



Reality Expansion Pack for X-Plane

Quest Kodiak

Checklists & References

BEFORE STARTING ENGINE

- 1. Preflight Inspection and Weight and Balance Checks COMPLETE
- 2. Passenger Briefing COMPLETE
- 3. Cabin Doors LATCHED (Check Aft Door)
- 4. Master Switch ON
- 5. Avionics Master Switch ON
- 6. Parking Brake SET
- 7. Engine Inlet AS REQUIRED
- 8. Fuel Selector Valves LEFT and RIGHT ON
- 9. Firewall Fuel Shutoff FUEL ON (PUSHED IN)
- 10. Emergency Power Lever NORMAL
- 11. Power Lever IDLE
- 12. Propeller Control Lever FEATHER
- 13. Fuel Condition Lever CUTOFF
- 14. Wing Flaps UP
- 15. Circuit Breakers IN
- 16. Cabin Heat OFF
- 17. T/O Torque Limit DETERMINE from Max Torque for T/O Chart
- 18. Autopilot (if equipped) PERFORM PREFLIGHT CHECK
- 19. Pitch Latch Propeller Blade Pitch (if equipped) .. SEE SUPPLEMENT 2

BATTERY POWERED ENGINE START

1. Buss Voltages CHECK 24V Minimum
2. Flashing Beacon ON
3. Emergency Power Leve NORMAL: EMER PWR LVR not Shown on PFD
4. Propeller Area CLEAR
5. Auxiliary Fuel Pump ON and NOTE-
 - a. AUX PUMP ON Annunciator SHOWN ON PFD
 - b. Fuel Flow ZERO
6. Ignition Switch AS REQUIRED-
 - a. for LO/MOTOR START ON
 - b. for HI START OFF
7. Starter Switch HI or LO/MOTOR as Required and NOTE-
 - a. IGNITION ON Annunciator SHOWN ON PFD
 - b. Engine Oil Pressure CHECK RISING
 - c. Ng ACCELERATING THROUGH 14% MINIMUM
8. Fuel Condition Lever LOW IDLE and NOTE-
 - a. Fuel Flow CHECK at 12 to 16 GPH
 - b. ITT MONITOR (1090°C Maximum: Limited to 2 sec.)
 - c. Ng 52% MINIMUM
9. Starter Switch OFF: Check STARTER ON Ann. Not Shown on PFD
10. Ignition Switch OFF: Check IGNITION ON Ann. Not Shown on PFD

BATTERY POWERED ENGINE START (Continued)

- 11. Propeller Lever MAX RPM
- 12. Engine Instruments CHECK
- 13. Auxiliary Fuel Pump STBY
- 14. Generator ON
- 15. Alternator ON
- 16. Exterior Lights AS REQUIRED
- 17. Cabin Heat, Ventilation and Defrost AS REQUIRED
- 18. Radios / Avionics SET
- 19. Preflight Procedure for the GMA 1347 Audio Panels PERFORM

EXTERNAL POWER ENGINE START

(24-28 VOLTS, 800 AMPS Min / 1700 AMPS Max)

- 1. External Power CONNECT then ON
- 2. Battery Master Switch ON
- 3. Buss 1 Voltage CHECK 24V Minimum
- 4. Flashing Beacon ON
- 5. Emergency Power NORMAL: Check EMER PWR LVR Not Shown on PFD
- 6. Propeller Area CLEAR
- 7. Auxiliary Fuel Pump ON and NOTE-
 - a. AUX PUMP ON Annunciator SHOWN ON PFD
 - b. Fuel Flow ZERO
- 8. Ignition Switch AS REQUIRED-
 - a. for LO/MOTOR START ON
 - b. for HI START OFF
- 9. Starter Switch HI or LO/MOTOR as Required and NOTE-
 - a. IGNITION ON Annunciator SHOWN ON PFD
 - b. Engine Oil Pressure CHECK RISING
 - c. Ng STABLE (14% Minimum)
- 10. Fuel Condition Lever LOW IDLE and NOTE-
 - a. Fuel Flow CHECK at 80 to 110 lb/hr
 - b. ITT MONITOR (1090°C Maximum: Limited to 2 sec.)
 - c. Ng 52% MINIMUM

EXTERNAL POWER ENGINE START (Continued)

- 11. Starter Switch OFF: Check STARTER ON Ann. Not Shown on PFD
- 12. Ignition Switch OFF: Check IGNITION ON Ann. Not Shown on PFD
- 13. Propeller Lever MAX RPM
- 14. Engine Instruments CHECK
- 15. Auxiliary Fuel Pump STBY
- 16. External Power DISCONNECT
- 17. Generator ON
- 18. Alternator ON
- 19. Exterior Lights AS REQUIRED
- 20. Cabin Heat, Ventilation and Defrost AS REQUIRED
- 21. Radios / Avionics SET
- 22. Preflight Procedure for the GMA 1347 Audio Panels PERFORM

TAXIING

- 1. Brakes CHECK
- 2. Flight Controls POSITIONED ACCORDING TO WIND DIRECTION
- 3. Flight Instruments CHECK

BEFORE TAKEOFF

- 1. Parking Brake SET
- 2. All Seats, Seatbelts and Shoulder Harnesses LOCKED and SECURE
- 3. Inertia Reel Levers LOCKED
- 4. Flight Controls FREE and CORRECT
- 5. Flight Instruments CHECK and SET
- 6. Auxiliary Fuel Pump ON
- 7. Fuel Selectors RECHECK LEFT and RIGHT ON
- 8. Firewall Fuel Shutoff RECHECK FUEL ON (FULL IN)
- 9. Fuel Quantity CHECK and SET FUEL TOTALIZER
- 10. Wing Flaps SET FOR TAKEOFF
- 11. Aileron and Elevator Trim SYSTEM CHECKS

(1st Flight of Day)

- 12. Elevator, Aileron and Rudder Trim SET FOR TAKEOFF
- 13. Engine Inlet SYSTEM CHECK on 1st Flight of the day
- 14. Power Lever 300 FT LB
 - a. Bus Voltages CHECK 26 Volts Minimum
 - b. Engine Instruments CHECK

BEFORE TAKEOFF (Continued)

- 15. Overspeed Governor SYSTEM CHECK on 1st Flight of the Day
(Stabilized at 1970 ± 50 RPM)
- 16. Power Lever IDLE
- 17. Quadrant Friction Lock ADJUST as Necessary
- 18. Engine Inlet AS REQUIRED and Verify Proper Ann. Shown on PFD
- 19. Pitot/Static Heat ON When OAT is < 4°C and Vis. Moist. Present
- 20. Avionics Equipment CHECK and SET
- 21. Transponder SET
- 22. CDI SET
- 23. Annunciators CHECK
- 24. Strobe Lights AS REQUIRED
- 25. Parking Brake RELEASE
- 26. Propeller Lever MAX RPM
- 27. Fuel Condition Lever HIGH IDLE

NORMAL TAKEOFF

- 1. Wing Flaps 0°-20°
- 2. Elevator Trim RECHECK Set for Takeoff
- 3. Power SET FOR TAKEOFF (Observe Torque, ITT, and Ng Limits)
- 4. Annunciators CHECK
- 5. Engine Instruments CHECK
- 6. Rotate 60-65 KIAS
- 7. Climb Speed 85-95 KIAS
- 8. Wing Flaps RETRACT

(Retract to 10° after reaching 85 KIAS and 0° after reaching 95 KIAS)

SHORT FIELD TAKEOFF

- 1. Wing Flaps 20°
- 2. Elevator Trim Set for Takeoff
- 3. Power SET FOR TAKEOFF (Observe Torque, ITT, and Ng Limits)
- 4. Annunciators CHECK
- 5. Engine Instruments CHECK
- 6. Brakes RELEASE
- 7. Rotate 50 KIAS
- 8. Climb Speed 72 KIAS Until Clear of Obstacles
- 9. Wing Flaps RETRACT

(Retract to 10° after reaching 85 KIAS and 0° after reaching 95 KIAS)

CRUISE CLIMB

- 1. Auxiliary Fuel Pump STBY
- 2. Pitot/Static Heat ON when OAT < 4°C and Vis. Moist. Present
- 3. Engine Inlet AS REQUIRED
- 4. Airspeed 110-120 KIAS
- 5. Torque SET (Refer to Maximum Torque for Climb Chart in Section 5)
- 6. Propeller 2000-2200 RPM
- 7. ITT and Ng Limits OBSERVE

MAXIMUM PERFORMANCE CLIMB (Non-Emergency)

- 1. Auxiliary Fuel Pump STBY
- 2. Pitot/Static Heat ON when OAT < 4°C and Vis. Moist. Present
- 3. Engine Inlet AS REQUIRED
- 4. Airspeed 101 KIAS
- 5. Propeller 2000-2200 RPM
- 6. Torque Set (Refer to Maximum Torque for Climb Chart in Section 5)
- 7. ITT and Ng Limits OBSERVE

NORMAL CRUISE

- 1. Pitot/Static Heat ON when OAT < 4°C and Vis. Moist. Present
- 2. Propeller 2000-2200 RPM
- 3. Power SET per Cruise Power Tables

(Observe Max Cruise ITT and Ng Limits)

NORMAL DESCENT

- 1. Engine Inlet AS REQUIRED
- 2. Pitot/Static Heat ON when OAT < 4°C and Vis. Moist. Present
- 3. Altimeter SET
- 4. CDI SET APPROPRIATELY
- 5. Power AS REQUIRED to Provide the Desired Rate of Descent
- 6. Seats, Seatbelts and Shoulder Harnesses ADJUSTED and SECURE
- 7. Inertial Reel Levers LOCKED

BEFORE LANDING

- 1. Fuel Selector Valves LEFT AND RIGHT: ON
 - 2. Auxiliary Fuel Pump ON
 - 3. Firewall Fuel Shutoff FUEL ON (PUSHED IN)
 - 4. Fuel Condition Lever HIGH IDLE
 - 5. Propeller Lever MAXIMUM RPM
 - 6. Wing Flaps AS DESIRED
- (10° below 138 KIAS, 20° below 120 KIAS, 35° below 108 KIAS)
- 7. Landing/Taxi Lights AS REQUIRED
 - 8. Yaw Damper OFF

NORMAL LANDING

- 1. Wing Flaps FULL DOWN
- 2. Airspeed 80-85 KIAS
- 3. Touchdown MAIN WHEELS FIRST
- 4. Power Lever BETA RANGE After Touchdown
- 5. Brakes AS REQUIRED

SHORT FIELD LANDING

- 1. Wing Flaps FULL DOWN
- 2. Airspeed 76 KIAS
- 3. Power Lever SMOOTHLY REDUCE TO IDLE

From Obstacles to Touchdown

- 4. Touchdown MAIN WHEELS FIRST
- 5. Power Lever BETA RANGE After Touchdown
- 6. Brakes APPLY HEAVY PRESSURE
- 7. Elevator Control FULL AFT
- 8. Wing Flaps RETRACT for Maximum Brake Effectiveness

BALKED LANDING

- 1. Power Lever ADVANCE to TAKEOFF POWER
- 2. Climb Speed 80 KIAS Until Clear of Obstacles
- 3. Wing Flaps RETRACT to 20°
- 4. Wing Flap FULLY RETRACT Upon Reaching Safe Altitude and Airspeed

AFTER LANDING

- 1. Wing Flaps UP
- 2. Fuel Condition Lever LOW IDLE
- 3. Auxiliary Fuel Pump OFF
- 4. Strobe Lights OFF
- 5. Landing and Taxi Lights AS REQUIRED
- 6. Pitot Heat (L&R) OFF

