

Antonov Blacklist

Hundreds of the aircraft have been targeted for grounding until their airworthiness is assured.

BY MARK LACAGNINA

In an unprecedented action, a list of Antonov aircraft that apparently are being operated in violation of requirements for continued airworthiness has been published by the International Civil Aviation Organization (ICAO).

“The primary purpose for publishing the list is to share this important safety information,” said Paul Lamy, chief of ICAO’s Flight Safety Section. “The action is very much in line with the organization’s general policy of transparency and sharing of information, which was reinforced by the conference of directors general of civil aviation that was held in March 2006.”

The conference, convened in Montreal to forge a “global strategy for aviation safety,” included a presentation by Ukraine, home of the Antonov Aviation Scientific/Technical Complex (ASTC), about insufficient communication between countries in which aircraft are registered and countries in which they were designed and/or manufactured.

The presentation provided the following example: In 2004 and 2005, Ukraine’s State Aviation Administration (SAA) sent information to several African civil aviation authorities (CAAs), requesting that they take action on aircraft that had been identified as unairworthy. The presentation said that because of an “insufficient level of cooperation” and communication, the SAA does not know if the requested action was taken. Moreover, the presentation said that an analysis of 10 fatal Antonov aircraft accidents in Africa in 2005 indicated that eight of the aircraft were not airworthy.

Among Ukraine’s recommendations was that ICAO and its contracting states “take adequate measures to ensure an exchange of mandatory safety-related information ... and to

improve an effective control on continuing airworthiness.”¹

Biplanes Top List

In August 2006, Antonov gave the SAA a list of 436 aircraft that it does not consider airworthy. The SAA promptly forwarded the list to ICAO and authorized the organization to publish it.²

The list includes the names of the 16 countries, all ICAO contracting states, in which the



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Eight An-24s are on Antonov's list of aircraft whose airworthiness cannot be confirmed. Introduced in 1959, the twin-turboprop carried more than one-third of the passengers transported in the Soviet Union for several decades. The aircraft reportedly has a design service life of 30,000 hours.

aircraft are registered, the aircraft models, serial numbers, registration numbers, dates of manufacture, airworthiness expiration dates, and operators (see appendix, page 22).

The list includes 362 An-2s operated domestically by 35 airlines in Kazakhstan. The An-2 is a 5,500-kg (12,125-lb) biplane powered by a 746-kW (1,000-hp), nine-cylinder radial engine. Originally designed for aerial application, the aircraft first flew in 1947 and later was modified

to carry cargo or as many as 10 passengers. The SAA said that Kazakhstan's Civil Aviation Committee did not comply with ICAO requirements when it established overhaul periods allowing extension of the service lives of the An-2s registered in the country without Antonov's participation.

Also on the list are the following aircraft, which are not considered airworthy because they apparently had not been returned to



After overrunning the runway at N'Djamena, Chad, in October 2004, this An-12 reportedly was returned to service following repair of the landing gear.

Kazakhstan's extension of An-2 service life without Antonov's participation landed 362 of the workhorse biplanes on the blacklist.

Antonov for overhauls that were required before they reached established service-life limits:

- Twenty-seven An-12s, a four-engine turboprop freighter with a maximum takeoff weight of 61,000 kg (134,481 lb), which also can carry 14 passengers;
- Twenty-three An-28s, a 5,700-kg (12,500-lb) general-purpose twin-turboprop;
- Ten An-26s, a 24,000-kg (52,910-lb) pressurized short-haul twin-turboprop that can carry freight or as many as 40 passengers;
- Eight An-24s, a 21,000-kg (46,297-lb) predecessor of the An-26;
- Three An-32s, a development of the An-26 for operation at high density altitudes;
- One An-8, a military transport that preceded the An-12;
- One An-72, a 33,000-kg (72,752-kg) twin-turbofan, short-takeoff-and-landing transport that replaced the An-26; and,
- One An-74, a development of the An-72 for operation in arctic regions.

In addition to the 362 An-2s, Kazakhstan's registry includes one of the An-24s on the list. Moldova has the second largest number

of aircraft, 18, on its registry, followed by the Democratic Republic of the Congo, with eight; Congo and Sudan, with seven each; Angola, Sierra Leone, Surinam and Togo, with five each; Kenya, with four; Venezuela, with three; Iran, with two; and Cambodia, Nicaragua, South Africa and Uganda, with one each.

