drab c/s; l/n 22oct15, flying
37 08 12	SP-SYO (2)	W-3AM	PZL Swidnik	mfd	18nov98	rgd 23nov98; seen Swidnik 28sep98 under assembly; canx 09dec98
	HL9264	W-3AM	Daewoo	rgd	20jan99	
	HL9264	W-3AM	Heli Korea Ltd.	rgd	17oct01	l/n POZ 17dec05; canx 14jun07
	N647LH	W-3A	Lloyd Helicopters	rgd	22jun07	canx 28jun07 as to Spain; version as such on FAA register
	EC-KHF	W-3AM	Hispánica de Avn	rgd	02jul07	temporary registration only (registration was not accomplished until 16nov07, so the operator filed another application)
	EC-KSA	W-3AM	Sky Helicópteros	rgd	13oct08	leased from Banco de Crédito Balear, S.A.; f/n Mallorca-Son Bonet feb09, no titles and may09 with small titles; seen Mallorca-Son Bonet 21may10 with additional 'M.A.R.M.' titles (Ministry of the Environment, Rural and Maritime Affairs); l/n Mallorca-Son Bonet 22oct10; current nov14
36 08 13	0813	W-3WARM	Polish Navy	d/d	06aug98	named 'City of Puck'; l/n PZN 27aug16
36 08 14	0814	W-3WARM	Polish Navy	Swd	28sep98	under assembly; not delivered but transferred to, see next line
37 08 14	119	W-3AM	Choong Nam Fire D.	mfd	19nov99	handed over 08dec99; same c/n as previous line but type in c/n changed from 36 to 37; opb Choong Nam Fire Department (South Korea); d/d 27dec99; rgd 10dec99 with the registration 'Choongnam 001' but carries just '119' which is the emergency telephone number in South Korea
	HL9449	W-3AM	Choong Nam Fire D.	rgd	06dec07	ex '001'; probably is the W-3 that crashed 19mar11 into a reservoir in Seosan, some 277 kilometres south of Seoul after taking off for an extinguishing operation in the nearby Mont Gaya region; canx 09aug11 as destroyed
36 08 15	0815	W-3WARM	Polish Navy	d/d	13aug99	l/n Babie Doly 25mar15
36 08 16	0816	W-3PPD-2	Polish Army	d/d	1998	prototype of the W-3PPD-2 "Gipsówka" command version; f/n Swidnik 28sep98; underwent flight trials at least 1999/2000; l/n Swidnik 24feb06; converted in 2006 to, see next line
	0816	W-3PSOT	Polish Army			PSOT stands for "Powietrzne Stanowisko Obserwacji Terenu" (Airborne Observation Post); l/n Tomaszów Mazowiecki 05may10
36 08 17	0817	W-3WA	Polish Army	d/d	30sep98	opb 66. Dywizjon Lotniczy; f/n Swidnik 28sep98; l/n off airport 07oct14
36 08 18	0818	W-3WA	Polish Army	d/d	30sep98	opb 66. Dywizjon Lotniczy; f/n Swidnik 28sep98; l/n Radom 23aug15
36 08 19	0819	W-3WA	Polish Army	h/o	30sep98	opb 7 Dywizjon Lotniczy from 30sep98, by 56. Pulk Smiglowców Bojowych late 2010/31dec11 and by 56. Baza Lotnicza from 01jan12; f/n Swidnik 28sep98; converted to, see next line
36 08 20	0819	W-3PL	Polish Army	Mis	10aug11	opb 56. Baza Lotnicza at Inowroclaw-Latkowo; in olive drab c/s; l/n Radom 26aug18
	0820	W-3WA	Polish Army	h/o	30sep98	opb 7 Dywizjon Lotniczy from 30sep98, by 56. Pulk Smiglowców Bojowych late 2010/31dec11 and by 56. Baza Lotnicza from 01jan12; in dark green/dark brown camo c/s; f/n Swidnik 28sep98; l/n POZ 19may05; converted to, see next line
36 09 01	0820	W-3PL	Polish Army	BZG	21may11	opb 56. Baza Lotnicza at Inowroclaw-Latkowo; in olive drab c/s; l/n Inowroclaw-Latkowo 21may16
	0901	W-3WA	Polish Army	h/o	31aug99	opb 7 Dywizjon Lotniczy from 31aug99, by 56. Pulk Smiglowców Bojowych late 2010/31dec11 and by 56. Baza Lotnicza from 01jan12; f/n Swidnik 28sep98; converted to the first W-3PL (seen under conversion at Swidnik 24feb06)
