6
US Department
of Transportation
Federal Aviation
Administration

MAJOR REPAIR AND ALTERATION

OMB No. 2120-0020 Exp: 01/31/2023	Electronic Tracking Number
	For FAA Use Only

of Transportation Federal Aviation Administration	ion Ion			owerplant, F				-				For FAA Use Only
instruction	TIONS: Print s and dispos tion. (49 U.S	sition of this	s form.	es. See Title 1 This report is r	4 CF requir	R	§43.9, Part 4 by law (49 U.	3 Appendi S.C. §447	ix B, an (01). Fa	d AC 43.9- ilure to repo	1 (or su ort can re	bsequent revision thereof) for esult in a civil penalty for each
1. Aircraft	N27FB	y and Reg	istratio	n Mark				Serial N	[№] .E-	3727		
i. Aircraft	Make R	ayth	eo	n				Model	G36	6		Series Bonanza
	Name (As	s shown or	n regist	ration certificate)			Addres	s (As st	hown on reg	istration	certificate)
2. Owner	T2 Avi	ation L	LC							WY 160 #200		State Nevada
								Zip	Pahrump 89060		Cour	
						3. 1	For FAA Use					
4. Ty	pe					5. 1	Unit Identifica	ation				
Repair	Alteration	Un	Unit Make Model				Model		Serial No.			
	×	AIRFRAN	ΛE	Raytheon			(As de	escribed	in Item 1 a	bove)	E-3727	
		POWERF	PLANT	т								
		PROPEL	LER	R								
			Туре									
		APPLIAN	CE	Manufacturer								
					6.	Co	onformity Sta	tement				
A. Agency's N	Name and Ad	ddress				B.	Kind of Agend					
	rike Aviation				_	X	U. S. Certific				_	nufacturer
Address 2705 Amport				State Nevada	-			rtificated Mechanic C. Certificate No. Repair Station				
Zip 89032	Cou	ntry United S	States		_			Maintenance Organization A&P 4484/32				
have be	en made in	accordanc	e with	the requirement the best of my	s of F know	Part rled	t 43 of the U.S Ige.	5 above 5. Federal	and des Aviation	scribed on the Regulation	ne revers	se or attachments hereto at the information
Extended ran	ge fuel		-	ture/Date of Aut								
per 14 CFR P App. B	art 43		w	186	<u> </u>	1		5-	18-	202	1	
				7.	. Арр	rov	val for Return					
Pursuant to Administrate	the author or of the Fed	rity given eral Aviatio	person on Adm	ns specified be ninistration and i	elow, is	the		Approv		as inspect Rejecte		ne manner prescribed by the
Ins	A Fit. Standa	ards	Manu	facturer		Ma	aintenance O	rganization	n	360000 000000		ved by Canadian Transport
BY	A Designee		Repa	ir Station	X	In	spection Auth	orization		Other (Spe	cify)	
Certificate or		-	Signat	ture/Date of Aut	horiz	ed l	Individual					
esignation No	0. 0.10 / 9			Remon a				5.10	. 0 -	. 0 1		
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NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished (If more space is required, attach additional sheets. Identify with aircraft nati	onality and registration mark and date	te work completed.)
	N27FB	05-18-2021
	Nationality and Registration Mark	Date
Installed STC SA1176SO Aileron and Wing Flap Gap Test flown aircraft, operational check good. All work of Installation Manual B6300 Rev.F	Seals. Updated weight lone in accordance with	and balance in POH. D'Shannon Products
•		
		•
Additional Sheets	s Are Attached	

Bepartment of Transportation -- Federal Abiation Administration

Supplemental Type Certificate

Number SALITOSO

This cortificate issued to

D'Shannon Products Ltd. 1309 County Road 134 Buffalo, MN 55313

certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereco meets the airecerthiness requirements of Part 3 of the Civil Air Regulations.)

Criginal Product Type Certificate Number: A-777 and 3A15

. Make . Hawker Beechcraft Corporation

Model:

See Continuation Sheet

Description of Type Design Change: Installation of Aileron and Wing Flap Gap Seals in accordance with D'Shannon Products Drawing B6300, Revision A, dated October 8, 1980, or later FAA approved revision.

