

King Air 350 | Limitations

TRAINING REFERENCE ONLY — NOT A SUBSTITUTE FOR THE AFM

This document is a training summary compiled from the aircraft's POH/AFM. In any conflict, the FAA Approved Airplane Flight Manual for the specific airplane, including all applicable Temporary Changes and Supplements, is the governing authority. Verify limitations against the AFM for the serial number being flown. Applicable to the King Air 350 (B300/B300C).

Source: Beechcraft Super King Air B300/B300C (King Air 350) Pilot's Operating Manual, P/N 130-590031-235 (FL-493, FL-500 and after; FM-14 and after), March, 2013 (Hawker Beechcraft Corporation) — Section 2, Limitations (pages 2-1 through 2-52). Engine: PT6A-60A.

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1. AIRSPEED

AIRSPEED LIMITATIONS

POH 2-5

The limitations included in this section have been approved by the Federal Aviation Administration, and they must be observed in the operation of the Model B300/B300C.

SPEED	KCAS	KIAS	REMARKS
Maneuvering Speed (Va)	182	184	Do not make full or abrupt control movements above this speed.
Maximum Flap Extension/Extended Speed (Vfe) — Approach	200	202	Do not extend flaps or operate with flaps extended above these speeds.
Maximum Flap Extension/Extended Speed (Vfe) — Full Down	155	158	Do not extend flaps or operate with flaps extended above these speeds.
Maximum Landing Gear Operating Speed (Vlo) — Extension	182	184	Do not extend or retract landing gear above these speeds.
Maximum Landing Gear Operating Speed (Vlo) — Retraction	164	166	Do not extend or retract landing gear above these speeds.
Maximum Landing Gear Extended Speed (Vle)	182	184	Do not exceed this speed with landing gear extended.
Air Minimum Control Speed (Vmca) — Propeller Feathered, Flaps Up	96	94	These are the lowest airspeeds at which the airplane is directionally controllable when one engine suddenly becomes inoperative, with autofeather armed, and the other engine at take-off power.
Air Minimum Control Speed (Vmca) — Propeller Feathered, Flaps Approach	94	93	These are the lowest airspeeds at which the airplane is directionally controllable when one engine suddenly becomes inoperative, with autofeather armed, and the other engine at take-off power.

SPEED	KCAS	KIAS	REMARKS
Maximum Operating Speed (Vmo) — Sea Level to 21,000 feet	260	263	These speeds may not be deliberately exceeded in any flight regime.
Maximum Operating Speed (Vmo) — 21,000 to 35,000 feet	260-192*	263-194*	Red pointer reflects Vmo/Mmo limits.

NOTE

*0.58 Mach

DISPLAY	KIAS VALUE OR RANGE	SIGNIFICANCE
Red Line	94	Air Minimum Control Speed (V_{mca}).
Solid Red Bar (at bottom of airspeed scale)		ISS LSC* Marker. The top of the marker changes with flap position to reflect the following stall speeds.
Solid Red Bar — V_{so}	81	Stalling Speed (V_{so}) at maximum weight with flaps down and idle power.
Solid Red Bar — V_{s1} (flaps approach)	89	Stalling Speed (V_{s1}) at maximum weight with flaps approach and idle power.
Solid Red Bar — V_{s1} (flaps up)	96	Stalling speed (V_{s1}) at maximum weight with flaps up and idle power.
◀ DN (white)	158	Maximum speed permissible with flaps extended beyond approach.
◀ APP (white)	202	Maximum speed permissible with flaps in approach position.
Blue Line	125	One-Engine-Inoperative Best Rate-of-Climb Speed.
Solid Red Bar (at top of airspeed scale) — Sea Level to 21,000 feet	263	V_{mo} Marker. The bottom of the Marker represents the Maximum Operating Speed. These speeds may not be deliberately exceeded in any flight regime.
Solid Red Bar (at top of airspeed scale) — 21,000 to 35,000 feet	263 - 194**	V_{mo} Marker. The bottom of the Marker represents the Maximum Operating Speed. These speeds may not be deliberately exceeded in any flight regime.

NOTE

* Impending Stall Speed Low Speed Cue

NOTE

** The indicated airspeed decreases with altitude to maintain a constant Mach number of 0.58.

2. POWER PLANT

POWER PLANT LIMITATIONS

NUMBER OF ENGINES	Two
ENGINE MANUFACTURER	Pratt & Whitney Canada Corp. (Longueuil, Quebec, Canada)
ENGINE MODEL NUMBER	PT6A-60A

Do not lift power levers in flight. Lifting the power levers in flight, or moving the power levers in flight below the flight idle position, could result in a nose-down pitch and a descent rate leading to airplane damage and injury to personnel.

ENGINE OPERATING LIMITS

POH 2-7

The following limitations shall be observed. Each column presents limitations. The limits presented do not necessarily occur simultaneously. Refer to the Pratt & Whitney Engine Maintenance Manual for specific actions required if limits are exceeded.