36 09 02	0901	W-3PL	Polish Army	Mis	30aug08	opb 56. Baza Lotnicza at Inowroclaw-Latkowo; in olive drab c/s; l/n Inowroclaw 19may18
	0902	W-3WA	Polish Army	d/d	31aug99	opb 66. Dywizjon Lotniczy; f/n Swidnik 28sep98; l/n Tomaszów Mazowiecki 08sep00; opb Samodzielna Grupa Powietrzno-Szturmowa in Iraq in 2003/04; dbr 15dec04 when made an emergency landing near Kerbela (Iraq), 3 killed and 4 injured; wreck l/n in Iraq in 2005
36 09 03	0903	W-3WA	Polish Army	d/d	11may00	opb 66. Dywizjon Lotniczy; opb Samodzielna Grupa Powietrzno-Szturmowa in Iraq in 2003/05; l/n Radom 23aug15
36 09 04	0904	W-3WA	Polish Army	d/d	11may00	opb 66. Dywizjon Lotniczy; opb Samodzielna Grupa Powietrzno-Szturmowa in Iraq in 2003/05; l/n Bemowo 29sep18
36 09 05	0905	W-3WA	Polish Army	d/d	11may00	opb 66. Dywizjon Lotniczy; l/n Bemowo 29sep18
36 09 06	--	W-3		Swd	05jul00	green pod only; intended for Korea, but not delivered
	0906	W-3WARM	Polish Navy	h/o	18jan02	f/n Kiel 28jun03; l/n Babie Doly 23feb15
36 09 07	--	W-3		Swd	07may03	green pod only
	0907	W-3RR	Polish Army	d/d	2005	"Procion-3" Elint version; f/n Swidnik 26feb06; l/n Tomaszów Mazowiecki 17may12
37 09 08	SP-SXW	W-3	Tatrzańskie OPR	mfd	10nov04	some parts of c/n 370507 used; rgd 08feb05; d/d 19feb05; in red/white c/s with 'TOPR' titles; l/n Krakow museum 01apr17 but active inside the museum
36 09 09	0909	W-3WA	Polish Army	d/d	30nov00	seen on the assembly line 05jul00; opb 66. Dywizjon Lotniczy; opb Samodzielna Grupa Powietrzno-Szturmowa in Iraq in 2003/05; f/n sep03, l/n feb05; l/n Bemowo 29sep18
36 09 10	0910	W-3WA	Polish Army	d/d	30nov00	seen on the assembly line 05jul00; opb 66. Dywizjon Lotniczy; opb Samodzielna Grupa Powietrzno-Szturmowa in Iraq in 2003/05; l/n Radom 23aug15
36 09 11	0911	W-3WA	Polish Army	d/d	30nov00	seen on the assembly line 05jul00; opb 66. Dywizjon Lotniczy; opb Samodzielna Grupa Powietrzno-Szturmowa in Iraq in 2003/05; l/n Tomaszów Mazowiecki 15jul13
37 09 12	--	W-3A	primer	Swd	07may03	a green pod only by may03; seen on the assembly line 26feb06; l/n Swidnik 26jun06, almost complete
	0912	W-3A	Iraqi Army Avn	Dbl	16nov06	in sand/brown/green camo c/s with black code, no insignia yet; never delivered as the contract was cancelled jun06; stored with serial '912' at Swidnik, seen jul15
37 09 13	9A-HGA	W-3A	HeliFOR	res	nov08	ntu
	--	W-3		Swd	26feb06	under assembly; bought by Polish Border Guards in 2004
	SN-33XG	W-3WARM	Pol. Border Guard	d/d	18jul06	l/n GDN 19jul06; l/n active 14may11
	SP-VSN	W-3	Pol. Border Guard	res	may11	finally rgd 07jun13; seen GDN 26may14; l/n Gdansk-Rebiechowo 05sep17
37 09 14	--	W-3A	primer	Swd	26feb06	on the assembly line; l/n Swidnik 26jun06, almost complete
	0914	W-3A	Iraqi Army Avn	Swd	nov06	in sand/brown/green camo c/s with black code, no insignia yet; never delivered as the contract was cancelled jun06; stored without serial at Swidnik, seen nov09/jul15
36 09 15	9A-HNI	W-3A	HeliFOR	res	nov08	ntu
	0915	W-3A	Polish Air Force	Swd	05nov08	opb 36. splt at WAW (disbanded 31dec11); in red/white c/s with 'Republic of Poland' titles; opb 1 BLT at WAW from 01jan12; Rzeszow 12jun16; 'Republic of Poland' titles
