

AIR COMM CORPORATION  
BOULDER MUNICIPAL AIRPORT  
3300 AIRPORT ROAD  
BOULDER, CO 80301

SIKORSKY \*  
MODELS S-76A, S-76B & S-76C

FLIGHT MANUAL SUPPLEMENT  
FOR  
BLEED AIR CABIN HEATER

S76H-104

FAA APPROVED

The information contained in this document is FAA approved material, which must be carried in the basic Flight Manual after the rotorcraft has been modified by installation of the cabin heater system in accordance with Air Comm Corporation, STC No. SH4057NM.

The information in this document supplements or supersedes the basic manual only in the items contained herein. For limitations, procedures, and performance data not contained in this supplement, consult the basic Flight Manual.

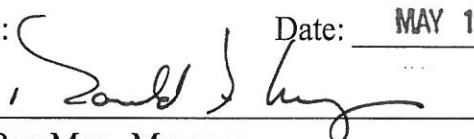
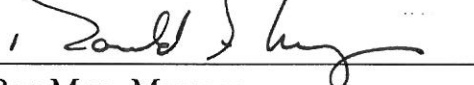
\*Includes S-76A modified by installation of Arriel engine (see Sikorsky STC SH568NE).

FAA APPROVED MAY 14 1998

1 of 9

MODEL S-76A, S-76B & S-76C  
FLIGHT MANUAL

## Bleed Air Cabin Heater

LOG OF REVISIONS				
Original .....0				
Rev. No.	Log of Pgs.	Pgs Rev.	Date	Approval
0	1-9		MAY 14 1998	
<div>FAA APPROVED:  Date: MAY 14 1998</div> <div>Approved:  Ron May, Manager Denver Aircraft Certification Office, Northwest Mountain Region, Denver, Colorado</div>				

FAA APPROVED MAY 14 1998

FAA APPROVED  
SUPPLEMENT

MODEL S-76A, S-76B & S-76C  
FLIGHT MANUAL

Bleed Air Cabin Heater

Introduction

The S76H-104 cabin heating system is a bleed air type which consists of a bleed air plumbing system, a manually operated heater control valve and a system of heater ejectors. The system also includes a windshield defroster system. The system general arrangement is shown by Figure 1.

The system is available with flight deck and cabin heaters and a windshield defroster system.

The system is approved for installation as a supplement to the existing bleed air heater or ECU, or with the existing system removed. If the factory installed heater system is removed, the bleed air shut-off valves must be retained. In addition, the heater "low bleed air pressure" system is retained. The low pressure system includes the engine bleed low pressure switch, the heater shutoff valves, and the engine bleed air advisory light system. This system automatically shuts the heater system off, in case of low engine bleed pressure, or loss of engine power.

Bleed air flows from the engine compressors through the heater ON-OFF valves, the bleed air plumbing, and the heater control valves to the heater ejectors. The heater ejectors mix cabin air with the bleed air and exhausts the warm air to the cabin and across the windshield. The air is circulated by the pumping action of the ejectors.