SHUTDOWN AND SECURING

- 1. Parking Brake SET
- 2. Environmental Control Systems OFF
- 3. AUX BUS Switch OFF
- 4. Power Lever IDLE
- 5. Propeller Control Lever FEATHER

(See Supplement 2 for shutdown procedures for Pitch-Latched Propellers (If Equipped))

- 6. Generator OFF
- 7. Alternator OFF
- 8. ITT STABILIZED at Minimum Obtainable Temperature for One Minute
- 9. Fuel Condition Lever CUTOFF
- 10. Oxygen Supply Control Switch (If On) OFF
- 11. Light Switches OFF
- 12. Fuel Selector OFF if Parked on a Sloped Surface

(Turn off the fuel valve of the higher wing to prevent fuel transfer)

- 13. Avionics Master Switch OFF
- 14. Master Switch OFF
- 15. Controls LOCK
- 16. Tie-Downs and Wheel Chocks AS REQUIRED
- 17. External Covers INSTALL
- 18. Firewall Fuel Filter CHECK FILTER BYPASS FLAG (Normal: Flush)
- 19. Oil Dipstick/Filler Cap CHECK HOT LEVEL
- 20. Oil Dipstick/Filler Cap CLOSED and SECURE

AIRSPEDS FOR EMERGENCY OPERATIONSOPERATING MANEUVERING SPEED (V₀)

6750 Pounds	142 KIAS
6000 Pounds	136 KIAS
5000 Pounds	124 KIAS

BEST GLIDE SPEED (PROPELLER FEATHERED)

6750 Pounds	97 KIAS
6000 Pounds	92 KIAS
5000 Pounds	86 KIAS

ENGINE FAILURE AFTER TAKEOFF

Flaps 0°	100 KIAS
Flaps 20°	85 KIAS

PRECAUTIONARY LANDING WITH ENGINE POWER

Flaps 35°	80 KIAS
-----------------	---------

LANDING WITHOUT ENGINE POWER

Flaps 0°	100 KIAS
Flaps 35°	80 KIAS

ENGINE FAILURE DURING TAKEOFF ROLL

- 1. Power Lever BETA Range
- 2. Brakes Apply
- 3. Wing Flaps Retract

If the airplane cannot be stopped on the remaining length of runway:

- 4. Fuel Condition Lever CUTOFF
- 5. Firewall Fuel Shutoff FUEL OFF (Pull Out)
- 6. Fuel Selector Valves OFF
- 7. Master Switch OFF

ENGINE FAILURE IMMEDIATELY FOLLOWING TAKEOFF

- 1. Airspeed 85 KIAS with 20° of Flaps
- 2. Propeller FEATHER
- 3. Wing Flaps FULL DOWN
- 4. Fuel Condition Lever CUTOFF
- 5. Firewall Fuel Shutoff FUEL OFF (Pull Out)
- 6. Fuel Selector Valves OFF
- 7. Master Switch OFF
- 8. Landing MAKE AS STRAIGHT AHEAD AS POSSIBLE

CATASTROPHIC ENGINE FAILURE DURING FLIGHT

- 1. Airspeed 97 KIAS
- 2. Power Lever IDLE
- 3. Propeller Control Lever FEATHER
- 4. Fuel Condition Lever CUTOFF
- 5. Wing Flaps UP
- 6. Auxiliary Fuel Pump OFF
- 7. Firewall Fuel Shutoff OFF (Pull Out)
- 8. Ignition Switch OFF
- 9. Generator OFF
- 10. Alternator OFF
- 11. Electrical Load REDUCE
- 12. Landing Refer to the Engine Out Emergency Landing Checklist

ENGINE FLAMEOUT DURING FLIGHT

If Ng is above 52%:

- 1. Power Lever IDLE
- 2. Ignition Switch ON
- 3. Power Lever AS REQUIRED

(Following successful relight as indicated by normal ITT and Ng)

- 4. Ignition Switch AS REQUIRED

(Shut off if cause of flameout has been eliminated)

If Ng is below 52%:

- 5. Fuel Condition Lever CUTOFF
- 6. Refer to the Airstart Checklist for engine restart (Next Page)

STARTER ASSISTED AIRSTART (Preferred Method)

1. Electrical Load REDUCE
2. Generator Switch OFF
3. Alternator Switch OFF
4. AUX BUS Switch OFF
5. Emergency Power Lever NORMAL
6. Power Lever IDLE
7. Propeller Control Lever 2000 RPM
8. Fuel Condition Lever CUTOFF
9. Firewall Fuel Shutoff ON (Push In)
10. Fuel Selector Valves BOTH ON
11. Master Switch ON
12. Auxiliary Fuel Pump ON
 - a. AUX PUMP ON annunciator shown on PFD Check
13. Altitude 16,000 Feet Maximum
14. Starter Switch HI START and NOTE-
 - a. IGNITION ON annunciator shown on PFD Check
 - b. Engine Oil Pressure Check rising
 - c. Ng to 14% minimum
15. Fuel Condition Lever LOW IDLE
 - a. ITT Check (1090°C maximum)
 - b. Ng Check 50% minimum

STARTER ASSISTED AIRSTART (CONTINUED)

- 16. Starter Switch OFF
- 17. Ignition Switch AS REQUIRED
- 18. Fuel Condition Lever HIGH IDLE
- 19. Propeller Control Lever AS DESIRED
- 20. Power Lever AS DESIRED
- 21. Auxiliary Fuel Pump STBY
 - a. If AUX pump cycles on and off leave the AUX Fuel Pump ON
- 22. Generator Switch ON
- 23. Alternator Switch ON
- 24. Electrical Equipment AS REQUIRED

NOT STARTER ASSISTED AIRSTART

- 1. Generator Switch OFF
- 2. Alternator Switch OFF
- 3. AUX BUS Switch OFF
- 4. Emergency Power Lever NORMAL
- 5. Power Lever IDLE
- 6. Propeller Control Lever 2000-2200 RPM
- 7. Fuel Condition Lever CUTOFF
- 8. Firewall Fuel Shutoff ON (Push In)
- 9. Fuel Selector Valves BOTH ON
- 10. Master Switch ON
- 11. Auxiliary Fuel Pump ON
 - a. AUX PUMP ON annunciator shown on PFD CHECK
- 12. Ignition Switch ON
 - a. IGNITION ON annunciator shown on PFD CHECK
- 13. Airspeed 120 KIAS Minimum
- 14. Altitude 16,000 Feet Maximum
- 15. Ng Indication CHECK STABLE
- 16. Fuel Condition Lever LOW IDLE
 - a. ITT Check 1090°C maximum
 - b. Ng Check 50% minimum
- 17. Ignition Switch OFF (Unless in Heavy Precip or Low Fuel)

NOT STARTER ASSISTED AIRSTART (CONTINUED)

- 18. Fuel Condition Lever HIGH IDLE
- 19. Propeller Control Lever AS DESIRED
- 20. Power Lever AS DESIRED
- 21. Auxiliary Fuel Pump STBY
 - a. If AUX pump cycles on and off , leave the AUX Fuel Pump Switch ON
- 22. Generator Switch ON
- 23. Alternator Switch ON
- 24. Electrical Equipment AS REQUIRED

ENGINE FIRE IN FLIGHT

1. Power Lever IDLE
2. Propeller Control Lever FEATHER
3. Fuel Condition Lever CUTOFF
4. Firewall Fuel Shutoff OFF (Pull Out)
5. Firewall Air Shutoff OFF (Pull Out)
6. AUX BUS Switch OFF
7. Airspeed AS REQUIRED TO EXTINGUISH FLAMES
8. Overhead Vents OPEN
9. Wing Flaps SET APPROPRIATELY FOR AIRSPEED
10. Engine Out Emergency Landing EXECUTE

ELECTRICAL FIRE IN FLIGHT

1. Master Switch OFF
2. AVN BUS Switch OFF
3. AUX BUS Switch OFF
4. Generator Switch OFF
5. Alternator Switch OFF
6. Vents CLOSED
7. Fire Extinguisher ACTIVATE
8. All Other Electrical Switches OFF
9. Circuit Breakers CHECK FOR FAULTY CIRCUIT BUT DO NOT RESET
10. Master Switch ON
11. Avionics Master Switch ON
12. Generator ON
13. Alternator ON
14. Other Electrical Switches TURN ON MIN. REQUIRED ONE AT A TIME
15. Vents (When certain that the fire is completely extinguished) OPEN

CABIN FIRE

1. Master Switch OFF
2. Avionics Master Switch OFF
3. AUX Bus Switch OFF
4. Generator OFF
5. Alternator OFF
6. Vents CLOSED
7. Forward OR Aft Fire Extinguishers ACTIVATE
8. Emergency Descent PERFORM
9. Cabin VENTILATE

Open all ventilation outlets, pilot storm window, and slightly open right crew door

WING FIRE

1. Pitot-Static Heat OFF
2. Stall Warning Heat OFF
3. Strobe Lights OFF
4. NAV Lights OFF
5. Landing/Recognition Lights OFF
6. Taxi Lights OFF

CABIN FIRE DURING GROUND OPERATIONS

- 1. Power Lever IDLE
- 2. Brakes STOP THE AIRCRAFT (if taxiing)
- 3. Propeller Control Lever FEATHER
- 4. Fuel Condition Lever CUTOFF
- 5. Master Switch OFF
- 6. Airplane EVACUATE
- 7. Fire EXTINGUISH

ENGINE FIRE DURING START

- 1. Fuel Condition Lever CUTOFF
- 2. Auxiliary Fuel Pump OFF
- 3. Ignition Switch OFF
- 4. Starter Switch LO / MOTOR (Observe Starting Cycle Limits)
- 5. Firewall Fuel Shutoff OFF (Pull Out)
- 6. Starter Switch OFF
- 7. Master Switch OFF
- 8. Airplane EVACUATE
- 9. Fire EXTINGUISH

EMERGENCY DESCENT (LOW ALTITUDE)

- 1. Propeller Lever MAX RPM
- 2. Power Lever IDLE
- 3. Flaps FULL DOWN
- 4. Airspeed 108 KIAS

EMERGENCY DESCENT (HIGH ALTITUDE)

- 1. Propeller Lever MAX RPM
- 2. Power Lever IDLE
- 3. Flaps 0°
- 4. Airspeed 182 KIAS

GLIDE

- 1. Propeller FEATHER
- 2. Flaps UP
- 3. Airspeed 97 KIAS

ENGINE-OUT EMERGENCY LANDING

1. Radio TRANSMIT MAYDAY on 121.5 MHz or with ATC
 - a. ATC Give Location and Intentions
 - b. Transponder SQUAWK 7700
2. Inertial Reel Levers LOCKED
3. Airspeed 100 KIAS (Flaps UP)
4. 80 KIAS Flaps DOWN
5. Power Lever IDLE
6. Propeller Control Lever FEATHER
7. Fuel Condition Lever CUTOFF
8. Auxiliary Fuel Pump OFF
9. Ignition Switch OFF
10. AUX BUS OFF
11. Firewall Fuel Shutoff OFF (Pull Out)
12. Fuel Selector Valves OFF
13. Wing Flaps FULL DOWN
14. Generator OFF
15. Alternator OFF
16. Master Switch OFF (When landing area is assured)
17. Touchdown As Slow as Possible
18. Nose Landing Gear HOLD OFF as Long as Possible
19. Brakes APPLY HEAVY PRESSURE

