

1978 C-152II



Speeds for Normal Operation KIAS

V _r Rotation	50
V _x Best Angle of Climb (clean)	55
V _y Best Rate of Climb Speed	67
V_{1a} Best Glide (lift/drag), flaps up/down	65/60
V _a Maneuvering Speed (gross weight).....	93-104
V _{no} Maximum Structural Cruising Speed	111
V _{ne} Never Exceed Speed.....	149
V _{fo} Maximum Flap Extension Speed.....	85
V _s Stall Speed, normal configuration	40
V _{so} Stall Speed, landing configuration.....	35
Short Field T/O, Flaps 10°	54
Climb Out-Normal	65-75
Normal Landing Approach, Flaps 0°	60-70
Normal Landing Approach, Flaps 30°	55-65
Short Field Approach, Flaps 30°	54
Steep Turns/ Chandelles/ Lazy eights	95

Emergency Procedures 3

EMERGENCY LANDING

Airspeed.....	(flaps 30°) 60+ KIAS
Wing Flaps.....	AS REQUIRED (30°)
Mixture.....	IDLE CUT-OFF
Throttle.....	IDLE
Carb Heat.....	OFF
Fuel Selector Valve.....	OFF
Ignition Switch.....	OFF
Master Switch.....	OFF
Primer.....	IN/LOCKED
Doors.....	UNLATCH PRIOR TO TOUCHDOWN
Touchdown.....	SLIGHTLY NOSE HIGH
Brakes.....	APPLY HEAVILY

PRECAUTIONARY LANDING

Airspeed.....	60+ KIAS
Wing Flaps.....	20°
Select field.....	SUITABLE
Radio/ Electrical Switches.....	OFF
Wing Flaps (on final approach)	30°
Airspeed.....	55 KIAS
Master Switch.....	OFF
Doors.....	UNLATCH PRIOR TO TOUCHDOWN
Touchdown.....	SLIGHTLY NOSE HIGH
Ignition Switch.....	OFF
Brakes.....	APPLY HEAVILY

Preflight Procedures 5

NOSE

Engine Oil Level.....	CHECK
Wind screen.....	CLEAN
Fuel Strainer.....	SAMPLE
Propeller and Spinner	CHECK
Landing light.....	CLEAN
Carburetor Air Filter	CHECK
Nose Wheel Strut/ Tire/ linkage.....	CHECK
Static Source Opening	CHECK

LEFT WING

Tire/ Tread/ Inflation.....	Check
Brake pads/ leakage	CHECK
Fuel Quantity	CHECK
Fuel Filler Cap	SECURE
Pitot Tube Cover.....	REMOVE
Fuel Tank Vent Opening	CHECK
Stall Warning Opening.....	CHECK
Wing Tie-Down.....	DISCONNECT
Aileron/ Hinge points/ Control linkage.....	CHECK FREE
Flap/Tracks/ Control Linkage.....	CHECK
Fuel Tank Sump.....	SAMPLE

Normal Procedures

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BEFORE STARTING ENGINE

Preflight Inspection.....COMPLETE
Doors.....LATCHED
Seats, Belts, Shoulder Harness.....ADJUST & LOCK
Flight Controls.....FREE/ CORRECT
Avionics.....OFF
Mixture.....RICH
Throttle.....OPEN ½ INCH
Carburetor Heat.....COLD
Circuit Breakers.....CHECK IN
Trim.....CLIMB
Fuel Selector Valve.....ON
Electrical Equipment.....OFF
Beacon.....ON
Nav. Lights.....Night/ ON
Master Switch.....ON
Prime.....3 STROKES

STARTING ENGINE

Brakes.....TEST & SET
Propeller Area.....CLEAR
Ignition Switch.....START
Throttle.....1000 RPM
Oil Pressure.....CHECK
Radios.....ON
Transponder.....ALTITUDE

Preflight Procedures

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CABIN

Control Wheel Lock.....REMOVE
Aircraft Documents.....AVAILABLE
Hobbs time.....Recorded
Sectional/ AFD /pencil/ paper.....AVAILABLE
Ignition/ key.....OFF/ON THE DASH
Master Switch.....ON
Fuel/Engine Gauges.....CORRECT
Flaps.....DOWN/ LISTEN/WATCH
Master Switch.....OFF

