

# Checklist

**LN-MTX** 

SFK April 2020





# GROUND Eksterior Checklist

**Drained** 

Down

1. Fuel (wings & filter)

2. Documents - Checked

3. Fire extinguisher, first aid sur. kit - Checked

4. Magnetos - Off

5. Master switch - On

6. Flaps

7. Fuel quantity - Checked

8. Master switch - Off

Gust lock - Removed

10. Doors & windows - Checked

11. Baggage door - Locked

12. Tail surface - Checked

13. Tail section - Checked 14. Antennas - Checked

15. R.H flap - Checked

16. R.H aileron - Checked

17. Nav & strobe lights - Checked 18. R.H wing surface - Checked

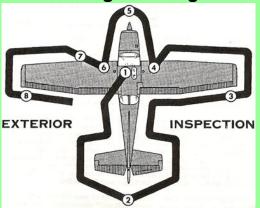
19. R.H main wheel & brakes - Checked

20. Fuel quantity R.H wing - Checked

21. Fuel cap R.H wing - Secured

22. Oil quantity (<u>6 - 8 / 5 - 7 quarts</u>) - Checked

23. Landing & taxi lights - Checked



Sjekk for type



# GROUND Eksterior Checklist

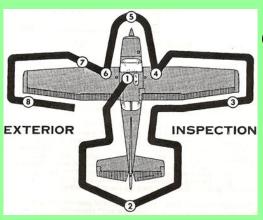
24. Airfilter	-	Checked
25. Fanbelt & generator	-	Checked
26. Propeller & spinner	_	Checked
27. Nosewheel strut & tire link	_	Checked
28. Engine cowling	-	Secured
29. Static port	_	Checked
30. Fuel quantity L.H wing	-	Checked
31. Fuel cap L.H wing	-	Secured
32. Pitot tube	-	Checked
33. Stall warning	-	Checked
34. L.H fuel vent	-	Checked
35. Left wing surface	-	Checked
36. Nav & strobe lights	-	Checked
37. L.H aileron	-	Checked
38. L.H flap	-	Checked
39. L.H main wheel & brakes	-	Checked

#### LIGHTS:

40. Landing & taxi lights - Checked 41. Nav & strobe lights - Checked

#### **PASSENGER BRIEFING:**

42. Evacuation, life jackets - Completed 43. Weight & balance - Checked





# GROUND **START**

#### **Before / Starting engine**

**Preflight inspection** 

2. **Seats & belts** 

**Parking brake** 

**Flight controls** 4.

5.

**Fuel selector** 

**Circuit breakers** 

**Avionics** 

Primer (hot - cold)

10. Mixture

11. Throttle

12. Carburetor heat

13. Doors & windows

14. Propeller area

15. Master switch **BATT** only

16. Beacon

17. Ignition18. Throttle

19. Oil pressure

20. Master switch ALT21. Flaps

22. Radios (ATIS - GND - TWR)

23. Navigation lights

24. Altimeters (QNH)

25. Gyros

Completed

Locked & on

Set

Free / correct

Checked & set

Checked / both

Checked in

Off

2 - 6, locked

Rich

1/2 cm open

Closed / locked

Clear

On

On

Start

1000 RPM

**Checked (30-60)** 

ON

Checked & up

On

On if necesarry

Set

Set



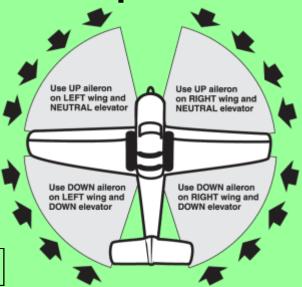
# TAXI

- 1. **Taxilight**
- 2. **Brakes**
- Flight instruments

# **GROUND** TAXI / RUN UP

- On, if necesarry
- Checked
- Checked

#### **Checklist Completed**



#### **Engine Run Up**

Nose into wind Checked

2. Checked & set **Brakes** 

3. **Area free** Checked

4. **Throttle** 1700 RPM

5. Oil pressure/temperature Checked

6. **Suction (4,6 - 5,4 green)** Checked

7. **Ampermeter** Checked Magnetos max 125 drop +/- 50-8. Checked

9. Carburetor heat (RPM drop) Checked

650 - 850 RPM 10. Throttle idle

11. Throttle 1000 RPM



# GROUND TAKE-OFF

#### **Before Take-Off**

- 1. Magnetos
- 2. Master
- 3. Carburetor heat
- 4. Mixture
- 5. Fuel selector
- 6. Flaps
- 7. Instruments
- 8. Gyros (comp. Set to RWY HDG)
- 9. Transponder
- 10. Departure briefing