The airworthiness-expiration dates range from October 1991, for two An-28s in Sudan, to June 2006, for an An-12 in Congo.

Communications Breakdown

ICAO said that there was a breakdown in communications between Antonov and the Ukraine SAA, and the states of registry of the aircraft. "There is an international standard that requires the state of registry and the state of manufacture or design to communicate regularly," Lamy said.

ICAO Annex 8, *Airworthiness of Aircraft*, requires, for example, that states of design notify the states of registry of any information essential to the continuing airworthiness of the aircraft. The states of registry, typically through their CAAs, are responsible for ensuring that every aircraft on their registers is maintained in an airworthy condition. States of registry also are responsible for establishing the channels for communication between their CAAs and the aircraft operators in their countries, and the states of design.

ICAO believes that in some cases, the calls for action on unairworthy aircraft that were issued by the Ukraine SAA in 2004 and 2005 either did not reach the responsible parties or were ignored. Publication of the list was an effort to resolve both problems.

"Making this information public was very important because, of all the people who should have received the information, there were quite a few who did not receive it because of a breakdown in communications," Lamy said. "In a minority of cases — but we still have to take them into account — people may have chosen to look the other way. The ICAO policy on transparency and the sharing information is not to allow this kind of behavior. By making the information



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public, we want to make sure that there is no possibility of looking the other way.”

Annex 8 says, “Any failure to maintain an aircraft in an airworthy condition as defined by the appropriate airworthiness requirements shall render the aircraft ineligible for operation until the aircraft is restored in an airworthy condition.” Accordingly, ICAO expects the aircraft on the list to be grounded by their states of registry or by other states in which they are operated until their airworthiness is assured.

Others to Follow?

ICAO anticipates that other states of design will come forward with lists of suspected unairworthy aircraft for publication. “We are hoping that they will,” said Lamy. “But you have to be aware that this situation is specific to aircraft built in states that used to be part of the Soviet Union. Service lives have been established for these aircraft; they are time-limited and have to come back to the factory every few years to be overhauled and restored to their original airworthiness conditions.”

Service lives typically are not established for Western-built aircraft. Their certificates of airworthiness are maintained, in part, through on-condition maintenance and inspection, and

compliance with airworthiness directives and any special conditions established for continuing airworthiness. ●

Notes

1. Among the actions taken by the International Civil Aviation Organization (ICAO) in response to recommendations made during the conference was the establishment of the Flight Safety Information Exchange (FSIX) Web site, <www.icao.int/fsix>. In addition to the list of apparently unairworthy Antonov aircraft, the site at press time included several ICAO Universal Safety Oversight Audit Program reports voluntarily authorized for public release by states and a July 2006 report by the United Nations Security Council that, ICAO says, contains information on “illegal and unsafe air operations concerning the Democratic Republic of the Congo.”
2. William R. Voss, president and CEO of Flight Safety Foundation, presented citations for outstanding service to Anatoly Kolisnyk, first deputy chairman of the Ukraine State Aviation Administration, and to Dmitry Kiva, general designer of the Antonov Aviation Scientific/Technical Complex, during the FSF International Air Safety Seminar in October 2006. Voss cited Kolisnyk and Kiva for “their personal commitments to safety ... by making critical airworthiness information available to states, operators and the public.”

Antonov built more than 1,000 An-12 freighters for a variety of military and civil applications from 1959 through 1973. The blacklist includes 27 of the aircraft.

Appendix

Aircraft Considered Unairworthy by the Antonov Aviation Scientific/Technical Complex