OPERATING CONDITION	TORQUE % (1)	MAXIMUM ITT °C	GAS GENERATOR RPM % N1	PROP RPM N2	OIL PRESS PSI (2)	OIL TEMP °C (3)(4)
STARTING	- - -	1000 (5)	- - -	- - -	0 to 200	-40 (min)
IDLE	- - -	750 (6)	62 (min)	1050 (min)	60 (min)	-40 to +110
TAKEOFF	100 (10)	820	104	1700 (9)	90 to 135	0 to 110
MAX CONT	100 (10)	820	104	1700 (9)	90 to 135	0 to 110
CRUISE CLIMB	(7) (10)	785	104	1700 (9)	90 to 135	0 to 110
MAX CRUISE	(7) (10)	820	104	1700 (9)	90 to 135	0 to 110
MAX REVERSE	- - -	760	- - -	1650	90 to 135	0 to 99
TRANSIENT	156 (8)	850 (8)	104	1870 (8)	200	0 to 110

NOTE

1. Torque limit applies within range of 1000 - 1700 propeller rpm (N2). Below 1000 propeller rpm, torque is limited to 62%.
2. Normal oil pressure is 90 to 135 psi at gas generator speeds above 72%. With engine torque below 62%, minimum oil pressure is 60 psi at normal oil temperature (60 degrees to 70 degrees C). Oil pressures under 90 psi are undesirable. Under emergency conditions, to complete a flight, a lower oil pressure limit of 60 psi is permissible at a reduced power level not to exceed 62% torque. Oil pressures below 60 psi are unsafe and require that either the engine be shut down or a landing be made at the nearest suitable airport, using the minimum power required to sustain flight. Fluctuations of plus or minus 10 psi are acceptable. During extremely cold starts, oil pressure may reach 200 psi. In flight, oil pressures above 135 psi but not exceeding 200 psi are permitted only for the duration of the flight.
3. A minimum oil temperature of 55°C is recommended for fuel heater operation at take-off power.
4. Oil temperature limits are -40°C and +110°C. However, temperatures between 99°C and 110°C are limited to a maximum of 10 minutes.
5. This value is time limited to 5 seconds.
6. High ITT at ground idle may be corrected by reducing accessory load and/or increasing N1 rpm.
7. Cruise torque values vary with altitude and temperature.
8. These values are time limited to 20 seconds.
9. To account for power setting accuracy and steady state fluctuations, inadvertent propeller excursions up to 1735 rpm are time limited to 7 minutes.
10. To account for power setting accuracy and steady state fluctuations, inadvertent torque excursions up to 102% are time limited to 7 minutes.

EXTERNAL POWER LIMITS

POH 2-9

External power carts will be set to 28.0 - 28.4 volts and be capable of generating a minimum of 1000 amps momentarily and 300 amps continuously.

GENERATOR LIMITS

POH 2-9

Maximum sustained generator load is limited as follows:

In Flight — Sea Level to 34,000 feet altitude	100%
In Flight — Above 34,000 feet altitude	95%

Ground Operation:

N1	MAXIMUM GENERATOR LOAD
62% to 70%	75%
70% to 100%	100%

STARTER LIMITS

POH 2-9

Use of the starter is limited to 30 seconds ON, 5 minutes OFF, 30 seconds ON, 5 minutes OFF, 30 seconds ON, then 30 minutes OFF.

PROPELLERS

POH 2-12

NUMBER OF PROPELLERS	2
PROPELLER MANUFACTURER	Hartzell Propeller, Inc. (Piqua, Ohio)
PROPELLER HUB MODEL NUMBER	HC-B4MP-3C
PROPELLER BLADE MODEL NUMBERS	M10476K or M10476NK
PROPELLER DIAMETER	105.0 inches (266.7 cm)

PROPELLER ROTATIONAL SPEED LIMITS

POH 2-12

Transients not exceeding 20 seconds	1870 rpm
Reverse	1650 rpm
All other conditions	1700 rpm
Minimum idle speed	1050 rpm

PROPELLER ROTATIONAL OVERSPEED LIMITS

POH 2-12

Sustained propeller overspeeds faster than 1700 rpm indicate failure of the primary governor. Flight may be continued at propeller overspeeds up to 1768 rpm, provided torque is limited to 96%. Sustained propeller overspeeds faster than 1768 rpm indicate failure of both the primary governor and the secondary governor, and such overspeeds are not approved.

PROPELLER AUTOFEATHER

POH 2-12

The propeller autofeather system must be operable for all flights and must be armed for takeoff, climb, approach and landing.

INSTRUMENT	GREEN DISPLAY NORMAL OPERATING RANGE	YELLOW DISPLAY CAUTION RANGE	RED DISPLAY MINIMUM/MAXI MUM
ITT (starting) °C	≤ 820 or $> 820 \leq 850 \leq 20$ sec or $> 850 \leq 1000 \leq 5$ sec (White)	---	$> 820 \leq 850 > 20$ sec or $> 850 \leq 1000 > 5$ sec or > 1000
ITT (running) °C	< 820 (White)	$> 820 \leq 850 \leq 20$ sec	$> 820 \leq 850 > 20$ sec or > 850
Torque % (Prop RPM more than 1000)	≤ 100 or $> 100 \leq 102$ for ≤ 5 min	$> 102 \leq 156 \leq 20$ sec or $> 100 \leq 102$ for > 5 min ≤ 7 min	$> 102 \geq 156 > 20$ sec or $> 100 \leq 102 > 7$ min or > 156
Torque % (Prop RPM less than 1000)	≤ 62	$> 62 \leq 156 \leq 20$ sec	$> 62 \leq 156 > 20$ sec or > 156
PROP RPM (starting)	≤ 1700 or $> 1700 \leq 1735 \leq 5$ min	$> 1735 \leq 1870 \leq 20$ sec or $> 1700 \leq 1735$ for > 5 min ≤ 7 min	$> 1735 \leq 1870 > 20$ sec or $1700 \leq 1735 > 7$ min or > 1870
PROP RPM (running)	$\geq 1050 \leq 1700$ or $> 1700 \leq 1735 \leq 5$ min	$> 1735 \leq 1870 \leq 20$ sec or $> 1700 \leq 1735$ for > 5 min & ≤ 7 min or < 1050	$> 1735 \leq 1870 > 20$ sec or $> 1700 \leq 1735 > 7$ min or > 1870
% N1 (starting)	≤ 104 (White)	---	> 104
% N1 (running)	$\geq 62 \leq 104$ (White)	< 62	> 104
FUEL FLOW	$\geq 0 \leq 800$	---	---
OIL TEMP (starting) °C	$\geq -40 \leq 99$	$> 99 \leq 110 \leq 10$ minutes	$> 99 \leq 110 > 10$ min or < -40 or > 110
OIL TEMP (running) °C	$\geq 0 \leq 99$	$> 99 \leq 110 \leq 10$ minutes or < 0	$> 99 \leq 110 > 10$ min or > 110
OIL PRESS (psi)	$\geq 90 \leq 135$	$\geq 60 < 90$ or $> 135 < 200$	< 60 or ≥ 200