Limitations and Conditions :

- 1) Compatibility of this design change with previously approved modifications must be determined by the installer.
- 2) This approval should not be extended to other specific airplanes of this model on which previously approved modifications are incorporated, unless it is determined that the interrelationship between this change and any other of those previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane.
- 3) If the holder agrees to permit another person to use this certificate to alter a product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis forcest the shall remain in effect until surrendered, suspended, received or a termingotate of the support to the support of t Model GSIO COME STEB SOME E-3727 and the return of the registration slip is validated. KH & OBOST Approved By SE_Dete 1112

Late of application : August 1, 1980

Dale reissued . June 4, 2009; July 7, 2009

Lute of issuance October 10, 1980

Date amended . January 6, 2010

By direction of the Administrator

Many Ellen a. Selven

(Signature)

Mary Ellen A. Schutt

Manager, Airframe and Administrative Branch

Chicago Aircraft Certification Office

(Title)



Bepartment of Transportation - Federal Abiation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SAI176SO

Date of Issuance: October 10, 1980 Date Amended: January 6, 2010

	Eligible M	odels
	Type Certificate	Models
	A-777	35 A35 B35 C35 35R D35 E35 F35 G35
	3A15	H35 J35 K35 M35 35-33
		N35 35-A33 35-B33 P-35 S35
A the later of the	Con Edition 379	35-C33 E33 F33 V35 V35A
ST STORY STO	De Manilani	V35B 35-C33A E33A
A transfer of the residence of the later of		36 A36 F33A G33
WAR COLOR		A36TC G36

----END----

D' Shannon Products, LTD

Aileron & Flap Gap Seal Kit

Drawing List DLB-6300

Issued: 3/24/2009

Page 1 of 1

Oromina	Drawing		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	200					Revisions		Super
Number	Title	nemarks Next	Assv.	1	2 3	4	V	8	ပ	D	Cedes
					1						
					-						
	Manufacturing Drawings				-						
B6301	Wing Bolt Fairing Extension. Plate.	2 pgs.			-	L	10/08/80	06/24/95	01/22/96	03/24/09	
B6302	Bottom Flap Root Seal	3 pgs.			-	L	10/08/80	06/28/95	01/22/96	03/24/09	
B6303	Inboard Top Gap Seal Flap.	3 pgs.					10/08/80	06/24/95	01/22/96	03/24/09	
B6304	Aileron Gap Seal.	3 pgs.		1		L	10/08/80	06/24/95	01/22/96	03/24/09	
Be305	Flap Gap Seal.	3 pgs.	_	A CANADA		_	10/08/80	06/24/95	01/22/96	03/24/09	
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		SAN COMPANY	EN TON								
		13									

FAA APPROVED

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CERTRAL REGION
CENTRAL REGION
C. FORMWALL

(3)
U.S. Department
of Transportation
Federal Aviation

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

OMB No.2120-0020 2/28/2011	
Forf	AA Use Only

ederal Aviation		-	e, Powerplant, P			-				
NSTRUCTIO	on of this form	r type all entries. n. This report is r	See Title CFR §43.9, required by law (49 U.	Part S.C.	43 Appendix §44701). Fa	B, and AC 4 ilure to repor	3.9-1 (or t can res	subseque ult in a civ	nt rev il pen	vision thereof) for instructions alty for each such violation
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ty and Registration N	Mark			Serial No				
1. Aircraft	N27FB					E-3727				
	Make					Model				Series
	Raythed	on			G36					Bonanza
	Name (A	s shown on registrat	tion certificate)			Address (As shown	on registrat	ion ce	rtificate)
2 0	Boudwi	n Daniel B				Address	111 Yorkt	own RD		State New Jersey
2. Owner						City Zip	Woolwich 08085		intry	Gloucester
			3 6	or F	AA Use Onl		-			
4. 1	ype		5. U	nit lo	dentification					
Repair	Alteration	Unit	Mak	е			Model			Serial No.
	X	AIRFRAME				(As described in item 1 above)			e)	
		POWERPLANT								
		PROPELLER								
		APPLIANCE Manufacturer								
Ш										
			6. C	onfo	rmity State	ment			•	
A Agonci	's Name an	d Address		T	B. Kind of					
A STATE OF THE PARTY OF THE PAR	veritt Burns dul			x	U.S. Certifica	ted Mechanic				Manufacturer
	O Box 481				Foreign Cert	ficated Mecha	nic		C.	Certificate No.
_	oughkenamon		State PA	-		Repair Station			A&I	P 3341870 IA
	9374-0481	Country Cheste	er	-	-	Maintenance Organization				
D. I certif	y that the rep have been ation furnish ge fuel per	pair and/or altera made in accorda led herein is true	tion made to the unit nce with the requiren and correct to the be /Date of Authorized I	nents est of	dentified in it s of Part 43 of f my knowled	em 5 above of the U.S. F	and des	cribed on	guia	everse or attachments tions and that the
THO INTO			7 Anne	oval	for Return 1	o Service				
Purs	uant to the a	authority given pe	ersons specified belo	w, th	e unit identif	ied in item 5	was ins	pected in	the r	manner prescribed by
	FAA Fit. Sta Inspector		Manufacturer	n an		ce Organiza	ation	Per	sons A	Appoved by Canadian ent of Transport
BY	FAA Desig	nee R	epair Station	x	Inspection	Authorizati	on	Other (S	pecify)
Certificate o	r Designation I		ignature/Date of Aut	-						
IA 3341870	IA		Cueuts	0.7	ayr	JKN		03/09/201	18	

Bepartment of Transportation — Federal Abiation Administration

Supplemental Type Certificate

Number SA04165CH

This cortificate issued to

D'Shannon Products, Ltd. 1309 County Road 134 Buffalo, MN 55313

cortifies that the change in the type design for the following product with the limitations and conditions therefor as specified horors much the aircrothings requirements of Part & of the Civil Acriation Begulations.