POWERED PRECAUTIONARY LANDING

1. Heavy Objects in Cabin SECURE (with passenger assistance)
2. Seats/Seat Belts/Shoulder Harnesses SECURE
3. Inertia Reel Levers LOCKED
4. Wing Flaps 10°
5. Airspeed 90 KIAS
6. Landing Area FLY OVER, check terrain and obstructions
7. All Electrical Switches (Except Master and Generator) OFF
8. Wing Flaps FULL DOWN (On Final)
9. Airspeed 80 KIAS
10. Crew Doors UNLATCH
11. Generator Switch OFF
12. Master Switch OFF (When landing area is assured)
13. Touchdown As Slow as Possible
14. Fuel Condition Lever CUTOFF
15. Brakes APPLY HEAVY PRESSURE

DITCHING

1. Radio TRANSMIT MAYDAY on 121.5 MHz
 - a. ATC Give Location and Intentions
 - b. Transponder SQUAWK 7700
2. Heavy Objects in Cabin SECURE (If Passenger Available to Assist)
3. Seats/Seat Belts/Shoulder Harnesses SECURE
4. Inertia Reel Levers LOCKED
5. Wing Flaps FULL DOWN
6. If Engine Power is Available Establish 300ft/min descent @ 76 KIAS

Final Approach:

- a. High Winds Land INTO WIND
- b. Light Winds/Heavy Swells Land PARALLEL TO SWELLS
7. Doors UNLATCH
8. Head CUSHION at touchdown
9. Touchdown SLOWEST POSSIBLE SPEED
10. Airplane EVACUATE
11. Life Vests and Raft INFLATE after having exited the airplane

LANDING WITH A FLAT MAIN TIRE

1. Fuel Selectors (Valve opposite side to flat tire) to OFF
2. Airplane FLY as desired to lighten the fuel load
3. Seats/Seatbelts/Shoulder Harnesses SECURE
4. Inertia Reel Levers LOCKED
5. Approach FULL FLAPS
6. Touchdown INFLATED TIRE FIRST
 - a. Flat Tire Hold off as long as possible
7. Directional Control MAINTAIN

LANDING WITH A FLAT NOSE TIRE

1. Passengers and Baggage If possible, move aft (remain in CG limits)
2. Seats/Seatbelts/Shoulder Harnesses SECURE
3. Inertia Reel Levers LOCKED
4. Approach FULL FLAPS (Normal)
5. Touchdown MAIN LANDING GEAR
 - a. Nose Wheel Hold off the runway as long as possible
6. Brakes Minimum Required

LOSS OF FUEL PRESSURE

(FUEL PRESS LOW Annunciator Shown on PFD)

- 1. AUX FUEL Pump ON
- 2. Fuel Pressure Indication CHECK

If the Fuel Pressure Indication shows approximately 20 PSI:

- a. Fuel quantity gages Monitor
- b. Fuel odor and signs of fuel leakage Monitor

Land as soon as practicable to determine cause for failure of the motive flow system prior to the next flight.

If the Fuel Pressure Indication shows less than 5 PSI:

- c. Fuel quantity gages for possible fuel starvation Check
- d. Land as soon as possible

INTERRUPTION OF FUEL FLOW TO FUEL RESERVOIR

- 1. Fuel Selector Valves ENSURE LEFT ON and RIGHT ON
- 2. Ignition Switch ON
- 3. Auxiliary Fuel Pump ON

If RESERVOIR FUEL ann. remains and usable fuel is available

- a. Monitor the engine gages and the FUEL PRESS LOW annunciator
- b. Attempt a steady heading sideslip for 10 seconds to the left and then
- c. Land as soon as possible to determine the cause of the problem
- d. If there are signs of fuel starvation, prepare for an emergency

GENERATOR FAILURE

- 1. Generator and Alternator Switches CHECK ON
- 2. Engine Gauges CHECK GEN AMPS
 - a. GEN AMPS Check (0 amps displayed)

IF GEN AMPS DISPLAYS ZERO AMPS

- b. Generator Switch OFF, THEN ON

If the generator output remains at zero:

- c. Generator Switch OFF
- d. Electrical Load REDUCE LOAD to less than 40 amps as follows:
 - 1. AVN Bus Switch OFF
 - 2. Environmental Control System OFF
 - 3. AUX BUS Switch OFF
 - 4. Flashing Beacon OFF
 - 5. Strobe Lights OFF
 - 6. All Ice Prevention Equipment (if equipped) OFF

Flight: CONTINUE with caution to destination airport

ALTERNATOR FAILURE

- 1. Generator and Alternator Switches CHECK ON
- 2. Engine Gauges CHECK ALT AMPS
 - a. ALT AMPS Check (0 amps displayed)

IF ALT AMPS DISPLAYS ZERO

- 3. Alternator Switch OFF THEN ON

If the alternator output remains at zero:

- a. Alternator Switch OFF
- b. Generator Load REDUCE TO LESS THAN 300 AMPS
- 4. Flight CONTINUE with caution to destination airport

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-14 MAXIMUM ENGINE TORQUE FOR TAKEOFF

Conditions:

- 2200 RPM
- 60 KIAS
- Inertial Separator - Normal

NOTES:

- Torque increases approximately 30 LB FT during takeoff ground roll.
- Torque on this chart shall be achieved without exceeding 790°C ITT or 101.6% Ng.
- With the takeoff power setting specified below the 1790 LB FT limit, decrease the takeoff torque setting for each system as follows:

CONDITION	POWER REDUCTION
Inertial Separator in BYPASS	50 FT-LB
Bleed Air Heat ON	30 FT-LB
Pitot or Stall Heat ON	10 FT-LB
Electric Cabin Heat ON	20 FT-LB

REV 6

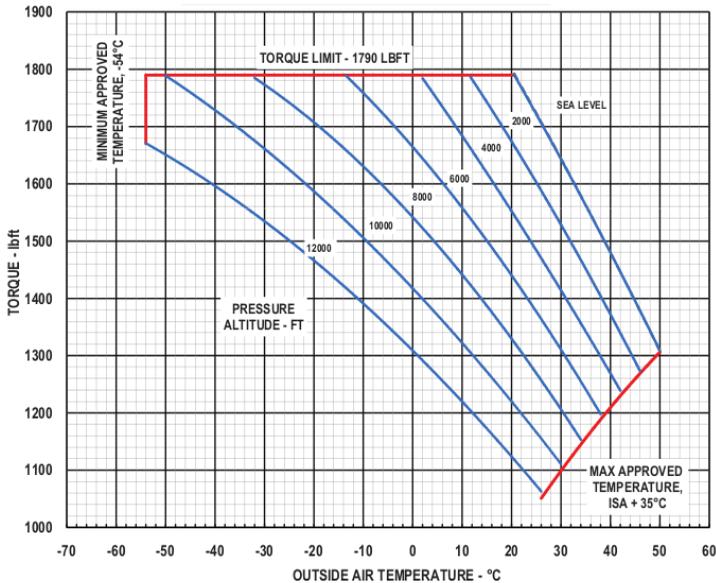


Figure 5-8 – Maximum Torque for Takeoff

5-15 MAXIMUM ENGINE TORQUE FOR CLIMB

Conditions:

- 2200 RPM
- 101 KIAS
- Inertial Separator - Normal (Solid **BLUE** Line) BYPASS (Dashed **GREEN** Line)

NOTES:

- Torque on this chart shall be achieved without exceeding 765°C ITT or 101.6% Ng.
- For pilot convenience, use of an initial climb ITT setting of 740°C when climb performance is not critical is recommended if torque and Ng limits are also observed.
- With the climb power setting specified below the 1670 LB FT limit, decrease the climb torque setting for each system as follows:

CONDITION	POWER REDUCTION
Inertial Separator in BYPASS	Sea Level: 140 FT-LB Higher Altitudes: See Below
Bleed Air Heat ON	Below 15,000 FT 40 FT-LB 15,000 FT or Above: 60 FT-LB
Pitot or Stall Heat ON	10 FT-LB
Electric Cabin Heat ON	20 FT-LB



An alternate method in lieu of using this chart is to maintain power at or below maximum continuous. (All engine gages in green arc.)

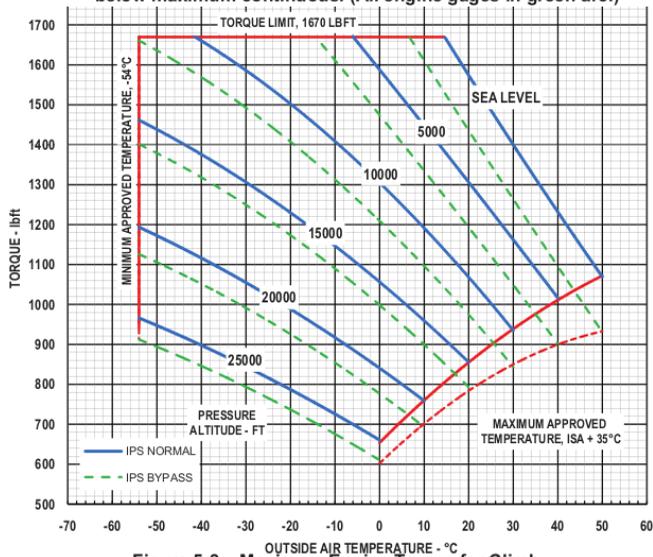


Figure 5-9 – Maximum Engine Torque for Climb

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-16 MAXIMUM ENGINE TORQUE FOR CRUISE (120 KIAS)

Conditions:

- 2200 RPM
- Inertial Separator - Normal
- 120 KIAS

NOTES:

- Torque on this chart shall be achieved without exceeding 740°C ITT or 101.6% Ng.
- With the cruise power setting specified below the 1670 LB FT limit, decrease the cruise torque setting for each system as follows:

CONDITION	POWER REDUCTION
Inertial Separator in BYPASS	60 FT-LB
Bleed Air Heat ON	Below 15,000 FT 40 FT-LB 15,000 FT or Above: 60 FT-LB
Pitot or Stall Heat ON	10 FT-LB
Electric Cabin Heat ON	20 FT-LB

REV 6

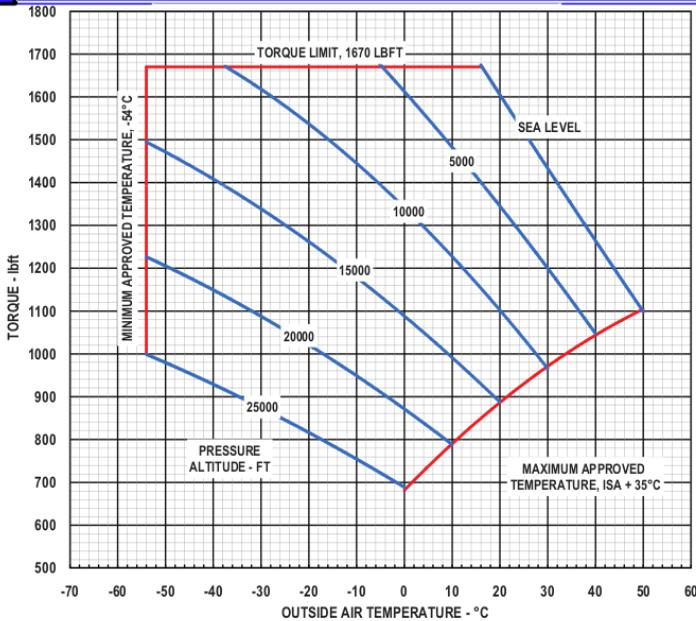


Figure 5-10 – Maximum Engine Torque for Cruise

5-18
REVISION NO. 6

Pilot's Operating Handbook
Date: 09/07/2010

5-16A MAXIMUM ENGINE TORQUE FOR CRUISE (140 KIAS)

