



TYPE-CERTIFICATE DATA SHEET FOR NOISE

No. EASA.A.182

for

BAE 146 / AVRO 146-RJ Series

Type Certificate Holder:

BAE Systems (Operations) Ltd

Prestwick International Airport

Monkton, Ayrshire, Scotland

KA9 2RW

United Kingdom

For models: AVRO 146-RJ100
AVRO 146-RJ70
AVRO 146-RJ85
BAe 146 Series 100-01
BAe 146 Series 100-21
BAe 146 Series 100-31
BAe 146 Series 200-01
BAe 146 Series 200-11
BAe 146 Series 300
BAe 146 Series 300-11
BAe 146 Series 300-21



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Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **AVRO 146-RJ100**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **LF507-1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2043	46,039	40,142	88.1	95.0	86.1	93.8	97.6	98.9	-
A19172	45,300	40,142	88.1	95.0	85.5	93.7	97.6	98.9	-
A2042	45,132	39,240	88.1	94.9	85.4	93.6	97.4	98.9	-
A5992	44,999	40,142	88.1	94.9	85.3	93.6	97.6	98.8	-
A8544	44,225	40,142	88.2	94.9	84.7	93.5	97.6	98.8	-
A8912	44,225	39,240	88.2	94.9	84.7	93.5	97.4	98.8	-
A2041	44,225	38,329	88.2	94.9	84.7	93.5	97.3	98.8	-
A19173	44,000	40,142	88.2	94.9	84.5	93.5	97.6	98.8	-
A2040	43,091	37,648	88.3	94.8	83.8	93.4	97.2	98.7	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **AVRO 146-RJ70**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **LF507-1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2047	40,823	37,875	86.9	94.6	84.1	93.1	97.5	98.5	-
A2046	38,102	37,875	87.2	94.3	81.9	92.7	97.5	98.3	-
A2045	36,287	36,060	87.4	94.1	80.5	92.4	97.2	98.1	-
A2044	36,287	35,150	87.4	94.1	80.5	92.4	97.1	98.1	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **AVRO 146-RJ70**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **LF507-1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **HCM00020R (Full thrust variant)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2052	43,091	37,875	88.6	94.8	83.6	93.4	97.5	98.7	-
A2051	40,823	37,875	88.8	94.6	82.0	93.1	97.5	98.5	-
A2050	38,102	37,875	89.1	94.3	80.2	92.7	97.5	98.3	-
A2049	36,287	36,060	89.2	94.1	79.1	92.4	97.2	98.1	-
A2048	36,287	35,150	89.2	94.1	79.1	92.4	97.1	98.1	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **AVRO 146-RJ85**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **LF507-1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2058	43,998	38,555	88.4	94.9	84.3	93.5	97.3	98.8	-
A2057	42,184	38,555	88.6	94.7	83.0	93.2	97.3	98.6	-
A2056	42,184	36,740	88.6	94.7	83.0	93.2	97.1	98.6	-
A2055	40,597	35,150	88.7	94.6	81.9	93.0	96.9	98.5	-
A2054	38,555	38,555	88.9	94.4	80.4	92.7	97.3	98.3	-
A2053	36,287	35,150	89.1	94.1	79.0	92.4	96.9	98.1	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **AVRO 146-RJ85**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **LF507-1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **HCM60843A (Reduction of maximum take-off weight to 41.308 kg)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A16307	41,308	38,555	88.6	94.6	82.4	93.1	97.3	98.6	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **AVRO 146-RJ85**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **LF507-1F**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **HCM60856A (Reduction of maximum take-off weight to 41.800 kg)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A13630	41,800	38,555	88.6	94.7	82.7	93.2	97.3	98.6	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 100-01**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-3A**

Additional modifications essential to meet the requirements or needed to attain the certified noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2059	34,473	32,817	88.0	94.0	79.0	92.1	94.9	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 100-01**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2060	34,473	32,817	88.0	94.0	79.0	92.1	94.9	98.0	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 100-21**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-3A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2061	37,308	33,270	87.6	94.2	82.3	92.5	95.2	98.2	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 100-21**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2062	37,308	33,270	87.6	94.2	82.3	92.5	95.2	98.2	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 100-31**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2063	38,102	35,154	87.7	94.3	81.8	92.7	95.6	98.3	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 200-01**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-3A**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2064	40,597	35,153	87.3	94.6	84.9	93.0	95.6	98.5	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 200-01**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2065	40,597	35,153	87.3	94.6	84.9	93.0	95.6	98.5	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 200-11**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2066	42,184	36,741	87.3	94.7	85.2	93.2	95.8	98.6	-
A5808	41,368	35,788	87.3	94.6	85.2	93.1	95.8	98.6	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 300**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A8998	44,225	38,329	86.7	94.9	86.5	93.5	95.6	98.8	-
A15901	43,091	37,648	87.0	94.8	86.0	93.4	96.0	98.7	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 300**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **LF507-1H**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **None**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2070	46,039	40,142	87.6	95.0	86.3	93.8	97.6	98.9	-
A2069	45,132	39,235	87.7	94.9	85.6	93.6	97.4	98.9	-
A2068	44,225	38,329	87.8	94.9	84.9	93.5	97.3	98.8	-
A2067	43,091	37,648	87.9	94.8	84.0	93.4	97.2	98.7	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 300-11**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2071	43,091	37,648	87.0	94.8	86.0	93.4	96.0	98.7	-
A5837	42,999	37,648	87.0	94.8	86.0	93.4	96.0	98.7	-

¹ See Note 1.



Type Certificate Holder¹ **BAE Systems (Operations) Ltd** Aircraft Type Designation¹ **BAe 146 Series 300-21**

Engine Manufacturer¹ **Lycoming** Engine Type Designation¹ **ALF 502R-5**

Additional modifications essential to meet the requirements or needed to attain the certificated noise levels¹ **Standard Option 71-1 (Nacelle acoustic treatment)**

Noise Certification Basis **ICAO Annex 16, Volume I** Edition / Amendment Chapter¹ **3**

EASA Record No.	Maximum Mass		Lateral EPNL		Flyover EPNL		Approach EPNL		See Note
	Take-off ¹ (kg)	Landing ¹ (kg)	Level ¹	Limit	Level ¹	Limit	Level ¹	Limit	
A2072	44,225	38,329	86.7	94.9	86.5	93.5	95.6	98.8	-

¹ See Note 1.



TCDSN EASA.A.182 Notes

1. In cases where it is appropriate to issue a noise certificate, items so marked shall be included on EASA Form 45.

Change Record

Issue	Date	Changes
Issue 1	04 November 2009	Initial Issue
Issue 2	21 July 2010	Revised
Issue 3	20 May 2011	Revised
Issue 4	29 May 2017	Added records A19172 and A19173; removed record A2073 (BAE 146 Series 301)

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