

Supplemental Type Certificate

Number SA2942NM

This certificate, issued to

**Rosen Sunvisor Systems
86365 College View Road
Eugene, OR 97405**

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 4b of the Civil Air Regulations.

Original Product—Type Certificate Number: A5EU
Make: British Aerospace P.L.C.
Model: BAC 1-11 200 and 400 Series

Description of the Type Design Change: Installation of monorail sun visor system in accordance with FAA approved Rosen Product Development, Inc., Drawing List RBAC 1-11-00DL, Revision A, or later FAA approved revision.

Limitations and Conditions: The approval of this change in type design applies basically to the above model aircraft only. This approval should not be extended to aircraft 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, including changes in type design, will introduce no adverse effect upon the airworthiness of the aircraft. The resulting interior arrangement, along with the required placarding has not been evaluated and is not part of this STC. A copy of this Certificate and FAA approved Rosen Product Development, Inc., Drawing List RRAB 1-11-00DL, Revision A shall be maintained as part of the permanent records of the modified aircraft.

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: April 15, 1985

Date reissued: March 24, 2003

Date of issuance: June 4, 1985

Date amended: March 24, 2003



By direction of the Administrator

[Signature]

(Signature)
for Acting Manager, Seattle 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.



U.S. Department
of Transportation
**Federal Aviation
Administration**

**Transport Airplane Directorate
Aircraft Certification Service**

1601 Lind Avenue S.W.
Renton, Washington 98055-4056

In Reply
Refer To: 190S-03-200

Rosen Sunvisor Systems
86365 College View Road
Eugene, OR 97405

Gentlemen:

Per the transfer endorsements on the following Supplemental Type Certificates (STC), we have reissued these documents in your new name and address with a reissue date of March 24, 2003.

SA1637NM	SA3067NM	SA3650NM	SA4147NM	SR00014SE
SA2128NM	SA3068NM	SA3681NM	SA4148NM	
SA2151NM	SA3301NM	SA3687NM	SA4381NM	
SA2367NM	SA3302NM	SA3688NM	SA4391NM	
SA2383NM	SA3304NM	SA3689NM	SA4960NM	
SA2614NM	SA3305NM	SA3690NM	SA4962NM	
SA2650NM	SA3306NM	SA3691NM	SA4963NM	
SA2652NM	SA3335NM	SA3692NM	SA5136NM	
SA2672NM	SA3336NM	SA3693NM	SA5934NM	
SA2678NM	SA3342NM	SA3694NM	SH2695NM	
SA2917NM	SA3529NM	SA3695NM	SH3533NM	
SA2942NM	SA3597NM	SA3696NM	SH3817NM	
SA3066NM	SA3598NM	SA3850NM	SA00682SE	

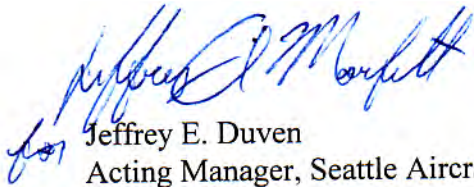
As recipient of this approval, please review your responsibilities under the requirements of Federal Aviation Regulation (FAR) 21.3, regarding the reporting of any failure, malfunction, or defect in any article manufactured under this STC. You are required to report such occurrences except as provided in FAR 21.3(d), to the Manager, Seattle Aircraft Certification Office, at 1601 Lind Ave. SW, Renton, WA 98055-4056. The report should be communicated initially by telephone to the Manager, (425) 917-6400, within 24 hours after it has been determined that the failure has occurred. In addition, written notification to the Manager, Seattle Aircraft Certification Office, ANM-100S, at the above address is required. Federal Aviation Administration (FAA) Form 8010-4 (Malfunction or Defect Report) or any other appropriate format is acceptable in transmitting the required details.

If you plan to manufacture replacement or modification parts for sale in conformance with approved data listed on the STC, you are required to comply with FAR 21.303. A Parts Manufacturer Approval (PMA) may be issued under the provisions of FAR 21.303(d) when you submit a statement certifying you have established the fabrication inspection system as required by FAR 21.303(h). The identification requirements for parts produced under a PMA are in FAR 45.15. Your statement should be in letter form, with reference to the STC number, and should be addressed to the Federal Aviation Administration, Northwest Mountain Region, Attention: Manager, Seattle Manufacturing Inspection District Office, 2500 E. Valley Road, Suite C-2, Renton, WA 98055-4056.

You, as the STC holder, are responsible for any design changes necessary to correct unsafe conditions as well as for submitting those design changes for approval. This requirement is contained in FAR 21.99.