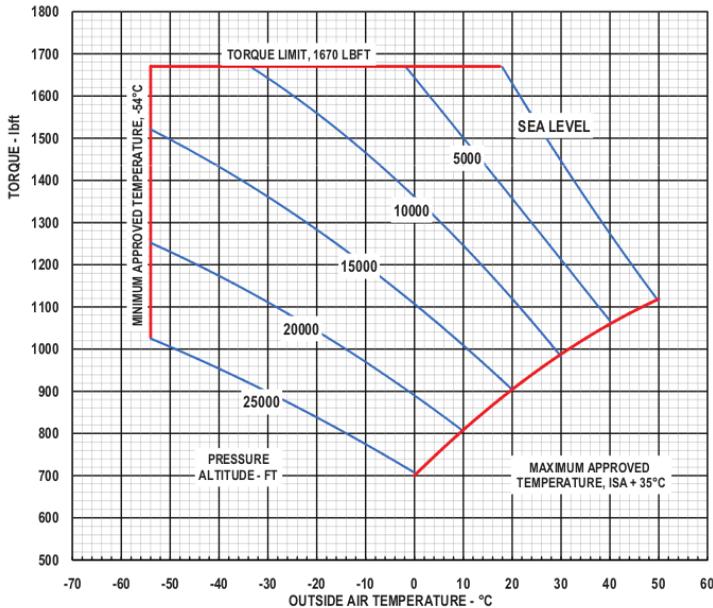
Conditions:

- 2200 RPM
- Inertial Separator - Normal
- 140 KIAS

NOTES:

- Torque on this chart shall be achieved without exceeding 740°C ITT or 101.6% Ng.
- With the cruise power setting specified below the 1670 LB FT limit, decrease the cruise torque setting for each system as follows:

CONDITION	POWER REDUCTION
Inertial Separator in BYPASS	80 FT-LB
Bleed Air Heat ON	Below 15,000 FT 40 FT-LB 15,000 FT or Above: 60 FT-LB
Pitot or Stall Heat ON	10 FT-LB
Electric Cabin Heat ON	20 FT-LB



REV 6

Figure 5-10a -Maximum Engine Torque for Cruise

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-16B MAXIMUM ENGINE TORQUE FOR CRUISE (160 KIAS)

Conditions:

- 2200 RPM
- Inertial Separator - Normal
- 160 KIAS

NOTES:

- Torque on this chart shall be achieved without exceeding 740°C ITT or 101.6% Ng.
- With the cruise power setting specified below the 1670 LB FT limit, decrease the cruise torque setting for each system as follows:

CONDITION	POWER REDUCTION
Inertial Separator in BYPASS	100 FT-LB
Bleed Air Heat ON	Below 15,000 FT 40 FT-LB 15,000 FT or Above: 60 FT-LB
Pitot or Stall Heat ON	10 FT-LB
Electric Cabin Heat ON	20 FT-LB

REV 6

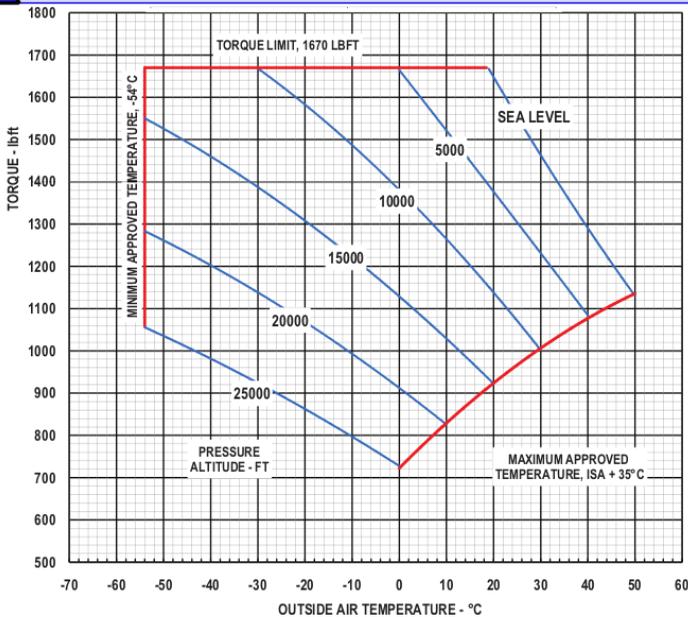


Figure 5-10b -Maximum Engine Torque for Cruise

5-18B
REVISION NO. 6

Pilot's Operating Handbook
Date: 09/07/2010

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-17 MAXIMUM TAKEOFF WEIGHTS (BASE AIRPLANE)

(Refer to the Table on the following page)

Conditions:

- Standard Tires Installed
- Maximum Takeoff Power
- Flaps 20°

Altitude	Climb Speed – V _y (KIAS)
S.L.	89
2000	89
4000	88
6000	87
8000	87
10000	86
12000	85

NOTES:

- *These weights assure the availability of a steady gradient of climb of at least 243 FT/NM with the flaps at 20°.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*
- *Takeoff weight is not limited by altitude or temperature with the airplane in this configuration.*



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

OAT (°C)	OAT (°F)	PRESSURE ALTITUDE (FEET)															
		0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000			
-3	26.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
-1	30.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
1	33.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
3	37.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
5	41.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
7	44.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
9	48.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
11	51.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
13	55.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
15	59.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
17	62.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
19	66.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
21	69.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
23	73.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
25	77.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
27	80.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
29	84.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
31	87.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
33	91.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
35	95.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
37	98.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
39	102.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
41	105.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
43	109.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
45	113.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
47	116.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
50	120.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-

Figure 5-11 – Maximum Takeoff Weight (Standard Tires)

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-18 MAXIMUM TAKEOFF WEIGHTS (OPTIONAL LARGE TIRES INSTALLED)

(Refer to the Table on the following page)

Conditions:

- Large Tires Installed
- Maximum Takeoff Power
- Flaps 20°

Altitude	Climb Speed – V _r (KIAS)
S.L.	89
2000	89
4000	88
6000	87
8000	87
10000	86
12000	85

REV 5

NOTES:

- *These weights assure the availability of a steady gradient of climb of at least 243 FT/NM with the flaps at 20°.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*
- *Takeoff weight is not limited by altitude or temperature with the airplane in this configuration.*



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

OAT (°C)	OAT (°F)	PRESSURE ALTITUDE (FEET)															
		0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000			
-3	26.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
-1	30.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
1	33.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
3	37.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
5	41.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
7	44.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
9	48.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
11	51.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
13	55.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
15	59.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
17	62.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
19	66.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
21	69.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
23	73.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750
25	77.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6740
27	80.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6640
29	84.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6540
31	87.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
33	91.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
35	95.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
37	98.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
39	102.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
41	105.8	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
43	109.4	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
45	113.0	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
47	116.6	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-
50	120.2	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	6750	-

Figure 5-12 – Maximum Takeoff Weight (Large Tires)

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-19 MAXIMUM LANDING WEIGHTS (BASE AIRPLANE)

(Refer to the Table on the following page)

Conditions:

- Standard Tires Installed
- Maximum Takeoff Power
- Flaps 35°
- Climb Speed – 76 KIAS (V_{REF})

NOTES:

- *These weights assure the availability of a steady gradient of climb of at least 152 FT/NM with the flaps at 35°.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*
- *Landings are prohibited when airport altitude and temperature fall in the red shaded areas below at weights above those shown.*



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

OAT (°C)	OAT (°F)	PRESSURE ALTITUDE (FEET)														
		0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000		
-3	26.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
-1	30.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
1	33.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
3	37.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
5	41.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
7	44.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
9	48.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
11	51.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
13	55.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
15	59.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
17	62.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
19	66.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
21	69.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
23	73.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
25	77.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
27	80.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
29	84.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
31	87.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
33	91.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
35	95.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
37	98.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
39	102.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
41	105.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
43	109.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
45	113.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
47	116.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
50	120.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690

Figure 5-13 – Maximum Landing Weight (Standard Tires)

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-20 MAXIMUM LANDING WEIGHTS (OPTIONAL LARGE TIRES INSTALLED)

(Refer to the Table on the following page)

Conditions:

- Large Tires Installed
- Maximum Takeoff Power
- Flaps 35°
- Climb Speed – 76 KIAS (V_{REF})

REV
5

NOTES:

- *These weights assure the availability of a steady gradient of climb of at least 152 FT/NM with the flaps at 35°.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*
- *Landings are prohibited when airport altitude and temperature fall in the red shaded areas below at weights above those shown.*



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

OAT (°C)	OAT (°F)	PRESSURE ALTITUDE (FEET)															
		0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000			
-3	26.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
-1	30.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
1	33.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
3	37.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
5	41.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
7	44.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
9	48.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
11	51.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
13	55.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
15	59.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
17	62.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
19	66.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
21	69.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
23	73.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
25	77.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
27	80.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
29	84.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
31	87.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
33	91.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
35	95.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
37	98.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
39	102.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
41	105.8	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
43	109.4	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
45	113.0	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
47	116.6	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690
50	120.2	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690	6690

Figure 5-14 – Maximum Landing Weight (Large Tires)

5-21 TAKEOFF DISTANCE

(Refer to the Tables on the following pages)

Conditions:

- Winds.....Zero
- Runway.....Dry, Level, Grass
- Flaps.....20°
- Power.....Maximum Torque
- Propeller.....2200 RPM
- Inertial Air Particle Separator.....Normal

Example:

- Outside Air Temperature.....20°C
- Weight.....6750 Pounds
- Field Pressure Altitude.....2150
- Headwind Component.....11 Knots
- Runway.....Dry Grass
- Propeller.....2200 RPM

Results:

- Rotation Speed.....50 KIAS
- 50 Foot Obstacle Speed.....72 KIAS
- Takeoff Ground Roll.....1035 Feet
- Total Distance Over 50 Foot Obstacle.....1569 Feet

NOTES:

- *Headwind – Subtract 10% from the calculated distance for each 12 knots headwind.*
- *Tailwind – Add 10% for each 2 knots of tailwind (up to 10 knots).*
- *Grass Runway – Add 15% to the ground roll distance.*
- *Brakes – If the brakes are not held while applying power for takeoff, the published distances apply from the point where full engine power is reached.*
- *Temperature – Use extreme caution when operating from fields where the outside air temperature is warmer than those published in this table.*
- *Sloped Runway – Increase the table distances by 22% of the ground roll distance at Sea Level, 30% of the ground roll distance at 5000 feet, 43% of the ground roll distance at 10,000 feet for each 1% of upslope. Decrease the table distances by 7% of the ground roll distance at Sea Level, 10% of the ground roll distance at 5000 feet, and 14 % of the ground roll distance at 10,000 feet for each 1% of downslope.*
- *Inertial Air Particle Separator – If maximum takeoff power is not achieved due to employment of the inertial air particle separator in BYPASS, increase the distance (both ground roll and total distance to clear 50 foot obstacle) by 1%.*



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

CAUTION: The takeoff correction factors for runway slope, located on the previous page, are required to be provided. These corrections are applicable to runway slopes up to 3% and should be applied with caution since the published runway slope figures are usually the net slope from one end of the runway to the other. Certain portions of some runways have greater or lesser slopes than the published slope. If the takeoff roll is performed on a portion of the runway that differs from the published slope, the takeoff performance will be greatly affected.



