

Cessna SID

Supplemental Inspection Document

Presentatör

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Sjö- och luftfartsavdelningen
Operatörsenheten
Sektionen för teknisk operation

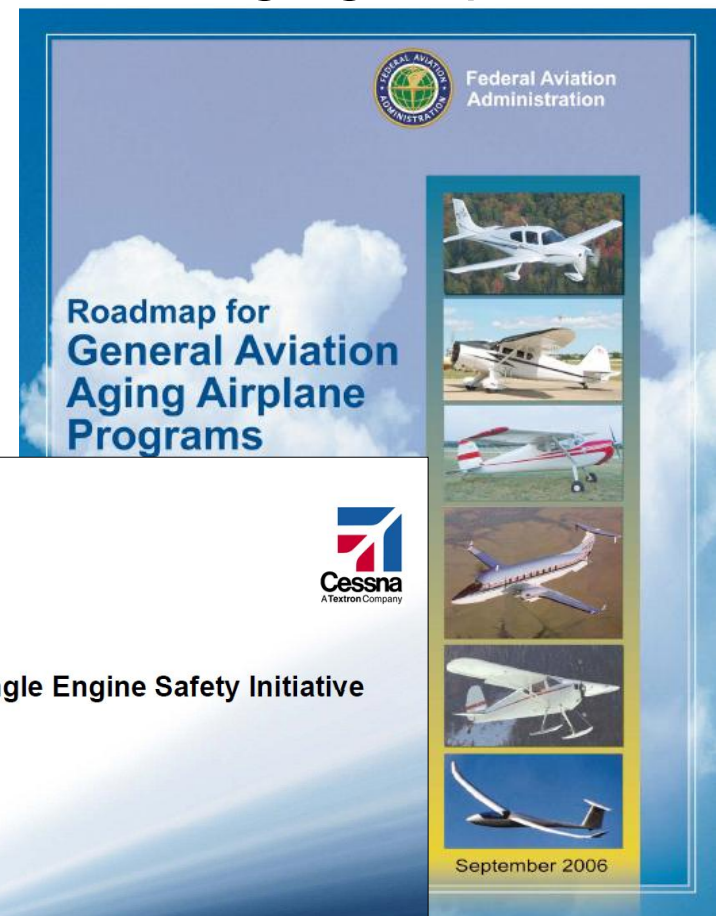
- Denna presentation är baserad på olika exempel.
- För specifik flygplansindivid.
Kontrollera Cessna manualen med rätt revision.

Innehåll

- Bakgrund
- Cessna CAP & SID
- Bedömning/värdering miljö (Korrosion & Operation)
- Exempel Cessna 182 1977-86
 - Motorfundament
 - Vinginfästning
- Exempel på dokumentation i AMP
- Möjligheter
- Sammanfattning

Bakgrund:

- Se tex "Roadmap for General Aviation Aging Airplane Programs" från 2006.
 - "Executive summary" och "Background".
- Se även:
 - Cessna Single Engine Safety Initiative.
- Äldre flygmaskiner kräver annan "vård", eller?



- **Från CAP till SID+CAP**

CAP
Continuing
Airworthiness
Program

+

SID
Supplement Inspection Document

- Operations
 - "Taskar" (Underhållsuppgifter)
 - Luftvärdighetsuppgifter
 - SID
 - CPCP
 - Expanded Maintenance

- **Och tydligare krav på återrapportering**

Innehåll Cesview angående SID

Cesview III - Table of Contents

100-70dvd12-9 disk 1 Table Of Contents

Cesview III Version 1.3.0

Model Serial Filtering is not available for this manual.

