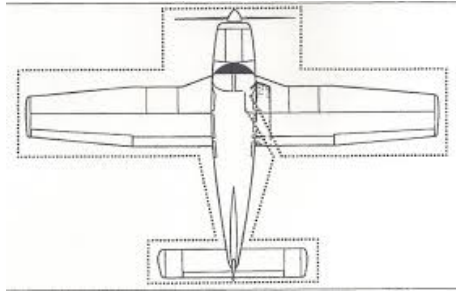


# N8255J Piper Dakota 235 - Checklist

## PREFLIGHT



WEATHER.....CHECK  
EQUIPMENT REQUIRED .....CHECK  
WEIGHT & BALANCE .....CHECK  
PERFORMANCE FIGURES.....CHECK  
AIRCRAFT CLIPBOARD & KEYS .....CHECK

## COCKPIT

REQUIRED DOCUMENTS.....AVAILABLE  
HOBBS/TACH ..... RECORD  
ALL SWITCHES .....OFF  
MIXTURE.....IDLE CUT-OFF  
MASTER ..... ON  
MANIFOLD PRESSURE .....SHOWING OUTSIDE PRESSURE  
FUEL QUANTITY GAUGES ..... CHECK  
ANNUNCIATOR PANEL.....CHECK  
ROTATING BEACON .....CHECK  
STROBES .....CHECK  
NAV LIGHTS.....CHECK (NIGHT OPS)  
LANDING LIGHT.....CHECK  
STALL WARNING .....CHECK  
PITOT HEAT .....CHECK  
MASTER SWITCH ..... OFF  
FLAPS ..... DOWN  
PITOT AND STATIC SYSTEMS .....DRAIN

# N8255J Piper Dakota 235 - Checklist

## RIGHT WING

FLAP ..... SECURE & UNDAMAGED  
AILERON ..... FREE & CORRECT  
AILERON COUNTERWEIGHT ..... FREE  
WING TIP & LIGHT ..... UNDAMAGED  
FUEL DRAIN ..... SAMPLE  
FUEL QUANTITY ..... CHECK  
FUEL CAP ..... SECURE  
FUEL VENT ..... CLEAR  
LANDING GEAR/TIRE ..... UNDAMAGED  
BRAKES ..... CHECK  
AIR INLET ..... CLEAR

## NOSE

WINDSHIELD ..... CLEAN & UNDAMAGED  
ENGINE OIL LEVEL ..... 9 TO 12 QTS  
ENGINE OIL DIPSTICK ..... SECURED  
PROPELLER & SPINNER ..... CHECK  
COWLING ..... CHECK  
LANDING LIGHT ..... CHECK  
NOSE GEAR & TIRE ..... CHECK  
TOW BAR ..... REMOVED & STOWED  
CHOCKS ..... REMOVED  
ALTERNATOR BELT ..... TENSION  
FUEL SUMP DRAIN ..... SAMPLE

## LEFT WING

AIR INLET ..... CLEAR  
FUEL DRAIN ..... SAMPLE  
FUEL QUANTITY ..... CHECK  
FUEL CAP ..... SECURE  
FUEL VENT ..... CLEAR  
LANDING GEAR & TUBE ..... CHECK  
PITOT COVER ..... REMOVED  
PITOT MAST ..... UNDAMAGED  
STALL WARNING INDICATOR ..... CHECK  
WING TIP & LIGHT ..... UNDAMAGED

# N8255J Piper Dakota 235 - Checklist

AILERON ..... FREE  
AILERON COUNTERWEIGHT .....FREE  
FLAP ..... SECURE & UNDAMAGED

## EMPENNAGE

STABILATOR & TRIM.....CHECK  
RUDDER .....CHECK  
VERTICAL STABILIZER.....CHECK  
ANTENNAS .....CHECK  
FRESH AIR INLET .....CLEAR

## FUSELAGE

ANTENNAS .....CHECK  
LEFT STATIC PAD .....CLEAR  
RIGHT STATIC PAD.....CLEAR  
BAGGAGE DOOR ..... CLOSED & SECURE  
PREFLIGHT INSPECTION ..... COMPLETE