Criginal Product - Type Garlificate Vinneber: 3A15, A-777

Make Beechcraft Corporation

Model: 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33,

E33A, E33C, F33, F33A, F33C, G33, 35, A35, B35, C35, D35, E35, F35, G35, 35R, H35 J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36, A36, G36

Throngaline of Type Thrips Change. Installation of an Enhanced Exhaust System, D'Shannon Products, Ltd. kit DSP-KIT-15-009. Installation Instructions as listed on DSP-IM-15-009, revision IR, dated January 12, 2016, and drawing list DSP-DL-15-009, revision 1, dated January 6, 2016, or later FAA approved revision.

Similations and Conditions:

1. Compatibility of this design change with previously approved modifications must be determined by the installer.

2. A copy of this Certificate must be maintained as part of the permanent records for the modified aircand. 3. If the holder agrees to permit another person to use this certificate to alter the product, the holder

give the other person written evidence of that permission.

This artificate and the supporting data which is the basis for approval shall remain in affect until sumender suspended, recoked or a termination date is otherwise established by the Administrator of the Federal And Administration

Plate of application: July 21, 2012

Take of issuance . January 13, 2017

Date missend. January 17, 2017

Date arunded:

By direction of the Administrator

Roy E. Boffo

Manager, Propulsion and Project Management Branch

Chicago Aircraft Certification Office

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

Bepartment of Transportation — Federal Abiation Administration

Supplemental Type Certificate

Number SA368CH

cortifies that the change in the type design for the following product with in the little light and conditions therefore as specified hereon mosts the airmorthiness requirements of Alast and throofrest. Begulations.

See Aircraft Specification No. 3A15 for complete certification basis)

Friginal Broduct - Type Cartificate Number : 3A15

Made: Hawker Beechcraft Corporation

Noodel: S35 V25

Diversation of Type Divige Change

Installation of cooling air baffles in accordance with D'Shannon Products Installation Manual No. DSP-IM95-2, revision 6, dated April 16, 2002 or later FAA approved revision.

Bimilations and Conditions:

- Compatibility of this design change with previously approved modifications must be determined by the installer.
- Aircraft Specifications are the same as listed on Aircraft Specifications Number 3A15.
- 3) If the holder agrees to permit another person to use this certificate to alter a product, the holder shall give the other person written evidence of that permission.

This carlificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, recolled or a termination date is otherwise established by the Administrator of the Francel . Aciation . Administration

Date of application . April 1, 1995

Date of issuance . June 23, 1995

Dale recised . April 12, 1996, August 5, 2002, March 18, 2008, February 23, 2009, February 24, 2009 Date amended . April 9, 2003, March 27, 2008

direction of the Administrator

(Signature) Thaddeus D. Krolicki Manager, Propulsion Branch

Chicago Aircraft Certification Office

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

(2)
US Department
of Transportation
Federal Aviation

MAJOR REPAIR AND ALTERATION

OMB No. 2120-0020 Exp: 01/31/2023	Electronic Tracking Number
	For FAA Use Only

(Airframe, Powerplant, Propeller, or Appliance) Administration INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a)) Serial No. E-3727 Nationality and Registration Mark N27FB 1. Aircraft Make Series Model Bonanza Raytheon Address (As shown on registration certificate) Name (As shown on registration certificate) Address 2050 N HWY 160 #200 T2 Aviation LLC 2. Owner State Nevada Pahrump City 89060 Country United States 3. For FAA Use Only 4. Type 5. Unit Identification Serial No. Model Unit Alteration Repair Make E-3727 Raytheon (As described in Item 1 above) AIRFRAME x POWERPLANT PROPELLER Type **APPLIANCE** Manufacturer 6. Conformity Statement B. Kind of Agency A. Agency's Name and Address U. S. Certificated Mechanic Manufacturer Mark Blackwood Foreign Certificated Mechanic C. Certificate No. 2705 Airport Drive Address State Nevada Certificated Repair Station City Las Vegas A&P4484732 **United States** Certificated Maintenance Organization Country 89032 Zip D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge. Signature/Date of Authorized Individual Extended range fuel per 14 CFR Part 43 08-19-2021 App. B 7. Approval for Return to Service Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is Approved Rejected Persons Approved by Canadian FAA Fit. Standards Maintenance Organization Manufacturer Department of Transport Inspector BY Other (Specify) Inspection Authorization Repair Station FAA Designee Signature/Date of Authorized Individual Certificate or Designation No. 08 -19-2021