36 09 16	0916	W-3A	Polish Air Force	ph.	06aug09	flying over Poland; opb 36. splt at WAW (disbanded 31dec11); opb 1 BLT at WAW from 01jan12; seen WAW 30jun14 with 'Republic of Poland' titles; l/n WAW 27jul17
37 09 17	SP-SYS	W-3A	Corp.Nac.Forestal		11aug10	seen on a low loader near Poznan; all yellow c/s with green trim and small stylish 'CONAF' titles; photo 15sep10 taken at Vina del Mar-Rodelillo, Chile, and l/n there 23sep10
37 09 18	CC-ACJ	W-3A	Corp.Nac.Forestal	rgd	28sep10	f/n 30sep10 on certification flight; l/n Santiago Eulogio Sanchez 08jan13
31 09 19	--	W-3A	primer	Swd	02jul11	on the assembly line
	--	W-3A	primer	Swd	02jul11	on the assembly line
	SP-SWZ	W-3A	PZL Swidnik	rgd	05aug11	
	SP-SWZ	W-3A	Philippine AF	Swi	jan12	in olive drab c/s with 'Philippine Air Force' titles but no serial or nationality marks yet; canx 22feb12 as to the Philippines
	310919	W-3A	Philippine AF	RZE	27jan12	in full c/s with titles and nationality marks and serial in the tail and '919' on the nose; delivered ex Rzeszów 13feb12 by An-124 RA-82044; l/n active dec12
31 09 20	--	W-3A	primer	Swd	02jul11	on the assembly line
	SP-SWI	W-3A	PZL Swidnik	rgd	05aug11	seen flying 13sep11 with Philippine Air Force titles but no serial or nationality marks yet; l/n Swidnik jan12; canx 22feb12 as to the Philippines
	310920	W-3A	Philippine AF	RZE	27jan12	in full c/s with titles and nationality marks and serial in the tail and '920' on the nose; delivered ex Rzeszów 13feb12 by An-124 RA-82044; l/n Clark AFB 13mar12
31 09 21	--	W-3A	primer	Swd	02jul11	on the assembly line
	SP-SWP	W-3A	PZL Swidnik	rgd	30sep11	in olive drab c/s with 'Philippine Air Force' titles, but no serial or nationality marks yet; seen as such Swidnik jan12; canx 22feb12 as to the Philippines
	310921	W-3A	Philippine AF	RZE	27jan12	in olive drab c/s with roundels and 'Philippine Air Force' titles, full serial on the tail and '921' on the nose; still carried the Polish registration SP-SWP when seen RZE 27jan12; delivered from RZE 13feb12 by An-124-100 RA-82044; severely damaged 07aug14 on a flight from Camp Ranao at Marawi City to Cagayan de Oro City when went out of control shortly after take-off and came to rest on its right side, 1 of the 4 crew and 1 person on the ground injured while all 7 passengers escaped unhurt, a technical malfunction was ruled out
31 09 22	--	W-3A	primer	Swd	02jul11	on the assembly line
	SP-SWE	W-3A	PZL Swidnik	rgd	18oct11	
	SP-SWE	W-3A	Philippine AF	Swi	jan12	in olive drab c/s with 'Philippine Air Force' titles but no serial or nationality marks yet; canx 22feb12 as to the Philippines
	310922	W-3A	Philippine AF	RZE	26jan12	in full c/s with titles and nationality marks and serial in the tail and '922' on the nose; delivered ex Rzeszów 13feb12 by An-124 RA-82044; l/n Koakan 09nov18
31 09 23	--	W-3A	primer	Swd	02jul11	on the assembly line; probably to be delivered nov12
	SP-SWC	W-3A	PZL Swidnik	rgd	09jul12	canx 04jan03 as to the Philippines
	310923	W-3A	Philippine AF	RZE	nov12	arriving Clarke AFB 26nov12; crashed 22nov18 into a ravine on approach in a mountainous aerea