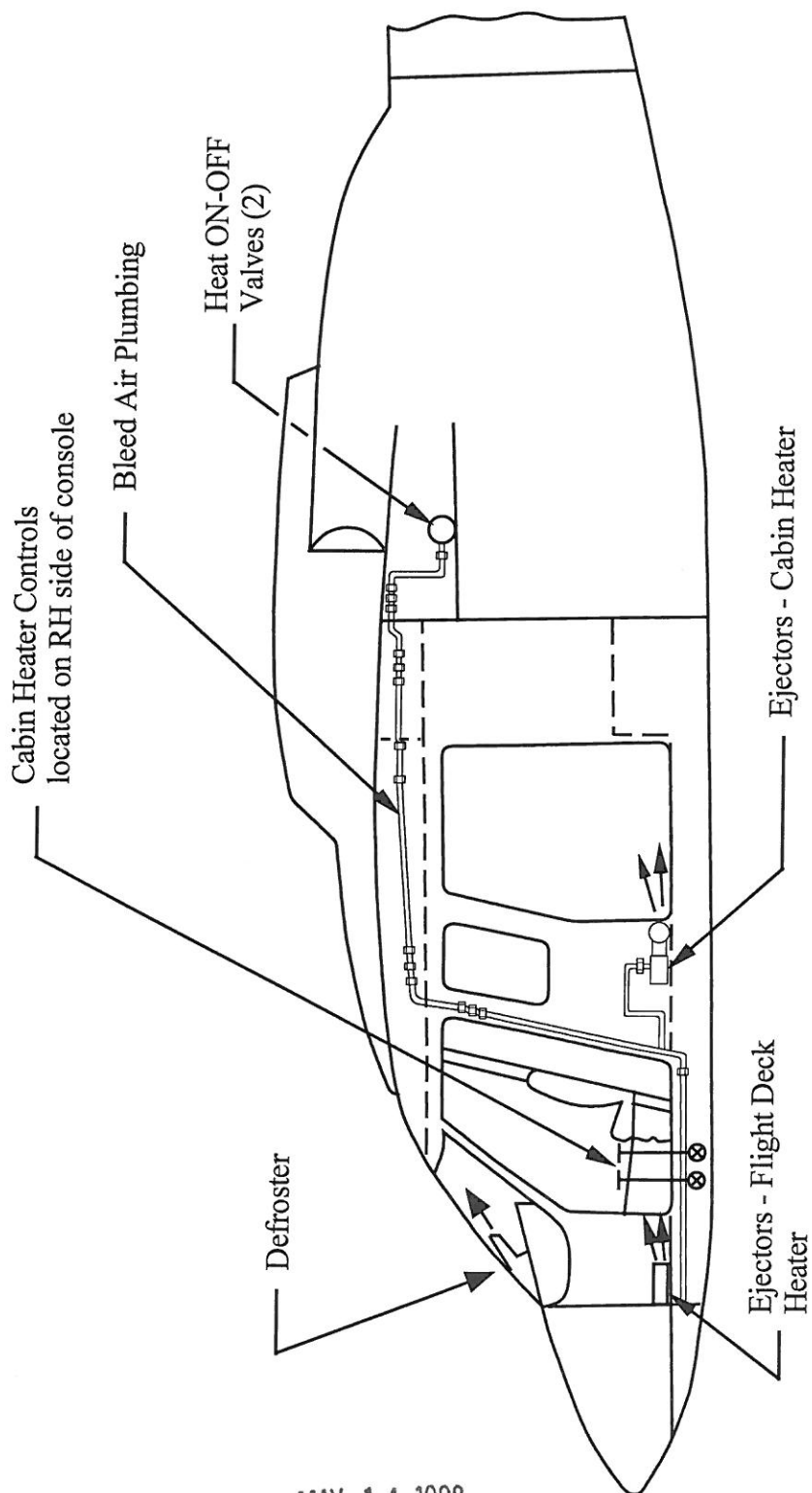


Figure 1, General Arrangement, S-76 Cabin Heater System

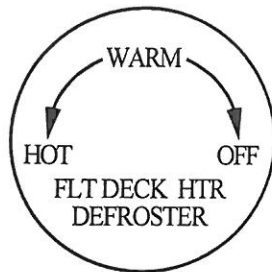
MODEL S-76A, S-76B & S-76C  
FLIGHT MANUAL

Bleed Air Cabin Heater

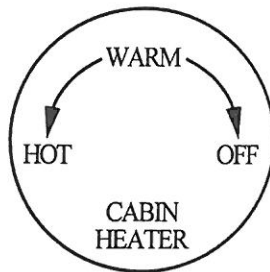
Section I

Operating Limitations

Placards and Markings:



Locate on heater control knob - RH side of center console



Located on aft heater control knob - RH side of center console

DO NOT BLOCK  
HEATER VENT

LH & RH side panels directly  
above heater inlets and outlets (4 total).

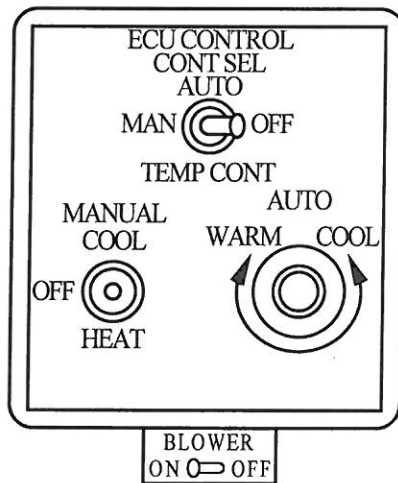
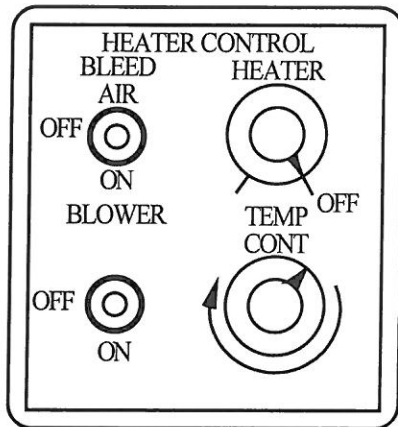
MODEL S-76A, S-76B & S-76C  
FLIGHT MANUAL

Bleed Air Cabin Heater

Section I

Operating Limitations

Placards and Markings:



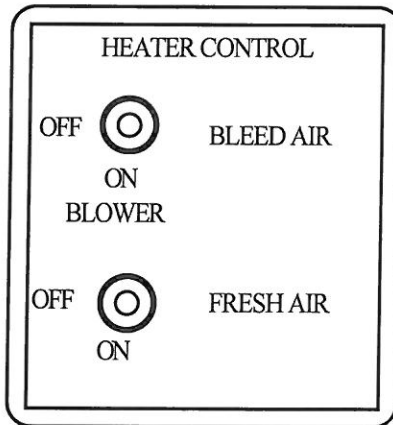
Existing Heater or ECU Control Panels if system is retained

MODEL S-76A, S-76B & S-76C  
FLIGHT MANUAL

Bleed Air Cabin Heater

Section I (cont'd)

Operating Limitation



Overhead control panel if factory heater has been removed



Overhead control panel if factory ECU has been removed.

MODEL S-76A, S-76B & S-76C  
FLIGHT MANUAL

Bleed Air Cabin Heater

Section II

Normal Procedures

Engine Prestart Check

Heater control bleed air switch OFF.  
Heater/Defroster valves OFF.

Before Take-Off

Heater control bleed air switch OFF.  
Heater/Defroster valves OFF.

In-flight Operations

Heater control bleed air switch ON as desired.  
Heater/Defroster valves ON as desired.  
Operate factory installed bleed air heater or ECU as desired  
(if system has not been removed).

NOTE

The electrically operated bleed air valves, which are located at each engine, will automatically close if power is lost on either engine.

Descent and Landing

Heater control bleed air switch OFF.  
Heater/Defroster valves OFF.



MODEL S-76A, S-76B & S-76C  
FLIGHT MANUAL

Bleed Air Cabin Heater

Section III

Emergency Procedures

Operate the heater control bleed air switch and the cabin heater/defroster valves to OFF for any of the following emergencies:

Engine failure.  
Engine over-temperature.  
Insufficient power.  
Onboard fire.

Section IV

Malfunction Procedures

No change.

Section V

No change in performance with heater OFF. Basic Flight Manual performance cannot be achieved with heater on.