# N8255J Piper Dakota 235 - Checklist

## BEFORE STARTING ENGINE

PASSENGER BRIEFING .....COMPLETE  
FLAPS ..... RETRACTED  
SEATS, BELTS.....ADJUSTED, LOCKED  
DOOR ..... LATCHED  
AVIONICS MASTER ..... OFF  
FUEL SELECTOR ..... LOWEST TANK  
CIRCUIT BREAKERS ..... CHECK  
CONTROLS ..... CHECK

## ENGINE START

PARKING BRAKE .....SET  
MIXTURE .....FULL RICH  
PROPELLER .....FULL FORWARD  
CARBURETOR HEAT ..... OFF  
MASTER SWITCH .....ON  
ANTI-COLLISION LIGHTS .....ON  
FUEL PUMP ..... ON  
FUEL PRESSURE ..... CHECK  
PRIME ..... AS REQUIRED  
THROTTLE ..... CRACKED  
TOE BRAKES.....APPLY  
PROPELLER AREA.....CLEAR  
STARTER ..... ENGAGE  
OIL PRESSURE (30/WARM & 60/COLD) ..... CHECK  
ENGINE ..... SET 1000 - 1200 RPM  
FUEL PUMP .....OFF  
AVIONICS/RADIOS ..... ON  
TRANSPONDER ..... ALT & 1200  
G550W/450W .....VERIFY DATABASE

# N8255J Piper Dakota 235 - Checklist

## TAXI

DO NOT RIDE THE BRAKES

GBR UNICOM 122.8.....RADIO CHECK  
ALTIMETER .....SET  
FLIGHT INSTRUMENTS.....CHECK  
LIGHTS .....AS REQUIRED  
AIRPORT DIAGRAM.....AVAILABLE  
TAXI AREA CLEAR.....CLEAR  
STERILE COCKPIT .....NO NON-ESSENTIAL CONVERSATION  
BRAKES .....TEST

## RUN UP

AIRCRAFT POSITION.....INTO THE WIND  
PARKING BRAKE .....SET  
MIXTURE ..... FULL RICH  
FUEL SELECTOR ..... FULLEST TANK  
THROTTLE .....2000 RPM  
MAGNETOS (175 RPM MAX DROP, 50 RPM DIFF.) ..... CHECK  
CARBURETOR HEAT .....CHECK  
PROPELLER .....EXERCISE  
ENGINE INSTRUMENTS ..... IN GREEN  
FUEL PRESSURE .....CHECK  
AMMETER.....CHECK  
VACUUM GAUGE ..... 4.5 – 5.2  
ANNUNCIATOR .....CHECK  
THROTTLE ..... 1000 RPM  
PRIMER .....LOCKED  
FLIGHT INSTRUMENTS.....CHECK  
FLIGHT CONTROLS ..... FREE & CORRECT  
THROTTLE FRICTION LOCK ..... ADJUSTED  
TRANSPONDER ..... ON-ALT

# N8255J Piper Dakota 235 - Checklist

## BEFORE TAKEOFF

DOOR .....CLOSED & LOCKED  
WINDOW .....SECURE  
SEAT .....LOCKED IN PLACE  
SEAT BELTS .....FASTENED  
LANDING LIGHT .....ON  
FUEL PUMP .....ON  
PROPELLER .....FULL FORWARD  
MIXTURE ..... FULL RICH (OR SET FOR ALTITUDE)  
FLAPS .....SET  
TRIM TAB .....SET TO NEUTRAL  
COURSE SET .....SET  
TIME OFF .....NOTED  
DEPARTURE BRIEFING .....BRIEFED

# N8255J Piper Dakota 235 - Checklist

## DEPARTURE BRIEFING

- Wind Direction & Speed
- Runway Abort Point
- Climb Speed
- Best Glide Speed
- Known Obstructions & Terrain
- Decision Height/Altitude
- Landing Options
- Airplane Configured (W.H.A.T. - I.F.)