FAA Form 337 (10/06)

1907305

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished (If more space is required, attach additional sheets. Identify with aircraft no	ationality and registration mark and dat	e work completed.)
	N27FB	08/19/2021
	Nationality and Registration Mark	Date
Installed D' Shannon Products Engine Baffle STC N	o.SA2200SW. Weight and	balance is negligible
and there are no airworthiness limitations associated	d with this type design cha	inge. All work done
IAW Installation Manual DSP-IM95-1 and AC43.13-1	1A.	
Additional Shee	ets Are Attached	

1	L)		
U.S	De	peri	men	to
Tran	spo	xte	tion	

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved	
OMB No. 2120-0020)
11/30/2007	

Electronic Tracking Number

For FAA Use Only

	ederal Aviati dministratio			•	2000 p 100 .			,			FOR PAA USE Only
airu	nishosinoi	I OF THIS I	orm. Inis	repon	es. See FAR 4 t is required by deral Aviation	law (49 U	43 Apr .S.C.	pendix B, and AC (43.9-1 (or subsequent re eport can result in a civil	vision then penalty no	eof) for instructions to exceed \$1,000
		Nationa N27F	lity and Re	gistra	ition Mark				Serial No. E-3727		
1. Aircr	απ	Make Bee	chcraft	ŀ					Model Series G-36 Bonanza		
2. Own	eru an		As shown o		gistration certif al B	icate)	À		Address (As shown on re Address 111 Yorkto City Woolwich Zip 08085	wn Rd	certificate)
							3.	For FAA Use Or	nty		
	4. Type							5.	Unit Identification		
Repa	air Ah	teration		Un	it		м	lake	Model		Serial Number
		⊠	AIRFRA	ME		_			(As described in Item	1 above)	
			POWER	RPLA	NT						
			PROPE	LLEI	R						
			APPLIA	NCE		Туре					
						Manufactu	rer				
							•	. Conformity Sta	tement		
	ncy's Nam		dress				_	ind of Agency			
	oe Schl						N N	U.S. Certificated			Manufacturer
		echan	ic Stree	t	. MN		片	Foreign Certifica		_	Certificate No.
	FF070				Certificated Repa			P3491579 IA			
D. Id	certify that	mage in	ir and/or a	Iterati e witt	n the requirem	ents of Pa	rt 43 (ed in item 5 above	and described on the re Aviation Regulations a	everse or a	ittachments hereto
- п	umisneo n	erein is t	rue and co	rrect	to the best of	my knowle	dge.				
	d range fu CFR Part 4				Februa			od Individual 7 See	Schlosse	,	
								pproval for Retu			
Pursu Admir	ant to the histrator of	authority f the Fede	given pen eral Aviatio	sons : on Adi	specified beloministration ar	w, the unit	APP	fied in item 5 was	inspected in the manne JECTED	r prescribe	ed by the
ву		Fit Stan pector	dards		Manufacture			Maintenance Or	ganization	0	Person Approved by Canadian Department of Transport
	FAA	Designe	e		Repair Statio	on .	X	Inspection Author	orization	Other	(Specify)
Certificat Designat A&P34		IA			ature/Date of a			idual	hlosser	•	

Bepartment of Transportation - Federal Abiation Administration

Supplemental Type Certificate

Number SA02723CH

certifies that the change in the type design for the following product with the his design of the airworthiness requirements of Part 34 the Crist Ast Regulations.

Criginal Product Type Certificate Number: 3A15

Make

36, A36, A36TC, G36

Lescription of Type Design Change:

Install D'Shannon Products, Ltd. 20-gallon fiberglass auxiliary wing-tip fuel tanks DLB1400, Rev. B dated May 14, 2009, in accordance with Installation Manual KB-1401-1, Rev. A, dated May 14, 2009, or later FAA Approved revision for 4010-lb gross weight normal category operation.

Similations and Conditions:

- 1. The installer must determine whether this design change is compatible with previously approved modifications.
- 2. A copy of this Certificate and Flight Manual Supplement for individual aircraft must be maintained as part of the permanent records for the modified aircraft.
- 3. Airplanes modified pursuant to this STC must be maintained in accordance with D'Shannon Products, Ltd. Instructions for Continued Airworthiness (ICA) Document No. DP-ICA-1400, Rev. IR., dated 4/10/09 or later FAA accepted revision. Airworthiness Limitations, FAA Approved 7/1/09 are contained within the ICA.
- 4. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

(See Continuation Sheet 3)

This certificate and the supporting data, which is the basis for approval, shall remain in effect until surrendered, suspended, receked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: April 13, 2009

Dale reissued :

Date of issuance :

