

# **N 8857K**

## **BEFORE STARTING ENGINES**

ALL SWITCHES .....OFF  
FUEL SELECTORS ..... MAIN TANKS  
COWL FLAPS ..... OPEN/ AS REQUIRED  
VOLTMETER .....CHECK VOLTS  
NAV/ ANTI COLL ..... ON  
BATTERY & ALTERNATORS ..... ON  
MAGENTO SWITCHES ..... ON  
PRESSURIZATION CONTROLS .....SET  
GEAR LEVER ..... THREE GREEN NO RED  
FUEL METER/ QUANTITY ..... SET/ CHECK  
CABIN DOOR ..... LATCHED AND SECURE

## **STARTING ENGINES**

POWER QUADRANT ..... SET  
PROPELLERS ..... CLEAR  
ENGINES ..... START  
ELECTRICAL SYSTEM .....CHECK  
ENGINE INSTRUMENTS .....CHECK  
AVIONICS ..... ON & SET

## **BEFORE TAXING**

ATIS/ CLEARANCE .....CHECK  
PFD ..... BRIEF  
RADIO STACK & SCORE BOARD ..... BRIEF  
ENG MONITOR .....ON, SET, BRIEFED  
FLIGHT CONTROLS .....CHECK  
TRIM TABS ..... SET  
BRAKES .....CHECK  
AUXILIARY FUEL PUMPS ..... LOW

## **ENGINE RUNUP:**

THROTTLES ..... 1700RPM  
MAGENTOS ..... CHECL  
PROPELLERS .....CHECK  
ENGINE INSTRUMENTS .....CHECK  
ALTERNATORS .....CHECK  
MIXTUES .....CHECK, FULL RICH  
THROTTLES ..... 1000 RPM  
FRICITION LOCK..... ADJUST

## **BEFORE TAKEOFF**

LANDING LIGHT .....AS REQUIRED  
WING FLAPS ..... TAKEOFF  
COWL FLAPS .....OPEN  
ICE PROTECTION EQUIPMENT .....AS REQUIRED  
ANNUNCIATOR PANEL ..... CLEAR

## **TAKEOFF**

POWER ..... SET FOR TAKEOFF (2700 /38)  
MIXTURES ..... WHITE ARC (34-36)  
ENGINE INSTRUMENTS .....CHECK

## **AFTER TAKEOFF/ CLIMB**

LANDING GEAR ..... RETRACT  
TAXI LIGHT ..... OFF  
BEST ANGLE ..... Vx 88 Vy 111 CRUISE 120 KIAS  
POWER ..... 33/ 2500  
MIXTURES ..... 27 GPHADJUST  
COWL FLAPS .....AS REQUIRED  
PRESSURIZATION .....CHECK

## CRUISE

ELECTRICAL SYSTEM .....CHECK  
AUXILIARY FUEL PUMPS .....OFF  
CABIN PRESSURE .....CHECK  
POWER QUADRANT..... 29.5/ 2400/19GPH  
TRIM TABS/ AUTO PILOT ..... ADJUST  
COWL FLAPS .....AS REQUIRED  
FUEL SELECTORS ..... AUX TANKS  
PFD .....CHECK  
ATIS, APPCH, VNAV, .....TUNE, PROGRAM

## DESCENT

SEAT BELTS .....SECURE  
AUXILIARY FUEL PUMPS .....LOW  
PRESSURIZATION .....SET  
COWL FLAPS ..... CLOSE  
FUEL SELECTORS ..... MAIN TANKS  
PROP SYNC.....OFF  
PROPELLERS.....AS REQUIRED  
MIXTURES ..... ADJUST  
ALTIMETER..... SET

## BEFORE LANDING

CABIN DIFF PRESSURE ..... CHECK ZERO  
LANDING GEAR ..... DOWN 3 GREEN  
WING FLAPS .....LANDING  
POWER .....SHEDULE  
PROPELLERS..... FULL FORWARD  
MIXTURES ..... ADJUST  
APPROACH SPEED..... 94 KIAS AT 6750 POUNDS