Risk Profile

Low

### 1. TAKE OFF ROLL

Power To Idle  
Maintain Directional Control  
Stop

Moderate

### 2. RUNWAY REMAINING

Pitch Down  
Power To Idle  
Land Straight Ahead

High

### 3. INITIAL CLIMB

Pitch Down  
Establish Best Glide  
Land Within a Widening Pie Slice  
Land Into Wind

Moderate

### 4. DEPARTURE CLIMB

Pitch Down  
Establish Best Glide  
Select Best Landing Spot  
Land Into Wind  
Systems Off  
Crack Open Doors

# N8255J Piper Dakota 235 - Checklist

## NORMAL TAKEOFF

FLAPS .....UP  
ROTATE ..... 60 - 65 KTS

## SHORT-FIELD TAKEOFF

FLAPS .....25°  
POSITION .....ALL AVAILABLE RUNWAY  
BRAKES.....HOLD  
THROTTLE ..... FULL OPEN  
ENGINE.....MAX STATIC POWER  
BRAKES.....RELEASE  
ROTATE ..... 50 - 60 KTS  
INITIAL CLIMB SPEED (V<sub>X</sub>) .....73 KTS  
FLAPS .....UP - CLEAR 50' OBSTACLE  
CLIMB SPEED (V<sub>Y</sub>).....85 KTS

## CLIMB

THROTTLE .....FULL  
FLAPS .....RETRACT CLEAR OBSTACLES  
CRUISE CLIMB..... 100 KTS

## CRUISE

PITCH .....SET  
THROTTLE ..... **SET PER POWER TABLE**  
PROPELLER .....2400 RPM  
TRIM ..... SET  
FUEL SELECTOR..... PROPER TANK  
FUEL PUMP .....OFF  
LANDING LIGHT .....OFF  
MIXTURE .....LEAN AS REQ



# N8255J Piper Dakota 235 - Checklist

## POWER SETTINGS TABLE

### POWER SETTING TABLE -- AVCO LYCOMING O-540-J3A5D, 235 HP @ 2400 RPM

SL	Alt. Feet	Std. Alt. Temp. °C	129 HP - 55% Rated RPM & MAN. PRESS.				153 HP - 65% Rated RPM & MAN. PRESS.				175 HP - 75% Rated RPM & MAN. PRESS.				200 HP - 85% Rated RPM & MAN. PRESS.			
			2100	2200	2300	2400	2100	2200	2300	2400	2200	2300	2400	2200	2300	2400	2200	2300
15			20.8	20.0	19.4	18.7	23.2	22.4	21.7	21.0	24.6	23.9	23.1	27.2	26.4	25.5		
1000	13		20.5	19.8	19.2	18.5	22.9	22.2	21.5	20.8	24.3	23.6	22.9	26.9	26.1	25.3		
2000	11		20.3	19.5	19.0	18.3	22.7	21.9	21.2	20.6	24.1	23.4	22.6	F.T.	25.8	25.0		
3000	9		20.0	19.3	18.8	18.1	22.4	21.7	21.0	20.4	23.8	23.1	22.4	—	F.T.	24.7		
4000	7		19.8	19.1	18.5	17.9	22.1	21.4	20.8	20.2	23.5	22.8	22.1	—	—	F.T.		
5000	5		19.5	18.9	18.3	17.7	21.9	21.2	20.5	20.0	23.2	22.6	21.9					
6000	3		19.3	18.6	18.1	17.5	21.6	21.0	20.3	19.7	F.T.	22.3	21.7					
7000	1		19.1	18.4	17.9	17.3	21.3	20.7	20.1	19.5	—	F.T.	21.5					
8000	-1		18.8	18.2	17.7	17.2	21.1	20.5	19.9	19.3	—	—	F.T.					
9000	-3		18.6	18.0	17.5	17.0	F.T.	20.2	19.7	19.1								
10,000	-5		18.3	17.7	17.2	16.8	—	F.T.	19.4	18.9								
11,000	-7		18.1	17.5	17.0	16.6	—	—	F.T.	F.T.								
12,000	-9		17.8	17.3	16.8	16.4												
13,000	-11		F.T.	17.0	16.6	16.2												
14,000	-13		—	F.T.	16.4	16.0												
15,000	-15		—	—	F.T.	15.8												
16,000	-17		—	—	—	F.T.												

NOTE: To maintain constant power, add approximately 1% for each 6°C above standard, subtract approximately 1% for each 6°C below standard.

