

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

Number SA00711CH

*This certificate, issued to* Hershey Flying Service  
P. O. Box 754  
Platte, SD 57369

*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 8.10(a)(1) Civil Air*

*Regulations.* (See Type Certificate Data Sheet No. 1A16 for complete certification basis).

*Original Product — Type Certificate Number:* 1A16

*Make:* Ag Cat Corp.

*Model:* G-164A & G-164B

*Description of Type Design Change:*

Install replacement tail landing gear spring described by Drawing 5480, revision E, dated August 12, 1996, or later FAA approved revisions; in accordance with Installation Instructions Report 1484-5, no revisions, dated October 9, 1996, or later FAA approved revisions.

*Limitations and Conditions:*

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

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

*Date of application:* September 12, 1995

*Date issued:*

*Date of issuance:* July 16, 1997

*Date amended:*



*By direction of the Administrator*

*Mary Ellen A. Schutt*  
for Mary Ellen A. Schutt (Signature)  
Manager, Airframe & Administrative Branch  
Chicago Aircraft Certification Office  
(Title)

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

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

Number SA3645SW

This certificate, issued to S & R Aircraft, Inc.  
P. O. Box 215  
Hershey, Nebraska 69143

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 8 of the Civil Air Regulations.

Original Product — Type Certificate Number: 1A16  
Make: Schweizer (Grumman)  
Model: G-164B

*Description of Type Design Change:*

Widen fuselage hopper in accordance with data listed on S & R Aircraft FAT-CAT Drawing List Revision J dated August 8, 1986.

*Limitations and Conditions:*

Limited to Serial Numbers 1B through 548B only.

The compatibility of this modification with other previously approved modifications is the responsibility of the installer.

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

Date of application: December 8, 1980

Date reissued:

Date of issuance: August 15, 1986

Date amended:

By direction of the Administrator



*L. B. Andriesen*  
For L. B. Andriesen (Signature)  
Assistant Manager, Aircraft Certification  
Division, Southwest Region  
(Title)

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

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SE5141NM

*This certificate, issued to* SOL Company  
571 Winslow Way West  
Bainbridge Island, WA 98110

*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 33 of the Federal Regulations.*

*Original Product — Type Certificate Number:* E-123-14, TC-39, TC-85, TC-5E1, TC-113  
*Make:* Pratt & Whitney Aircraft  
*Model:* Wasp Jr.

*Description of Type Design Change:* Installation of the SOL 3503 Exhaust Gasket as defined by Drawing SOL3503 REV NC, dated 2/22/91, or later FAA approved revision, and the SOL0524AK10 retaining nut as defined by Drawing SOL0524AK10 REV B dated 6/22/81, or later FAA approved revision.

*Limitations and Conditions:* The approval of this change in type design applies to the above model engine only. This approval should not be extended to engines of this model on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that engine. (See Continuation Sheet 3 under Limitations.)

*This certificate and the supporting data which is the basis for approval shall remain in effect until ~~re-~~renewed, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:*

*Date issued:*

*Date of issuance:* Apr 11 10, 1991

*Date amended:*



*By direction of the Administrator*

*D. L. Riggan*  
Donald L. Riggan (Signature)  
Manager, Seattle Aircraft  
Certification Office, ANM-100S

(Title)

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

*This certificate may be transferred in accordance with FAR 21.47.*

INSTALLATION PROCEDURES FOR SOL3503 "BLONPROOF" EXHAUST  
GASKET ON PRATT & WHITNEY R-985 ENGINES

Inspection Requirements Prior to Installation:

1. Inspect exhaust port for erosion of aluminum in gasket sealing area. No erosion is permitted that would cause the gasket to leak.
2. Inspect exhaust studs for corrosion, misalignment and stripped threads.
3. Inspect exhaust stack flanges for erosion and sealing surface flatness (utilize a metal straight edge) from mounting hole to mounting hole - stack must be flat.



Repair Requirements Prior to Installation:

1. Clean exhaust port gasket seating area with drill motor and soft wire brush to remove all carbon and corrosion.
2. Clean exhaust studs with soft wire brush, chase studs with 5/16 - 24 die nut if required.
3. Correct any warps in the exhaust stack flange by resurfacing with horizontal belt sander or other suitable means.



Installation:

1. Install gasket
2. Coat exhaust studs with high temperature anti-seize compound.
3. Install exhaust stack.
4. Install the stainless steel copper flashed exhaust nuts P/N SOL 0524AK10.
5. Tighten the stack down evenly insuring that the nut does not bottom out on the stud before the stack is tight to the cylinder. Stainless washers are provided if required. Torque nuts to 15-20 ft/lbs. Inspect assembly to insure that the exhaust collector to stack is not misaligned, preventing complete compression of the "blowproof" gasket.

"CAUTION"

The SOL 0524AK10 exhaust nut should only be used with the SOL 3503 "Blowproof" exhaust gasket provided and must not be used with any copper or asbestos gasket. Loss of nut torque will occur when the copper or asbestos gasket blows out.

Recommended service life for the SOL 0524AK10 exhaust nuts and SOL 3503 "Blowproof" gaskets is 1600 hours.