July 1, 2009

Date amended . September 23, 2011

By direction of the Administrator

Timothy Smyth

Manager, Propulsion Branch

Chicago Aircraft Certification Office

Bepartment of Transportation -- Federal Abiation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA02723CH

Limitations and Conditions: (Continued from Page 1 of 3)

- 5. D'Shannon Products, Ltd. FAA Approved Flight Manual Supplement (FMS), Document No. FMS-DP-36E, Rev. IR dated May 26, 2009 or later FAA approved revision is required for Model 36 and Model A36, S/N E-1 through E-2110 except E-1946 and E-2104.
- 6. D'Shannon Products, Ltd. FAA Approved Flight Manual Supplement (FMS), Document No. FMS-DP-36L, Rev., IR dated May 26, 2009 or later FAA approved revision, is required for Model A36 and G36, S/N E-1946, E-2104, E-2111 and after.
- 7. D'Shannon Products, Ltd. FAA Approved Flight Manual Supplement (FMS), Document No. FMS-DP-36TC, Rev., IR dated May 26, 2009 or later FAA approved revision, is required for Model A36TC, S/N EA1 through EA-241, and EA-243 through EA-272.
- 8. Models 36 and A36, S/N E-1 through E-2110 except E-1946 and E-2104, modified pursuant to this STC must be equipped with the following installations:
 - A. Continental I0-550-B engine per STC SA2200SW
 - B. Cooling Air Baffles per STC SA2200SW or STC SA368CH
 - C. Lower Cowling Access Panels per STC SA414CH
- 9. Models A36 S/N E-1946, E-2104, and E-2111 & Subsequent; and Models G36 & A36 To modified for suant to this STC must be equipped with the following installations:

 A. Cooling Air Baffles per STC SA368CH

 B. Gap Seals per STC SA1176SO or STC SA1416CE

 - B. Gap Seals per STC SA1176SO or STC SA1416CE

...END...

Department of Transportation -- Nederal Abiation Administration

Supplemental Type Certificate

Number SA02722CH

This certificate issued to

D'Shannon Products, Ltd. 1309 County Road 134 Buffalo, MN 55313

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part * of the * Progulations.

Griginal Product - Type Certificate Number: * * See attached FAA Approved Model

Maka. * List (AML) No. SA02722CH for list of

Model: * approved airplane models and applicable airworthiness regulations

Description of Type Design Change.

Install D'Shannon Products, Ltd. 20-gallon fiberglass auxiliary wing-tip fuel tanks DLB1400, Rev. B dated May 14, 2009, in accordance with Installation Manual KB-1401-1, Rev. A, dated May 14, 2009, or later FAA approved revision.

Bimilations and Conditions:

- 1. Compatibility of this design change with previous modifications must be determined by the installer.
- 2. A copy of this Certificate and FAA Approved Model List (AML) No. SA02722CH, and Flight Manual Supplement for individual aircraft, must be maintained as part of the permanent records for the modified aircraft.
- 3. Airplanes modified pursuant to this STC must be maintained in accordance with D'Shannon Products, Ltd. Instructions for Continued Airworthiness (ICA) Document No. DP-ICA-1400, Rev. IR., dated 4/10/09 or later FAAaccepted revision. Airworthiness Limitations FAA Approved 7/1/09, are contained within the ICA.
- 4. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until This certificate and the supporting and a termination date is otherwise established by the Administrator of the Inderal Aviation Administration.

Date of application . April 13, 2009

Date of issuance . July 1, 2009



Dalo roissuod:

Dalo aparaled .

Lord Care DIFB Conse E-BID

(Signature) Thaddeus D. Krolicki Jr.

Manager, Propulsion Branch

Chicago Aircraft Certification Office

(Title)

FAA APPROVED MODEL LIST (AML) NUMBER SA02722CH D'Shannon Products, LTD

Issue Date: July 1, 2009

MAKE	5	MAXIMUM	REQUIRED FLIGHT			ELIGIBLE	INSTALLATION	TYPE	CERTIFICATE	1
	MODELS	GROSS	MANUAL SUPPLEMENT	JENT		SERIAL	MANUAL	CERTIFICATE	BASIS	AMENDMENT
		WEIGHT	DOCUMENT	REV.	DATE.	NUMBERS	DOCUMENT REV*. DATE* NUMBER	NUMBER		DAIE
	35	2550	FMS-DP-35 TT	R	5/26/2009					
	A35, B35	2850	FMS-DP-AB35 TT	æ	5/26/2009					
	cas	2900	FMS-DP-C35 TT	낊	5/26/2009				CAR 03 Dated	
	035	2006	FMS-DP-D35 TT	R	5/26/2009			A-777	11/13/1945	
	E35	2950	FMS-DP-E35 TT	R	5/26/2009					
	F35	2950	EMS-DP-EG35 TT	2	5/26/2009	Permission is hereby	Jean for " ingraft and only vall	•		
	G35	2975				and the return of the	Novertauon Sip sted.			
	H35, J35	3100	FMS-DP-HJ35 TT	R	5/26/2009			2		
	K35, M35	3150	FMS-DP-KM35 TT	ĸ	5/26/2009	2		1		
	N35, P35	3325	FMS-DP-NP35 TT	R	5/26/2009	A Kars D. H. J. & Approved By C. H.	Approved By Sic Dete 24 1141	7		
	35-33, 35-A33					!				
	35-B33, 35-C33	3202	FMS-DP-AF33 TT	ĸ	5/26/2009					
	E33, F33									
Hawker	633	3465	FMS-DP-G33 TT	ĸ	5/26/2009		KB-1401-01 Rev. A 05/14/09			
Beecharaft	S35		FMS-DP-S35 TT	ĸ	9/26/2009				7	
	35-C33A,		FMS-DP-E33C TT	Ē	5/26/2009				5/15/1956	
	E33A, E33C	3600						2815		
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Sheet 1 of 1