- On both
- On both
- Off
- Rich
- On Both
- 0 10°
- Checked
- Set
- On
- Reviewed
- Engine failure during take-off
- Outbound ruting
- 11. On Line-up: Compass heading
- Checked

12. Take-off time

Logged

## **Checklist Completed**

#### **CLIMB**

#### **AIRBORNE**

**Up** (300-500')<sup>\*</sup>

- 1. Flaps
- 2. Mixture
- 3. Engine instruments
- 4. Altimeters
  - Vx = 64 KIAS (Best rate of climb speed)
    Vy = 78 KIAS (Best angle of climb speed)
- Lean as req.Checked
- Set
  - **Checklist Completed**



# **AIRBORNE CRUISE**

#### CRUISE

Power Set

2. **Mixture** Lean as req.

3. Engine instruments Checked Fuel quantity/balance **Checked** 4.

5. Heading Set

## **Checklist Completed**

#### AIRWORK / STALL CHECK

1. **Loose articles Secured** 

Min. 3000' AGL 2. **Altitude** 

Forced landing area Located

**Seat belts** 4. On

On both 5. Fuel selector

6. **Mixture** Rich Checked 7. Instruments

**Within limits** 8. Weight & balance

Other traffic Checked

10. Carburetor heat As req.

11. Clearance Received



# AIRBORNE PRE-LANDING

#### **APPROACH**

1. Atis - Received

2. Altimeters (QNH) - Set 3. Heading - Set 4. Landing lights - On

# **Checklist Completed**

#### **PRE-LANDING**

1. Engine instruments - Checked

2. Mixture - Rich - On both

4. Landing lights - On

5. Seats / belts - Adjust/lock

6. Flaps - Set

7. Carburetor heat - On, before closing throttle



# AIRBORNE PRE-LANDING

#### **DOWNWIND CHECK**

1. Primer - Locked

2. Magnetos - On both

3. Master switch - On both

4. Landing lights - As req.

5. Carburetor heat (< 2000 RPM) - On 6. Mixture - Rich

7. Fuel selector - On both

8. Brake pressure - Checked

9. Harness - Checked

10. Doors - Locked

#### **Checklist Completed**

#### **GO AROUND**

1. Throttle - Full power

2. Carburetor heat - Off 3. Mixture - Rich

4. Flaps - Carefully up

5. Trim - Set



# GROUND SHUT DOWN

#### **AFTER LANDING**

1. Carburetor heat

2. Flaps

3. Lights

4. Radios

5. Landing time

- Off

- Up

- As req.

- As req.

- Logged

## **Checklist Completed**

#### **SHUT DOWN**

1. Throttle - 1000 RPM

2. Radios - Off

3. Transponder - Off 4. Lights (nav - taxi) - Off

5. Throttle - 1000 RPM

6. Mixture - Full lean

7. Beacon light - Off 8. Magnetos - Off

9. Master switch - Off 10. All Switches - Off

11. Gust lock - Installed 12. Documents - Filled



# **EMERGENCY IN FLIGHT**

- **Nose down** 
  - Trim best glide 70 kts
- **Select field** 
  - **Set Cource**
- - On
- **Identify** 
  - **Primer**
  - **Magnetos**
  - **Master switch**
  - **Carburetor heat**
  - Mixture
  - **Fuel selector**
- **Radio** 
  - **Mayday call**
- Transponder



# EMERGENCY ON GROUND

#### FIRE DURING START UP

1. Starter - Continue cranking

2. Mixture - Idle cut off 3. Throttle - Full open

#### **If fire continues:**

4. Fuel selector - Off5. Magnetos - Off6. Master switch - Off

7. Aircraft - Evacuate

8. Fire extinguisher - As necessarry

## **Checklist Completed**

#### **ENGINE FAILURE ON RWY**

1. Throttle - Idle

2. Brakes - Apply to stop

#### If insufficient runway:

3. Mixture - Idle cut off

4. Fuel selector - Off
5. Master switch - Off
6. Magnetos - Off



# EMERGENCY TAKE-OFF

#### **ENGINE FAILURE AFTER TAKE-OFF**

Speed (nose down)
 Throttle
 Flaps
 70 kts
 Idle
 As req

4. Land - Straight ahead

#### If insufficient runway:

5. Mixture - Idle cut off

6. Fuel selector - Off7. Master switch - Off8. Magnetos - Off

Make shallow turns to avoid obstacles. Min. altitude for 180° turns 700' AGL.