- Introduction
- Model 150 Series (1969-1976) Service Manual
- Model 150 Series (1977) Service Manual
- Model 152 Series (1978-1985) Maintenance Manual
- Model 172 Skyhawk Series (1969-1976) Service Manual
- Model 172 Series (1977-1986) Service Manual
- Model R172 Series (1977-1981) Service Manual
- Model 177 (1968-1978) Service Manual
- Model 177RG (1971-1975) Maintenance Manual
- Model 177RG Series (1976-1978) Service Manual
- Model 180 and 185 (1969-1980) Service Manual
- Model 182 Series (1969-1976) Service Manual
- Model 182 Series (1977-1986) Maintenance Manual
- Model R182/TR182 (1978-1986) Maintenance Manual
- Model 188 (1966-1984) Service Manual
- Model 150 Series (1970-1977) Parts Catalog
- Model 152 Series (1978-1985) Parts Catalog
- Model 172 Series (1963-1974) Parts Catalog
- Model 172 Series (1975-1986) Parts Catalog
- Model R172 (1977-1981) Parts Catalog
- Model 177 Series (1968-1978) Illustrated Parts Catalog
- Model 177RG Series (1971-1978) Illustrated Parts Catalog
- Model 180 and 185 (1961-1973) Illustrated Parts Catalog
- Model 180 and 185 (1974-1985) Parts Catalog
- Model 182 Series (1962-1973) Parts Catalog
- Model 182 and T182 Series (1974-1986) Parts Catalog
- Model R182 and TR182 Skylane RG (1978-1986) Parts Catalog
- Model 188 (1966-1975) Illustrated Parts Catalog
- Model 188 (1976-1984) Parts Catalog
- Model 150, 172 and 177 Series (1969-1973) Avionics Manual
- Model 150, 172 and 177 Series (1974-1976) Avionics Manual
- Model 150, 152, 172 and 177 Series (1977-1978) Avionics Manual
- Models 152 and 172 Series (1979-1982) Avionics Manual
- Model 177RG, 182, 206, 210 and 337 Avionics Manual
- Model 177RG, 182, 206, 210 and 337 Series Avionics Manual
- Model 177RG, 182, U206, 210 and 337 Series Avionics Manual
- Model 180, 185, 206 and 207 Series (1969-1973) Avionics Manual
- Model 180, 185 and 207 Series Avionics Installation Manual
- Model 180, 185 and 207 Avionics Installations Service Manual
- Models 180, 182, R182, 185, U206, 207 and 210 Avionics Manual
- Accessory Kit Index - Single and Multi-Engine Propellers
- Alternator Charging Systems (38, 52, 60 Amp)
- Air Conditioning System Service/Parts Manual
- 100 Series Continuous Airworthiness Program
- Model FR172 (1968-1976) Service Manual
- Model FR172 Series (1968-76) Parts Catalog
- Progressive Care & Inspection
- Emergency Rescue Access and Fire Fighting Procedures
- Alternator Charging System (100 Amp)
- Alternator Charging System (95 Amp)
- Service Documents

Section 1 - General Description

Section 2 - Ground Handling, Servicing, Cleaning, Lubrication and Inspection

Section 2A - Supplemental Inspection Documents

- Inspection Time Limits - Structure
- Inspection Time Limits
- Inspection Operation 1
- Inspection Operation 2
- Inspection Operation 3
- Inspection Operation 4
- Inspection Operation 5
- Inspection Operation 6
- Inspection Operation 7
- Inspection Operation 8
- Inspection Operation 9
- Inspection Operation 10
- Inspection Operation 11
- Inspection Operation 12
- Inspection Operation 13
- Inspection Operation 14
- Inspection Operation 15
- Inspection Operation 16
- Inspection Operation 17
- Inspection Operation 18
- Inspection Operation 19
- Inspection Operation 20
- Inspection Operation 21
- Inspection Operation 22
- Inspection Operation 23
- Supplemental Inspection Document
- Nondestructive Inspection Methods and Requirements
- Listing of Supplemental Inspections
- Supplemental Inspection Number: 27-20-01 Rudder Pedal Torque Tube Inspection
- Supplemental Inspection Number: 27-30-01 Elevator Trim Pulley Bracket and Actuator Bracket Structure Inspection
- Supplemental Inspection Number: 32-13-01 Main Landing Gear Tubular Spring Corrosion Inspection
- Supplemental Inspection Number: 32-13-02 Main Landing Gear Fittings Inspection
- Supplemental Inspection Number: 32-20-01 Nose Gear Torque Link and Fork Inspection
- Supplemental Inspection Number: 53-11-01 Carry-Thru Structure Corrosion Inspection
- Supplemental Inspection Number: 53-12-01 Fuselage Forward Doorpost Inspection
- Supplemental Inspection Number: 53-30-01 Fuselage Interior Skin Panels Corrosion Inspection
- Supplemental Inspection Number: 53-30-02 Strut Attach Fitting Inspection
- Supplemental Inspection Number: 53-47-01 Seat Rails and Seat Rail Structure Corrosion Inspection
- Supplemental Inspection Number: 55-10-01 Horizontal Stabilizer, Elevators and Attachments Inspection
- Supplemental Inspection Number: 55-30-01 Vertical Stabilizer, Rudder and Attachments Inspection
- Supplemental Inspection Number: 57-11-01 Wing Structure Inspection
- Supplemental Inspection Number: 57-11-02 Wing Structure Corrosion Inspection
- Supplemental Inspection Number: 57-11-03 Wing Splice Joint at Strut Attach Inspection
- Supplemental Inspection Number: 57-12-01 Wing Root Rib Corrosion Inspection
- Supplemental Inspection Number: 57-40-01 Strut and Strut Wing Attachment Inspection
- Supplemental Inspection Number: 57-51-01 Aileron Support Structure Inspection
- Supplemental Inspection Number: 57-53-01 Flap Tracks and Attachments Inspection
- Supplemental Inspection Number: 71-20-01 Engine Mount Inspection
- Expanded Maintenance
- Corrosion Prevention and Control Program (CPCP)
- Corrosion