31 09 24	SP-SWI	W-3A	PZL Swidnik	Swd	02jul11	on the assembly line without registration; rgd 03sep12; probably to be delivered nov12; canx 04jan03 as to the Philippines

31 09 25	310924	W-3A	Philippine AF	RZE	nov12	arriving Clarke AFB 26nov12; l/n CRK 09apr16
	--	W-3A	primer	Swd	02jul11	on the assembly line; probably to be delivered nov12
	SP-SWP	W-3A	PZL Swidnik	rgd	12dec12	canx 22mar13 as to the Philippines
	310925	W-3A	Philippine AF	d/d	14feb13	left this day by An-124
31 09 26	--	W-3A	primer	Swd	02jul11	on the assembly line; probably to be delivered nov12
	SP-SWZ	W-3A	PZL Swidnik	rgd	14jan13	canx 22mar13 as to the Philippines
	310926	W-3A	Philippine AF	d/d	14feb13	left this day by An-124; l/n Mactan-Cebu 13nov13; crashed 07nov16 in a rice field in Puerto Princesa, Palawan
37 09 27	--	W-3A	primer	Swd	02jul11	on the assembly line
37 10 01	AT-12	W-3A	Algerian Air Force	Swd	nov12	first of 8
	SP-SWL	W-3A	PZL-Swidnik	rgd	03dec12	photo early 2013 also carries AT-12; l/n RZE 18mar13; canx 25apr13 as to Algeria; seen at Karlsruhe and Lyon-Bron 08mar14 on delivery
37 10 02	SP-SIC	W-3A	PZL Swidnik	rgd	24may13	canx 18dec13
	AT-14	W-3A	Algerian Air Force	Swd	23aug13	l/n Lyon-Bron 14apr14 on delivery
37 10 03	SP-SIE	W-3A	PZL Swidnik	rgg	16jul13	canx 18dec13
	AT-18	W-3A	Algerian Air Force	Swd	23aug13	seen Lyon-Bron 14apr14 on delivery; l/n Ain Arnat
37 10 04	SP-SIF	W-3A	PZL Swidnik	rgd	09oct13	f/n Swidnik 31oct13; also marked AT-22; seen as such Lyon-Bron 19jan14 on delivery; canx 29jan14
	AT-22	W-3A	Algerian Air Force	Swd	27may15	at Ain Arnat
37 10 05	SP-SII	W-3A	PZL Swidnik	rgd	10dec13	f/n Swidnik 31dec13, also marked AT-28; seen as such Lyon-Bron 19jan14 on delivery; canx 29jan14
	AT-28	W-3A	Algerian Air Force	Swd	27may15	at Ain Arnat
37 10 06	SP-SIL	W-3A	PZL Swidnik	rgd	19dec13	f/n Swidnik 20dec13; canx 21mar14
	AT-32	W-3A	Algerian Air Force	Swd	08mar14	seen Karlsruhe and Lyon-Bron on delivery also marked SP-SIL
37 10 07	SP-SIN	W-3A	PZL Swidnik	rgd	18feb14	f/n Swidnik 15feb14, also marked AT-36; canx 17jun14
	AT-36	W-3A	Algerian Air Force	PMI	31may14	on delivery, also marked SP-SIN
37 10 08	SP-SIO	W-3A	PZL Swidnik	rgd	01apr14	f/n Swidnik 24apr14, also marked AT-42; canx 17jun14
	AT-42	W-3A	Algerian Air Force	PMI	31may14	on delivery, also marked SP-SIO
37 10 09	SP-SIP	W-3A	PZL Swidnik	rgd	25jun15	f/n in the factory 28jul15, still in primer; later painted up in full Ugandan Police colours
	5X-MAG	W-3A	Ugandan Police	h/o	17dec15	at Kampala; in white/blue c/s with 'Police' titles
37 10 10	SP-SIS	W-3A	PZL Swidnik	Swi	28jul15	rgd 23oct15; l/n Swidnik 11dec15, in full c/s as per the next line; canx 14dec15
	EC-MJH	W-3A	Heliseco	rgd	15dec15	f/n Swidnik 14jan16 in red/yellow/white c/s with just 'HASA' titles; l/n Tenerife Sur-Reina Sofia 10apr18
37 10 11	--	W-3A	--	Swi	28jul15	seen under assembly for Spain
	SP-SJR	W-3A	PZL Swidnik	rgd	25nov15	canx 16dec15
	EC-MJI	W-3A	Heliseco	rgd	17dec15	f/n Swidnik 14jan16 in red/yellow/white c/s with just 'HASA' titles; l/n Fuerteventura 07jun17
37 10 12	SP-SIW	W-3A	PZL Swidnik	rgd	03dec15	canx 16dec15
	EC-MJJ	W-3A	Heliseco	rgd	17dec15	f/n Swidnik 14jan16 in red/yellow/white c/s with just 'HASA' titles; l/n La Palma 14dec16