S.O.L. Co.  
528 6th Street  
Juneau, AK 99801

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA00881CH

*This certificate, issued to* Hershey Flying Service, Inc.  
Box 754  
Platte, SD 57369

*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 8.10(a)(1) Civil Air Regulations.* (See Type Certificate Data Sheet 1A16 for complete certification basis.)

*Original Product — Type Certificate Number:* 1A16  
*Make:* Ag Cat Corp. (Schweizer)  
*Model:* G-164A, G-164B

*Description of Type Design Change:*

Install rudder servo tab in accordance with Drawing Number H9033001, no revisions, dated July 19, 1995, or later FAA Approved revisions.

*Limitations and Conditions:*

1. Compatibility of this design change with previously approved modifications must be determined by the installer.
2. This modification is limited to airplane serial numbers 401 and up for the G-164A, and 1B and up for the G-164B.
3. 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 surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.*

*Date of application:* March 21, 1995

*Date issued:* August 21, 1998

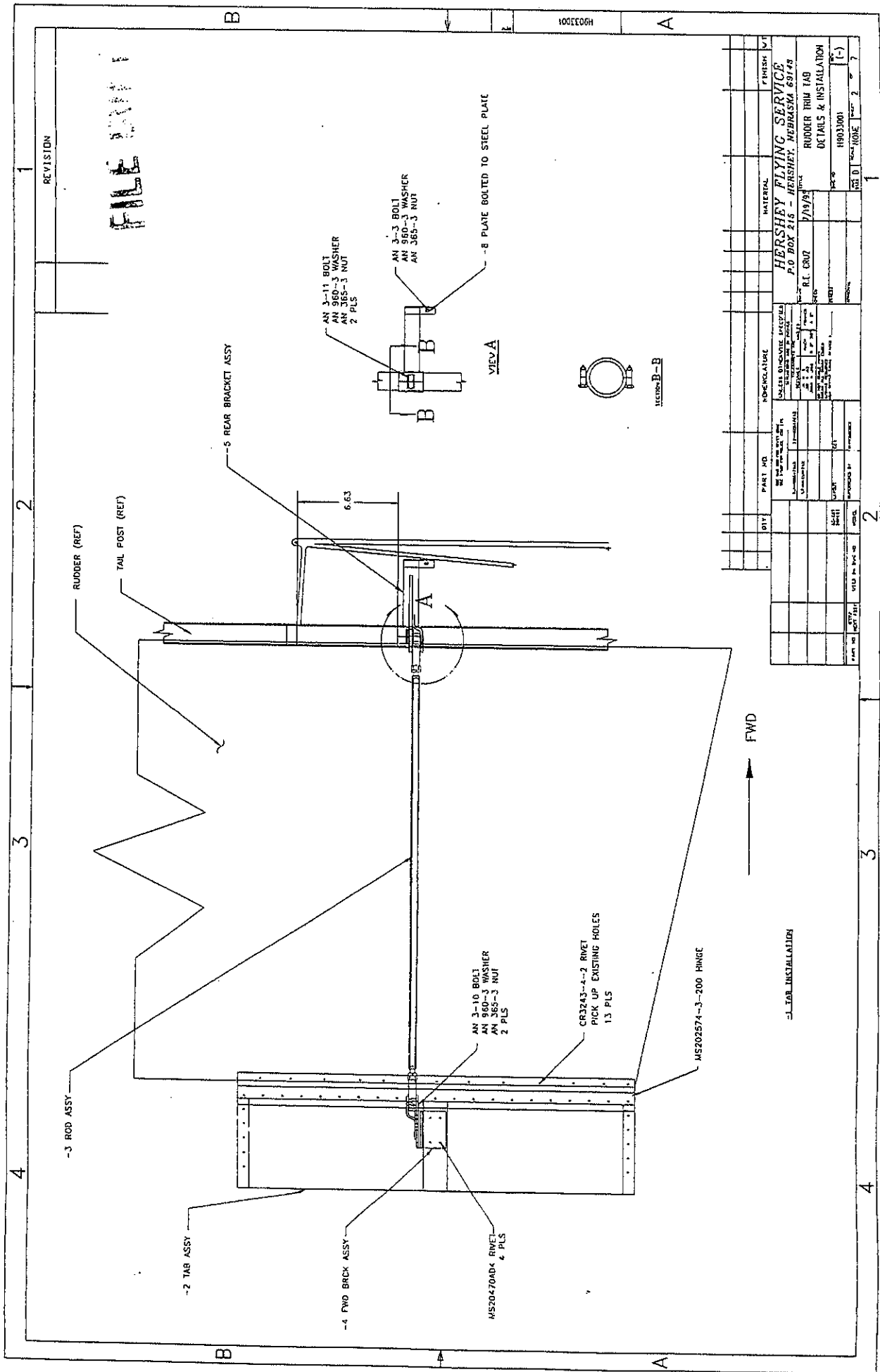
*Date of issuance:* May 7, 1998

*Date amended:*



*By direction of the Administrator*  
*Mary Ellen A. Schmitt*  
(Signature)  
Manager, Airframe & Administrative Branch  
Chicago Aircraft Certification Office  
(Title)