Section 3 - Fuselage

Section 4 - Wings and Empennage

Section 5 - Landing Gear and Brakes

Section 6 - Aileron Control System

Inspection Operations

Instruktioner för SID programmet

Supplemental Inspection till Inspection Operations

Många visuella inspektioner i områden som ändå är öppna vid tillsyn.

- Skillnaden är att inspektionen är mera **specifik**.



När ska det vara infört:

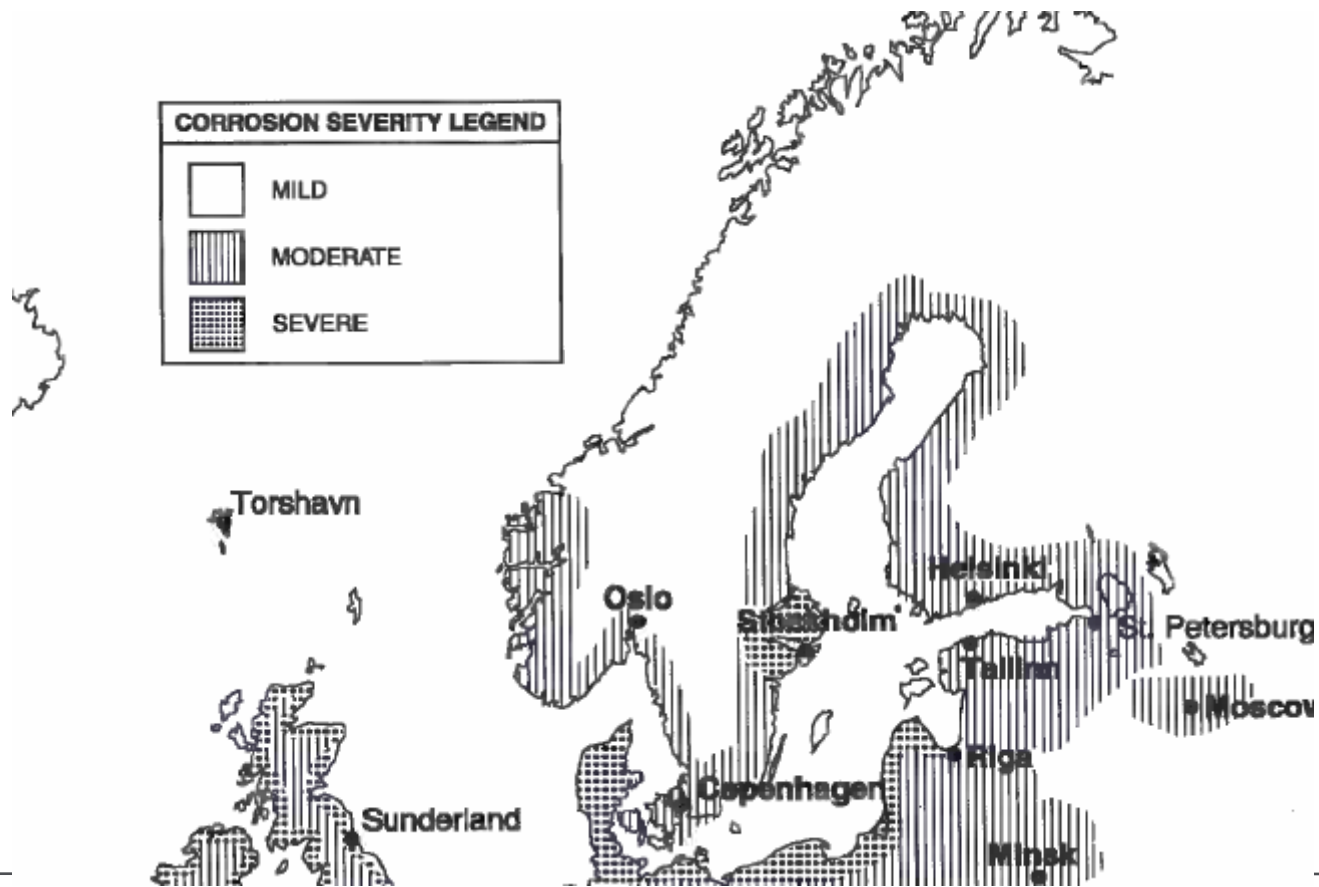
Inspection Program Availability



- Revised inspection program will be published in the airplane service manual
 - 200 Series airplanes – November 2011
 - 100 Series airplanes – April 2012
 - Compliance Date
 - 200 Series airplanes – December 2013