Chicago Aircraft Certification Office

Manager, Propulsion Branch

Thaddeus D. Krol

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

D'Shannon Products, LTD. 1309 County Road 134 Buffalo, MN 55313

20-GALLON TIP TANKS

INSTALLED ON

HAWKER BEECHCRAFT MODELS 33/35/36

STC SA02722CH

STC SA02723CH

STC SA153EA

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RECORD OF REVISIONS

Revision Letter	Issue Date	Date Issued	Ву
IR (Initial Release)	04/10/2009	04/10/2009	J.H. McGarvey
A	- 17 (17 (17) 17 (nt to inspect fuel pump	David Braun, P.E. mps at five year intervals. operation prior to each flight
В			David Braun, P.E. Limitations from Chapter 4 to equirements to Chapter 1 and
C	20 Gallon tank. A Moved time / life Added statement	dded information on tro limited items to Airwort that the 20 Gallon Tip	David Braun, P.E. C to cover the approval of the puble shooting, access, wiring, hiness Limitations Section. Tanks are identical, except for aks previously offered on STC

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LIST OF REVISIONS: Revision IR (Initial Release) April 10, 2009
Revision A October 9, 2009
Revision B August 19, 2011
Revision C January 17, 2013

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List of Effective Pages	iii	C
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Chapter 4 Airworthiness Limitations 04-00-00	3	C
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CHAPTER 1 INTRODUCTION

Type Design Change: This type design change consists of the installation of the D'Shannon

Products, LTD 20 Gallon Fuel Tip Tanks on the wing tips of Hawker Beechcraft Bonanza Model 33/35/36 pursuant to STC SA02722CH, SA02723CH or SA153EA. The 20 Gallon Fuel Tip Tank differs from the 15 Gallon Fuel Tip Tank approved on STC SA153EA only in its interior volume, accomplished by increasing its diameter and length. All other aspects of the 20 Gallon Fuel Tip Tank are essentially identical.

Some models require changes to the aileron overbalance. Reference D'Shannon Products, LTD installation manual KB1401-1 Revision H or

later FAA Approved Revision, and §5.3 of this document for

information.

2. Scope: The scope of this Instruction for Continued Airworthiness (ICA) focuses

exclusively on Maintenance, Inspection & Airworthiness Limitations of

this FAA-approved type design change.

Purpose: The purposes of this ICA are to apprise Owner/Operators who have

modified their airplane pursuant to this type design change: (1) When, where & how to inspect; and (2) When to replace this type design to

assure continued operational safety.

4. Arrangement: This ICA is a single document comprised of six (3) Chapters:

Chapter 1, Introduction;

Chapter 4, Airworthiness Limitations;

Chapter 5, Inspection Requirements, Overhaul Schedule &

Troubleshooting.

Superseded Documents: This ICA supersedes the Hawker Beechcraft Bonanza Model 33/35/36

Maintenance documents only in the areas relating to aviation fuel management, maintenance of fuel components added by the

modification, and aileron overbalance.

6. Applicability: This ICA is applicable to all eligible Serial Numbered Hawker

Beechcraft Models 33/35/36 aircraft.

7. Precautions: Tip tank fuel is transferred into its respective main tank by an electric

pump at a rate of approximately 15 gallons per hour. At higher power settings, fuel consumption may exceed the transfer rate to the main

tank selected.

If for any reason it is necessary to land with more than 1/2 tank

difference in tip tank quantities, the landing should be made with flaps

in the up position.

Fuel consumption may exceed tip tank transfer rate. Initiate transfer with both mains at least ½ full. Monitor main tank gauges to prevent

overflow.

Before flight, check the tip tanks for asymmetrical loading. If fuel tank capacities differ more than 1/4 tank, relocate fuel prior to takeoff.