The pilot is responsible for monitoring all engine limits, including transient limits not accounted for by the EIS as defined in Engine Operating Limits.

3. FUEL

APPROVED ENGINE FUELS

POH 2-9

COMMERCIAL GRADES	Jet A, Jet A-1, Jet B
MILITARY GRADES	JP-4, JP-5, JP-8, Chinese No. 3 Jet Fuel

EMERGENCY ENGINE FUELS — COMMERCIAL AVIATION GASOLINE GRADES POH 2-9

80 Red (Formerly 80/87)
91/96
100 Green (Formerly 100/130)
100LL Blue*
115/145 Purple

NOTE

* In some countries, this fuel is colored Green and designated "100L".

LIMITATIONS ON THE USE OF AVIATION GASOLINE

POH 2-10

1. Operation is limited to 150 hours between engine overhauls.
2. Operation is prohibited if either standby fuel pump is inoperative.
3. Crossfeed capability is required for flight above 20,000 feet pressure altitude (FL200).

APPROVED FUEL ADDITIVES — ANTI-ICING ADDITIVE

POH 2-10

Anti-icing additive conforming to MIL-I-27686 or MIL-I-85470 may be used. Refer to Section 4, NORMAL PROCEDURES, for blending procedures.

CAUTION

Prior to refueling, check with the fuel supplier to determine whether or not anti-icing additive has already been added to the fuel. If anti-icing additive is used, it must be properly blended with the fuel to avoid deterioration of the fuel cell sealant. The additive concentration shall be a minimum of 0.10% and a maximum of 0.15% by volume. To assure proper concentration by volume of fuel on board, blend only enough additive for the unblended fuel.

FUEL BIOCIDAL ADDITIVE

POH 2-10

Fuel biocide-fungicide "BIOBOR JF" in concentrations of 135 ppm or 270 ppm may be used in the fuel. BIOBOR JF may be used as the only fuel additive, or it may be used with the anti-icing additive conforming to MIL-I-27686 or MIL-I-85470 specification. Used together, the additives have no detrimental effect on the fuel system components.

Refer to the Model B300/B300C Maintenance Manual and to the latest revision of Pratt and Whitney Canada Engine Service Bulletin No. 13044 for concentrations to use and for procedures, recommendations, and limitations pertaining to the use of biocidal/fungicidal additives in turbine fuels.

FUEL MANAGEMENT — USABLE FUEL

POH 2-11

Quantities shown on the fuel control panel are valid for fuel at 6.7 lbs/gal (.8 kg/ltr).

Total Usable Fuel Quantity	539 gallons/2040 liters (3611 pounds)
Each Main Fuel Tank System	190 gallons/719 liters (1273 pounds)
Each Auxiliary Fuel Tank	79.5 gallons/301 liters (533 pounds)

NOTE

Gallons X 6.7 = Pounds.

FUEL IMBALANCE

POH 2-11

Maximum allowable fuel imbalance between wing fuel systems is 300 pounds (136 kg).

Crossfeeding of fuel is permitted only when one engine is inoperative.

WARNING

One operative standby fuel pump is required for takeoff when using approved engine fuels, but in such a case, crossfeed of fuel will not be available from the side of the inoperative standby fuel pump. Two operative standby fuel pumps are required for takeoff when operating on emergency engine fuels.

FUEL GAGES IN THE YELLOW ARC

POH 2-11

Do not take off if fuel quantity gages indicate in yellow arc or indicate less than 265 pounds (120 kg) of fuel in each wing system.

AUXILIARY FUEL

POH 2-11

Do not put any fuel into the auxiliary tanks unless the main tanks are full.

OPERATING WITH LOW FUEL PRESSURE

POH 2-11

Operation of either engine with its corresponding fuel pressure annunciator (L FUEL PRES LO or R FUEL PRES LO) illuminated is limited to 10 hours before overhaul or replacement of the engine-driven fuel pump. Windmilling time need not be charged against this limit.

4. OIL**OIL SPECIFICATION**

POH 2-11

Any oil specified by brand name in the latest revision of Pratt & Whitney Service Bulletin Number 13001 is approved for use in the PT6A-60A engine.