## BALKED LANDING

PROPS ..... FULL  
THROTTLE..... FULL  
POSITIVE RATE ..... GEARUP  
FLAPS ..... 15°  
COWL FLAPS .....OPEN  
OBSTACLES ..... FLAPS UP

## AFTER LANDING

AUXILIARY FUEL PUMPS .....LOW  
COWL FLAPS .....OPEN  
WING FLAPS ..... UP

## SHUTDOWN

PARKING BRAKE.....SET IF BRAKES ARE COOL  
AUXILIARY FUEL PUMPS .....OFF  
AVIONICS/ SWITCHES .....OFF  
THROTTLES ..... IDLE  
MIXTURES ..... CUTOFF  
MAGENTO SWITCHES .....OFF  
BATTERY, ALTERNATORS.....OFF

Vmca ..... 72  
Vso ..... 71  
Vs1 ..... 81  
Approach ..... 105  
Over # ..... 94  
Balked landing ..... 86  
Vx ..... 88  
Vy ..... 111  
Cruise climb ..... 115-140  
Vsse ..... 83  
Vxse ..... 97  
Vyse ..... 102  
Vfe 15° ..... 160  
Vfe ..... 142  
Vle ..... 140  
Vlo ..... 140  
Vr ..... 88  
Lift off ..... 94  
Vno ..... 200  
Vne ..... 234  
Vbest glide ..... 107

|                          |           |
|--------------------------|-----------|
| Empty cargo config ..... | 4421/153  |
| Ramp .....               | 6430      |
| TO .....                 | 6390      |
| Landing .....            | 6075      |
| Zero fuel.....           | 5630      |
| Wing locker fuel .....   | 120 each  |
| Aux tanks .....          | 31.5 each |
| Mains .....              | 50 each   |
| Max baggage .....        | 340       |
| Optimum oil level .....  | 10 qts    |

**TAKE OFF PERFORMANCE**

|                                      |         |
|--------------------------------------|---------|
| Takeoff 20° 6290 sea level.....      | 2600 ft |
| Takeoff 20° 6290 3000 ft.....        | 3451 ft |
| Accel/ stop 20° 6290 sea level ..... | 3326 ft |
| Accel/ stop 20° 6290 3000 ft.....    | 3718 ft |
| Accel/ go 20° 6290 sea level .....   | 5661 ft |
| Accel/ go 20° 6290 3000 ft .....     | 8556 ft |

**ENGINE SECURING PROCEDURE**

|                     |         |
|---------------------|---------|
| Throttle.....       | close   |
| Mixture.....        | cutoff  |
| Propeller.....      | feather |
| Fuel selector ..... | off     |
| Aux pump.....       | off     |
| Mags .....          | off     |
| Prop sync.....      | off     |
| Alternator .....    | off     |
| Cowl flap.....      | close   |

**ENGINE FAILURE AFTER TAKEOFF**

|                            |             |
|----------------------------|-------------|
| Mixtures .....             | full rich   |
| Props full forward         |             |
| Throttles full forward     |             |
| Inop engine                |             |
| Throttle .....             | close       |
| Mixture .....              | idle cutoff |
| Prop.....                  | feather     |
| Bank 5° toward good engine |             |
| Climb over obstacle 91 kts |             |
| Climb 102                  |             |
| Trim tabs                  |             |
| Cowl flap.....             | close       |
| Inop engine.....           | secure      |
| Fuel selector .....        | off         |
| Aux pump.....              | off         |
| Mags.....                  | off         |
| Alternator .....           | off         |
| Land as soon as practical  |             |

**ENGINE FAILURE DURING FLIGHT - SPEED ABOVE 91**

INOPERATIVE ENGINE ..... DETERMINE  
 OPERATIVE ENGINE .....ADJUST AS REQUIRED.