By acceptance of this certificate, you acknowledge that you have read and understand your responsibilities as an STC holder and are in effect certifying that you have received and hold all the available data from the previous holder.

Sincerely,



Jeffrey E. Duven
Acting Manager, Seattle Aircraft
Certification Office

Enclosures



**ROSEN PRODUCT
DEVELOPMENT INC.**

P.O. BOX 5386, EUGENE, OR 97405 (503) 342-3802

BAC 1-11 Series Monorail Sunvisor System

DRAWING LIST

RBAC 1-11-00 DL

Drawing #	Description	Sheet #	Rev Level	DCN #'s
RBAC 1-11-100	Rail & Brackets	1	---	---
RBAC 1-11-100PL	Parts List	1	---	---
RBAC 1-11-200	Visor & Clamping Block	1	---	---
RBAC 1-11-200PL	Parts List	1	---	---
RBAC 1-11-300	Assembly Drawing	1	---	---
RBAC 1-11-300PL	Parts List	1	---	---
RBAC 1-11-400	Installation Instructions	1 2	---	---

April 1985



**ROSEN PRODUCT
DEVELOPMENT INC.**

P.O. BOX 5386, EUGENE, OR 97405 (503) 342-3802

PARTS LIST

Drawing No. RBAC 1-11-100 PL

BAC 1-11

No.	Required		P/N	Description	Material
		1	RBAC 1-11-100-1	Bracket	260 HH Brass
		1	RBAC 1-11-100-2	↓	↓
		1	RBAC 1-11-100-3	↓	↓
		1	RBAC 1-11-100-6	↓	↓
		1	RBAC 1-11-100-7	↓	↓
		1	RBAC 1-11-100-4	Bracket	260 HH Brass
		1	RBAC 1-11-100-5	↓	↓
		1	RBAC 1-11-100-10	Monorail	330 FH Brass Tube .313 OD .065 Wall

ROSEN PRODUCT DEVELOPMENT INC.

P.O. BOX 5386, EUGENE, OR 97405 (503) 342-3802

PARTS LIST

Drawing No. RBAC 1-11-200 PL

BAC 1-11

No.	Required	P/N	Description	Material
	3	RBAC 1-11-200-1	Visor Lens --Dark Gray	1/8" Acrylite Acrylic ↓
	3	RBAC 1-11-200-2	Optional Visor Colors: --Gray	
	3	RBAC 1-11-200-3	--Bronze	
	3	RBAC 1-11-200-4	--Green	
	2	RBAC 1-11-200-5A	Thumb Tension Knob	1 3/16 OD Brass
	2	RBAC 1-11-200-7A	Clamping Block Nut Plate	6061-T6 Aluminum Anodized Black ↓
	2	RBAC 1-11-200-8A	Clamping Block Main Body	
	2	RBAC 1-11-200-8AA	Clamping Block Swivel	
	2	RBAC 1-11-200-9	Spring	Plated Steel ↓
	2	RBAC 1-11-200-10	7/32 Ball Bearing	
	2	RBAC 1-11-200-11	Plug	Rubber
	2	RBAC 1-11-200-12	1/4 x 28 x 3/8 Set Screw	Steel
	2	PCS-1000-14 STCD	Retainer Clips	Steel

ROSEN PRODUCT DEVELOPMENT INC.

P.O. BOX 5386, EUGENE, OR 97405 (503) 342-3802

PARTS LIST

Drawing No. RBAC 1-11-300 PL

BAC 1-11

No.	Required			P/N	Description	Material
1			1	RBAC 1-11-300-1	Complete Monorail Assembly	
2			1	RBAC 1-11-300-10	Monorail	Chrome Plated 330 Brass Tubing .313 OD .065 Wall & 260 HH Brass Brackets .090 Thick
3			3	RBAC 1-11-300-3 RBAC 1-11-300-1	Visor Assembly --Dark Gray	Acrylite Acrylic GP .125 Thick
		3 3 3		RBAC 1-11-300-2 RBAC 1-11-300-3 RBAC 1-11-300-4	Optional Color: --Gray --Bronze --Green	↓
5			6	AN526C-6/32R12	Machine Screws	Stainless Steel
7			1	AN526C-8/32R12	Machine Screws	Stainless Steel
8			1	A8K75	Rivnuts	Aluminum

ROSEN PRODUCT DEVELOPMENT INC.

P.O. BOX 21636, EUGENE, OR 97402 (503) 342-3802

INSTALLATION INSTRUCTIONS

for

BAC 1-11 SERIES MONORAIL SUN VISOR SYSTEM

DRAWING #RBAC 1-11-400

- The Bac 1-11 Series comes equipped with two rather cumbersome visors that have very limited travel and maneuverability. These units will be replaced with the Rosen monorail system that permits total cockpit coverage and ease of operation. Since this aircraft comes with a Flight Engineers station, three visor units are standard.
- The simple installation instructions which follow will refer to Figure #1 for the corresponding bracket numbers.