5. INSTRUMENT MARKINGS

MISCELLANEOUS INSTRUMENT MARKINGS

POH 2-14

FUEL QUANTITY INDICATORS — Yellow Arc (No-Takeoff Range)	0 to 265 pounds
CABIN DIFFERENTIAL PRESSURE GAGE — Green Arc (Normal Operating Range)	0 to 6.6 psi
CABIN DIFFERENTIAL PRESSURE GAGE — Red Arc (Unapproved Operating Range)	6.6 psi to end of scale
PNEUMATIC PRESSURE GAGE — Green Arc (Normal Operating Range)	12 to 20 psi
PNEUMATIC PRESSURE GAGE — Red Line (Maximum Operating Limit)	20 psi
VACUUM GAGE — Narrow Green Arc (Normal from 35,000 to 15,000 feet)	2.8 to 4.3 in. Hg
VACUUM GAGE — Wide Green Arc (Normal from 15,000 feet to Sea Level)	4.3 to 5.9 in. Hg
VACUUM GAGE — 35K marked on face of gage at	3.0 in. Hg
VACUUM GAGE — 15K marked on face of gage at	4.3 in. Hg
PROPELLER DEICE AMMETER — Green Arc (Normal Operating Range)	26 to 32 amperes

6. WEIGHT AND BALANCE

WEIGHT LIMITS

POH 2-15

Maximum Ramp Weight	15,100 pounds (6849 kg)
Maximum Take-off Weight	15,000 pounds (6804 kg), or as limited by the following graphs (Refer to Section 5, PERFORMANCE): Maximum Take-off Weight to Achieve Take-off Climb Requirements; Maximum Take-off Weight As Limited By Tire Speed; Take-off Field Length
Maximum Take-off Weight (For 14 CFR Part 135 Operations)	As limited by the following graphs: Take-off Flight Path Requirements to 1500 feet AGL; Service Ceiling - One Engine Inoperative
Maximum Landing Weight	15,000 pounds (6804 kg), or as limited by the following graphs: Maximum Landing Weight To Achieve Climb Requirements; Normal Landing Distance - Flaps Down
Maximum Zero-Fuel Weight	12,500 pounds (5670 kg)
Maximum Weight in Baggage Compartment	550 pounds (250 kg)

CENTER OF GRAVITY LIMITS

POH 2-15

Aft Limit	208.0 inches (5283 mm) aft of datum at all weights
Forward Limits	191.4 inches (4861 mm) aft of datum at 11,800 pounds (5352 kg), with straight line variation to 199.4 inches (5064 mm) aft of datum at 15,000 pounds (6804 kg); 191.4 inches (4861 mm) aft of datum at 11,800 pounds (5352 kg) or less.

DATUM

POH 2-15

The reference datum is located 83.5 inches (2121 mm) forward of the center of the front jack point.

MEAN AERODYNAMIC CHORD (MAC)

POH 2-15

The leading edge of the MAC is at F.S. 186.01. The MAC length is 69.43 inches (1763 mm).

7. FLIGHT AND OPERATING LIMITS

MANEUVER LIMITS

POH 2-15

The Model B300 and B300C are Commuter Category Airplanes. Acrobatic maneuvers, including spins, are prohibited.

FLIGHT LOAD FACTOR LIMITS

POH 2-16

FLAPS UP	FLAPS DOWN
3.1 positive g's	2.0 positive g's
1.24 negative g's	0.00 g

MINIMUM FLIGHT CREW

POH 2-16

The minimum crew is one pilot. See the Kinds of Operations Equipment List in this section for required equipment.

MAXIMUM OCCUPANCY LIMITS

POH 2-16

Crew	Two (2)
Passengers	Nine (9)

NOTE

Refer to Section 6, WEIGHT & BALANCE, for Approved Seating Configurations.

MAXIMUM OPERATING ALTITUDE LIMITS

POH 2-16

Normal Operation	35,000 feet
Yaw Damp System	Refer to STC supplement 91-111
Operation with Aviation Gasoline — Both Standby Fuel Pumps Operative	35,000 feet
Operation with Aviation Gasoline — Either Standby Fuel Pump Inoperative	Flight Prohibited
Operation with Aviation Gasoline — Climbs without Crossfeed Capability	20,000 feet

MAXIMUM OUTSIDE AIR TEMPERATURE LIMITS

POH 2-16

Sea Level to 25,000 feet pressure altitude	ISA + 37°C
Above 25,000 feet pressure altitude	ISA + 31°C

CABIN PRESSURIZATION LIMIT

POH 2-16

Maximum Cabin Pressure Differential	6.6 psi
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RUDDER BOOST — Must be operational for all flights.

LANDING GEAR CYCLE LIMITS — Landing gear cycles (1 up - 1 down) are limited to one every 5 minutes for a total of 6 cycles, followed by a 15-minute cool-down period.

BRAKE DEICE (IF INSTALLED) — Brake Deice system is not to be operated above 15°C.

SEATS — For takeoff and landing, each occupied forward-facing seat must be located in full aft and full outboard position with seat back upright. For takeoff and landing, each occupied aft-facing seat must be located in full forward and full outboard position with seat back upright and headrest extended to support occupant's head.

OTTOMANS (350i) (IF INSTALLED) — All forward-facing ottomans must be in the full forward position for takeoff and landing. All aft-facing ottomans must be in the full aft position for takeoff and landing.

AIR CONDITIONING LIMITATIONS — 1. The supplemental electric heater must be off for at least two minutes prior to and during engine start. 2. Do not operate the electric heat with the pedestal floor outlet blocked or the cockpit door closed.