BEFORE SECURING INOPERATIVE ENGINE:

FUEL FLOW .....CHECK  
 ..... IF DEFICIENT- AUXILIARY FUEL PUMP TO LOW

FUEL SELECTORS..... MAIN TANKS  
 ..... (FEEL FOR DETENT)

FUEL QUANTITY.....CHECK  
 OIL PRESSURE AND OIL TEMPERATURE.....CHECK  
 MAGNETO SWITCHES ..... CHECK ON  
 MIXTURE..... ADJUST  
 .....LEAN FOR MANIFOLD PRESS  
 ..... RICHEN AS POWER INCREASES

**IF ENGINE DOES NOT START**

INOPERATIVE ENGINE ..... SECURE  
 THROTTLE ..... CLOSE  
 MIXTURE .....IDLE CUT-OFF  
 PROPELLERS.....FEATHER  
 FUEL SELECTOR .....OFF (FEEL FOR DETENT)  
 AUXILIARY FUEL PUMP ..... OFF  
 MAGNETO SWITCHES ..... OFF  
 PROP SYNCHROPHASER ..... OFF  
 ALTERNATOR ..... OFF  
 COWL FLAP ..... CLOSE

OPERATIVE ENGINE ADJUST  
 POWER .....ASREQUIRED  
 MIXTURE ..... ADJUST FOR POWER  
 FUEL SELECTOR..... MAINTANK (FEEL FOR DETENT)  
 AUXILIARY FUEL PUMP ..... LOW  
 COWL FLAP .....AS REQUIRED

TRIM TABS ..... ADJUST  
 ELECTRICAL LOAD.....DECREASE TO MIN REQD.  
 LAND AS SOON AS PRACTICAL

**ENGINE INOPERATIVE LANDING**

**ENGINE INOPERATIVE GO AOUND**

Throttle..... FULL FORWARD  
 Positive Rate..... Gear up  
 Landing gear up  
 Wing flaps ..... up if extended  
 Cowl flaps ..... open  
 Climb Vyse..... 102  
 Trim tabs adjust

## AIRSTART

### WITH UNFEATHERING SYSTEM:

AUXILIARY FUEL PUMP ..... CHECK OFF

#### IF ONPURGE:

PUMP OFF  
MIXTURE IDLE CUTOFF  
THROTTLE OPEN  
MAGS OFF  
ROTATE ENG 15 TIMES

MAGNETO SWITCHES ..... ON  
FUEL SELECTOR ..... MAINTANK  
..... (FEEL FOR DETENT)  
THROTTLE ..... 1 ½ INCHES FROM FULL  
MIXTURE ..... 2 INCHES FROM RICH  
PROPELLER ..... FULL FORWARD  
PROPELLER @ 1000 ..... RETARD TO DETENT  
AUXILIARY FUEL PUMP ..... LOW  
MIXTURE ..... ADJUST  
POWER @ **200° F**/..... INCREASE  
MIXTURE ..... ENRICH WITH POWER INCREASES  
COWL FLAPS ..... AS REQUIRED  
ALTERNATOR ..... ON

## AIRSTART

### WITHOUT UNFEATHERING SYSTEM:

AUXILIARY FUEL PUMP ..... CHECK OFF

#### IF ON--- PURGE:

PUMP OFF  
MIXTURE IDLE CUTOFF  
THROTTLE OPEN  
MAGS OFF  
ROTATE ENG 15 TIMES

MAGNETO SWITCHES ..... ON  
FUEL SELECTOR ..... MAINTANK  
..... (FEEL FOR DETENT)  
THROTTLE ..... 1 ½ INCHES FROM FULL  
MIXTURE ..... 2 INCHES FROM RICH  
PROPELLER ..... FORWARD OF DETENT  
START BUTTON ..... PRESS  
PRIME SWITCH ..... ACTIVATE  
AUXILIARY FUEL PUMP ..... LOW  
MIXTURE ..... ADJUST  
POWER.....**200° F**/ THEN INCREASE  
MIXTURE ..... ENRICH WITH POWER INCREASES  
COWL FLAPS ..... AS REQUIRED  
ALTERNATOR ..... ON.