37 10 13	--	W-3A	--	Swd	nov12	probably not yet built by end 2015 and earmarked for Algeria
36 10 14	1014	W-3A	Polish Air Force	Swd	nov12	d/d to WAW 08feb13; l/n RZS 11sep18
36 10 15	1015	W-3A	Polish Air Force	d/d	29may13	f/n WAW 06jun13; l/n WAW 15aug18
36 10 16	1016	W-3A	Polish Air Force	Swd	02jul13	Polish Republic c/s & titles; l/n WAW 30may17
36 10 17	1017	W-3A	Polish Air Force	Swd	27oct13	Polish Republic c/s & titles; l/n KRK 19jul16
36 10 18	1018	W-3A	Polish Air Force	Swd	23nov13	Polish Republic c/s & titles; l/n WRO WAW oct17

PZL SW-4 "Puszczyk" & Leonardo AW009

The "Puszczyk" (Tawny Owl) is a light utility helicopter developed to replace the Mi-2 in 80 % of its roles. It can be used for transport, training, crop-spraying, law enforcement, liaison, ambulance and patrolling duties, or even as a flying crane. The standard version which is powered by one Allison 250-C20R/2(SP) turboshaft engine can carry four passengers or 400 kg of cargo in the main cabin and a further 150 kg in the luggage compartment (or up to 700 kg as an external underslung load). An alternative engine would be the Turboméca TM-319 while original plans from the 1980s to install the PZL-built GTD-350M1 have been shelved in the meantime. When its development started in 1985, the SW-4 stood in direct competition with the Mi-34 (both are the first Eastern helicopters with a skid-type landing gear, incidentally). Two decades later it is obvious that neither of these two helicopters became a real success. This is partly to blame on the political and economical changes which shook Eastern Europe since the late 1980s, but partly also on technical problems.

Design of the SW-4 was initially led by Stanislaw Trebacz who was succeeded by Krzysztof Bzówka in 1990. The draft project was completed in 1987, and a full-scale mock-up was built in the same year. However, work continued very slowly due to financial difficulties, and a major re-design had to be conducted in 1991 as there were severe technical problems. A ground-test airframe was completed in December 1994, but the first flight of the prototype did not take place before 26 October 1996 as ground trials revealed that the main rotor had to be re-designed. The type certificate in accordance with FAR-27 / JAR-27 requirements was granted on 14 November 2002, and the first production helicopter made its maiden flight in November 2004. It is the first of 30 (according to other sources 47) SW-4s ordered by the Polish Armed Forces which wanted to use them for flying training and liaison duties. Although there are reports about agreements with possible clients in the UK and Russia, no firm orders had been placed by the end of 2004. Nevertheless, PZL Swidnik planned to deliver about ten SW-4s to civilian operators each year starting from 2005. The civil version was redesignated Finmeccanica AW009 in early 2016, while the military version retained the designation SW-4. The c/n is explained as follows: the first two digits (60 or 66) seem to stand for the version (as is the case with the Mi-2); they are followed by the batch number and the number in the batch.