# N8255J Piper Dakota 235 - Checklist

## DESCENT

THROTTLE .....SET FOR 500 - 1000 FPM  
AIRSPEED .....137 KTS  
MIXTURE .....AS REQ  
CARBURETOR HEAT .....AS RQ

## APPROACH

ATIS/AWOS .....CHECK  
ALTIMETER .....SET  
AIRPORT DIAGRAM .....CHECK  
LANDING LIGHT .....ON  
MIXTURE .....ADJUST  
APPROACH .....BRIEFED

## BEFORE LANDING

POWER .....AS REQUIRED  
MIXTURE .....RICH  
CARB HEAT .....AS REQ  
FUEL PUMP .....ON  
LANDING LIGHT .....ON  
FUEL SELECTOR .....PROPER TANK  
SEAT BELTS .....FASTENED  
FLAPS .....AS REQ  
FLIGHT INSTRUMENTS .....CHECK

## NORMAL LANDING

FLAPS .....FULL  
PROPELLER .....FULL FORWARD ON FINAL  
AIRSPEED .....72 KTS

# N8255J Piper Dakota 235 - Checklist

## GO AROUND

THROTTLE .....FULL FWD  
PROPELLER.....FULL FWD  
CARB HEAT.....OFF  
PITCH .....UP  
FLAPS .....RETRACT TO 25°  
AIRSPEED (V<sub>x</sub>).....PITCH FOR 73 KTS  
POSITIVE RATE OF CLIMB .....CONFIRM  
FLAPS .....RETRACT AT SAFE ALTITUDE  
AIRSPEED (V<sub>y</sub>).....PITCH FOR 85 KTS

# N8255J Piper Dakota 235 - Checklist

## CLEAR OF RUNWAY

FLAPS.....RETRACT  
CARB HEAT.....OFF  
LANDING LIGHT.....AS REQ  
STROBES.....OFF  
FUEL PUMP.....OFF  
MIXTURE.....LEAN FOR TAXI  
TAXI CLEARANCE.....BRIEF

## SHUTDOWN

THROTTLE.....1000 - 1200 RPM  
TRANSPONDER.....STANDY & 1200  
LANDING LIGHTS.....OFF  
AVIONICS/RADIOS.....OFF  
PROPELLER.....FULL INCREASE  
THROTTLE.....FULL AFT  
MIXTURE.....IDLE CUT-OFF  
MAGNETOS.....OFF  
MASTER.....OFF  
KEY.....REMOVED

## SECURING

WINDOW.....CLOSED  
FLIGHT CONTROLS.....SECURED  
COCKPIT.....CLEAN OF DEBRIS  
PARKING BRAKE.....OFF  
HOBBS/TACH.....RECORDED  
COWL COVERS.....INSTALLED  
PITOT COVER.....INSTALLED  
DOOR.....CLOSED  
CHOCK.....AS REQ  
POST-FLIGHT WALK AROUND.....COMPLETE

# N8255J Piper Dakota 235 - Checklist

## EMERGENCY PROCEDURES

### SPEEDS

#### STALL SPEEDS

3000 LBS. (0° FLAP) ..... 65 KIAS

3000 LBS. (FULL FLAP) ..... 56 KIAS

#### MANUEVERING SPEEDS

3000 LBS. .... 124 KIAS

1761 LBS. .... 96 KIAS

NEVER EXCEED SPEED ..... 172 KIAS

#### POWER OFF GLIDER SPEED

3000 LBS. (0° FLAP) ..... 85 KIAS

### ENGINE INOPERATIVE PROCEDURES

#### ENGINE POWER LOSS DURING TAKEOFF (NOT AIRBORNE)

##### SUFFICIENT RUNWAY REMAINING:

THROTTLE ..... CLOSE

BRAKES ..... APPLY AS REQUIRED

STOP ..... STRAIGHT AHEAD

##### INSUFFICIENT RUNWAY REMAINING:

THROTTLE ..... CLOSE

BRAKES ..... APPLY AS REQUIRED

MIXTURE ..... IDLE CUT OFF

FUEL SELECTOR ..... OFF

MASTER ..... OFF

MAGNETOS ..... OFF

MAINTAIN DIRECTIONAL CONTROL AND MANEUVER TO  
AVOID OBSTACLES

# N8255J Piper Dakota 235 - Checklist

## ENGINE POWER LOSS DURING TAKEOFF (AIRBORNE)

SUFFICIENT RUNWAY REMAINING:

AIRSPEED ..... MAINTAIN ABOVE STALL  
DIRECTIONAL CONTROL ..... MAINTAIN  
LAND ..... STRAIGHT AHEAD

INSUFFICIENT RUNWAY REMAINING:

AIRSPEED ..... MAINTAIN ABOVE STALL  
THROTTLE ..... CLOSE  
MIXTURE ..... IDLE CUT OFF  
FUEL SELECTOR ..... OFF  
MASTER ..... OFF  
MAGNETOS ..... OFF  
FLAPS ..... AS REQUIRED  
DIRECTIONAL CONTROL ..... MAINTAIN

IF SUFFICIENT ALTITUDE TO ATTEMPT RESTART:

AIRSPEED ..... SAFE AIRSPEED  
FUEL SELECTOR ..... SWITCH TANKS  
FUEL PUMP ..... ON  
MIXTURE ..... RICH  
CARBURETOR HEAT ..... ON  
ENGINE GAUGES ..... CHECK  
PRIMER ..... IN & LOCKED  
IGNITION ..... LEFT/RIGHT/BOTH

IF POWER NOT REGAINED PROCEED WITH POWER OFF  
LANDING

# N8255J Piper Dakota 235 - Checklist

## ENGINE POWER LOSS IN FLIGHT

AIRSPEED.....BEST GLIDE  
SUITABLE FIELD.....SELECT  
FUEL SELECTOR.....SWITCH TANKS  
FUEL PUMP ..... ON  
MIXTURE ..... RICH  
CARBURETOR HEAT ..... ON  
ENGINE GAUGES .....CHECK  
PRIMER ..... IN & LOCKED  
IGNITION.....LEFT/RIGHT/BOTH

### IF POWER IS RESTORED:

CARBURETOR HEAT.....AS REQ  
FUEL PUMP ..... AS REQ  
MIXTURE.....SET AS REQ  
LAND.....AS SOON AS POSSIBLE

IF POWER IS NOT RESTORED PREPARE FOR POWER OFF LANDING

## POWER OFF LANDING

AIRSPEED .....85 KIAS  
SUITABLE FIELD.....SELECT  
TRANSPONDER.....7700  
COMMUNICATE .....MAYDAY (121.5)

### WHEN COMMITTED TO LANDING:

IGNITION SWITCH ..... OFF  
MASTER SWITCH ..... OFF  
FUEL SELECTOR VALVE ..... OFF  
MIXTURE ..... IDLE CUT-OFF  
SEAT BELTS.....SECURE  
PASSENGERS.....BRIEFED  
DOOR ..... OPEN  
FLAPS ..... AS REQ  
TOUCHDOWN.....72 KIAS  
EXIT AIRCRAFT.....AS SOON AS POSSIBLE

# N8255J Piper Dakota 235 - Checklist

## FIRE

### ENGINE FIRE DURING START

STARTER..... CONTINUE CRANKING  
MIXTURE ..... IDLE CUT-OFF  
THROTTLE ..... OPEN  
FUEL PUMP ..... OFF  
FUEL SELECTOR..... OFF  
IF FIRE CONTINUES..... EVACUATE

### FIRE IN FLIGHT

SOURCE OF FIRE ..... CHECK

### ELECTRICAL FIRE (SMOKE IN CABIN)

MASTER ..... OFF  
VENTS ..... OPEN  
CABIN HEAT..... OFF  
ELECTRICAL EQUIPMENT ..... OFF  
LAND ..... AS SOON AS POSSIBLE

### ENGINE FIRE

FUEL SELECTOR..... OFF  
THROTTLE ..... CLOSED  
MIXTURE ..... IDLE CUT-OFF  
FUEL PUMP ..... OFF  
CABIN HEAT..... OFF  
DEFROSTER..... OFF  
AIRSPEED ..... PITCH FOR EMERGENCY DESCENT

PROCEED WITH POWER OFF LANDING



# N8255J Piper Dakota 235 - Checklist

## LOSS OF OIL PRESSURE/HIGH OIL TEMPERATURE

LAND .....AS SOON AS PRACTICAL

PREPARE FOR IMMINENT ENGINE FAILURE

## LOSS OF FUEL PRESSURE

FUEL PUMP .....ON

FUEL SELECTOR.....CHECK ON FULL TANK

LAND .....AS SOON AS PRACTICAL

## ELECTICAL FAILURES

ALT ANNUNCIATOR LIGHT ILLUMINATED:

AMMETER.....VERIFY INOP. ALT

IF AMMETER SHOWS ZERO:

ALT.....OFF

ELECTRICAL LOAD .....REDUCE

CIRCUIT BREAKERS.....CHECK & RESET

ALTERNATOR.....OFF (FOR 1 SECOND), THEN ON

IF POWER NOT RESTORED THEN:

ALTERNATOR .....OFF

ELECTRICAL LOAD .....REDUCE

LAND .....AS SOON AS PRACTICAL

## ELECTICAL OVERLOAD

ALTERNATOR OVER 20 AMPS ABOVE KNOWN ELECTRICAL  
LOAD:

ALT SWITCH ..... ON

BAT SWITCH.....OFF

# N8255J Piper Dakota 235 - Checklist

IF ALTERNATOR LOADS ARE REDUCED:

ELECTICAL LOAD.....MINIMIZE

LAND AS SOON AS PRACTICAL

IF ALTERNATOR LOADS ARE NOT REDUCED:

ALT SWITCH.....OFF

BAT SWITCH.....AS REQ.

LAND AS SOON AS PRACTICAL. ANTICIPATE COMPLETE ELECTRICAL FAILURE

## SPIN RECOVERY

THROTTLE.....IDLE

AILERONS.....NEUTRAL

RUDDER.....OPPOSITE ROTATION

CONTROL WHEEL.....FULL FORWARD

RUDDER.....NEUTRAL (WHEN ROTATION STOPS)

CONTROL WHEEL.....SMOOTHLY REGAIN LEVEL FLIGHT

## OPEN DOOR

AIRSPEED.....SLOW TO 83 KIAS

CABIN VENTS.....CLOSE

STORM WINDOW.....OPEN

SLIP.....IN DIRECTION OF DOOR

DOOR.....LATCH CLOSED

## CARBURATOR ICING

CARBURETOR HEAT.....ON

MIXTURE.....ADJUST FOR MAX. SMOOTHNESS

# N8255J Piper Dakota 235 - Checklist

## ENGINE ROUGHNESS

- CARBURETOR HEAT .....ON
- MIXTURE .....ADJUST FOR MAX. SMOOTHNESS
- FUEL PUMP .....ON
- FUEL SELECTOR .....SWITCH TANKS
- ENGINE GAUGES .....CHECK
- PRIMER .....CONFIRM IN & LOCKED
- MAGNETOS .....CHECK LEFT - RIGHT - BOTH

IF ROUGHNESS PERSISTS, PREPARE FOR  
PRECAUTIONARY LANDING

## PROPELLER OVERSPEED

- THROTTLE .....RETARD
- OIL PRESSURE .....CHECK
- PROP CONTROL .....FULL DECREASE RPM  
.....THEN SET IF CONTROL AVAILABLE
- AIRSPEED .....REDUCE
- THROTTLE .....AS REQUIRED  
.....TO MAINTAIN BELOW 2400 RPM

# N8255J Piper Dakota 235 - Checklist

## PERFORMANCE\*

Takeoff Ground Run (minimum) .....	886 ft
Takeoff Distance Over 50-ft Obstacle (25 ° flaps).....	1216 ft
Rate of Climb (ft per min).....	660 ft
Service Ceiling .....	17,500 ft
Landing Roll (flaps down) .....	825 ft
Landing Roll Over 50-ft Obstacle (flaps down).....	1725 ft

Vso .....	56 kts
Vs .....	65 kts
Vx .....	73 kts
Vy .....	85 kts
Vfe .....	102 kts
Va .....	96 - 124 kts
Vno .....	137 kts
Vne .....	173 kts
Vbg.....	85 kts

Max. Gross Weight.....	3000 lbs
Useful Load .....	1175 lbs
Max. Baggage .....	200 lbs

Fuel .....	Full 77 gals
.....	Usable 72 gals
.....	Tabs 50 gals
Oil .....	10 - 12 quarts

Avg. Fuel Burn .....	10.0 - 14.0 GPH
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\*Please reference specific aircraft POH for flight planning.

The pilot is responsible for verifying all documents prior to flight!  
For more detailed information on operating each aircraft and its systems, please refer to each aircraft's specific POH and W&B.