PRESS ALT (FT)	0° C		10° C		20° C		30° C		40° C		50° C	
	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS
S.L.	691	1089	735	1150	779	1212	890	1384	1035	1612	1223	1913
1000	728	1153	774	1218	842	1319	969	1519	1130	1775	1341	2114
2000	767	1221	815	1290	917	1449	1057	1671	1233	1952	---	---
3000	809	1294	874	1392	1000	1593	1154	1840	1348	2153	---	---
4000	852	1372	954	1533	1092	1753	1260	2026	1473	2374	---	---
5000	920	1493	1042	1689	1191	1928	1374	2228	1609	2615	---	---
6000	1007	1648	1138	1860	1299	2122	1503	2457	---	---	---	---
7000	1100	1816	1244	2050	1421	2342	1648	2718	---	---	---	---
8000	1204	2005	1363	2267	1560	2593	1809	3010	---	---	---	---
9000	1320	2218	1497	2511	1713	2873	1984	3332	---	---	---	---
10000	1445	2450	1640	2777	1880	3182	2182	3699	---	---	---	---
11000	1586	2712	1801	3078	2067	3533	---	---	---	---	---	---
12000	1743	3010	1982	3419	2279	3931	---	---	---	---	---	---

Figure 5-15 – Takeoff Distance (6750 Pounds)

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

PRESS ALT (FT)	0° C		10° C		20° C		30° C		40° C		50° C	
	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS
S.L.	509	812	541	858	574	904	655	1032	762	1202	901	1426
1000	536	860	570	908	620	984	716	1133	832	1323	987	1576
2000	565	911	600	962	675	1080	778	1245	907	1456	---	---
3000	595	965	643	1038	736	1187	850	1372	992	1605	---	---
4000	628	1023	703	1143	804	1307	928	1510	1085	1769	---	---
5000	678	1113	767	1259	876	1437	1012	1660	1185	1949	---	---
6000	742	1229	838	1386	957	1582	1106	1831	---	---	---	---
7000	810	1354	916	1527	1046	1745	1213	2025	---	---	---	---
8000	886	1494	1004	1689	1148	1932	1332	2243	---	---	---	---
9000	972	1652	1102	1871	1261	2141	1461	2483	---	---	---	---
10000	1064	1825	1208	2069	1384	2371	1607	2756	---	---	---	---
11000	1167	2021	1326	2293	1522	2632	---	---	---	---	---	---
12000	1283	2242	1459	2547	1678	2928	---	---	---	---	---	---

Figure 5-16 – Takeoff Distance (6000 Pounds)

PRESS ALT (FT)	0° C		10° C		20° C		30° C		40° C		50° C	
	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS	GRND ROLL (FT)	Total Feet to Clear 50' OBS
S.L.	317	516	337	545	357	574	408	656	474	764	561	906
1000	334	546	355	577	386	625	444	719	518	841	614	1001
2000	352	579	374	611	420	686	484	791	565	925	---	---
3000	371	613	401	659	458	754	529	871	618	1019	---	---
4000	391	650	437	726	500	830	578	959	675	1124	---	---
5000	422	706	478	799	546	912	630	1054	738	1237	---	---
6000	462	780	522	880	595	1004	689	1162	---	---	---	---
7000	504	859	570	969	651	1107	755	1285	---	---	---	---
8000	552	948	625	1072	715	1226	829	1423	---	---	---	---
9000	605	1048	686	1187	785	1358	909	1575	---	---	---	---
10000	662	1158	752	1313	861	1504	1000	1748	---	---	---	---
11000	727	1282	825	1454	947	1669	---	---	---	---	---	---
12000	799	1422	908	1615	1044	1857	---	---	---	---	---	---

Figure 5-17 – Takeoff Distance (5000 Pounds)

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-22 TAKEOFF RATE OF CLIMB

Conditions:

- Flaps.....20°
- Power.....Maximum Takeoff
- Inertial Separator.....Normal
- Airspeed.....Best Rate of Climb

Example:

- Outside Air Temp.....20°C
- Weight.....6000 LB
- Pressure Altitude.....4000 FT MSL
- Climb Airspeed: 88 KIAS
- Rate of Climb: 1427 FT/MIN

NOTES:

- Do not exceed the placarded maximum takeoff torque, ITT (790°C) and NG (101.6%) limits or the charted max takeoff torque from **Figure 5-8**.
- This power setting is time limited to 5 minutes.
- Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.
- On a standard day at Sea Level, the enroute rate of climb at 6750 lb is 1541 ft/min.



WT (LB)	Press Alt. (FT)	Climb Speed (KIAS)	RATE OF CLIMB – Feet per Minute				
			Temperature – (°C)				
			-20	0	20	40	50
6750	SL	89	1505	1480	1456	1074	842
	2000	89	1475	1449	1298	908	683
	4000	88	1442	1414	1124	744	---
	6000	86	1397	1244	955	576	---
	8000	85	1306	1100	817	---	---
	10000	84	1135	917	637	---	---
6000	SL	89	1831	1808	1786	1361	1103
	2000	89	1804	1779	1616	1182	932
	4000	88	1773	1748	1427	1005	---
	6000	86	1731	1565	1246	825	---
	8000	85	1638	1413	1100	---	---
	10000	84	1455	1217	908	---	---
5000	SL	89	2388	2368	2349	1846	1539
	2000	89	2363	2342	2153	1640	1343
	4000	88	2336	2314	1938	1439	---
	6000	86	2297	2107	1732	1235	---
	8000	85	2198	1937	1570	---	---
	10000	84	1992	1715	1355	---	---

Figure 5-18 – Takeoff Rate of Climb

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-23 TAKEOFF CLIMB GRADIENT

Conditions:

- Flaps.....20°
- Power.....Maximum Takeoff
- Inertial Separator.....Normal
- Airspeed.....Best Rate of Climb
- WindsZero

Example:

- Outside Air Temp.....40°C
- Weight.....6750
- Pressure Altitude.....2000 FT
Climb Airspeed: 89 KIAS
Gradient: 652 FT/NM

NOTES:

- Do not exceed the maximum climb power torque, ITT and Ng limits.
- This table represents the gain in altitude for the horizontal distance traveled and is expressed as Feet per Nautical Mile.
- Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.



WT (LB)	Press Alt. (FT)	Climb Speed (KIAS)	CLIMB GRADIENT – Feet Per Nautical Mile				
			Temperature – (°C)				
			-20	0	20	40	50
6750	SL	89	1255	1185	1123	795	612
	2000	89	1193	1125	969	652	481
	4000	88	1135	1070	816	520	---
	6000	86	1075	918	677	393	---
	8000	85	981	792	565	---	---
	10000	84	832	645	431	---	---
6000	SL	89	1543	1462	1390	1013	804
	2000	89	1472	1394	1215	851	658
	4000	88	1408	1333	1041	704	---
	6000	86	1343	1162	887	565	---
	8000	85	1240	1023	764	---	---
	10000	84	1073	859	616	---	---
5000	SL	89	2058	1955	1864	1390	1131
	2000	89	1971	1872	1644	1192	954
	4000	88	1894	1798	1432	1015	---
	6000	86	1817	1588	1245	850	---
	8000	85	1692	1420	1100	---	---
	10000	84	1489	1223	924	---	---

Figure 5-19 – Takeoff Climb Gradient

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-24 ENROUTE RATE OF CLIMB

Conditions:

- Flaps.....0°
- Power.....Maximum Climb
- Inertial Separator.....Normal
- Airspeed.....VCLIMB

Example:

- Outside Air Temp.....20°C
 - Weight.....6000 LB
 - Pressure Altitude.....10000 FT
- Climb Airspeed: 101 KIAS
Rate of Climb: 697 FT/MIN

MAXIMUM CLIMB POWER – FLAPS 0°

NOTES:

- Do not exceed the placarded maximum climb torque, ITT (765°C) and Ng (101.6%) limits or the charted max climb torque from **Figure 5-9**.
- For operation in temperatures colder than provided in this table, use the coldest data shown.
- For operation in temperatures warmer than provided in this table, use extreme caution.
- Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.



WT (LB)	Press Alt. (FT)	Climb Speed (KIAS)	Rate of Climb - Feet Per Minute				
			Temperature – (°C)				
			-20	0	20	40	50
6750	SL	101	1645	1627	1395	848	559
	5000	101	1599	1398	939	419	---
	10000	101	1251	920	500	---	---
	15000	101	762	432	17	---	---
	20000	101	337	18	---	---	---
6000	SL	101	1956	1939	1682	1071	748
	5000	101	1913	1692	1180	599	---
	10000	101	1533	1165	697	---	---
	15000	101	995	629	168	---	---
	20000	101	531	178	---	---	---
5000	SL	101	2491	2477	2174	1446	1061
	5000	101	2454	2195	1586	895	---
	10000	101	2013	1579	1023	---	---
	15000	101	1385	953	407	---	---
	20000	101	848	432	---	---	---

Figure 5-20 – Enroute Rate of Climb

5-25 TIME FUEL AND DISTANCE TO CLIMB

Conditions:

- Flaps 0°
- Power Maximum Climb Power
- Inertial Separator Normal
- Airspeed V_{CLIMB}
- Weight 6750 lb
- Winds Zero

NOTES:

- Taxi Fuel: Add 50 pounds of fuel for start, taxi and takeoff.
- Temperature: Add 10% to calculated values for each 10°C above standard.

Press Alt (FT)	ISA OAT (°C)	Climb Speed (KIAS)	Rate of Climb (FPM)	Time, Fuel & Distance – From Sea Level		
				Time (Minutes)	Fuel (LB)	Distance (NM)
SL	15	101	1545	0	0	0
1000	13	101	1494	.67	4.7	1.1
2000	11	101	1443	1.4	9.8	2.4
3000	9	101	1390	2.1	14.6	3.6
4000	7	101	1337	2.8	19.4	4.9
5000	5	101	1284	3.6	24.9	6.3
6000	3	101	1229	4.4	30.5	7.8
7000	1	101	1174	5.3	36.5	9.5
8000	-1	101	1117	6.2	42.4	11.2
9000	-3	101	1060	7.1	48.0	13.0
10000	-5	101	1002	8.1	54.1	15.0
11000	-7	101	943	9.17	60.0	17.1
12000	-9	101	883	10.3	66.4	19.4
13000	-11	101	822	11.5	73.1	21.9
14000	-13	101	760	12.8	80.1	24.7
15000	-15	101	697	14.3	87.9	27.9
16000	-17	101	632	15.9	95.9	31.4
17000	-19	101	566	17.6	104.3	35.2
18000	-21	101	499	19.6	113.8	39.7
19000	-23	101	430	22.0	124.8	45.1
20000	-25	101	359	24.7	136.8	51.4
21000	-27	101	287	28.2	151.7	59.6
22000	-29	101	213	32.9	171.2	70.8
23000	-31	101	137	40.2	200.3	82.2
24000	-33	101	58	57.5	267.5	124.6
25000	-35	101	0	77.8	344.6	175.0

Figure 5-21 – Time, Fuel, and Distance to Climb

5-26 CRUISE PERFORMANCE

(Refer to the Tables on the following pages)

The following information is applicable to all Cruise Performance Charts contained in this section.