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



FILE

REVISION

REV.	DATE	BY	CHKD.	DESCRIPTION	APPROVED BY
1					
2					
3					
4					

NO.	DESCRIPTION	QUANTITY	UNIT	REMARKS
1	AN 3-10 BOLT	2	PLS	
2	AN 960-3 WASHER	2	PLS	
3	AN 385-3 NUT	2	PLS	
4	CR3243-4-2 RIVET	1.3	PLS	PICK UP EXISTING HOLES
5	MS20470B-X RIVET	6	PLS	
6	MS202574-3-200 HINGE	1	PC	
7	RUDDER TRIM TAB	1	PC	
8	DETAILS & INSTALLATION	1	PC	

REV.	DATE	BY	CHKD.	DESCRIPTION	APPROVED BY
1					
2					
3					
4					

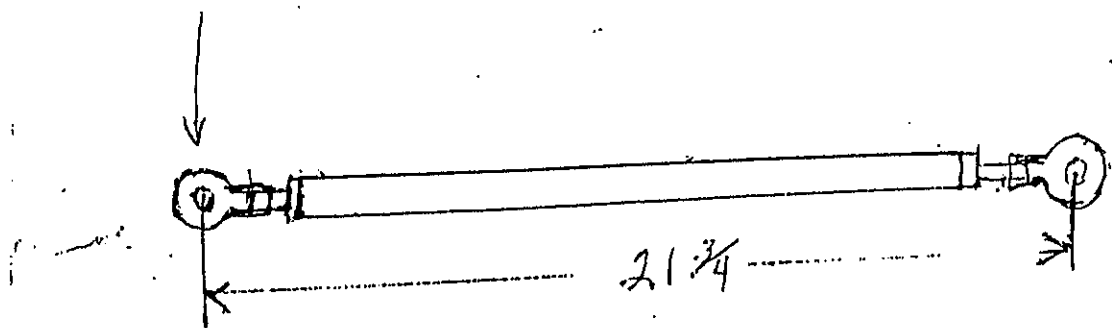
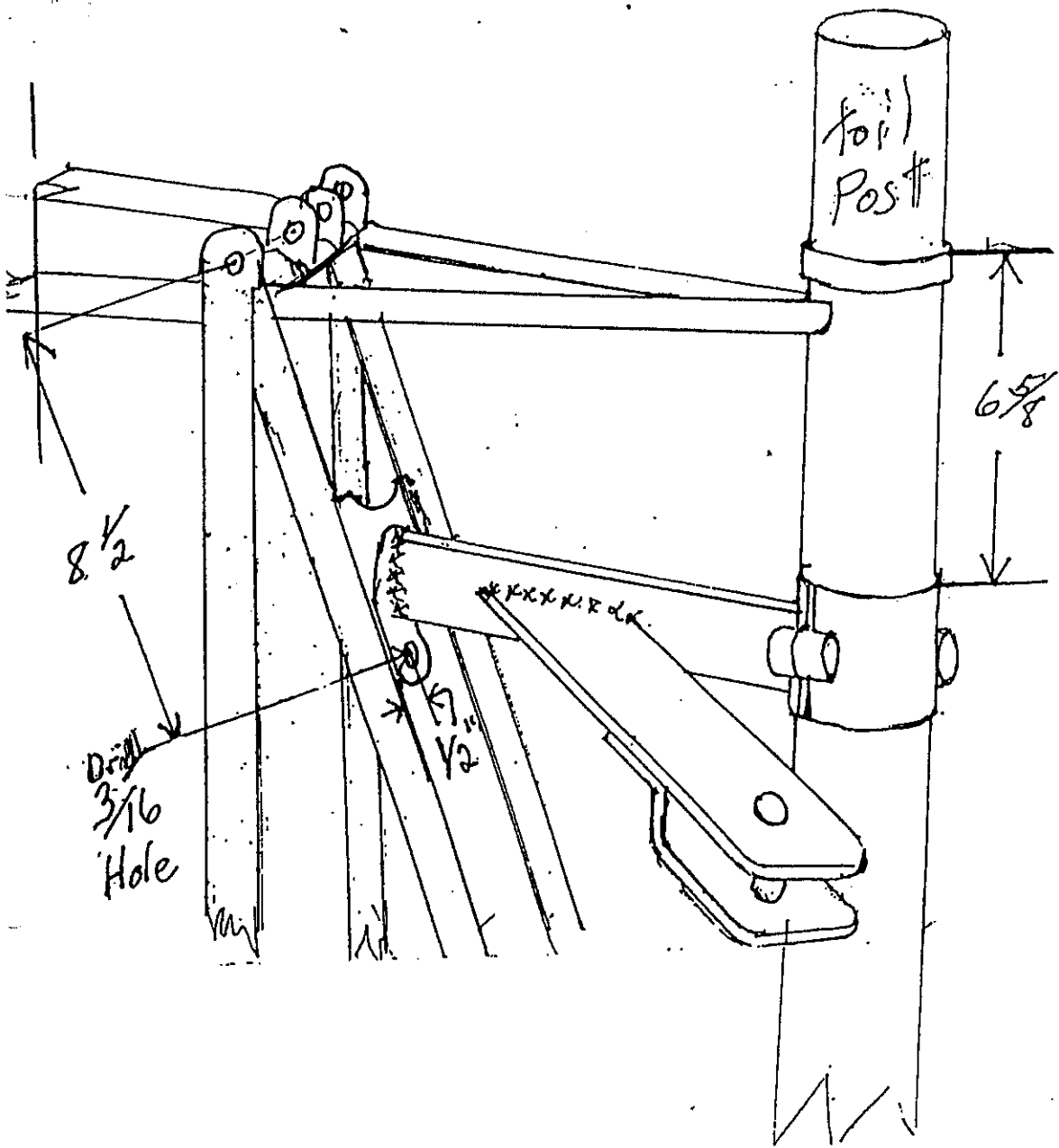
  