# EMERGENCY IN FLIGHT

#### **ENGINE FAILURE IN FLIGHT**

1. Fly the aircraft - 70 kts
2. ELT - On
3. Landing area - Select
4. Primer - Locked
5. Magnetos - Checked

6. Carburetor heat
7. Throttle
8. Mixture
9. Fuel selector
10. Mayday call
11. Passenger
12. See the Shelfer
13. Carburetor heat
14. Carburetor heat
15. On
16. Completed
16. Carburetor heat
17. Completed
18. Carburetor heat
18

12. Seats & belts - Locked & on

13. Transponder - 7700

#### Prop rotating

#### If time and altitude permits:

14. Mixture - Idle cut off 15. Throttle - Full 3 - 5 sec

16. Mixture (when engine starts) - Rich

#### **Prop not rotating**

17. Mixture - Idle cut off 18. Throttle - 1 cm open 19. Ignition - Start

19. Ignition - Start20. Mixture (when engine starts) - Rich

**Continue with emergency landing checklist:** 



# EMERGENCY IN FLIGHT

When unable to restart:

# **EMERGENCY LANDING**

1. Mixture - Idle cut off

2. Fuel selector - Off
3. Magnetos - Off
4. Master (when flaps selected) - Off
5. Doors - Open

## **Checklist Completed**

#### **ENGINE FIRE IN FLIGHT**

1. Fuel selector - Off

2. Mixture - Idle cut off
3. Throttle - Full open
4. Cabin heat & vent - Closed

**Continue with emergency landing checklist:** 



# EMERGENCY ON GROUND

#### **EMERGENCY EXIT ON GROUND**

1. Personal equipment - Disconnect

2. Doors - Open

3. Aircraft (if possible pax. first) - Abandon

## **Checklist Completed**

#### **LOSS OF OIL PRESSURE**

Power
 Oil pressure
 Reduce
 Checked

If unable to bring back oil pressure within limits:

LAND A.S.A.P



# EMERGENCY ELECTRICAL

#### **ELECTRICAL FIRE**

Master switch
 Electrical switches
 Fire
 Off
 All off
 Extinguish

4. Master switch - On

5. Radio - On

# **Checklist Completed**

## **IF VOLTAGE DROP**

1. Electrical load - Reduce

2. Alt output / alt field - Reset after 3 min

If circuit breakers are not tripped:

3. alternator - Off 30 sec 4. Alternator - On, check

If no charge:

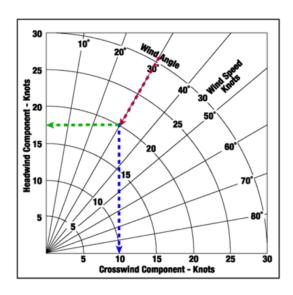
5. Alternator - Off 6. Electrical load - Min

LAND A.S.A.P



# PERFORMANCE X-WIND

# NOTE: Maximum demonstrated crosswind velocity is <u>15 knots</u>



Wind 20 kts, 30 degrees off CL gives headwind component 17 kts and x-wind component 10 kts.

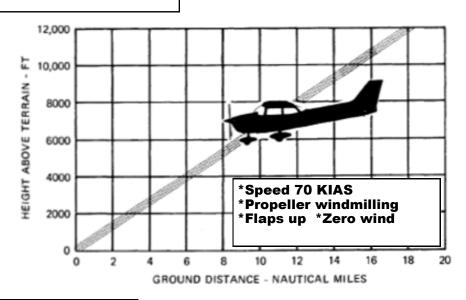
# Hastighet / distanse

<u>GS</u>			
<del>30</del>	kts	=	0,5 NM / min
60	kts	=	1,0 NM / min
90	kts	=	1,5 NM / min
120	kts	=	2,0 NM / min
150	kts	=	2,5 NM / min
180	kts	=	3,0 NM / min
210	kts	=	3,5 NM / min



# PERFORMANCE GLIDE / CLIMB

## **Best glide speed**



#### Rate of climb

Weight	Press	Climb	RA	TE OF CLI	MB - FPM	
LBS	ALT FT	speed KIAS	-20°C	0°C	20°C	40°C
2300	S.L	78	755	695	630	565
	2000	76	655	595	535	470
	4000	74	555	500	440	380
	6000	72	460	405	350	290
	8000	70	365	310	255	200
	10.000	68	270	215	165	
	12.000	66	175	125		



# PERFORMANCE YOUR AIRPLANE

FLY TYPE = C172M

FLY REG = LN-MTX

#### **SPEED**

 $V_A =$ 97 KIAS **Maneuvering speed** 2.  $V_{FE} =$ 85 KIAS Flap extended speed 3. **128 KIAS**  $V_{NO} =$ **Maximum structural cruising** speed 4.  $V_{NE} =$ **160 KIAS Never exeed speed** 5.  $V_s =$ 47 KIAS Stall speed  $V_{so} =$ 6. 41 KIAS Stall speed / min. steady flight speed in landing configuration