 - 100 Series airplanes – June 2014

OBS: Se manualen vad gäller specifik individ.

Bedömning/värdering korrosiv miljö:



Bedömning/värdering miljö:

- **Corrosion Environment:**
 - Mild or Moderate Corrosion Environment
 - Severe Corrosion Environment
- **Operation Usage:**
 - Typical Usage Environment
 - Severe Usage Environment

Värdera/Motivera:

- Var befinner den sig nu,
- var har den varit, ev inspektera och
- bedöm (motivera).

Ex: Cessna 182 1977-86

- 23 Operations (61 Taskar).
- Efter Värdering blir det 17-18 Operations kvar (46 Taskar).

De jobbigaste (dyraste) är inspektion av:

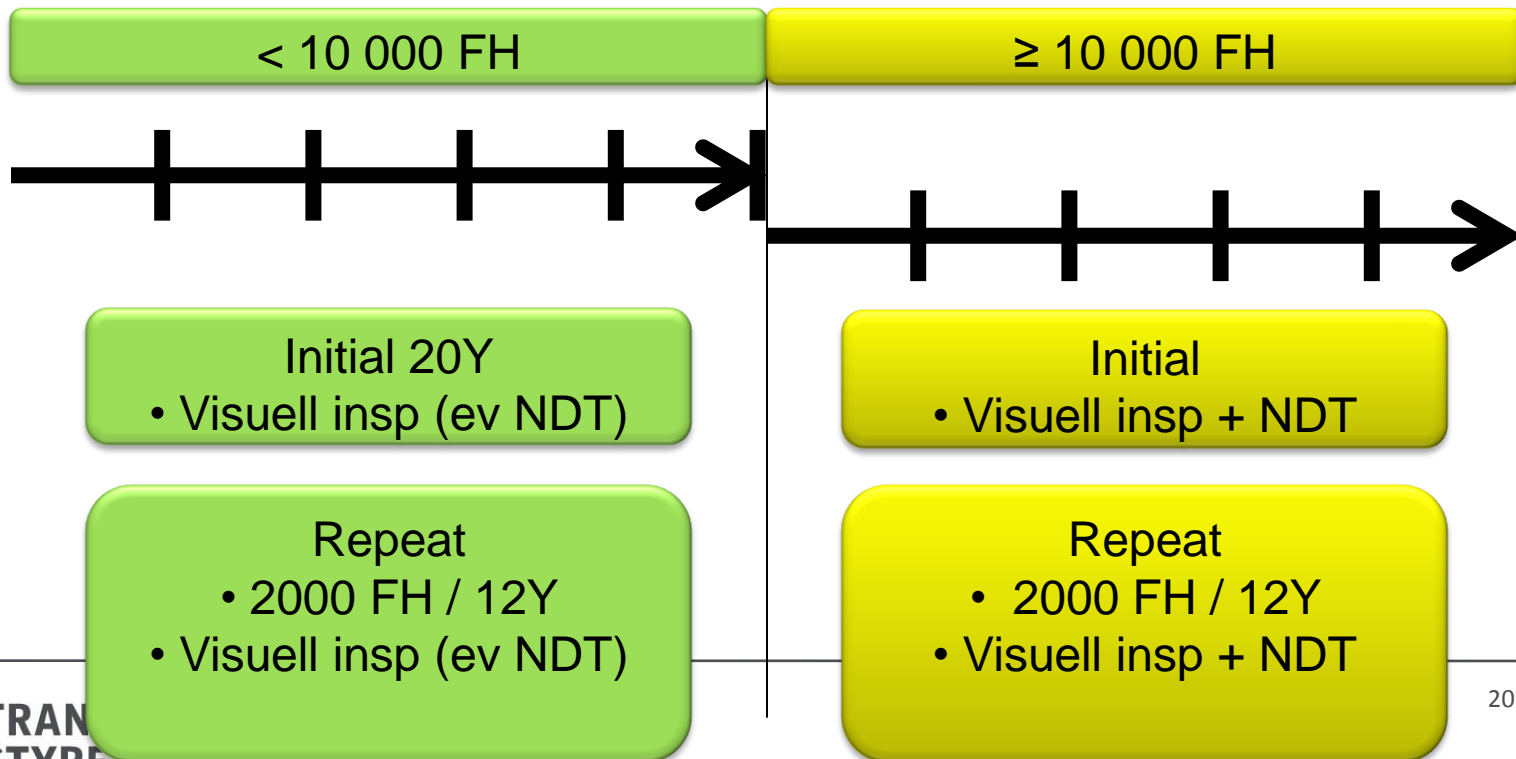
- Motorfundament,
 - Vinginfästning (bulthålen).
- Pga av NDT inspektion.