EMPENNAGE

Fuel sump.....CHECK
Screws/ Rivets.....IN PLACE
Elevator/ 3 Hinge Points.....CHECK
Rudder/ 3 Hinge points.....CHECK
Tail Tie-Down.....DISCONNECT
Trim Tab/ Hinge/ Control Linkage.....CHECK

RIGHT WING

Flap/Tracks/ Control Linkage.....CHECK
Ailerons/ Hingepoints/ Control linkage.....CHECK
Wing Tie-Down.....DISCONNECT
Tire/Tread/Infation.....Check
Brake pads/ leakage.....CHECK
Fuel Tank Sump.....SAMPLE
Fuel Quantity.....CHECK
Fuel Filler Cap.....SECURE

Emergency Procedures

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ENGINE FAILURE DURING TAKEOFF

Throttle.....IDLE
Brakes.....APPLY
Wing Flaps.....RETRACT
Mixture.....IDLE CUT-OFF
Ignition Switch.....OFF
Master Switch.....OFF

ENGINE FAILURE AFTER TAKEOFF

Airspeed.....(flaps UP) 65 KIAS
Airspeed.....(flaps DOWN) 60 KIAS
Mixture.....IDLE CUT-OFF
Fuel Selector Valve.....OFF
Ignition Switch.....OFF
Wing Flaps.....AS REQUIRED
Master Switch.....OFF

ENGINE FAILURE DURING FLIGHT

Airspeed.....60 KIAS
Flaps.....UP
Mixture.....IN
Throttle.....FULL
Carb Heat.....ON
Fuel Valve.....ON
Magnetos.....CYCLE/START/BOTH
primer.....IN/LOCKED
Fuel Gauges.....CHECK
No start.....PERFORM EMERGENCY LANDING

Normal Procedures

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BEFORE TAXI

Wing FlapsUP
 AreaCLEAR
 BrakesTEST

BEFORE TAKEOFF

Doors & Windows& Seat beltsSECURED
 Flight ControlsFREE & CORRECT
 AmmeterCHECK
 Tach.....CORRECT
 Radios.....SET
 TransponderON-ALT-CODE
 Environmental ControlsSET
 Flaps0°-10°
 Mixture(Below 3000' PA) RICH
 Throttle.....1700 RPM
 Carburetor Heat.....OFF
 Circuit Breakers.....IN
 Elevator Trim.....CLIMB OUT
 Fuel Selector Valve.....ON
 Electrical Switches.....AS REQUIRED
 MagnetosR/Both/L/Both Check drop 125max/ 50 diff
 AlternatorOFF/ CHECK LIGHT/ CHARGE/ ON
 PrimerIN/ LOCKED
 Fuel GaugesCHECK
 Engine InstrumentsCHECK
 Flight InstrumentsSET
 Suction Gauge.....CHECK
 Carburetor HeatON/ CHECK RPM DROP
 Throttle.....Check Idle
 Carburetor HeatOFF/ CHECK RPM INCREASE
 Throttle.....1000 RPM

Normal Procedures

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CRUISE

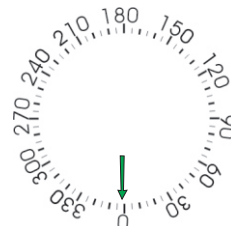
Power.....2450RPM (75%) or LESS
 Elevator Trim.....ADJUST
 MixtureLEAN

DESCENT

MixtureADJUST
 Power.....AS DESIRED
 Carburetor Heat..... AS REQUIRED

BEFORE LANDING/ DESCENT

Landing light.....TOUCH
 Carb HeatON/ BELOW GREEN ARC
 Throttle.....APPROACH (1500-1700)
 MixtureRICH
 FlapsAS REQUIRED
 Trim.....AS REQUIRED
 Seats, Belts, Shoulder HarnessesSECURE



Specifications

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Maximum Gross Weight.....1670 lbs
 Basic Empty Weight1186 lbs
 Payload w/ Full Fuel.....336 lbs
 Fuel Flow @ 75% Power6.1 gph
 Endurance(1 hr. reserve)3hrs
 Range (1 hr reserve).....285 nm