7.  $V_X$  = 64 KIAS Best angle of climb speed

8.  $V_Y = 78 \text{ KIAS}$  Best rate of climp speed

#### X-WIND

Max demontrated X-wind = 15 kts



# SIGNALS FOR AERODROME TRAFFIC

Light Signal	Meaning to Aircraft in Flight	Meaning to Aircraft on Aerodrome
STEADY GREEN	Authorised to land if pilot satisfied no collision risk exists	Authorised to take- off if pilot satisfied no collision risk exists
STEADY RED	Givo way to other aircraft and continue circling	Stop
GREEN FLASHES	Return, wait for permission to land	Authorised to taxi IF pilot satisfied no collision risk exists
RED FLASHES	- Do not land, - Aerodrome not available for landing	Taxi clear of landing area in use
WHITE FLASHES	Land at this aero- drome, after receiving continuous green light	Return to starting point on aero- drome

Red rocket = Do not land!

#### Prosedyrer for avskjæring

Dersom du blir avskjært av luftfartøy fra Forsvaret, sørg først og fremst å fly på en forutsigbar måte. Dersom forholdene tillater det oppretthold høyde, kurs og hastighet, inntil du mottar instrukser fra luftfartøyet som avskjærer deg. Som fartøysjef er du forpliktet til å følge instruksene umiddelbart.

- ⇒ Følg instruksene som gis via visuelle hjelpemidler, visuelle signaler eller radio.
- ⇒ Forsøk å oppnå kontakt med flyet som avskjærer deg eller lufttrafikktjenesten ved å gjøre et opprop på nødfrekvensen (121,5 MHz). Oppgi registrering, posisjon og formålet med flygingen.
- ⇒ Dersom du har transponder, sett kode 7700, med mindre lufttrafikktjenesten gir beskjed om noe annet. Har du ADS-B eller ADS-C, velg relevant nødfunksjon, med mindre lufttrafikktjenesten gir beskjed om noe annet.
- Du må følge instruksene og signalene fra det avskjærende luftfartøyet inntil du har fått klarering til å fortsette på egenhånd.

Mer informasjon finner du i forordning (EU) nr. 923/2012, SERA.11015 Avskjæring

#### Visuelle signaler

Avskjærende luftfartøy (avskjærer)	Betydning	Du skei
Nærmer seg på flygerens side med samme hastighet og kurs. Om natten; Blinker med lys,	Du har blitt avskåret.	Dag; Vink med vingene for å be- krefte. Natt: Vink med vingene og blink med navigasjonslysene.
Starter en svak sving med lav krengevinkel.	Følg meg – Fly denne retningen.	Sett samme kurs som avskjærer.
Krapp sving foran deg . Kan også slippe «flares».	ADVARSEL! Endre kurs nå og følg avskjærer.	Sett umiddelbar samme kurs som avskjærer.
Sirkler over en landingsplass og senker understell. Overflyr fly- plassen i en retning. Om natten settes landingslys på.	Land på denne landingsplassen.	Land på rullebanen. Dersom lan- dingsplassen ikke er egnet, blink med landingslyset og deretter sirkle i 1000-2000 fot AGL til du mottar nye instrukser fra avskjærer.
Utfører «breakaway» manøver.	Avskjærer forstår dine intensjo- ner. Avskjæringen er avsluttet og du kan fortsette.	Kan du ikke følge instruksene; blink med lysene med jevne pul- ser. Har du en nødsituasjon; blink med lysene med ujevne pulser.

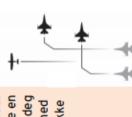
# Radioprosedyrer

Uttale	Betydning	Uttale	Betydning
KÅLSAIN	Hva er din registrering?	KÅLSAIN	Min registrering er
FÅLLÅ	Følg min retning.	VILKO	Jeg følger instruksen.
DISENT	Stig ned.	DISEND	Jeg må stige ned.
JU LÆND	Land på denne landingsplas- sen.	KÆNNÅT	Kan ikke følge instruksen.
PROSIID	Du kan fortsette.	RIPIT	Gjenta.
		MEIDEI	Jeg er i nød.
		HAIDSJÆK	Jeg er kapret.
		ÆM LÅSST	Jeg vet ikke hvor jeg er.

# Tilnærming og identifikæsjon Det er vanlig at to flyr sammen. Det ene jagerflyet vil legge seg ved siden av deg (hvis hastigheten tillater det) for å oppnå kontakt med deg. Det andre flyet ligger bak deg. Avskjæring kan også utføres med helikopter.



# cBreakaway> manaver Jagerflyene vil utføre en krapp sving vekk fra deg dersom de er kjent med din intensjon og du ikke utgjør en fare.



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