Both engine failure during cruise  
Flaps up

Landing gear ..... up  
Props ..... feather  
Cowl flaps ..... close  
Airspeed ..... 105kias  
Landing ..... refer to forced landing

## FIRE PROCEDURES

### FIRE ON THE GROUND

#### THROTTLE CLOSE

BRAKES ..... **AS REQUIRED**  
MIXTURES ..... **CUTOFF**  
BATTERY ..... **OFF**  
MAGNETOS ..... **OFF**  
EVACUATE ..... **ASAP**

### IN FLIGHT WING OR ENGINE FIRE:

BOTH AUXILIARY FUEL PUMPS ..... OFF  
APPROPRIATE ENGINE SECURE  
THROTTLE ..... CLOSE  
PROPELLER ..... FEATHER  
MIXTURE ..... IDLE CUT-OFF  
FUEL SELECTOR ..... OFF (FEEL FOR DETENT)  
MAGNETOS ..... OFF  
PROP SYNCH ..... OFF  
ALTERNATOR ..... OFF  
COWL FLAP ..... CLOSE  
CABIN HEATER ..... OFF  
LAND AND EVACUATE AIRPLANE AS SOON AS PRACTICAL  
OPERATIVE ENGINE FUEL SELECTOR ..... MAIN TANK (FEEL FOR DETENT)  
EMERGENCY CROSSFEED SHUTOFF ..... OFF (PULL UP)

### IN-FLIGHT CABIN FIRE OR SMOKE

Electrical load ..... reduce  
Attempt to isolate  
Cabin air controls ..... open all  
..... close if smoke increases  
Pressurization air contamination procedure ..... initiate if required  
Land and evacuate ..... as soon as practical

### EMERGENCY DESCENT PROCEDURES

#### PREFERED PROCEDURE:

THROTTLES ..... IDLE  
PROPELLERS ..... FULL FORWARD  
MIXTURES ..... ADJUST FOR SMOOTH ENGINE OPERATION

WING FLAPS ..... UP  
LANDING- GEAR ..... UP  
MODERATE BANK..... INITIATE  
AIRSPEED 230 KIAS.

### TURBULENCE

THROTTLES..... IDLE  
PROPELLERS..... FULLFORWARD  
MIXTURES .....ADJUSTFORSMOOTH ENGINE OPERATION  
WINGRAPS ..... DOWN45°  
LANDING GEAR .....DOWN  
MODERATEBANK ..... INITIATE  
AIRSPEED : ..... 140 KLAS.

### FORCED LANDING (WITH POWER)

Landing site..... check 100 kts 15°

#### SMOOTH SURFACE

Gear .....down  
Normal landing..... nose wheel off alap

#### ROUGH SURFACE:

Landing gear up..... rough surface  
Approach ..... 100 kts/ 15°  
Left and right pressurization.....pull  
All switches except mags ..... off  
EMERGENCY EXIT..... REMOVE  
MIXTURE .....IDLE CUTOFF  
MAGNETOS .....OFF  
FUEL SELECTORS ..... OFF  
LANDING ATTITUDE ..... NOSE HIGH

### FORCED LANDING (NO POWER)

MIXTURE .....IDLE CUTOFF  
Props..... feather  
Fuel selectors..... Off  
All switches except battery..... Off  
Approach .....105 kts  
Hard/ smooth surface  
Gear .....down  
Flaps ..... as required  
Battery switch ..... off  
Emergency exit..... remove  
Normal landing.....hold nose off  
Soft /rough surface  
Gear ..... up  
Flaps ..... 15°  
Approach ..... 100 kts  
Battery switch ..... off  
Emergency exit..... remove