SW-4s built by PZL Swidnik at Swidnik since 1994

---	no reg	SW-4	PZL Swidnik	mfd	1987	full-scale mock-up of the GTD-350 powered original version; in white c/s with red cheatline and trim, no titles; stored behind one of the factory halls until 1996, then scrapped
60 01 01	--	SW-4	PZL Swidnik	mfd	1994	static test airframe; still present Swidnik aug09
60 01 02	--	SW-4	PZL Swidnik	mfd	dec94	ground test airframe, never flew; in all-white c/s with blue 'SW-4' titles; l/n Swidnik aug13
60 01 03	no reg	SW-4	PZL Swidnik	f/f	26oct96	first prototype; in all-red c/s with white 'SW-4' titles; l/n Swidnik 29oct96
	SP-PSW	SW-4	PZL Swidnik	rgd	21nov96	f/n Deblin-Irena 30aug98; seen SXF jun02 with exhibition number '363'; l/n Mielec 03may03; canx 03feb06 because it needed some repairs and modifications and the factory saved paying insurance while this work was taking place; l/n Swidnik 26oct07, titles not reported
60 01 04	no reg	SW-4	PZL Swidnik	f/f	19oct98	second prototype; in yellow c/s with blue 'SW-4' titles; f/n LBG 16jun97, with the exhibition number 'H-321'; l/n Swidnik sep98
	SP-PSZ	SW-4	PZL Swidnik	rgd	21oct98	f/n Goraszka may99, still with the exhibition number 'H-321'; seen LBG jun01 with the new exhibition number 'H-344'; involved in a minor accident at Swidnik 17apr02, but repaired; seen Goraszka 17may03 without exhibition number; l/n Swidnik 26oct07
	SP-SSZ	SW-4	PZL Swidnik	Swd	19oct13	reserved, but not taken up
	SP-PSZ	SW-4 Solo	AgustaWestland	Swd	19oct13	SW-4 Solo RUAS/OPH (Unmanned Aerial System/Optionally Piloted Helicopter) technology demonstrator, developed under the UK Ministry of Defence's Rotary Wing Unmanned Aerial System (RWUAS) Capability Concept Demonstration (CCD) contract; in matt-black c/s with 'Agusta Westland' titles on the upper tailboom and the inscription 'RUAS' below the rotor-head; f/n Swidnik 19oct13, flying; pilotless trials at Llanbedr (North Wales) in late May 2015 included 27 hours of demonstration flying and 22 automatic simulated deck landings onto a towed trailer that replicated the deck of a frigate (there is a photo of the helicopter flying with no 'driver' 19may15); l/n Swidnik 12may16; canx 22nov17 as sold
66 02 01	0201	SW-4	Polish Air Force	f/f	08nov04 ?	first production helicopter; in all-green c/s, no titles; presented to the public Swidnik 15nov04; was to undergo military qualification trials dec04/apr05; was to be handed over to the Air Force Flying School (WSO SP) at Deblin apr05; l/n Deblin-Irena 16nov06, with 'Puszczyk' (Tawny Owl) painted on
60 02 02	6601	SW-4	Polish Air Force	LCJ	19mar07	c/n not confirmed; l/n Deblin 18aug17
	SP-PSY	SW-4	PZL Swidnik	mfd	27may05	rgd 06jun05; initially in all-white c/s, no titles; f/n QYD 15jul05; seen Paderborn 14jul06 in white/red c/s, no titles; l/n as such FAB 21jul06; seen SSN 17oct07 in white/red/black c/s, no titles; canx 19oct07, 06dec07 & 10jan08 !