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8. Reference Documents

D'Shannon Products, LTD installation manual KB1401-1 Revision H or

later FAA Approved

FAA Advisory Circular 43.13-1B FAA Advisory Circular 43.13-2A

9. Distribution:

D'Shannon Products, LTD. will maintain a list of all Hawker Beechcraft /Operators that have purchased our 20 Gallon Fuel Tip Tanks, and should the need arise to modify this ICA, The AEG- accepted revision will be sent directly to all Owner/Operators. For Owner/Operators having internet access, the latest AEG- accepted revision to this ICA will be available for downloading from the D'Shannon Products, LTD.

website: http://d-shannon-aviation.com/

CHAPTER 4 AIRWORTHINESS LIMITATIONS

TIME LIMITATIONS:

Replace 5-years after installation, and every 5 years thereafter the

following components:

Drain Valve O-Ring Fuel Cap O-ring

Tip Tank Fuel Connection Hoses

See 5.1 for more information regarding servicing these items.

The information contained herein supplements the basic Maintenance Manuals only in those areas listed, when the aircraft is modified in accordance with D'Shannon Products, LTD Installation Manual KB-1401-01, Rev NC, dated 04/04/09 or later FAA-approved revision.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

FAA Approved:

Charles L. Smalley, Manager

Chicago Aircraft Certification Office Federal Aviation Administration

Des Plaines, IL 60018

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INSPECTION REQUIREMENTS, OVERHAUL SCHEDULE & TROUBLEHSOOTING CHAPTER 5

INSPECTION REQUIREMENTS 1.

At Annual:

Drain Valve

Drain tank fully at annual to check for dirt and other contaminants. Access to the drain valve is in the lower portion of the tip tank. The drain time can be decreased by removing the drain valve body from the drain valve fitting by unscrewing it. Visually Inspect & Replace O-Rings found to have cracks, deformation, or embrittlement. The large O-Ring is M83248/1-110 which seals the drain valve body. The smaller O-Ring is M83248/1-007 which seals the plug for the drain valve may only be accessed by driving out the small spring pin and removing the spring and drain plug from the subassembly. Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-1B Chapter 8 §2 dealing with fuel systems.

Fuel Transfer Pumps

The fuel pumps are installed in the wheel wells of the aircraft. Visually inspect for leaks through fuel pump connections with pump on. Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-1B Chapter 8 §2 dealing with fuel systems.

Fuel Transfer Solenoid Valve

The fuel transfer solenoid valves are located on the fuel pump bracket adjacent to the fuel pumps. Visually inspect for leaks through valve connections with pump on. Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-1B Chapter 8 §2 dealing with fuel systems.

Tip Tank Fuel Connection Hoses The fuel tip tank connection hoses are between the wing and the tip tank. Remove the 28 screws and washers that secure the tip tank cuff to the wing and slide the tip tank outboard clean of the wing. Support the tip tank with a stand or other means. Visually Inspect & Replace any hoses found to have cracks, deformation, or embrittlement. The hose assembly is 350-4-0140 Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-1B Chapter 8 §2 dealing with fuel systems.

Tip Tank Vent

The fuel vent connector is a blade like device on the bottom outer surface of the tip tank. Check vent hole and pin hole on vent connector for any obstructions. Although removal of the vent connector is unlikely to be required for maintenance, the vent connector may be unscrewed from the vent fitting. Reinstall with sealant CS3204 class A. Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-1B Chapter 8 §2 dealing with fuel systems.

Tip Tank Surface

Check for cracks or deformation of the tip tank surface at annual. Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-1B Chapter 3.

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Tip Tank Sight Strip

Inspect for clarity. The tip tank sight strip for fuel quantity gauging may cloud over time due to UV exposure. The sight strip clarity may be renewed by applying Armor-Dillo TS-1 per the package instructions. If this does not clear the sight strip, sand the affected area with 180 grit paper being careful not to penetrate the glass fibers in the underlaying mat. Apply a coat of such as Evercoat Premium Marine Resin if the glass fibers are exposed. Ref. FAA Advisory Circular 43.13-1B Chapter 3. Next, apply a coat of automotive clear coat to the affected area. The clear coat will protect the surface from the UV rays as well as smoothing the surface to make the sight strip translucent. Be sure to follow the manufacturer's recommendations for the clear coat, including any surface preparation (clean, wax and silicon free, and roughened with the proper grit paper) and mixing instructions for the two part catalyzed system you are using.

Tip Tank Caps

The tip tank fuel caps can be found on the top surface of the tip tank. Visually inspect & replace O-Ring MS29513-138 in the fuel cap base if found to have cracks, deformation, or embrittlement. A pair of O-Rings seal the rod assembly through the center of the cap. Remove the stainless steel cotter pin, remove the castellated nut keeping track of the number of turns, and the order of assembly of the washers, lock and spring. The two O-Rings nested in the cap are M83248/1-011. Reassemble and install a new stainless steel cotter pin. Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-1B Chapter 8 §2 dealing with fuel systems.