State of Registry	Antonov Aircraft Model	Serial Number	Registration Number	Date of Manufacture	Airworthiness Expiration Date	Operator
Angola	An-12	4342209	D2-MBH	29/07/1964	29/01/1998	unknown
Angola	An-12	3402007	D2-MBE	1964	1999	unknown
Angola	An-12	5343405	D2-MAZ	30/09/1965	20/01/1997	unknown
Angola	An-12	2340608	D2-MBD	1962	1997 Service not extended to civil aviation.	unknown
Angola	An-12	7345210	D2-FRI	1967	1997 Service not extended to civil aviation.	unknown
Cambodia	An-24B	99902009	XU-335	30/06/1969	01/07/2005	Imtrec Aviation Airlines
Democratic Republic of the Congo	An-28	1AI006-03	9XR-KI	17/04/1989	17/04/1993	unknown
Democratic Republic of the Congo	An-28	1AI005-09	9Q-GZN	30/07/1988	30/07/1992	Blue Airlines
Democratic Republic of the Congo	An-28	1AI006-01	9Q-GZL	13/04/1989	13/04/1993	Blue Airlines
Democratic Republic of the Congo	An-28	1AI008-05	9XR-KV	10/07/1990	10/07/1994	Blue Airlines
Democratic Republic of the Congo	An-28	1AI008-09	9Q-CSP	16/08/1990	16/08/1997	Malu Aviation Airlines
Democratic Republic of the Congo	An-28	1AI008-21	EX-018	29/09/1990	29/09/1994	unknown
Democratic Republic of the Congo	An-28	1AI005-10	9Q-GZM	28/07/1988	28/07/1992	Blue Airlines
Democratic Republic of the Congo	An-32	22-10	9Q-CMD	31/01/1990	31/07/2002	unknown
Iran	An-26B	140-01	EP-SAK	04/02/1985	05/12/2006	Saffat Aviation Services Airlines
Iran	An-26B	140-02	EP-SAJ	13/02/1985	23/07/2004	Saffat Aviation Services Airlines
Kenya	An-28	1AI006-11	9XR-IM	12/06/1989	12/06/1993	unknown
Kenya	An-28	1AI007-06	9XR-SR	14/12/1989	14/06/2003	unknown
Kenya	An-28	1AI004-15	9XR-KG	28/02/1988	28/02/2006	SPD Savran P.V.
Kenya	An-28	1AI0010-02	ER-AKA	25/09/1991	25/09/1995	Valan Airlines, Moldova
Nicaragua	An-32	30-07	YN-CGA	31/03/1992	31/12/2003	Aerocharter Airlines
Republic of Kazakhstan*	An-2					
Republic of Kazakhstan	An-24	10-04	UN-47736	23/12/1966	21/11/2005	ACA Airlines
Republic of Moldova	An-12	9346909	ER-AXY	1969	31/05/2001	unknown
Republic of Moldova	An-12	2340605	ER-ADT	1962	01/01/1992	unknown
Republic of Moldova	An-12	9346502	ER-AXD	1969	1999	unknown
Republic of Moldova	An-12	2340403	ER-ADD	1962	29/12/1999	unknown
Republic of Moldova	An-12	00347407	ER-AXG	15/08/1970	2000	Tiramavia S.R.L. Airlines
Republic of Moldova	An-24	27307605	ER-47698	25/02/1972	06/12/2001	Air Moldova Airlines
Republic of Moldova	An-24	108-10B	ER-AFB	23/12/1978	20/04/2004	Aerocom Airlines
Republic of Moldova	An-24	37308801	ER-AZN	24/07/1973	24/01/2006	Pecotox Airlines
Republic of Moldova	An-24	17306907	ER-AWD	04/1971	01/2003	Aerocom Airlines
Republic of Moldova	An-24	87304102	ER-46417	02/1968	06/2001	Air Moldova Airlines
Republic of Moldova	An-24	97305109	ER-46599	04/1969	02/2001	Air Moldova Airlines
Republic of Moldova	An-26	126-03	ER-AFU	15/01/1983	20/12/2001	Aerocom Airlines
Republic of Moldova	An-26	117-05	ER-AFE	08/12/1981	08/12/2001	Aerocom Airlines
Republic of Moldova	An-26	90-05	ER-AZT	28/12/1979	17/09/2004	Aerocom Airlines
Republic of Moldova	An-26	22-06	ER-AZE	30/05/1974	30/06/1994	Aerocom Airlines