Engine Mount Inspection

Motorfundament

- Visuell inspektion
- Magnet Particle

INSPECTION COMPLIANCE			
ALL USAGE:	INITIAL	10,000 Hours	or 20 Years (NOTE)
	REPEAT		At Engine Overhaul (NOTE)

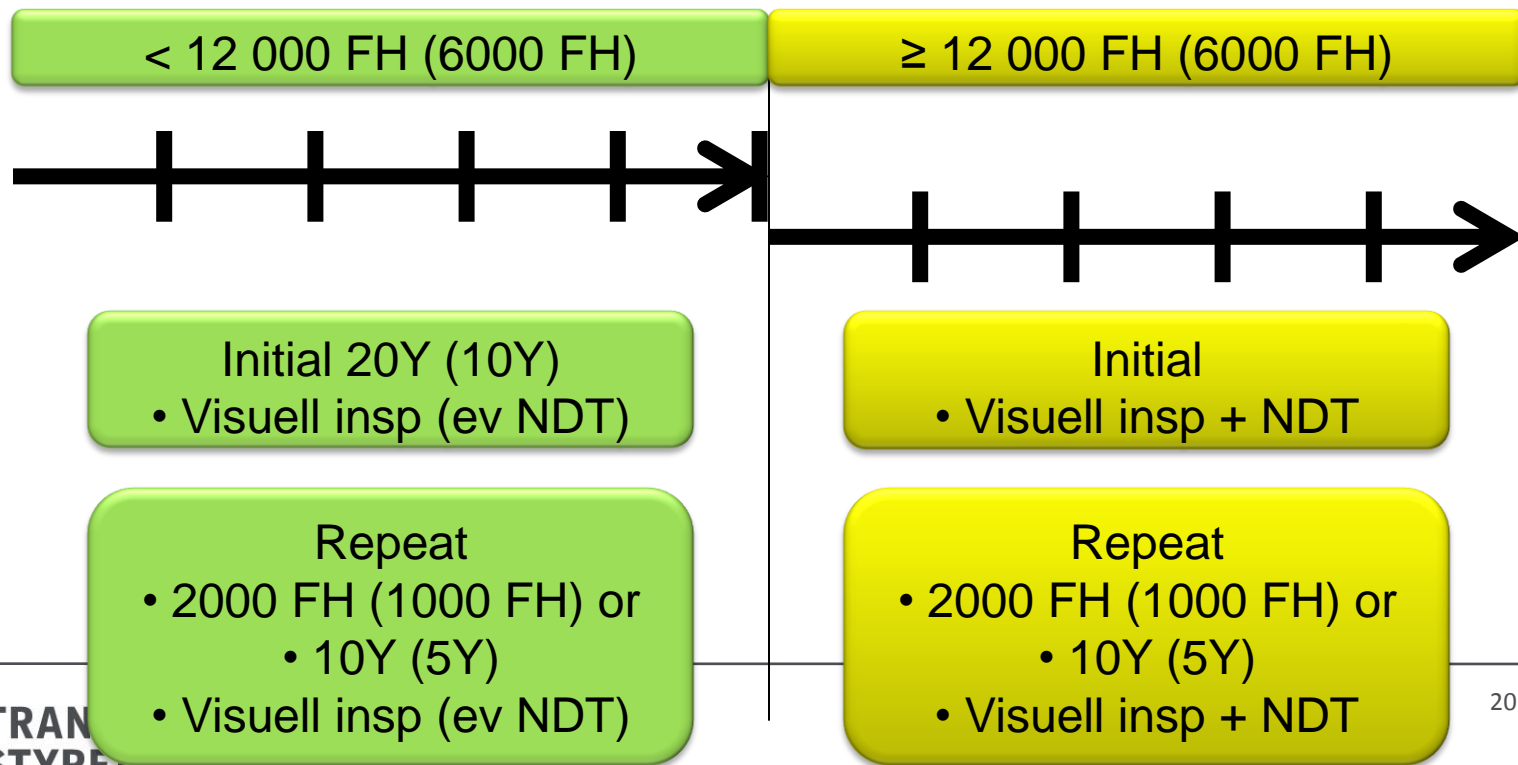


Wing Structure Inspection

Vinginfästning (bulthålen)

- Visuell inspektion (Visuellt, B...
- Detaljerad inspektion (Eddy C...

INSPECTION COMPLIANCE			
TYPICAL:	INITIAL	12,000 Hours	OR 20 Years (NOTE)
	REPEAT	2,000 Hours	OR 10 Years (NOTE)
SEVERE:	INITIAL	6,000 Hours	OR 10 Years (NOTE)
	REPEAT	1,000 Hours	OR 5 Years (NOTE)



Exempel dokumentering i AMP:

- Alla operationer värderas. Berörda ska dokumenteras.

Tabell 1 (Table 1)

Underhållsåtgärder som anges i grunddokumentationen (fält 7) och enl. fält 8, 9, 10, 13 och 14

(Maintenance tasks that are set out in the basic documentation (field 7) and field 8, 9, 10, 13 and 14)

Intervall (Interval)	Åtgärd (Action)	Referens (inkl. rev datum) (Reference, incl. revision date)	Gäller Reg (Ref A/C Reg)
SID – Inspections			
Ej ifyllt pga denna presentation	Inspection Operation 2	2A-12-2, Jan 2/1996	
- II -	Inspection Operation 3	2A-12-3, Jan 2/1996	
- II -	Inspection Operation 4	2A-12-4, Jan 2/1996	