Fuel Capacity26 gal
 Useable Fuel.....24.5 gal
 Fuel Octane Rating (Blue)100LL
 Oil Sump Capacity6 qts
 Minimum Oil Quantity5 qts
 Oil Type.....Aeroshell red label w100 SAE 50

Engine4cyl 110 hp Lycoming O-235
 Electrical24 V
 Positive Limit Load Factor4.4g
 Negative Limit Load Factor.....-1.76g

Jonesboro FSS	1800-992-7433	122.2
LIT Atis	324-2618	125.65
CWS;BDQ;1M1;BVX		122.8
MPJ		122.9
HBZ;RUE, SRC		122.7
Don Parker A&P	328-3628	

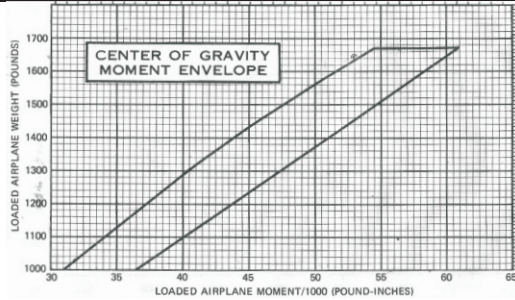
POWER SETTINGS
 2450 Level flight 100 kts
 2300 Level flight 95 kts
 2000 Level Flight 80 kts
 1700 . . . Normal apch flaps 30°
 1200 . . . steep apch idle+1/4"



ber Home Base SOB Color Weather Briefing Adverse conditions Briefer's Judgement
 (VFR not recommended) Synopsis Current conditions: Means, Props, Ranges Enroute forecast Destination forecast Winds & Temp aloft Unpublished Notams A
 TC Delays/TFRs

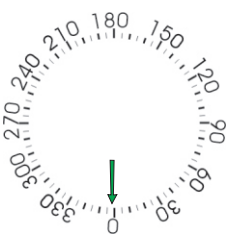
152 II Weights & Balance(N714WP)

	Gallons	weight	c.g arm	Moment/1000
aircraft		1186	34	40.3
Gal usable fuel	17	102.4	40	4.1
pilot (33 to 41)		180	39	7.0
copilot		200	35	7.0
baggage 64,84,94		0	84	0.0
Total		1668	35.03	58.4



PLANNING

- Course
- Distance
- Altitude
- ETE
- FAA Briefing-1800-992-7433
- Winds Aloft
- Altimeter Setting
- Temperature
- Delays weather or TFR's
- PA=(29.92-alt set)x 1000+ Field Elev
- Fuel Burn+5gal=fuel required
- T/O& Landing Distance
- TC+WCA+VAR=MH



Normal Procedures

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BALKED LANDING

Throttle.....FULL OPEN
 Carburetor HeatCOLD
 Wing Flaps(immediately) 20°
 attitudenose to horizon
 Wing Flaps (55 KIAS)RETRACT
 Climb SpeedBEST ANGLE

AFTER LANDING

Wing FlapsUP
 Carburetor HeatCOLD
 TransponderSTANDBY

SECURING AIRPLANE

Parking Brake.....SET
 Avionics Power Switch.....OFF
 Electrical Equipment.....OFF
 Mixture.....IDLE CUT-OFF
 Ignition Switch.....OFF
 Master SwitchOFF
 Control LockINSTALL



Normal Procedures

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NORMAL TAKEOFF

Wing Flaps.....0 - 10°
 Carburetor HeatCOLD
 ThrottleFULL OPEN
 Elevator ControlLIFT NOSE AT 50 KIAS
 Climb Speed.....65-75

SHORT FIELD TAKEOFF

Wing Flaps10°
 Carburetor HeatCOLD
 BrakesAPPLY
 ThrottleFULL OPEN
 MixtureLEAN above 3000', RICH below 3000'
 BrakesRELEASE
 Elevator Control.....SLIGHTLY NOSE HIGH
 Climb Speed (over Obstacles)54

ENROUTE CLIMB

AirspeedBEST RATE or HIGHER
 ThrottleFULL OPEN
 MixtureLEAN above 3000', RICH below 3000'

3 Miles 2000 1000/ 500 Except
 Class B 3 miles COC
 > 10K 5 miles 1 Mile 1000/1000
 G Day > 1200 < 10K 1 Mile 2000 1000/ 500
 G Day < 1200 1 mile COC