HIGH DEFINITION MONITORS (350i) — The Cabin High Definition Monitor(s) (HDMs) must be properly stowed in the entertainment cabinet for takeoff and landing. All Seat HDMs must be properly stowed in a cabinet or the baggage compartment for takeoff and landing.

AVIONICS LIMITS — GENERAL

1. The following guides must be immediately available to the pilot at all times: Operators Guide, Collins Pro Line 21 Avionics System for the Hawker Beechcraft King Air, P/N 523-0790065-003117, dated August 15, 2003 or later revision; Operators Guide, Collins FMS-3000 Flight Management System for the Hawker Beechcraft King Air B200/B300, P/N 523-0790066-003117, dated August 15, 2003 or later revision; Pilot's Guide for the Electronic Standby Instrument System, Model GH-3100, Goodrich Avionics Systems or L3 Communications P/N TP-560, Rev (-), or later revision; Pilot's Guide for the Skywatch HP Traffic Alert/Advisory System, Model SKY899, Goodrich or L3 Communications PN 009-11901-001, Rev A, dated August 29, 2001, or later revision (if installed). For airplanes with Honeywell EGPWS installed: Honeywell EGPWS MK VI and MK VIII Enhanced Ground Proximity Warning System Pilot's Guide, P/N 060-4314-0000, Revision B, dated February 2002, or later revision. For airplanes with ACSS TAWS+ installed: Aviation Communication and Surveillance Systems (ACSS) TAWS+ Pilot's Guide, Document No. 8006772-001, dated March 2007, or later revision.
2. This POH/AFM is approved for use with Collins FMS-3000 software version SCID 832-4120-011 or later.
3. Operating in the composite mode is limited to training and display failure conditions.
4. The pilot's and copilot's Air Data Computers must be operative for takeoff.
5. AHRS 1 and 2 must be operative for takeoff.
6. The pilots PFD and MFD and copilot PFD must be installed and operational in the normal mode for takeoff.
7. The MFD must be operational prior to engine start.

1. During autopilot operations, a pilot must be seated at the controls with the seat belt and shoulder harness fastened.
2. An autopilot preflight check must be conducted and found satisfactory prior to each flight on which the autopilot is to be used.
3. The autopilot minimum engage height after takeoff is 400 feet AGL.
4. The autopilot minimum use height during cruise is 1000 feet AGL.
5. The autopilot minimum use height during approach is 79 feet AGL.
6. The autopilot minimum use height during steep approach is 160 feet AGL.
7. Maximum airspeed for autopilot operation is unchanged from the airplane maximum airspeed (**Vmo/Mmo**).
8. The autopilot and yaw damper must not be used for takeoff and landing.
9. Operation of the autopilot system with a pitch trim malfunction is prohibited.
10. Do not manually override the autopilot during normal flight.
11. The maximum coupled intercept angles are: Nav and Localizer - Less than 90°; Back Course - 70°.

WARNING

Overriding the autopilot in pitch does not cancel the autopilot automatic trim. If a force is applied to the control column with the autopilot engaged, then automatic trim will run to oppose the applied force. This can lead to a severe out-of-trim condition during any phase of flight.

AVIONICS LIMITS — ENHANCED GROUND PROXIMITY WARNING SYSTEM (EGPWS) (IF INSTALLED)

1. Navigation must not be predicated upon use of the Terrain (or Obstacle) Awareness Display. The terrain display is intended to serve as a situational awareness tool only, and may not provide the accuracy and/or fidelity on which to solely base terrain avoidance maneuvering.
2. The Terrain Awareness and Display (TAD) must be inhibited by selecting the TERR INHIBIT switch when within 15 nm of takeoff, approach, or landing at an airport not contained in the EGPWS Airport Database. Refer to Honeywell document 060-4326-0000 for airports contained in the database. (See "Database" in www.EGPWS.com.)
3. When the FMS is operating in the DR mode, the Terrain Awareness alerting must be inhibited by selecting the TERR INHIB switchlight.