Electrical Components

Check that all bulbs and strobes are functioning correctly. The bulbs and strobes are accessed under the acrylic radome and fixed to an aluminum bracket which is accessible from both sides once the radome is removed by removing the four screws securing the radome to the tip tank forward bulkhead The radome is handed and must be reinstalled to its original Tip Tank. Wiring connections are made via pin connections, and the wires may be fished through the conveying aluminum tubing to the mounting cuff area of the tip tank. Remove the 28 screws and washers that secure the tip tank cuff to the wing and slide the tip tank outboard clean of the wing. Support the tip tank with a stand or other means to gain access to this area. Wiring diagrams and information may be found in the installation manual KB-1401-1 Rev H or later FAA Approved Revisions. Additional required maintenance, service and adjustments must be made to comply with FAA Advisory Circular 43.13-2A.

Pre-Flight:

Before flight, check the tip tanks for asymmetrical loading. If fuel tank Tip Tank Fuel Load

capacities differ more than 1/4 tank, relocate fuel prior to takeoff.

Check vent hole and pin hole on vent fitting for any obstructions as part Tip Tank Vent Fitting

of the pre-flight check.

Check for cracks or deformation of the tip tank surface at Pre-Flight Tip Tank Surface

Inspection.

Make sure that the fuel caps are on and secure at Pre-Flight Tip Tank Caps

Inspection.

Tip Tank Fuel Pumps During preflight with fuel in Tip Tanks, switch on Tip Tank fuel pumps

and assure they are operating. Inspect connections for signs of leaks. After this check, turn Tip Tank fuel pump switch to the off position. If Tip Tanks do not contain fuel this preflight item may be disregarded.

2. OVERHAUL SCHEDULE No overhaul required for this type design change.

3. FLIGHT CONTROLS Aileron Overbalance Requirements

Use the procedure in the Hawker Beechcraft Bonanza Model 33/35/36 Maintenance documents for aileron balance, except the aileron

overbalance to be achieved is: All 33 Models – 6.5 in-lb or greater

35 through P35 - Use overbalance in Hawker Beechcraft Maintenance

Documents

S35 and After - 6.5 in-lb or greater All 36 Models - 4.1 in-lb or greater

Additional overbalance information can be found in the installation manual KB-1401-1 Rev H or later FAA Approved Revisions.

4. TROUBLESHOOTING The tip tank fuel transfer system is equipped with a solenoid shutoff

system which is energized by the same circuit as the fuel pump itself. Monitor fuel transfer in flight and adhere to the asymmetrical fuel load precautions outlined in the applicable Airplane Flight Manual Supplement, if needed. If fuel transfer is observed not to occur, the system can be tested on the ground. Fuel gauging is provided by a sight strip on the side of the tip tank and visible to the cockpit; and by

the optional fuel quantity gauging system. See the installation manual KB-1401-1 Rev H or later FAA Approved Revisions for information of the wiring and plumbing of the fuel transfer and optional gauging

system.

Assure that there is fuel in the tip tank and space in the main tank to accept the fuel that will be transferred.

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4. TROUBLESHOOTING (cont)

Turn on the fuel transfer pump and observe that the pumps start the transfer process. Transfer is approximately 15 gallons per hour, so 10 minutes of transfer is plenty to observe. If the fuel does not transfer, check to make sure the fuel solenoid valve adjacent to the fuel pump is functioning. The fuel solenoid valve and the fuel pump may be tested individually in place by utilizing temporary hose connections and fuel supplies. Replace any components found to be defective.

If it is determined that the failure of the pump or solenoid is electrical in nature, and if the problem is found to be a lack of power at the device, trace the circuit back using the installation manual KB-1401-1 Rev H or later FAA Approved Revision for guidance.

If it is determined the pump and solenoid are functioning correctly, but the fuel does not transfer, open the fuel cap to eliminate a vacuum condition in the tank. If this solves the problem, clean the fuel vent system as described in this chapter. There is also a fuel pickup strainer in the tank, this item is not serviceable. However, 10 psi maximum air can be fed from the fuel outlet port located in the cuff of the tip tank with the fuel cap removed. If air is observed in the tank, the fuel pickup strainer is not obstructed, and the condition of the other fuel lines will have to be ascertained.

The fuel pump does not require fuel for cooling or lubrication and may be run indefinitely without damage with or without fuel present.

Leakage from the tip tank fuel cap in flight or on unlevel parking surfaces can be caused by a perished O-Ring, a loose fitting cap, or other misalignment. If replacing the O-Ring or adjusting the tension in the cap by adjusting the locking nut at the bottom of the rod connection does not eliminate the leakage, contact D'Shannon Products, LTD. for additional information. Do not overfill the tip tanks as fuel can expand with temperature and leak from the fuel vent.