

SIKORSKY 76

NR11PK
S-76A
FLIGHT MANUAL



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SA 4047-76-1

FAA APPROVED
ROTORCRAFT
FLIGHT MANUAL
SUPPLEMENT
NO. 29B
REVISION NO. 5

SIKORSKY
MODEL
S-76A
PART 1

Applicable to all helicopters equipped with
TURBOMECA ARRIEL 1S1 engines installed
in accordance with STC No. SH568NE.



Sikorsky

A United Technologies Company

Approved by:

[Redacted Signature]

for
Manager, Boston Aircraft
Certification Office, ANE-150

Date of Approval:
DECEMBER 21, 1993

Date of Revision:
May 4, 1999

Transient: 82% Nr

Transient: 70% Nr, at touchdown during single-engine landings and rejected takeoffs.

ROTOR BRAKE LIMITS

ROTOR STOPPED

Engine operations limited to one or both engines at idle or one engine at 70% N1 and the other engine at idle or off.

ROTOR TURNING

Rotor brake application limited to one (or two) engine(s) operating at idle or both engines shut down.

Maximum rotor speed for normal rotor brake application is 65% Nr.

A rotor shutdown using the rotor brake shall not be performed more than one time in any 10 minute period.

ROTOR BLADE LIMITS - ROTOR STOPPED

SINGLE OR DUAL ENGINE OPERATION

Main rotor blades must be positioned at approximately 45° to the longitudinal axis of the helicopter with one or both engines operating.

Engine Operation prohibited with engine cowling removed or hinged back.

ENGINE COWLING LIMITS

ENGINE COWLING OPEN

Engine operation with cowling open or unlatched is prohibited.

ENGINE COWLING REMOVED

Single-engine operations permitted only with operational rotor brake applied with main rotor blades positioned at 45° to the longitudinal axis of the helicopter and nose of the helicopter positioned into the wind. Do not exceed Ng 52%.

GO-AROUND

1. Increase collective pitch up to takeoff power.
2. Accelerate to best rate of climb speed.
3. Raise landing gear when positive rate of climb is established.

PRE-SHUTDOWN

1. AFCS switches - OFF.
2. Parking brakes - Set.
3. Flight controls - Centered, collective down.
4. Avionics - OFF.

SHUTDOWN

NOTE

Before shutdown, engines must have been running for at least 30 seconds with N1 at 70% or lower.

NOTE

Droop stops should be in at about 45% Nr. Tip path plane clearance is reduced if droop stops are not in.

NOTE

Normal Nr for rotor brake application with one or both engines at idle or with both engines shut down is 50% to 60% Nr. Maximum for shutdown is 65%. For emergencies with both engines shut off, rotor brake may be applied up to 107% Nr.

CAUTION

Maximum manual rotor brake application is not recommended when commenced below 30% Nr. Brake applications begun at less than 30% Nr should be light enough to produce a smooth, gentle stop.