1. IFR enroute and terminal navigation is prohibited unless the pilot verifies either the currency of the database or the accuracy of each selected waypoint and navaid by reference to current approved data.
2. The FMS position must be checked for accuracy prior to use as a means of navigation.
3. During periods of dead reckoning, the FMS shall not be used for navigation.
4. All FMS navigation operations are approved within the U.S. National Airspace System and latitudes bounded by 60° North latitude and 60° South latitude at any longitude. Operation to 70° North latitude is acceptable East of 75° West longitude and West of 120° West longitude. Operation to 80° North latitude is acceptable East of 50° West longitude and West of 70° East longitude. Operation to 70° South latitude is acceptable except for the 45° between 120° East and 165° East longitude. The WGS-84 coordinate reference datum in accordance with the criteria of AC 20-130A, AC 91-49 CHG 1, and AC 20-138 must be used. Satellite navigation data is based upon use of only the Global Positioning System (GPS) operated by the United States.
5. FMS based instrument approaches must be accomplished in accordance with approved instrument approach procedures that are retrieved from the FMS-3000 database. GPS instrument approaches must be conducted with GPS integrity monitoring (RAIM) and must be available by the Final Approach Fix. During FMS instrument approaches, the FMS annunciator APPR (green) or the FMS annunciator GPS APPR (green) must be displayed on the PFD at the FAF to indicate that the FMS is in the Approach Mode. Use of FMS guidance for conducting instrument approach procedures is prohibited with the FMS annunciator NO APPR (white or amber) displayed on the PFD. Accomplishment of ILS, LOC, LOC-BC, LDA and SDF approaches are not authorized utilizing the FMS from the FAF to the MAP. When an alternate airport is required by the applicable rules, it must be served by an approach based on other than GPS navigation, the airplane must have operational equipment capable of using that navigation aid, and the required navigation aid must be operational. FMS based approaches that are retrieved from the navigation database with an approach name of RNVxxx or VORxxx may be flown provided the VHF navigation receiver is tuned to the reference facility. IFR Non-Precision Approach is limited to published approaches within the US National Airspace System. Approaches to airports in other airspace are not approved unless authorized by the appropriate governing authority.
6. Provided the FMS is receiving adequate usable sensor inputs, it has been demonstrated capable of, and has been shown to meet the accuracy specifications for: a. VFR/IFR enroute RNAV operation in accordance with the criteria of AC 20-130A. b. VFR/IFR enroute, terminal, and approach operations. c. VFR/IFR operations on U.S. Area Navigation (RNAV) Routes (Q Routes), Standard Instrument Departures (SIDs) (Type A and B), and Standard Instrument Arrivals (STARs) (Type A and B) in accordance with AC 90-100 when the FMS is receiving usable GPS signals and the route/airport has been checked and verified for RAIM availability. d. GPS primary means of navigation in oceanic and remote airspace in accordance with AC 20-130A and FAA Notice 8110.60 if the following conditions are met: 1) Dual FMS-3000 Flight Management Systems and dual GPS-4000A receivers are installed and operable; Or 2) A single FMS-3000 Flight Management System and a single GPS-4000A receiver are installed and operable when operating along routes approved for single GPS navigation. And, in either case, the Collins Prediction Program, "Predeparture GPS Coverage Predictor (FDE Tool)," P/N 832-3443-005, or equivalent, has been run with satisfactory results. Compliance with the above does not constitute operational approval to operate in oceanic and remote airspace. e. Operation in European PRNAV airspace in accordance with JAA TGL-10 and AC 90-96A, provided that the FMS is not Dead Reckoning ("FMS DR" displayed on the PFD, MFD or CDU) and is receiving usable signals from one or more of the following: One GPS; Multiple DMEs; A single DME with auto-tune selected. Some terminal areas may require dual, operating FMS and GPS equipment. Operations on the PRNAV routes require that: The flight crew must select a PRNAV route from the FMS navigational database; The navigation database supplier has a Type 2 LOA that is currently valid for the intended operations. Navigation database alerts and NOTAM's may be associated with the intended operations and the Type 2 LOA. This does not constitute an operational approval to operate in such airspace. f. Operation in European B-RNAV airspace in accordance with AC 90-96, AC 20-130A, and JAA Temporary Guidance Material, Leaflet No. 2, Rev. 1. This does not constitute an operational approval to operate in such airspace. g. Minimum Navigation Performance Specification (MNPS) airspace for each of the following configurations: 1) When dual FMS-3000 Flight Management Systems and dual GPS-4000A GPS receivers are installed and operable. 2) When a single FMS-3000 Flight Management System and a single GPS-4000A receiver are installed and operable when operating along routes approved for single GPS navigation. Availability of the above equipment does not constitute operational approval to operate in MNPS airspace.
7. Use of FMS to capture and track a DME arc outside the published end points is prohibited.
8. Fuel management parameters are advisory only and must not replace the primary fuel quantity indications.

1. When using the IFIS-5000, the Collins IFIS-5000 Integrated Flight Information System Operator's Guide, Document 523-0806347-003117, dated 7 June 2005, or later revision, must be available to the flight crew.
2. When using Universal Weather, the Collins Corporate Datalink System CMU-4000 / RIU-40X0 Operator's Guide, Document 523-07090499, dated 14 July 2003, or later revision, must be available to the flight crew.
3. The IFIS-5000 system provides supplemental airplane situational awareness information. Its use as a means for navigational or weather avoidance is not approved.
4. Display ranges less than 50 miles must not be used when the GEO-POL data is selected for display. At shorter ranges, the situational picture provided by this data (i.e. rivers, lakes, oceans and political boundaries) may appear erroneous.
5. The use of the airplane symbol on the Electronic Charts is prohibited for navigation.
6. The database utilized for the Electronic Charts must incorporate the current update cycle.
7. When using the Electronic Charts, a paper equivalent (or electronic flight bag) must be on board and accessible to the pilot.
8. Data-linked graphical weather (either XM Radio or Universal Weather) is for informational purposes and should not be used for tactical decision making. By its nature, graphical weather is delayed from real time weather conditions. Use the aircraft's primary weather radar for all tactical decisions about weather avoidance.
9. Digital Automatic Terminal Information Service (available only when Universal Weather is installed): The flight crew shall verify that the D-ATIS numeric and alpha altimeter setting values are identical, e.g., "...ALTIMETER SETTING 29.95 (TWO NINER NINER FIVE)..." If the D-ATIS numeric and alpha altimeter setting values are different, the flight crew must not accept the D-ATIS Altimeter Setting nor rely on any other D-ATIS information.