REV.	DATE	BY	CHKD.	DESCRIPTION	APPROVED BY
1					
2					
3					
4					

-1 TAB INSTALLATION

FWD

H903300

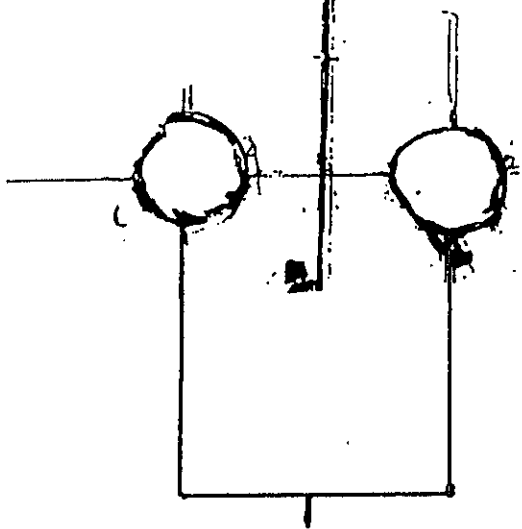




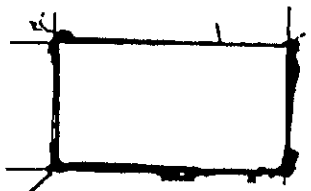


Align Hole over Stop Ext.  
from Vert. Longeron.

Align Vertical Line with  
longeron.



Cut Two Holes In Tail Wrap  
Around Ski 5/8" Dia.



Mark Square Hole on Tail Wrap Around  
& Cut Out Hole.

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

Number SA2254CE

This certificate, issued to  
Hershey Flying Service  
P. O. Box 215  
Hershey, NE. 69143

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 8 of the Civil Air Regulations effective October 1, 1950.

Original Product — Type Certificate Number: 1A16  
Make: Schweizer  
Model: G-164, G-164A, G-164B, G-164C,  
and G-164D

*Description of Type Design Change:*

Installation of replacement wing tips per Hershey Flying Service Document List No. 168100-001 with FAA approval date of June 5, 1987, or later. One each master wing tip, part numbers 168100-10, 168100-20, 168100-30, and 168100-40, to which is attached Conformity Certification Tag, FAA Form 8130-3, are part of the type design for this STC.

*Limitations and Conditions:*

This approval should not be extended to other specific airplanes of this model on which other previously approved modifications are incorporated, unless it is determined that the interrelationship between this change and any of these other previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane.

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

Date of application: January 9, 1987

Date issued:

Date of issuance: June 5, 1987

Date amended:



By direction of the Administrator

Robert A. Gambrell, Jr.  
(Signature)

Robert A. Gambrell, Jr., Manager  
Wichita Aircraft Certification Office  
(Title)

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

Hershey Flying Service  
Specification 168300 -1 For Both Wings  
-2 For Upper Wings Only  
Ag-Cat Wingtip Installation -3 For Lower Wings Only.

The new wingtips are essentially a direct replacement for the factory installed wingtips. The original tips are installed on the lower wings with nylon screws and Rivnuts, and on the upper wings by MS20600-AD4-2 rivets. The new wingtips are installed at all places with steel screws and Rivnuts.

PROCEDURE: NOTE: WINGTIP RIB MAY NEED TO BE TRIMED AT THE TRAILING EDGE, OR THE WINGTIP MAY SPLIT IF FORCED ON.

A. Lower Wings

1. Remove the existing wingtips. Discard the nylon screws.
2. Drill the new wingtips to match the existing 41 holes in the original wingtip.
3. Install the new wingtips with AN526R-632 screws, AN960-6L washers (41 of each), through the existing A6K-75 Rivnuts.

NOTE: THE BOTTOM FLANGE OF THE TIP RIB STARTING AT THE LEADING EDGE ON BACK TO 7.5 IN SHOULD BE BENT DOWN 90° FOR A BETTER FIT.

B. Upper Wings

1. Remove the existing wingtips by drilling out the existing rivets.
2. Remove the existing navigation lights, and disconnect the wiring.
3. Drill the new wingtip for clearance holes for the #6 screws to match the locations of the removed rivets used to attach the wingtip previously (41 places, each wingtip).
4. Drill and cut mounting holes in the wingtip to attach the original navigation light. The location is to be the same of the original relative to the aircraft station, buttline, and waterline. Use the original wingtip as a guide for the mounting holes.
5. Drill out the existing rivet holes to the size required

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA2271CE

*This certificate, issued to* Hershey Flying Service, Inc.  
P. O. Box 215  
Hershey, Nebraska 69143

*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 8 of the Civil Air Regulations.*

*Original Product — Type Certificate Number:* 1A16  
*Make:* Schweizer  
*Model:* G-164A,B,C (S/N 1C thru 42C), and D

*Description of Type Design Change:* Installation of additional wing fuel tanks.  
Data Required: 1. Data and Drawings called out on Hershey Flying Service Report No. 100-001, Revision K, dated August 23, 1987, or later "FAA Approved" Revision.  
2. A copy of this certificate.