NOTES:

- *The highest torque value for each temperature and RPM value represents the maximum allowable cruise power. Do not exceed this torque value, 740°C ITT, or 101.6% Ng, whichever occurs first.*
- *The lowest torque value provided for each temperature and RPM represents the recommended torque setting to attain best range in zero wind conditions. With the inertial air particle separator placed in BYPASS and the power set below the cruise torque limit of 1840 foot-pounds, decrease the maximum cruise torque by 55 foot-pounds. Do not exceed 740°C ITT or 101.6% Ng.*



Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-27 CRUISE PERFORMANCE (PRESSURE ALTITUDE SEA LEVEL)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

NOTE: Do not exceed maximum cruise torque or 740°C ITT.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
50	1050	325	149	1170	326	151	-10	1670	413	169	1840	416	171	
	1000	315	146	1000	298	141		1600	401	166	1800	409	169	
	800	279	132	800	264	127		1400	366	158	1600	374	162	
	600	242	110	625	234	110		1200	331	149	1400	342	154	
40	1210	350	157	1370	355	160		1000	297	138	1200	311	144	
	1000	312	145	1200	328	152		800	261	125	1000	279	134	
	800	276	131	1000	295	140		600	226	109	800	247	121	
	600	239	109	800	262	126		520	211	99	600	214	105	
	590	239	108	615	230	108					550	205	99	
30	1390	378	165	1570	386	168		-20	1670	409	167	1840	411	169
	1200	344	155	1400	356	160			1600	397	164	1800	404	167
	1000	309	144	1200	324	150			1400	362	156	1600	370	160
	800	273	130	1000	292	139			1200	327	147	1400	339	152
	600	236	109	800	259	125			1000	293	137	1200	307	143
	580	232	107	600	224	106			800	258	125	1000	276	132
20	1560	405	170	1750	413	173			600	223	108	800	244	120
	1400	376	163	1600	387	167	510		207	97	600	211	104	
	1200	341	154	1400	353	159					540	201	98	
	1100	323	148	1200	321	149	-30		1670	405	165	1840	406	167
	1000	306	143	1000	289	138		1600	393	162	1800	400	165	
	800	270	129	800	256	124		1400	358	154	1600	366	158	
	600	234	109	600	222	106		1200	324	145	1400	335	150	
570	228	104	590	222	105	1000		290	135	1200	304	141		
10	1670	421	173	1840	425	175		800	255	124	1000	273	131	
	1600	408	170	1800	418	173		600	221	107	800	241	119	
	1400	373	162	1600	383	165		500	203	95	600	209	103	
	1200	338	152	1400	349	157					520	195	95	
	1000	303	141	1200	317	147		-40	1670	402	163	1840	402	165
	800	267	128	1000	286	137	1600		390	160	1800	395	163	
	600	231	109	800	253	124	1400		355	152	1600	362	156	
	560	223	103	600	219	106	1200		321	144	1400	331	148	
	0				575	215	103		1000	287	134	1200	300	139
		1670	417	171	1840	420	173		800	253	122	1000	270	130
1600		404	168	1800	413	171	600		218	107	800	238	118	
1400		369	160	1600	379	164	485		198	93	600	206	103	
1200		331	151	1400	346	155					510	191	93	
1000		300	140	1200	314	146	-50		1670	398	161	1840	397	162
800		263	127	1000	282	135		1600	386	158	1800	390	161	
600		228	108	800	250	122		1400	352	150	1600	359	154	
545		218	101	600	217	105		1200	318	142	1400	328	146	
				560	210	101		1000	284	132	1200	297	138	
						800		248	121	1000	267	128		
						600		215	106	800	236	117		
						475		194	91	600	203	102		
										510	189	93		

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-28 CRUISE PERFORMANCE (PRESSURE ALTITUDE 2000 FT)

Conditions:

- Weight..... 6750 Pounds
- Engine Inlet..... NORMAL

NOTE: Shaded torques may produce calibrated speeds in excess of V_{MO} , and may have to be reduced slightly.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
46	1030	311	151	1150	313	153	-15	1670	404	172	1840	408	174
	1000	305	149	1000	288	144		1600	391	169	1800	401	172
	800	269	134	800	255	129		1400	356	161	1600	366	165
	620	236	113	645	229	113		1200	322	151	1400	333	156
35	1200	337	160	1350	342	162	1000	287	141	1200	301	147	
	1000	302	148	1200	318	154	800	252	128	1000	270	136	
	800	266	133	1000	285	143	600	217	109	800	238	123	
	605	231	111	800	252	128	545	207	101	600	206	106	
25				635	224	111	-25	1670	401	170	1840	404	172
	1400	370	168	1540	371	169		1600	388	167	1800	396	170
	1200	334	158	1400	347	163		1400	352	159	1600	362	163
	1000	299	146	1200	314	153		1200	318	150	1400	329	154
15	800	264	132	1000	282	141	1000	284	139	1200	297	145	
	600	227	110	800	249	127	800	250	127	1000	267	135	
	595	227	109	625	220	109	600	215	109	800	236	122	
							530	202	100	600	203	105	
5	1580	395	174	1720	400	175	-35				550	195	100
	1400	366	166	1600	378	170		1670	397	168	1840	399	170
	1200	330	156	1400	344	161		1600	384	165	1800	392	168
	1000	296	145	1200	311	151		1400	349	157	1600	358	161
-5	900	279	138	1000	279	140	1200	315	148	1400	326	152	
	800	261	131	800	247	126	1000	281	137	1200	294	143	
	600	225	110	610	215	108	800	247	125	1000	264	133	
	585	222	107				600	212	108	800	234	121	
-15	1670	412	176	1840	417	178	-45	520	198	98	600	201	104
	1600	389	173	1800	409	176					535	190	98
	1400	362	165	1600	373	168		1670	393	166	1840	395	167
	1200	327	155	1400	340	160		1600	381	163	1800	387	166
-25	1000	293	144	1200	308	150	1400	346	155	1600	354	158	
	800	258	130	1000	276	139	1200	312	146	1400	322	150	
	605	223	105	800	244	125	1000	278	136	1200	291	142	
				600	211	106	800	244	124	1000	261	132	
-35				590	209	105	-54	600	209	108	800	230	120
	1670	407	174	1840	413	176		505	193	96	600	198	104
	1600	395	171	1800	405	174					530	186	97
	1400	359	163	1600	369	166		1670	390	163	1840	391	165
-45	1200	325	153	1400	337	158	1600	377	161	1800	383	164	
	1000	290	142	1200	304	148	1400	343	153	1600	350	157	
	800	255	129	1000	273	137	1200	310	144	1400	319	149	
	600	220	110	800	241	124	1000	275	134	1200	289	140	
-54	555	211	103	600	208	106	800	241	123	1000	258	130	
				580	205	104	600	207	107	800	227	118	
							490	188	93	600	196	103	
										510	181	94	

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-29 CRUISE PERFORMANCE (PRESSURE ALTITUDE 4000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
42	1010	298	152	1120	299	154	-20	1670	396	175	1840	402	177
	800	261	136	1000	279	146		1600	383	172	1800	394	175
	640	232	117	800	246	131		1400	347	164	1600	358	167
30	1180	324	161	1330	330	164	1200	313	154	1400	324	159	
	1000	292	150	1200	308	157	1000	278	143	1200	292	149	
	800	258	135	1000	276	145	800	243	130	1000	261	138	
	625	226	114	800	243	130	600	209	110	800	230	125	
				655	219	115	560	202	104	600	198	106	
20	1340	349	168	1510	357	171	-30	1670	392	173	1840	397	175
	1200	324	161	1400	338	166		1600	380	170	1800	390	173
	1000	290	149	1200	305	156		1400	343	162	1600	354	165
	800	255	134	1000	273	144		1200	309	152	1400	321	157
	615	222	113	800	241	129		1000	275	141	1200	289	147
10	1500	375	174	1680	385	177	800	241	128	1000	258	137	
	1400	357	169	1600	370	173	600	207	109	800	228	124	
	1200	322	159	1400	335	164	550	198	103	600	196	106	
	1000	287	147	1200	302	154	-40	1670	388	171	1840	395	172
	800	252	133	1000	270	142		1600	376	168	1800	386	171
600	217	110	800	238	128	1400		340	160	1600	350	163	
			625	209	110	1200		306	150	1400	317	155	
						1000		272	140	1200	286	146	
0	1640	398	178	1840	411	181	800	239	127	1000	255	135	
	1600	390	177	1800	404	179	600	204	109	800	225	123	
	1400	353	168	1600	366	171	525	191	100	600	193	106	
	1200	319	158	1400	331	162	-50	1670	387	168	1840	393	170
	1000	284	146	1200	299	152		1600	372	166	1800	382	169
800	249	132	1000	267	141	1400		337	157	1600	346	161	
590	212	108	800	235	127	1200		306	148	1400	314	153	
			615	205	109	1000		270	138	1200	283	144	
-10	1870	400	177	1840	412	179	800	236	126	1000	252	134	
	1600	386	175	1800	399	177	600	201	108	800	222	121	
	1400	350	166	1600	362	169	515	187	98	600	191	105	
	1200	316	156	1400	328	161	-50	1670	387	168	1840	393	170
	1000	281	144	1200	295	151		1600	372	166	1800	382	169
800	247	131	1000	264	140	1400		337	157	1600	346	161	
600	212	110	800	233	126	1200		306	148	1400	314	153	
575	207	106	600	200	107	1000		270	138	1200	283	144	

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-31 CRUISE PERFORMANCE (PRESSURE ALTITUDE 6000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
38	980	284	153	1090	285	155	-25	1670	395	178	1840	406	180
	800	252	138	1000	271	149		1600	376	176	1800	397	178
	660	227	120	800	238	133		1400	339	167	1600	352	170
25							1200	304	157	1400	316	162	
	1180	320	164	1310	319	166	1000	270	145	1200	285	152	
	1200	316	165	1200	300	160	800	236	131	1000	253	140	
	1000	293	153	1000	267	147	600	202	110	800	222	127	
	800	249	137	800	235	132	580	198	107	605	191	108	
15	645	221	118	670	214	117	-35	1670	394	176	1840	399	178
	1310	336	170	1470	343	172		1600	374	173	1800	394	176
	1200	316	164	1400	331	169		1400	336	165	1600	347	168
	1000	281	151	1200	297	158		1200	301	155	1400	313	160
	800	246	136	1000	284	146		1000	267	144	1200	281	150
5	630	216	115	800	233	131	800	234	130	1000	250	139	
				655	209	115	600	199	110	800	220	125	
	1460	360	176	1640	372	178	570	194	106	600	188	107	
	1400	349	173	1600	364	176				585	186	105	
	1200	313	162	1400	327	167	-45	1670	390	174	1840	392	175
1000	278	150	1200	294	157	1600		373	171	1800	388	174	
800	244	135	1000	261	145	1400		333	162	1600	344	166	
620	212	114	800	230	130	1200		298	153	1400	309	158	
			645	205	114	1000		265	142	1200	278	148	
-5	1600	384	180	1790	398	182	800	231	129	1000	247	137	
	1400	345	171	1600	359	174	600	197	109	800	217	124	
	1200	310	160	1400	324	165	555	194	103	600	186	106	
	1000	275	148	1200	291	155				570	181	103	
	800	241	134	1000	258	143	-54	1670	384	172	1840	385	173
605	207	112	800	228	129	1600		373	169	1800	382	172	
			630	200	111	1400		330	160	1600	340	164	
1670	396	181	1840	411	182	1200		296	151	1400	306	156	
1600	380	178	1800	398	181	1000		263	140	1200	275	146	
-15	1400	342	169	1600	355	172	800	229	127	1000	245	136	
	1200	307	159	1400	320	163	600	195	109	800	215	123	
	1000	273	147	1200	288	153	545	185	101	600	184	106	
	800	239	132	1000	256	142				560	177	102	
	600	204	111	800	225	128							
	590	202	110	620	196	110							