AVIONICS LIMITS — TERRAIN AWARENESS AND WARNING SYSTEM PLUS (TAWS+) (IF INSTALLED)

POH 2-23

1. Navigation must not be predicated upon use of the Terrain Awareness Display. The terrain display is intended to serve as a situational awareness tool only, and may not provide the accuracy and/or fidelity on which to solely base terrain avoidance maneuvering.
2. The Terrain Awareness and Display (TAD) must be inhibited by selecting the TERR INHIB switch light when within 15 nm of takeoff, approach, or landing at an airport not contained in the TAWS+ Airport Database. Refer to ACSS document 8006417 for airports contained in the database. (See "TAWS Airport" in www.acsscustomerservices.com.)
3. When the FMS is operating in the DR mode, the Terrain Awareness alerting must be inhibited by selecting the TERR INHIB switch light.
4. The current local QNH altimeter setting must be entered in the pilot's altimeter for proper terrain alerting. In particular, the TERR INHIB switch light must be selected when operating in QFE mode.
5. The terrain database part number displayed on the MFD by MDC diagnostics must be 9000280-023 or latest.
6. The obstacle database part number displayed on the MFD by MDC diagnostics must be 9000380-001 or latest.

NOTE

The terrain database, displays and alerting algorithms currently account for limited cataloged human-made obstructions in North America and Europe. If obstacle data is not in the database for a particular obstacle, the Obstacle Awareness alerting is not available for the obstacle.

AVIONICS LIMITS — TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS I) (IF INSTALLED)

POH 2-24

1. The pilot must not maneuver the airplane based only on the traffic display. The traffic display is intended to assist in visually locating traffic and lacks the resolution necessary for use in evasive maneuvering.
2. If the pilot is advised by Air Traffic Control to disable the altitude reporting function of the transponder, the Traffic Advisory System must be turned off.

AVIONICS LIMITS — TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS II) (IF INSTALLED)

POH 2-24

1. Pilots are authorized to deviate from their current ATC clearance to the extent necessary to comply with a TCAS II resolution advisory (RA).
2. If the pilot is advised by Air Traffic Control to disable the altitude reporting function of the transponder, the TCAS II System must be placed in STBY.

1. When using the VNAV system, the barometric altimeters must be used as the primary altitude reference for all operations.
2. Use of VNAV guidance for a V-MDA approach that includes a step-down fix between the final approach fix and missed approach point is prohibited.
3. VNAV altitudes must be displayed on the MFD map page or CDU legs page when utilizing VNAV for flight guidance.
4. Use of VNAV while conducting a missed approach procedure is prohibited.
5. Provided the FMS is receiving adequate usable sensor inputs, it has been demonstrated capable of and has been shown to meet the accuracy specifications of VNAV operation in accordance with AC 20-129. Such VNAV approaches must be flown utilizing either the flight director or autopilot.
6. VNAV approach guidance to a DA is not authorized if the reported surface temperature is below the Baro-VNAV minimum temperature limitation specified on the applicable RNAV approach procedure chart.

NOTE

Barometric VNAV guidance during approach including the approach transition, final approach segment and the missed approach procedure is not temperature compensated. Operating at uncompensated minimum IFR altitudes will not provide expected terrain and obstacle clearance for temperature below ISA.

AVIONICS LIMITS — WEATHER RADAR**WARNING**

The area within the scan arc and within 2 feet (0.65 meters) of an operating TWR-852 system can be a hazardous area. Do not operate the systems in any mode other than standby (STBY) or test (TEST) when the antenna might scan over personnel within that range. Turning the transmitter on while inside the hangar is not advisable.

OTHER LIMITATIONS — CARGO LIMITATIONS

1. All cargo shall be properly secured by an FAA-approved cargo restraint system.
2. Cargo must be arranged to permit free access to all exits and emergency exits.

OTHER LIMITATIONS — STRUCTURAL LIMITATIONS

Refer to the Model B300/B300C Airworthiness Limitations Manual.

OTHER LIMITATIONS — RVSM EQUIPMENT (FL-840 AND AFTER; FM-54 AND AFTER)

POH 2-25

The following equipment must be installed and operational to enter RVSM airspace:

Description
#1 Air Data Computer (Pilot's ADC) and #1 Altitude Display (Pilot's ALT)
#2 Air Data Computer (Copilot's ADC) and #2 Altitude Display (Copilot's ALT)
Altitude Preselector/Alarmer
Automatic Altitude Control System
Transponder

Any deviation from this equipment list invalidates the RVSM approval status of this airplane; however, operations outside of RVSM airspace may be conducted as required.

PILOT'S STATIC AIR SOURCE — The Pilot's Static Air Source select switch must remain in the NORMAL setting during normal operation in RVSM airspace. Note that the standby altimeter system is NOT RVSM-compliant.

ALTITUDE DISPLAY DIFFERENCES — During normal operations within RVSM airspace, the pilot's and copilot's displayed altitudes must remain within 200 feet of each other at all times (as a minimum, cross-cockpit altimeter checks should be performed hourly). If the pilot's and copilot's displayed altitudes deviate by more than 200 feet, RVSM operation is NOT permitted.

ALTITUDE REPORTING — During normal RVSM operations, the altimetry system being used to control the airplane should provide input to the altitude-reporting transponder transmitting information to ATC.

AUTOMATIC ALTITUDE CONTROL — During normal RVSM operations, the autopilot must be able to maintain altitude within ± 65 feet of the assigned flight level at all times when in steady, level flight in non-turbulent conditions. If the autopilot cannot maintain ± 65 feet from the assigned flight level, follow the INABILITY OF AUTOMATIC ALTITUDE CONTROL SYSTEM TO MAINTAIN ± 65 FEET FROM ASSIGNED FLIGHT LEVEL DURING RVSM OPERATION procedure in Section 3A, ABNORMAL PROCEDURES.