*Limitations and Conditions:* Only aircraft with the factory installed 80 gallon fuel system are eligible for this modification. This approval should not be extended to other specific airplanes of this model on which other previously approved modifications are incorporated, unless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane.

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

*Date of application:* July 11, 1986  
*Date of issuance:* August 19, 1987

*Date issued:*  
*Date amended:* March 2, 1988



*By direction of the Administrator*  
*Robert A. Gambrell, Jr.*  
(Signature)  
Robert A. Gambrell, Jr., Manager  
Wichita Aircraft Certification Office  
(Title)

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

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA3077WE

*This certificate, issued to* Hershey Flying Service, Inc.

*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 8 of the Civil Air Regulations effective October 11, 1950 and CAM 8, Appendix B as amended March 19, 1957, except CAR 3.241 utilized for ground loads.*  
*Original Product — Type Certificate Number* 1A16

*Make* GRUMMAN  
*Model* G-164; G-164A; G-164B

*Description of Type Design Change:* Installation of elevator Servo-Tab in accordance with San Tan Duster Drawing No. 59742775, dated April 27, 1975.

The manufacturing drawing is San Tan Dusters Drawing No. 59742675 dated April 25, 1975.

*Limitations and Conditions:* The approval of this change in type design applies to the basic aircraft of the specified models that are otherwise unmodified. This approval should not be extended to other aircraft of these models on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft.

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

*Date of application:* May 13, 1975

*Date reissued:* Mar. 17, 1977, May 25, 1988

*Date of issuance:* July 30, 1975

*Date amended:*

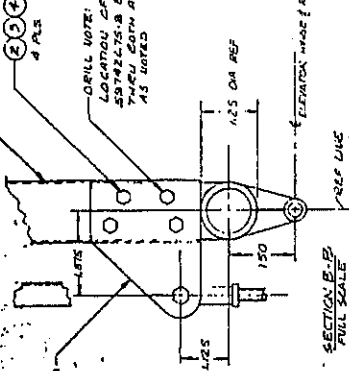


*By direction of the Administrator*  
*Harvin F. Kammlah*  
*actg.* Manager, Western Aircraft  
Certification Office

(Title)

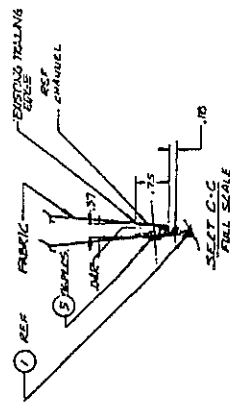
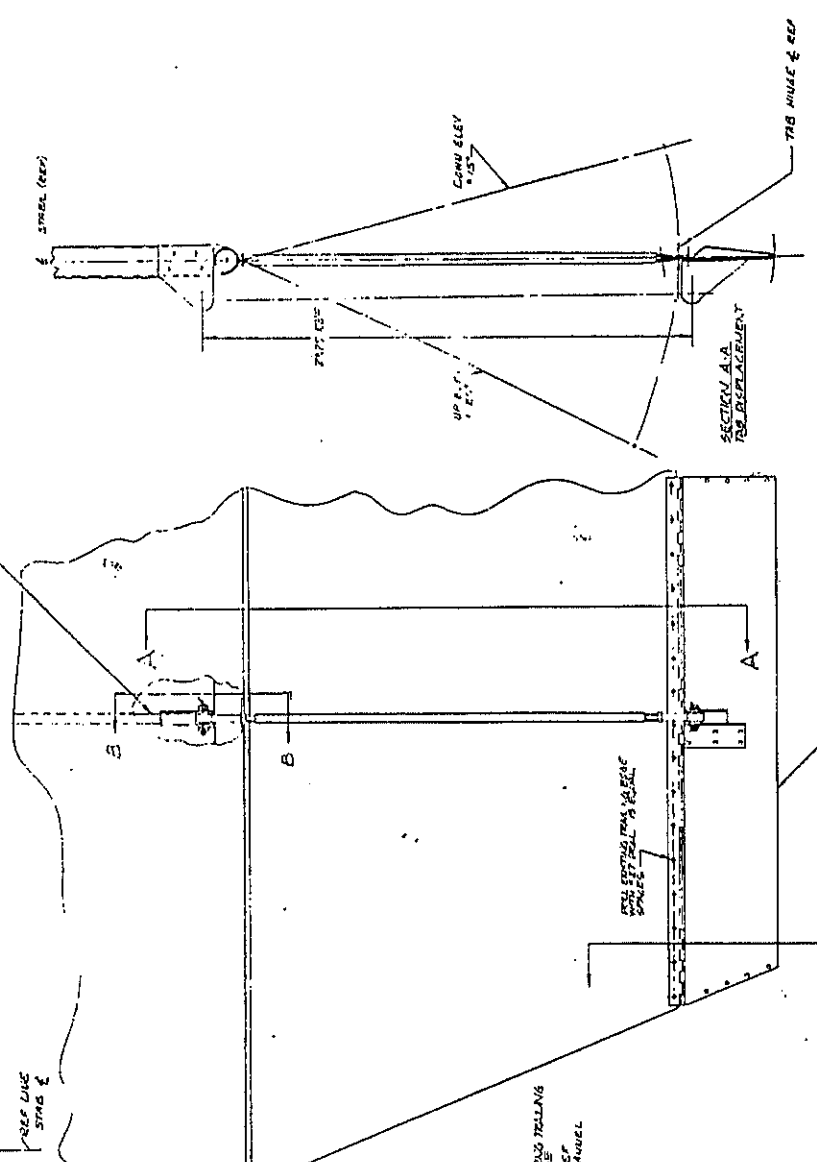
Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