Landing attitude .....nose high

### FLAT MAIN GEAR

Gear .....down  
Fuel selectors .....burn fuel on side of bad tire  
Fuel selectors ..... main tanks  
Crosswind ..... on good tire  
Flaps ..... 45°  
Align with runway edge .....on good tire side  
Bad tire hold off  
Brake on good tire  
Expect turn towards bad tire

### DEFECTIVE MAIN GEAR

Fuel selectors ..... burn bad gear side  
Fuel selectors before landing..... main tanks  
Headwind  
Gear down  
Runway alignment .....good side  
Battery ..... off  
Land ..... bad gear high  
Nose wheel ..... land immediately  
Ground loop.....initiate into defective gear  
Mixtures ..... cutoff  
Aileron..... lighten load  
Brakes ..... on good gear  
Fuel selectors ..... off  
Evacuate..... Airplane

### FLAT NOSE GEAR

GEAR..... DOWN  
LOAD ..... MOVE AFT  
APPROACH CONFIGURATION ..... 100 KTS 15°FLAPS  
LAND ..... NOSE HIGH  
NOSE ..... HOLD OFF  
BRAKES ..... MINIMUM  
THROTTLES .....RETARD IN LANDING ROLL  
CONTROL WHEEL .....AFT TILL STOP  
TAXI ..... MINIMIZE

### DEFECTIVE NOSE GEAR

### 0 FLAP LANDING

## DITCHING

### ENGINE DRIVEN FUEL PUMP FAILURE

#### ALTERNATOR FAILURE - SINGLE

ELECTRICAL LOAD REDUCE

IF CIRCUIT BREAKER IS TRIPPED:

TURN OFF AFFECTED ALTERNATOR.

& RESET AFFECTED ALTERNATOR CIRCUIT BREAKER.

TURN ON AFFECTED ALTERNATOR SWITCH.

IF CIRCUIT BREAKER REOPENS, TURN OFF ALTERNATOR.

IF CIRCUIT BREAKER DOES NOT TRIP:

SELECT AFFECTED ALTERNATOR ON VOLTAMMETER (NFL)

MONITOR OUTPUT.

IF OUTPUT IS NORMAL AND FAILURE LIGHT REMAINS ON.

DISREGARD FAIL INDICATION AND HAVE INDICATOR (A&B)

AFTER LANDING.

IF OUTPUT IS INSUFFICIENT, TURN OFF ALTERNATOR (NFL)

REDUCE ELECTRICAL LOAD TO ONE ALTERNATOR (CN/N::SR/F).

IF COMPLETE LOSS OF ALTERNATOR OUTPUT OCCURS. ATB:K

REPLACE FUSE AND REPLACE IF NECESSARY.

IF AN INTERMITTENT LIGHT INDICATION ACCOMPANIED BY

VOLTAMMETER FLUCTUATION IS OBSERVED, TURN OFF

AFFECTED ALTERNATOR AND REDUCE LOAD TO ONE ALTERNATOR

CAPACITY.

RESTRICT LOAD ON REMAINING ALTERNATOR TO 80% OF 115

RATED LOAD.

AIR SPEED 130 KIAS OR LESS

LANDING GEAR SWITCH DOWN

GEAR HYDRAULIC CIRCUIT BREAKER PULL

EMERGENCY GEAR EXTENSION

T-HANDLE PULL

GEAR DOWN LIGHTS ON; UPLOCKED

LIGHTS - OFF

IF MAIN GEAR DOES NOT

LOCK DOWN YAW AIRPLANE

ALL LOADS WILL LOCK

MAIN GEAR DOWN

UPLOCKS HAVE

RELEASED

GEAR WARNING HORN CHECK

AS SOON AS PRACTICAL. LAND.

NOTE: PROCEDURES PER MEB 8&3

ALTERNATOR FAILURE - DUAL

AVIONICS BUS FAILURE

GEAR WONT EXTEND

VACUUM PUMP

ICING STATIC SOURCE

## AIR INLET ICING

MRW..... 6430

MTOW ..... 6390

MLW ..... 6075

MZFW ..... 5630