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State of Registry	Antonov Aircraft Model	Serial Number	Registration Number	Date of Manufacture	Airworthiness Expiration Date	Operator
Republic of Moldova	An-26	108-07	ER-26046	27/02/1981	27/02/2001	Air Moldova Airlines
Republic of Moldova	An-72	365.720.94889	ER-AEJ	23/01/1992	23/01/2003	unknown
Republic of Moldova	An-74	365.470.95898	ER-AEN	31/03/1992	21/03/2001	Renan, Kishinev
Republic of South Africa	An-26	42-06	9U-BNO	28/07/1976	27/07/2004	Inter Sky Airline, Swaziland
Republic of the Congo	An-12	347003	3C-AAL	25/02/1970	25/05/2005	Trans Air Congo
Republic of the Congo	An-12	4341705	UN-11002	29/12/1963	15/03/2001	Trans Air Congo
Republic of the Congo	An-12	8345504	TN-AHD	31/03/1968	30/06/2004	Natalco Congo
Republic of the Congo	An-12	401912	3X-GDM	14/07/1964	06/07/2005	Aero-Service
Republic of the Congo	An-12	5343108	4L-12008	31/05/1965	18/02/2006	Aero Freight Partner
Republic of the Congo	An-12	402006	TN-AGK	29/11/1963	28/06/2006	Trans Air Congo
Republic of the Congo	An-26	86-02	9Q-CVR	31/08/1979	31/01/2004	Aviatrade Congo
Republic of Togo	An-12	2340606	S9DAF	30/08/1962	06/06/2001	unknown
Republic of Togo	An-12	1340206	TN-AHA	31/12/1961	Service not extended according to civil aviation documentation.	unknown
Republic of Togo	An-12	901306	TN-AGY	05/1960	Service not extended according to civil aviation documentation.	unknown
Republic of Togo	An-12	7345403	TN-AGZ	23/11/1967	09/1995	unknown
Republic of Togo	An-12	8345805	UN-11376	01/07/1968	Service not extended according to civil aviation documentation.	unknown
Sierra Leone	An-8	OG 3410	9L-LEO	23/06/1960	23/06/1995	unknown
Sierra Leone	An-12	5343408	9L-LEA	30/09/1965	22/12/1996	unknown
Sierra Leone	An-12	4341803	9L-LEA	02/1964	02/1999	unknown
Sierra Leone	An-12	2340805	9L-LDW	30/11/1962	29/08/2003	unknown
Sierra Leone	An-32	22-06	9L-LDO	22/12/1989	22/06/2003	unknown
Sudan	An-12	7345310	ST-ARV	25/12/1967	30/03/2006	Azza Transport
Sudan	An-12	9346504	ST-AQQ	30/06/1969	30/12/2003	Sudanese State
Sudan	An-26	102-05	ST-ARO	30/09/1980	30/09/2004	Ababeel
Sudan	An-28	1AJ004-06	ER-AIP	26/07/1988	26/07/1992	AU/AMIS
Sudan	An-28	1AJ004-07	ER-AJH	28/10/1987	28/10/1991	AU/AMIS
Sudan	An-28	1AJ004-08	ST-GWA	27/10/1987	27/10/1991	G. Wings, Poland
Sudan	An-28	1AJ0010-19	EK-28019	25/03/1992	25/03/1996	Badr Airlines
Surinam	An-28	1AI007-21	PZ-TSA	22/11/1990	22/11/1994	Blue Wing Airlines
Surinam	An-28	1AI007-10	PZ-TSV	18/01/1990	18/01/1994	Blue Wing Airlines
Surinam	An-28	1AI007-20	PZ-TSN	22/11/1990	22/11/1994	Blue Wing Airlines
Surinam	An-28	1AI008-04	PZ-TST	10/07/1990	10/07/1994	Blue Wing Airlines
Surinam	An-28	1AI007-17	PZ-TSO	02/04/1990	02/04/1994	Blue Wing Airlines
Uganda	An-12	7344801	3C-AAG	28/02/1967	28/03/2003	unknown
Venezuela	An-28	1AI009-11	28945	02/01/1991	02/01/1995	Angar 74
Venezuela	An-28	1AI007-15	28730	06/02/1990	06/02/1994	Angar 74
Venezuela	An-28	1AI007-12	28727	25/01/1990	25/01/1994	Angar 74

* Antonov said that 362 An-2 aircraft are being operated by 35 airlines in the Republic of Kazakhstan. In accordance with Decree No. 272, dated 30 November 2005, issued by the chairman of the Civil Aviation Committee of the Republic of Kazakhstan, rules for the extension of the service life of An-2 civil aviation aircraft in the Republic of Kazakhstan have been established with respect to overhaul periods. These rules provide for procedures for extension without the participation of the aircraft designer, which runs contrary to ICAO regulatory documents.

Source: International Civil Aviation Organization