REF. EXISTING STABILIZER EYE



DRILL NOTE:  
LOCATION OF HOLE HOLES FROM  
STABILIZER BENT  
MUST BE MARKED AFTER LOCATING ON STABILIZER  
AS SHOWN

EXISTING EYE LOCATION



- ALIGNMENT INSTRUCTIONS**
- 1 TAB MUST BE PARALLEL TO ELEVATOR AT ELEVATOR ZERO POSITION.
  - 2 ELEVATOR MUST BE (FLAT) PARALLEL TO STABILIZER (REF ELEV ZERO POSITION)
  - 3 ELEVATOR COMU POSITION - 15° (REF A/C SPECIF)
  - 4 ELEVATOR ILS POSITION - 25° (REF A/C SPECIF)

SIC-54307 WE  
NY 1.375 1.11 Apr. 3/5

NO.	PART NUMBER	QUANTITY	DESCRIPTION	DATE
1	A1375	1	STABILIZER	10-12
2	A1376	1	STABILIZER	10-12
3	A1377	1	STABILIZER	10-12
4	A1378	1	STABILIZER	10-12
5	A1379	1	STABILIZER	10-12
6	A1380	1	STABILIZER	10-12
7	A1381	1	STABILIZER	10-12
8	A1382	1	STABILIZER	10-12
9	A1383	1	STABILIZER	10-12
10	A1384	1	STABILIZER	10-12
11	A1385	1	STABILIZER	10-12
12	A1386	1	STABILIZER	10-12
13	A1387	1	STABILIZER	10-12
14	A1388	1	STABILIZER	10-12
15	A1389	1	STABILIZER	10-12
16	A1390	1	STABILIZER	10-12
17	A1391	1	STABILIZER	10-12
18	A1392	1	STABILIZER	10-12
19	A1393	1	STABILIZER	10-12
20	A1394	1	STABILIZER	10-12
21	A1395	1	STABILIZER	10-12
22	A1396	1	STABILIZER	10-12
23	A1397	1	STABILIZER	10-12
24	A1398	1	STABILIZER	10-12
25	A1399	1	STABILIZER	10-12
26	A1400	1	STABILIZER	10-12
27	A1401	1	STABILIZER	10-12
28	A1402	1	STABILIZER	10-12
29	A1403	1	STABILIZER	10-12
30	A1404	1	STABILIZER	10-12
31	A1405	1	STABILIZER	10-12
32	A1406	1	STABILIZER	10-12
33	A1407	1	STABILIZER	10-12
34	A1408	1	STABILIZER	10-12
35	A1409	1	STABILIZER	10-12
36	A1410	1	STABILIZER	10-12
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67	A1441	1	STABILIZER	10-12
68	A1442	1	STABILIZER	10-12
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70	A1444	1	STABILIZER	10-12
71	A1445	1	STABILIZER	10-12
72	A1446	1	STABILIZER	10-12
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74	A1448	1	STABILIZER	10-12
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88	A1462	1	STABILIZER	10-12
89	A1463	1	STABILIZER	10-12
90	A1464	1	STABILIZER	10-12
91	A1465	1	STABILIZER	10-12
92	A1466	1	STABILIZER	10-12
93	A1467	1	STABILIZER	10-12
94	A1468	1	STABILIZER	10-12
95	A1469	1	STABILIZER	10-12
96	A1470	1	STABILIZER	10-12
97	A1471	1	STABILIZER	10-12
98	A1472	1	STABILIZER	10-12
99	A1473	1	STABILIZER	10-12
100	A1474	1	STABILIZER	10-12

LIST OF MATERIAL  
DRAWING NUMBER: 101-1011  
DATE: 10-12-54  
BY: J. W. B. / J. W. B.  
CHECKED: J. W. B. / J. W. B.  
APPROVED: J. W. B. / J. W. B.  
SAN JOSE SYSTEMS  
INSTALLATION: SERVICED BY J. W. B. / J. W. B.  
SCALE: AS SHOWN

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA1754GL

*This certificate, issued to*

Hershey Flying Service, Inc.  
P.O. Box 215  
Hershey, NE 69143

*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 8 of the Civil Air*

*Regulations. (See Type Certificate Data Sheet 1A16 for complete certification basis.)*

*Original Product — Type Certificate Number:* 1A16

*Make:* Schweizer (Grumman)

*Model:* G-164A, G-164B, (Restricted Category)

*Description of Type Design Change:*

Install Aileron Servo Tabs in accordance with Roland M. Howard, Jr. Master Document List 344-10, Revision F, dated June 9, 1992, or later FAA approved revision.