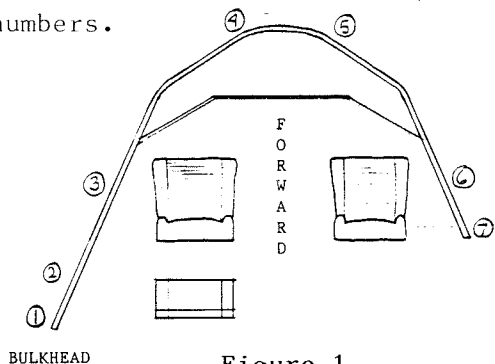


Figure 1

- Remove the original equipment visors from the aircraft by removing the screws from the channels that attach them to the side of the cockpit.
- Carefully unpack the Rosen monorail from its protective packaging and bring the rail into the cockpit.
- Remove the two #6 fasteners in the very front of the cockpit overhead. These will be the attach points for Brackets #4 and #5. Align the monorail so that Bracket #4 & #5 are correct and then mark the appropriate #6 screws to remove for Brackets #1, #2, #3, and #6. Bracket #7 will use an A8K75 rivnut and an AN526C-8/32R9 machine screw provided.
- Although all brackets are slotted to allow for variances in the aircraft completion process, there may be some Bac 1-11's where the original fasteners were not installed identically to the aircraft measured. To allow for this possibility, we have provided extra rivnuts and corresponding fasteners. Further, due to the age of some of these aircraft, some of the intended fastener locations may be stripped and corrective action required.
- Install the monorail and loosely tighten fasteners for Brackets #1 through #6.
- Mark the center of the slot of Bracket #7 for placement of the A8K75 rivnut. Remove the rail to facilitate rivnut installation. (Installation hole size references are .221" minimum and .226" maximum). Since the A8K75 rivnut is keyed, use a key cutting tool or simply use a small file to provide a keyway.
- Reinstall the rail using AN526C-6/32R12 screws on Brackets #1 through #6 and an AN526C-8/32R12 screw on Bracket #7. Firmly tighten all fasteners.
- Install the three visor assemblies with the thumb tension knob inboard towards the cockpit. Install the snap ring on the back of the thumb tension knob screw which stops excessive turning.

Continued

OPERATING INSTRUCTIONS

- As the RBAC 1-11-300 drawing depicts, two of the visors will be stationed on the pilot's/engineer's side while one is stationed on the copilot's side.
- To operate your visors, loosen the thumb tension knob by turning in the counter-clockwise direction and, while still holding the knob, slide the visor in the desired direction. (A snap ring is installed on the rear of the thumb knob to prevent the pilot from inadvertently over-loosening the visor assembly.)
- The unique split clamping block allows travel right past mounting brackets.
- To lock the visor in place, simply tighten the thumb knob by turning in the clockwise direction.
- Your visors incorporate a swivel modification that allows them to rotate in the vertical axis. Swivel tension can be increased or decreased by adjusting the set screw on the side of the visor clamping block.
- To stow the visors, simply tighten the thumb tension knob and rotate the visor up. There is a small learning curve in determining how tight the visor should be, but after several operations the visor assembly can be stowed with ease and the correct tension used. The best position for stowing is aft on both sides of the rail with the two on the pilot's side stowed side by side.

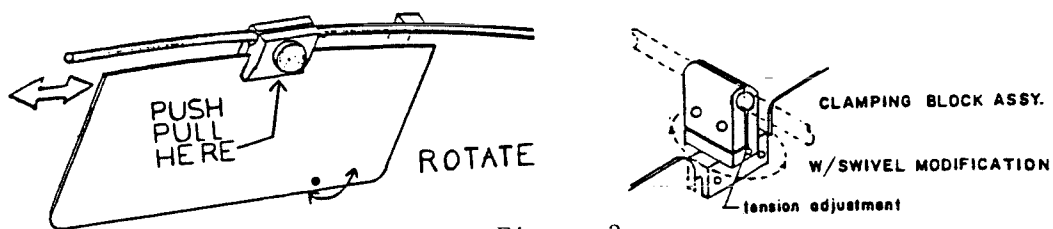


Figure 2

- Figure #2 shows where to rotate the visor for storage and that the thumb tension knob is held to push/pull the visor assembly. By holding the thumb tension knob only, the visor slides best.
- Enjoy your new monorail sun visor system. We always welcome comments regarding our products or suggestions for new products to improve your aircraft.