- II -	Inspection Operation 5	2A-12-5, Jan 2/1996	
- II -	Inspection Operation 6	2A-12-6, Jan 2/1996	
- II -	Inspection Operation 7	2A-12-7, Jan 2/1996	
- II -	Inspection Operation 8	2A-12-8, Jan 2/1996	
- II -	Inspection Operation 9	2A-12-9, Jan 2/1996	
- II -	Inspection Operation 10	2A-12-10, Jan 2/1996	(Mild/moderate corrosion) Till denna presentation
- II -	Inspection Operation 11	2A-12-11, Jan 2/1996	(Mild/moderate corrosion) Till denna presentation
- II -	Inspection Operation 14	2A-12-14, Jan 2/1996	
- II -	Inspection Operation 15	2A-12-15, Jan 2/1996	
- II -	Inspection Operation 16	2A-12-16, Jan 2/1996	
- II -	Inspection Operation 17	2A-12-17, Jan 2/1996	(Mild/moderate corrosion) Till denna presentation
- II -	Inspection Operation 19	2A-12-19, Jan 2/1996	(Typical usage) Till denna presentation
- II -	Inspection Operation 22	2A-12-22, Jan 2/1996	
- II -	Inspection Operation 23	2A-12-23, Jan 2/1996	

Möjligheter:

- Läs noggrant.
- Tillåtna variations enligt Cessna
 - Max +10 FH eller 30 dgr.
 - Ej ackumulera.
 - Om detta är beskrivet i underhållsprogrammet.
- Alltid möjligt med alternativa metoder
 - M.A.302(d)(iii) med AMC.
 - Se MFL AIR 3-2011.

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