*Limitations and Conditions:*

This approval should not be extended to other specific airplanes of this model on which other previously approved modifications are incorporated, unless it is determined that the interrelationship between this change and any of these other previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane.

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

*Date of application:* December 30, 1991

*Date issued:* December 16, 1992

*Date of issuance:* June 2, 1992

*Date amended:* January 21, 1993



*By direction of the Administrator*

*Ronald K. Rathgeber*  
(Signature)

Ronald K. Rathgeber, Acting Manager  
Wichita Aircraft Certification Office.

(Title)

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

*This certificate may be transferred in accordance with FAR 21.47.*

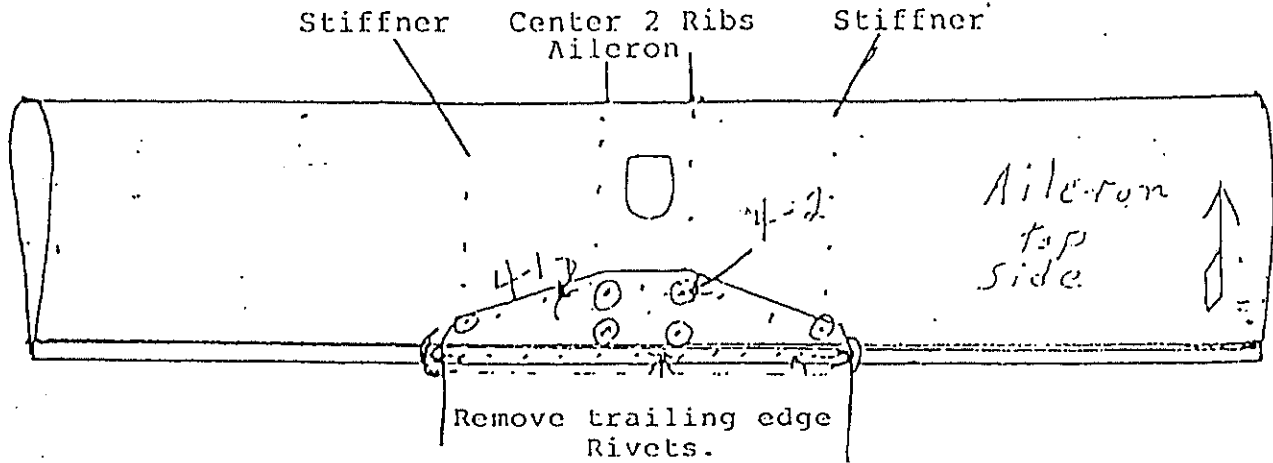
# Hershey Flying Service, Inc.

FAA Approved Repair Station No. MU2R018L

Phone 308-368-5556

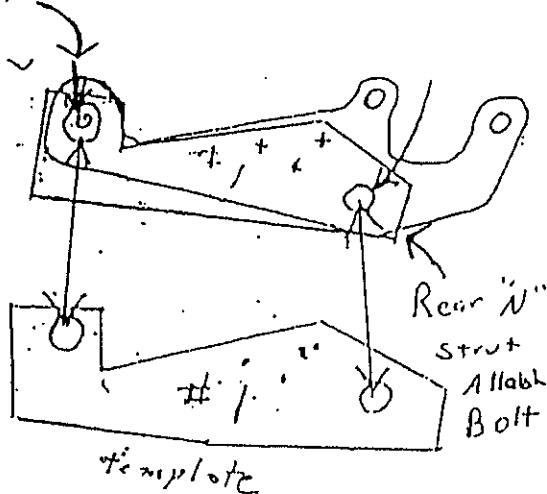
Box 215

Hershey, Nebraska



Remove the 6 rivets as marked on the aileron drawing with this mark  $\odot$ . Then remove all rivets from the trailing edge between the (-). Next fasten the Servo Beef on top of the aileron, using clecos in the first 6 holes drilled. Drill out the rest of the beef plate using a #27 bit. Also back drill the trailing edge holes with a #30 bit and cleco every other hole to help hold this. Ream the other holes with the #27 bit. The first 6 rivets drilled out will be replaced with 4-2 Cherrymax. All other rivets on top of the beef will be 4-1 Cherrymax. The trailing edge rivets will be 4-5 Cherrymax.

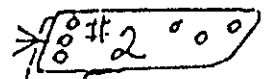
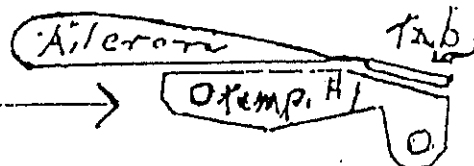
Aileron Center Hinge



Place the drill fixture #1 over the bolts in the aileron hinge point and rear "N" strut attach bolt. Drill 3 holes 3/16" as indicated by fixture. Then bolt #1 bracket to the outside of the fitting, using AN3-6A bolts. #2 bracket to the RH side using the same bolts. Next bolt push-pull rod to the tab & bracket using AN3-10A Bol Rods are preset and should need little adjustment. Use the bottom of the Drill jig for the correct setting. the tab should parallel the fixture end.

The 3 holes in the end of the fixed, bracket control tab pressure. Start in the middle hole. After you are use to the tab, drop to bottom hole for even less pressure.