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-32 CRUISE PERFORMANCE (PRESSURE ALTITUDE 8000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
34	950	270	153	1060	273	156	-25	1670	388	183	1840	399	184	
	800	244	140	1000	263	151		1600	381	180	1800	389	183	
	680	123	124	800	231	134		1400	333	171	1600	349	174	
25				710	216	124		1200	298	160	1400	312	165	
	1070	290	161	1200	294	163		1000	264	149	1200	278	155	
	1000	277	156	1000	260	150		800	230	134	1000	247	143	
	800	242	139	800	229	134		605	197	112	800	216	129	
15	670	220	122	700	213	122					630	190	112	
	1200	309	168	1350	317	170		-35	1670	384	181	1840	394	182
	1000	274	155	1200	291	162			1600	374	178	1800	386	180
	800	240	138	1000	258	149			1400	330	169	1600	347	172
655	215	120	800	226	133	1200			295	159	1400	308	163	
5				685	208	120	1000	261	147	1200	275	153		
	1320	328	173	1480	337	175	800	227	132	1000	244	142		
	1200	306	166	1400	222	171	600	194	111	800	214	128		
	1000	272	153	1200	288	160	590	192	109	615	185	109		
-5	800	237	137	1000	255	148	-45	1670	380	178	1840	390	180	
	645	211	118	800	224	132		1600	367	175	1800	381	178	
				670	203	118		1400	327	166	1600	345	170	
								1200	292	157	1400	305	161	
-15	1470	354	178	1650	368	181	1000	258	145	1200	272	152		
	1400	340	175	1600	356	179	800	225	131	1000	242	140		
	1200	303	164	1400	318	169	600	191	110	800	211	127		
	1000	269	152	1200	284	159	580	188	107	600	180	107		
-54	800	235	136	1000	252	146	-54	1670	377	176	1840	386	177	
	630	206	116	800	221	131		1600	362	173	1800	378	176	
				660	199	116		1400	324	164	1600	343	168	
								1200	290	155	1400	302	159	
								1000	256	143	1200	270	150	
								800	223	130	1000	239	139	
						600	189	110	800	209	125			
						565	183	105	600	178	107			
									580	175	104			

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-30 CRUISE PERFORMANCE (PRESSURE ALTITUDE 10000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM			
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS	
30	920	258	153	1020	259	156	-30	1600	370	183	1810	393	187	
	800	237	141	1000	256	154		1400	330	174	1800	391	186	
	700	220	128	800	224	136		1200	291	163	1600	349	178	
20	1060	280	163	1160	280	164		1000	257	151	1400	307	168	
	1000	270	159	1000	253	153		800	223	136	1200	272	158	
	800	234	141	800	221	135		620	192	115	1000	240	146	
	690	215	126	720	209	126					800	209	131	
10	1180	299	170	1320	306	172		-40	1670	382	184	1840	397	185
	1000	267	157	1200	284	165			1600	366	181	1800	386	184
	800	232	140	1000	251	152			1400	329	172	1600	342	175
	675	211	123	800	219	135	1200		288	161	1400	303	166	
0	1300	318	175	1450	327	177	1000		254	149	1200	269	156	
	1200	299	169	1400	317	174	800		220	134	1000	237	144	
	1000	264	156	1200	281	163	605		188	112	800	207	130	
	800	230	139	1000	248	150					635	182	112	
-10	660	206	121	800	216	134	-50		1670	379	181	1840	392	183
				690	199	121			1600	363	178	1800	382	181
	1410	336	179	1590	359	181		1400	328	169	1600	337	173	
	1400	334	178	1400	313	172		1200	286	159	1400	299	164	
-20	1200	296	167	1200	278	161		1000	252	148	1200	266	154	
	1000	262	154	1000	246	149		800	218	133	1000	235	142	
	800	227	138	800	214	133		600	185	111	800	204	128	
	650	202	119	680	195	119		585	182	110	615	177	110	
-20	1510	359	181	1710	374	185								
	1400	331	176	1600	355	180								
	1200	294	165	1400	310	170								
	1000	259	153	1200	275	160								
	800	225	137	1000	243	147								
	635	197	117	800	211	132								
			665	191	117									

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-33 CRUISE PERFORMANCE (PRESSURE ALTITUDE 12000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM							
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS					
26	890	246	153	980	246	155	-35	1540	355	184	1720	374	186					
	800	230	143	800	217	138		1400	324	177	1600	344	181					
	725	217	132	755	210	132		1200	285	166	1400	307	171					
15	1050	272	165	1150	273	166		1000	250	154	1200	266	161					
	1000	262	161	1000	247	155		800	217	137	1000	233	148					
	800	227	142	800	214	137		640	190	118	800	202	132					
5	710	212	130	740	205	130		-45	1630	374	186	1820	394	188				
	1170	291	172	1300	297	174						1600	367	184	1800	389	187	
	1000	259	160	1200	278	168						1400	320	175	1600	340	179	
800	225	142	1000	244	154	1200						282	164	1400	306	169		
695	207	127	800	212	136	1000						248	152	1200	263	159		
-5	1280	309	177	1420	319	178						800	214	136	1000	231	146	
	1200	293	172	1400	313	177	625		185	116	800	200	131					
	1000	257	159	1200	275	166	1670		379	185	1840	395	186					
800	223	141	1000	241	153	1600					363	182	1800	384	185			
685	204	126	800	209	135	1400					318	173	1600	337	176			
-15	1360	327	179	1520	336	181					1200	280	162	1400	302	167		
	1200	290	170	1400	311	175					1000	245	150	1200	261	157		
	1000	255	157	1200	272	164		800			212	135	1000	229	145			
-25	800	221	140	1000	239	151	610	181	113	800	198	130						
	670	199	123	800	207	135	1670	379	185	635	174	113						
	-5	1460	340	183	1630	356				184	1670	379	185	1820	394	188		
1400		330	179	1600	349	183				1600				367	184	1800	389	187
1200		287	168	1400	309	173				1400				320	175	1600	340	179
1000	253	155	1200	269	162	1200				282				164	1400	306	169	
800	219	139	1000	236	150	1000				248				152	1200	263	159	
655	194	121	800	205	134	800	214	136	1000	231				146				
			685	187	121					650	178	115						

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-34 CRUISE PERFORMANCE (PRESSURE ALTITUDE 14000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
22	860 740	234 213	152 135	940 780	220 207	154 137	-20	1290 690	308 196	179 127	1440 720	316 187	181 127
10	990 730	254 209	163 134	1090 765	257 202	165 134	-30	1380 670	320 191	182 123	1560 705	341 184	185 124
0	1100 720	272 205	170 132	1230 750	280 198	173 132	-40	1450 660	333 187	183 122	1640 690	356 180	186 122
-10	1200 705	288 201	175 129	1340 735	304 193	177 129	-50	1530 650	350 183	185 120	1740 675	377 176	188 119

5-35 CRUISE PERFORMANCE (PRESSURE ALTITUDE 16000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
18	820 770	221 213	149 141	910 805	224 206	154 141	-20	1190 715	285 196	177 132	1340 750	296 189	180 132
10	910 760	235 209	159 140	1000 795	237 203	161 140	-30	1280 700	298 191	181 129	1430 735	313 184	183 130
0	1010 745	251 205	167 137	1110 780	255 198	168 137	-40	1340 690	309 188	182 127	1510 715	329 179	184 126
-10	1100 730	266 200	173 134	1220 765	277 194	174 135	-50	1420 670	325 182	184 124	1600 700	347 175	186 124

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-36 CRUISE PERFORMANCE (PRESSURE ALTITUDE 18000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

NOTE: Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
14	790 *	211 *	145 *	870	212	151	-25	1120	264	176	1250	276	177
				830	205	146		740	194	136	775	188	136
5	860	221	156	960	226	160	-35	1200	279	179	1350	297	181
	780	207	144	820	201	144		720	189	133	755	182	133
-5	960	237	165	1060	242	167	-45	1260	291	181	1420	309	183
	765	202	141	805	198	142		710	185	131	740	178	131
-15	1040	253	171	1170	264	174	-54	1320	302	182	1460	315	183
	750	198	138	790	192	139		690	180	128	725	174	128

5-37 CRUISE PERFORMANCE (PRESSURE ALTITUDE 20000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

NOTE: Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.

TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
10	750 *	199 *	134 *	820 *	199 *	145 *	-30	1065	251	175	1170	258	175
								1000	238	169	1000	225	162
0	830	211	153	920	215	158		800	199	147	800	187	141
	800	205	148	845	201	149		760	193	141	795	186	140
-10	920	226	164	1010	231	166	-40	1130	263	178	1250	274	179
	800	203	148	1000	228	165		1000	234	167	1200	262	175
	790	202	146	830	196	146		800	197	146	1000	224	160
								740	187	137	800	185	140
-20	1000	242	171	1100	245	172	-50	1190	274	180	1310	285	180
	800	201	147	1000	227	163		1000	232	166	1200	259	173
	770	196	143	815	192	144		800	196	145	1000	222	159
								725	183	134	800	182	140
											760	176	134

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-38 CRUISE PERFORMANCE (PRESSURE ALTITUDE 22000 FT)

Conditions:

- Weight..... 6750 Pounds
- Engine Inlet..... NORMAL

NOTES:

- Dashes signify conditions where the airplane cannot maintain level flight at 6750 lb.
- Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.



TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
6	710	187	---	780	189	137	-35	1040	245	176	1150	256	177
				*	*	*		780	192	145	820	187	145
-5	810	204	150	900	208	157	-45	1100	257	179	1220	269	180
	*	*	*	870	203	153		765	187	142	800	181	142
-15	890	221	163	990	225	166	-54	1140	263	180	1270	278	181
	810	201	150	855	197	151		750	183	139	785	177	139
-25	960	229	169	1070	239	172							
	795	196	148	840	192	148							

5-39 CRUISE PERFORMANCE (PRESSURE ALTITUDE 24000 FT)

Conditions:

- Weight..... 6750 Pounds
- Engine Inlet..... NORMAL

NOTES:

- Dashes signify conditions where the airplane cannot maintain level flight at 6750 lb.
- Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.



TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
2	670	176	---	730	176	---	-40	960	227	171	1060	235	173
								805	195	150	845	192	150
-10	770	194	134	840	204	150	-50	1020	238	175	1120	246	176
	*	*	*	840	204	150		785	190	146	825	187	146
-20	840	206	157	920	216	161							
	835	205	156	880	215	156							
-30	890	213	164	990	223	168							
	820	200	153	865	210	153							

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-40 CRUISE PERFORMANCE (PRESSURE ALTITUDE 25000 FT)

Conditions:

- Weight.....6750 Pounds
- Engine Inlet.....NORMAL

NOTES:

- Dashes signify conditions where the airplane cannot maintain level flight at 6750 lb.
- Asterisks (*) indicate that maximum approved power is also approximately maximum range power at that temperature.