66 02 03	HL9402	SW-4	Ace Air	SSN	01feb08	according to register rgd 26feb08 to Seoultrejeo; l/n GMP 23feb10; current aug18
	0203	SW-4	Polish Air Force	Krz	09nov06	handed over 16nov06 at Deblin; opb 1. OSzL; l/n Tomaszow Mazowiecki 08apr09
	6602	SW-4	Polish Air Force	Dbl	19jun10	l/n Radom 26aug18
66 02 04	6603	SW-4	Polish Air Force	Swd	26oct07	ready for delivery; l/n Radom 24aug13
66 02 05	6604	SW-4	Polish Air Force	Swd	26oct07	ready for delivery; l/n Radom 26aug18
66 03 01	6605	SW-4	Polish Air Force	Msl	30aug08	in primer on the assembly line 26oct07; l/n Radom 26aug18
66 03 02	6606	SW-4	Polish Air Force	Dbl	24jun08	in primer on the assembly line 26oct07; l/n Radom 26aug18
66 03 03	6607	SW-4	Polish Air Force	Gzk	06jun08	l/n Radom 26aug18
66 03 04	6608	SW-4	Polish Air Force	Dbl	11jun08	in primer on the assembly line 26oct07; l/n Ketrzyn 31jul15
66 03 05	6609	SW-4	Polish Air Force	Swd	09jun08	under final assembly; in camo c/s; l/n Deblin 18aug17
66 03 06	6610	SW-4	Polish Air Force	Dbl	09jun09	l/n Deblin 18aug17
66 03 07	6611	SW-4	Polish Air Force	Dbl	09jun09	in primer on the assembly line 09jun08; l/n Deblin 18aug17
66 03 08	6612	SW-4	Polish Air Force	Dbl	11aug09	in primer on the assembly line 09jun08; l/n Deblin 18aug17
66 03 09	6613	SW-4	Polish Air Force	ph.	12nov08	in primer on the assembly line 09jun08; l/n Deblin 18aug17
66 03 10	6614	SW-4	Polish Air Force	ph.	12nov08	in primer on the assembly line 09jun08; l/n Deblin 18aug17
66 03 11	6615	SW-4	Polish Air Force	Dbl	may09	l/n Poznan-Krzyszyn 04oct11
66 03 12	6616	SW-4	Polish Air Force	QFO	19sep09	l/n Deblin 18aug17
66 03 13	6617	SW-4	Polish Air Force	Dbl	11aug09	l/n Deblin 18aug17
66 03 14	6618	SW-4	Polish Air Force	Swd	aug09	l/n Radom 26aug18
66 03 15	6619	SW-4	Polish Air Force	Swd	aug09	l/n Deblin 17sep16
66 03 16	6620	SW-4	Polish Air Force	WAW	04dec09	l/n Deblin 18aug17
66 03 17	6621	SW-4	Polish Air Force	Dbl	19jun10	l/n Radom 26aug18
66 03 18	6622	SW-4	Polish Air Force	SXF	08jun10	l/n Radom 26aug18
66 03 19	6623	SW-4	Polish Air Force	Dbl	19jun10	l/n Deblin 18aug17
66 03 20	6624	SW-4	Polish Air Force	Dbl	19jun10	l/n Deblin 18aug17

60 03 21	SP-SWV (1)	SW-4	no titles	mfd	04mar08	f/n Swidnik 09jun08; in white/red/black c/s
	HL9403	SW-4	Yech'on Astronom	rgd	15dec09	to Yech'on Astronomical Space Center; canx 27dec12 as w/o !
60 03 22	SP-SWV (2)	SW-4	no titles			test registration; seen in primer on the assembly line 09jun08; photo in silver/blue c/s, date unknown
	UR-SASW	SW-4	privately owned	Swd	30oct08	in silver/blue c/s, no titles; left Swidnik 30oct08 on its delivery flight; based at IEV; l/n IEV 25jul10; no longer on register 30jan12
	UR-SAS	SW-4	privately owned	rgd	26jun13	to Jortrom Enterprises of Cyprus; imported from Cyprus to Ukraine 22jul13 and exported from Ukraine to PZL Swidnik 09nov13; canx between 28mar14 and 28jun14; offered for sale by SpetsAvia, for \$ 750,000; seen Swidnik 28jul15 without any markings
	SP-TKW	SW-4		ph.	07oct18	at Krakow Pobiednik Wielke
60 03 23	SP-SWV (3)	SW-4	no titles	Swd	28oct09	in white/orange c/s
	B-1125L	SW-4	Chinese titles	rgd	26feb10	at Jiujiang; c/n not confirmed but in the same c/s
	B-7790	SW-4	THXAC	rgd	29oct10	Tianyi Helicopter Xinjiang Airlines Company; current 27sep14
60 03 24	SP-SWV (4)	SW-4	no titles	Swd	28oct09	in red/white c/s; l/n Swidnik 13nov09
	B-7791	SW-4	THXAC	rgd	29oct10	Tianyi Helicopter Xinjiang Airlines Company; canx jan14
66 03 25 ?	6625	SW-4	Polish Air Force	d/d	14apr10	
60 04 01	SP-SSW	SW-4	PZL Swidnik	rgd	21apr10	seen flying Zamosc-Mokre 11jun11 all-white c/s, black reg. & small PZL SW-4 titles; l/n Swidnik 02jul11; badly damaged at Fairbanks International Airport, AK on 15jan12 during cold-weather trials; canx 29sep15 as permanently wfu, see next line
	0401	SW-4	Polish Air Force	ph.	03sep12	displayed at the MSPO 2012 fair at Kielce with 'Agusta Westland' titles on the upper tail boom, as an armed version; l/n Radom 24aug13; is this a real chopper or a mock-up or just a display item after the Fairbanks mishap ?