Adjust to fit fixture #1, bottom side as shown at outboard end of tab.





United States of America  
Department of Transportation - Federal Aviation Administration  
**Supplemental Type Certificate**

Number SA5923SW

This certificate, issued to: Hershey Flying Service, Inc.  
P. O. Box 215  
Hershey, Nebraska 69143

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 8 of the Civil Air Regulations.

Original Product — Type Certificate Number: 1A26  
Make: Schweizer (Grumman)  
Model: G-164A, G-164B

Description of Type Design Change:

Installation of modifications to align the vertical control surface with airplane centerline in accordance with Hershey Flying Service Drawing No. HFS-1A, Revision A dated 4/17/85, or later FAA approved revision.

Limitations and Conditions:

Installation eligible on Schweizer Model G-164A, Serial Numbers 401 and subsequent.

Installation eligible on Schweizer Model G-164B, Serial Numbers 1B and subsequent.

Compatibility of this modification with other previously approved modifications must be determined by the installer.

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

*Federal Aviation Administration.*

Date of application: February 7, 1984

Date received: August 19, 1985

Date of issuance: April 22, 1985

Date amended:



By direction of the Administrator

for Don P. Watson (Signature)  
Manager, Aircraft Certification Division  
Southwest Region

(Title)

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

This certificate may be transferred in accordance with FAR 71.47

United States of America  
Department of Transportation — Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA2226CE

*This certificate, issued to* Hershey Flying Service, Inc.  
P. O. Box 215  
Hershey, NE 69143

*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 8 of the Civil Air Regulations.*

*Original Product — Type Certificate Number:* 1A26  
*Make:* Schweizer (Grumman)  
*Model:* G-164A and G-164B (S/Ns below 709B)

*Description of Type Design Change:* Convert the vertical fin and rudder to the configuration of the Model G-164B (S/Ns above 708B) per drawings and data called out on Hershey Flying Service Master Drawing List No. 169100, revised January 4, 1987, or later FAA approved revision.

*Limitations and Conditions:* This approval should not be extended to other specific airplanes of this model on which other previously approved modifications are incorporated, unless it is determined that the interrelationship between this change and any of these other previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane. This modification is compatible with STC SA5923SW.

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

*Date of application:* November 20, 1986

*Date issued:*

*Date of issuance:* February 5, 1987

*Date amended:*



*By direction of the Administrator*

*Robert A. Gambrell, Jr.*  
(Signature)

Robert A. Gambrell, Jr., Manager  
Wichita Aircraft Certification Office

(Title)

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

# Hershey Flying Service, Inc.

FAA Approved Repair Station No. 312-24

Phone 308-368-5556

BOX 218  
HERSHEY, NEBRASKA 69143

Specification # 169200

## Installation Instructions

- A. Grumman Ag-Cat Model G-164 B (S/N 708B & Lower)
1. Remove the rear side panels and cockpit side panels, tailfairings. (Refer to Grumman Service Manual) Remove the following:
    - a. Rudder
    - b. Rudder cables, LH & RH
    - c. Wire deflector cable
    - d. Upper tail brace wires
    - e. Vertical fin
    - f. Tailpost fairing and tail extension
    - g. Tail wheel steering bellcrank
  2. Cover the HFS rudder (P/N 169101-101 or 103) and HFS vertical fin (P/N 169102-10 or 169103-100) if purchased uncovered, in accordance with AC43.13-1A. If already covered proceed to step 3.
  3. Install HFS vertical stabilizer per maintenance manual section 4-75.
  4. Rig vertical stabilizer in accordance with maintenance manual after installing replacement lugs. Reuse the 2 top forward lugs on horz. stabilizer Part # 1218-3. Change 2 top forward lugs on vertical stabilizer Part # 3218-4 LH & 3218-2RH to HFS # X lugs. Then replace rear upper vertical stabilizer lugs to Part # 1218-9 lugs RH & LH. Then replace rear top horz. stabilizer lugs Part# A3218-3 & A3218-1, to Part # 1218-3 RH & LH. (ALL PART NUMBERS ARE GRUMMAN)
  5. Install rudder per maintenance manual section 5-17.
  6. Cut old rudder cables part # A3860-1 LH & A3860-3 RH to measure 142"1/4". Or if worn out use new rudder cables P/N A1860-35 LH & A18360-36 RH. Install A1878-101 anchors on rudder horn with MS20470AD5 rivets or replace horn with P/N A1841-1. (ALL PART NUMBERS ARE GRUMMAN) Re connect tailwheel steering chains.
  7. Install new A1826-111 wire deflector cable. (GRUMMAN PART NUMBER)
  8. Complete necessary weight & balance forms, FAA form 337, log book entries. Return old rudder & fin for exchange. *-19 lbs at stat. 297.84*
- B. Grumman Ag-Cat Model G-164 A, C & D
1. Referring to (1) above, remove a., c., and e.
  2. Install HFS vertical stabilizer per maintenance manual section 4-75.
  3. Rig vertical Stab. in accordance with maintenance manual. All lugs reuse
  4. Install rudder per maintenance manual section 5-17.
  5. Reinstall rudder cables, and tailwheel steering chains.
  6. Install new deflector cable P/N A1826-111. (NEW)
  7. Perform (8) above.