TEMP °C	2200 RPM			2000 RPM			TEMP °C	2200 RPM			2000 RPM		
	TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS		TRQ LBFT	FUEL FLOW PPH	TAS KTS	TRQ LBFT	FUEL FLOW PPH	TAS KTS
0	650	171	---	720	174	---	-30	850	204	159	940	211	164
-10	720	182	---	790	187	136	-40	835	201	156	880	198	156
-20	790	196	144	870	198	155	-50	910	216	167	1000	223	169
								820	196	153	865	192	153
								960	225	171	1060	234	173
								800	190	150	845	186	150

5-41 RANGE / ENDURANCE PROFILE

Conditions:

- Weight..... 6750 LB
- Propeller 2000 RPM
- Temperature..... ISA
- Winds..... Zero
- Total Fuel 320 GAL

Example:

- Power..... Maximum Cruise
 - Takeoff Press Alt 2000 FT
 - Cruise Press Alt 10000 FT
- Fuel to Climb: 42.4 LB
 Cruise Fuel Flow: 343 LB/HR
 Endurance: 5.6 HR
 Range: 987 NM
 True Airspeed: 179 KIAS

NOTES:

- *Fuel Remaining For Cruise is equal to 2110 pounds usable, less fuel required for climb from sea level at maximum climb power, less 153 pounds for 45 minutes IFR reserve fuel at Maximum Range Power (ISA @10,000 ft PA), less fuel for descent to sea level, less 50 pounds for fuel used prior to takeoff.*
- *Range and endurance values include descent to final destination at approximately 140 KIAS above 16,000 feet and 160 KIAS below 16,000 feet.*



Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

Maximum Cruise Power							
Press Alt (FT)	Climb Fuel (LB)	Fuel Remaining For Cruise (LB)	Airspeed (KTAS)	Fuel Flow (PPH)	Endurance (Hours)	Total Range (NM)	Total Specific Range (NM/LB)
SL	0	1907	174	419	4.6	792	.42
2000	9.8	1886	176	409	4.7	821	.43
4000	19.4	1864	178	390	4.9	869	.46
6000	30.5	1843	178	375	5.1	903	.47
8000	42.4	1820	178	353	5.4	956	.50
10000	54.1	1798	179	343	5.6	987	.52
12000	66.4	1776	179	327	5.9	1032	.54
14000	80.1	1751	179	308	6.2	1089	.57
16000	95.9	1725	179	293	6.5	1139	.60
18000	113.8	1699	177	271	7.0	1208	.63
20000	136.8	1668	176	252	7.4	1281	.67
22000	171.2	1626	175	247	7.6	1394	.68
24000	267.5	1521	171	225	8.2	1357	.71
25000	344.6	1440	169	219	8.4	1363	.71

Figure 5-22 – Maximum Cruise Profile

Maximum Range Power							
Press Alt (FT)	Climb Fuel (LB)	Fuel Remaining For Cruise (LB)	Airspeed (KTAS)	Fuel Flow (PPH)	Endurance (Hours)	Total Range (NM)	Total Specific Range (NM/LB)
SL	0	1907	104	219	8.7	906	.47
2000	9.8	1886	107	212	9.0	961	.50
4000	19.4	1864	110	207	9.1	1009	.53
6000	30.5	1843	114	204	9.2	1058	.55
8000	42.4	1820	117	201	9.3	1097	.58
10000	54.1	1798	120	197	9.5	1144	.60
12000	66.4	1776	124	194	9.6	1195	.63
14000	80.1	1751	128	191	9.7	1245	.65
16000	95.9	1725	133	190	9.7	1292	.68
18000	113.8	1699	138	190	9.6	1333	.70
20000	136.8	1668	142	189	9.7	1370	.72
22000	171.2	1626	147	189	9.6	1363	.71
24000	267.5	1521	152	193	9.4	1399	.73
25000	344.6	1440	154	194	9.2	1395	.73

Figure 5-23 – Maximum Range Profile

Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

5-42 TIME, FUEL AND DISTANCE TO DESCEND

Conditions:

- Weight..... 6750 LB
- Flaps 0°
- Airspeed..... 140 KIAS Above 16,000 Feet
160 KIAS Below 16,000 Feet
- Power..... Set for 800 FPM Descent
- Propeller 2200 RPM



NOTE: Distances provided are based on a zero wind condition.

Press Alt (FT)	DESCENT TO SEA LEVEL		
	Time (MIN)	Fuel (LB)	Distance (NM)
24000	30.0	118	76.6
22000	27.5	110	70.8
20000	25.0	102	65.0
18000	22.5	94	59.1
16000	20.0	86	53.3
14000	17.5	76	46.7
12000	15.0	65	40.0
10000	12.5	55	33.3
8000	10.0	45	26.7
6000	7.5	34	20
4000	5.0	23	13.3
2000	2.5	11	6.6
SL	0	0	0

Figure 5-24 – Time, Fuel, and Distance to Descend

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-43 BALKED LANDING CLIMB GRADIENT

(Refer to the Table on the following page)

Conditions:

- Power.....Max Takeoff
- Flaps.....35° (Down)
- Climb Airspeed.....V_{REF}
- Winds.....Zero

Example:

- Outside Air Temp.....20°C
 - Weight.....6690 LB
 - Pressure Altitude.....6000 FT
- Climb Airspeed: 76 KIAS
Climb Gradient: 489 FT/NM

NOTES:

- *Balked Landing Climb Gradients shown represent the gain in altitude for the horizontal distance traveled and is expressed as Feet per Nautical Mile.*
- *For operation in air colder than provided in this table, use the coldest charted data.*
- *For operation in air warmer than provided in this table, use extreme caution.*
- *This chart is required data for aircraft certification. However, significantly better performance may be achieved by climbing at the Best Rate of Climb speeds with the flaps positioned at 20° or following the Go-Around / Balked Landing procedure outlined in **Section 4**.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

Weight (LB)	Press Alt (FT)	Climb Speed (KIAS)	CLIMB GRADIENT – Feet Per Nautical Mile				
			-20 °C	0 °C	20 °C	40 °C	50 °C
6690	SL	76	1074	1005	944	617	437
	2000	76	1006	943	789	470	303
	4000	76	943	879	632	338	--
	6000	76	881	727	489	207	--
	8000	76	761	572	346	---	--
	10000	76	605	417	215	---	--
6000	SL	76	1329	1250	1180	806	602
	2000	76	1251	1178	1002	640	451
	4000	76	1178	1105	823	490	--
	6000	76	1107	931	660	342	--
	8000	76	970	755	499	---	--
	10000	76	792	579	351	---	--
5000	SL	76	1780	1680	1592	1128	878
	2000	76	1681	1590	1370	924	694
	4000	76	1590	1498	1149	741	--
	6000	76	1500	1282	949	562	--
	8000	76	1330	1065	752	---	--
	10000	76	1111	849	572	---	--

Figure 5-25 – Balked Landing Climb Gradient

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-44 BALKED LANDING RATE OF CLIMB

(Refer to the Table on the following page)

Conditions:

- Power.....Max Takeoff
- Flaps.....35° (Down)
- Climb Airspeed.....76 KIAS

Example:

- Outside Air Temp.....20°C
- Weight.....6690 LB
- Pressure Altitude.....6000 FT

Climb Airspeed: 76 KIAS
Climb Gradient: 712 FT/MIN

NOTES:

- *Balked Landing Rates of Climb shown represent the gain in altitude for the horizontal distance traveled and is expressed as feet per minute.*
- *For operation in air colder than provided in this table, use the coldest charted data.*
- *For operation in air warmer than provided in this table, use extreme caution.*
- *This chart is required data for aircraft certification. However, significantly better performance may be achieved by climbing at the Best Rate of Climb speeds with the flaps positioned at 20° or following the Go-Around / Balked Landing procedure outlined in **Section 4**.*
- *Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.*



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

Weight (LB)	Press Alt (FT)	Climb Speed (KIAS)	RATE OF CLIMB – Feet Per Minute				
			-20 °C	0 °C	20 °C	40 °C	50 °C
6690	SL	76	1287	1254	1222	830	599
	2000	76	1253	1221	1062	658	432
	4000	76	1220	1183	886	491	---
	6000	76	1185	1019	712	314	---
	8000	76	1066	835	525	---	---
	10000	76	884	634	339	---	---
6000	SL	76	1580	1548	1517	1081	823
	2000	76	1546	1517	1343	893	641
	4000	76	1515	1479	1149	711	---
	6000	76	1480	1300	960	517	---
	8000	76	1352	1099	755	---	---
	10000	76	1153	878	553	---	---
5000	SL	76	2079	2047	2017	1501	1194
	2000	76	2045	2017	1815	1282	983
	4000	76	2014	1979	1591	1071	---
	6000	76	1980	1771	1372	847	---
	8000	76	1834	1538	1134	---	---
	10000	76	1603	1282	899	---	---

Figure 5-26 – Baked Landing Rate of Climb

Quest Aircraft Company
KODIAK 100 Series

Section 5
PERFORMANCE

5-45 LANDING DISTANCE (MAXIMUM WEIGHT 6690 LB SHORT FIELD)

(Refer to the Table on the following page)

Conditions:

- Winds.....ZERO
- Runway.....Dry, Level, Paved
- Flaps.....35° (FULL)
- Powered 3° Powered Approach to 50 FT obstacle, then a smooth reduction to IDLE at touchdown. BETA range (Lever against spring) after touchdown.

Example:

- Outside Air Temp.....20°C
- Weight.....6690 LB
- Pressure Altitude.....2000 FT
- Headwind.....ZERO
Obstacle Speed(VREF): 76 KIAS
Landing Ground Roll: 986 FT
Total Dist. Over 50' Obs.: 1807

NOTES:

- Short field technique utilized as outlined in **Section 4**.
- Decrease distances 10% for each 13 knots headwind.
- Increase distances 10% for each 2 knots tailwind up to 10 knots.
- For operation on a dry, grass runway, increase distances by 40% of the ground roll calculation.
- Use of maximum reverse thrust after touchdown reduces ground roll by approximately 15%.
- For sloped runways (up to 3% slope), increase the distances by 27% of the ground roll distance for each 1% of downslope. Decrease distances by 9% of the ground roll distance for each 1% of upslope.
- Dashed entries correspond to outside air temperatures beyond the aircraft operating limits.



Section 5
PERFORMANCE

Quest Aircraft Company
KODIAK 100 Series

WT (LB)	50' Speed (KIAS)	Press Alt (FT)	0°C		20°C		40°C	
			GRD ROLL (FT)	Total Feet to Clear 50' OBS	GRD ROLL (FT)	Total Feet to Clear 50' OBS	GRD ROLL (FT)	Total Feet to Clear 50' OBS
6690	76	SL	867	1603	931	1681	994	1760
		2000	918	1719	986	1807	1053	1896
		4000	973	1849	1045	1947	1116	2047
		6000	1033	1994	1109	2104	--	--
		8000	1097	2156	1177	2279	--	--
		10000	1165	2336	1251	2475	--	--
6000	72	SL	737	1355	791	1419	845	1484
		2000	781	1452	838	1524	895	1597
		4000	827	1560	888	1640	949	1722
		6000	878	1679	943	1769	--	--
		8000	932	1813	1001	1914	--	--
		10000	991	1962	1063	2075	--	--
5000	65	SL	574	1038	616	1086	658	1134
		2000	608	1111	653	1164	697	1218
		4000	645	1191	692	1251	739	1312
		6000	684	1281	734	1348	--	--
		8000	727	1381	780	1455	--	--
		10000	772	1492	828	1576	--	--

Figure 5-27 – Landing Distance