	I-UASG	SW-4	RUAS	ph.	04sep18	reported with given c/n; was displayed at the MSPO at Kielce
60 04 02	SP-SST	SW-4	PZL Swidnik	rgd	12jul10	f/n FAB 16jun10; l/n FAB 26jul10; canx 26jul11 as 'sold abroad'
	B-7792	SW-4	THXAC	rgd	14dec11	Tianyi Helicopter Xinjiang Airlines Company; either B-7790/1/2 crashed on a spraying mission 16jun13 but still current on the register 27sep14
60 04 03	SP-SWV (5)	SW-4	PZL Swidnik	rgd	21jul11	in black/golden c/s; displayed at the Latin American Business Aviation Conference & Exhibition (LABACE) at São Paulo-Congonhas 11/13aug11; canx 11oct11
	PP-MHJ	SW-4	N. Correia Constr.	rgd	17nov11	in black/golden c/s, no titles; f/n BFH 29mar12; l/n BFH 11aug17
60 04 04	SP-SWY	SW-4	Agusta Westland	rgd	30sep11	seen on the assembly line 02jul11; opb PZL Swidnik
	I-ATWA	SW-4	Agusta Westland	ph.	26feb14	displayed at the "HAI HELI-EXPO 2014" helicopter exhibition in the Anaheim Convention Center 24/27feb14
	SP-SWY	AW009	Finmeccanica	ph.	01mar16	in black c/s with multi-coloured trim; displayed at the "HAI HELI-EXPO 2016" helicopter exhibition in the Kentucky Exposition Center at Louisville 29feb16/03mar16
60 04 05	SP-SWO	SW-4	PZL-Swidnik	res	end2011	
60 04 07	SP-SWN	SW-4	Agusta Westland	res	end2011	opb PZL-Swidnik; photo 26mar12 at Biala Podlaska all-white c/s, blue/red sunburst trim, 'Agusta Westland' titles; l/n as such active Swidnik 21jun18
	SP-SWN	SW-4	PZL-Swidnik	rgd	27mar13	f/n Hradec Kralove 11may13; l/n Swidnik 28jul15
60 04 08	--	SW-4		Swi	28jul15	under assembly for 'Tuncang' company, China
	SP-SIV	SW-4	PZL-Swidnik	rgd	24may16	canx 05jul17 as to China
	B-70XQ	SW-4	Tunchang G.A.	rgd	23nov17	
60 04 09	--	SW-4		Swi	28jul15	under assembly for 'Tuncang' company, China
	SP-SIT	SW-4	PZL-Swidnik	rgd	08apr16	was already seen flying Swidnik 06apr16; l/n Swidnik 12may16; canx 30may16 as to China
	B-70PF	SW-4		rgd	14dec16	to Hubei Tuncang General Aviation Co. Ltd
60 04 10	SP-SIA	SW-4	PZL Swidnik	rgd	29sep16	in black/golden c/s, no titles; f/n Deputyczne Królewskie 11jun17; l/n Radom 25aug18

For the Polish built SW-4s, registration SP-SWV is reserved for PZL Swidnik to make test flights. Many SW-4s reportedly have been sold to China and the factory received marks SP-SWV for each SW-4 they want to sell (only for test flight), they do not register any of these SW-4s.