LIMITATIONS WHEN ENCOUNTERING SEVERE ICING CONDITIONS (REQUIRED BY FAA AD 98-04-24)

POH 2-26

WARNING

Severe icing may result from environmental conditions outside of those for which the airplane is certificated. Flight in freezing rain, freezing drizzle, or mixed icing conditions (supercooled liquid water and ice crystals) may result in ice build-up on protected surfaces exceeding the capability of the ice protection system, or may result in ice forming aft of the protected surfaces. This ice may not be shed using the ice protection systems, and may seriously degrade the performance and controllability of the airplane.

1. During flight, severe icing conditions that exceed those for which the airplane is certificated shall be determined by the following visual cues. If one or more of these visual cues exists, immediately request priority handling from Air Traffic Control to facilitate a route or an altitude change to exit the icing conditions.
 - a. Unusually extensive ice accumulation on the airframe and windshield in areas not normally observed to collect ice.
 - b. Accumulation of ice on the upper surface of the wing, aft of the protected area.
 - c. Accumulation of ice on the engine nacelles and propeller spinners farther aft than normally observed.
2. Since the autopilot, when installed and operating, may mask tactile cues that indicate adverse changes in handling characteristics, use of the autopilot is prohibited when any of the visual cues specified above exist, or when unusual lateral trim requirements or autopilot trim warnings are encountered while the airplane is in icing conditions.
3. All wing icing inspection lights must be operative prior to flight into known or forecast icing conditions at night. [NOTE: This supersedes any relief provided by the Master Minimum Equipment List (MMEL).]

The following limitations are applicable for approach angles of 4.5° to 5.5°:

1. The maximum approved approach angle is 5.5°.
2. One-Engine-Inoperative steep approaches are not approved.
3. Flaps Up steep approaches are not approved.
4. Steep approaches are approved only when the following configuration is established no later than the final approach fix, or 3 nm from the runway during visual approaches: a. Both Engines - Operative; b. Flaps - Full Down; c. Prop Levers - Full Forward; d. Approach Speed - **Vref**, or **Vref** + 15 with residual ice.
5. Steep approaches are approved only when using vertical guidance provided by an approved: a. Flight Management System; b. Instrument Landing System; c. Ground Based Visual Reference System.
6. Flight Management System defined approaches are not approved using the autopilot; however, use of the Flight Director is approved.
7. The maximum tailwind for steep approaches is 5 knots.
8. The presentation of steep approach limitations, procedures, and performance in this manual reflects the capability of the airplane to perform steep approaches, but does not constitute operational approval.
9. Airplanes equipped with a Terrain Awareness and Warning System (TAWS) must have an operational steep approach override function associated with the system.

8. ICE AND RAIN PROTECTION

ICING LIMITATIONS

POH 2-17

Minimum Ambient Temperature for Operation of Deicing Boots	-40°C
Minimum Airspeed for Sustained Icing Flight	140 knots

Sustained flight in icing conditions with flaps extended is prohibited except for approach and landings.

ENGINE ANTI-ICE, LEFT and RIGHT, shall be ON for operation in ambient temperatures of +5°C or below when flight free of visible moisture cannot be assured. ENGINE ANTI-ICE, LEFT and RIGHT, shall be OFF for take-off operations in ambient temperatures of above +10°C.

APPROVED AIRPLANE DEICING/ANTI-ICING FLUIDS

POH 2-17

ISO 11075 Type I; ISO 11078 Type II; SAE AMS 1424 Type I; SAE AMS 1428 Type II; SAE AMS 1428 Type III; SAE AMS 1428 Type IV.

9. WINDSHIELD AND WINDOWS

CRACKED OR SHATTERED WINDSHIELD

POH 2-27

The following limitations apply when continued flight is required with a cracked outer or inner ply of the windshield.

1. Continued flight with a cracked windshield is limited to 25 flight hours.
2. Windshields which have a shattered inner ply will have numerous cracks which will obstruct forward vision and may produce small particles or flakes of glass that can break free of the windshield and interfere with the crew's vision. These windshields must be replaced prior to the next flight unless a special flight permit is obtained from the local FAA Flight Standards District Office.
3. Crack(s) must not impair visibility.
4. Crack(s) must not interfere with the use of windshield wipers for flights requiring the use of the wipers.
5. Windshield Anti-ice must be operational for flights in icing conditions.
6. The following placard must be installed in plain view of the pilot:

MAXIMUM AIRPLANE ALTITUDE IS LIMITED TO 25,000 FEET. CABIN ΔP MUST BE MAINTAINED BETWEEN 2.0 AND 4.6 PSI DURING FLIGHT

Windshields that have cracks in both the inner and outer plies must be replaced prior to the next flight unless a special flight permit is obtained from the local FAA Flight Standards District Office.

CRACK IN ANY SIDE WINDOW (COCKPIT OR CABIN)

POH 2-27

The following limitations apply when continued flight is required with a cracked outer or inner ply in any side window. These limitations do not apply to minor compression-type chips (Clamshell) which may occur on the milled edge of cockpit side windows. Refer to the maintenance manual for the disposition of such chips.

1. Continued flight is limited to 25 flight hours.
2. Flights must be conducted with the cabin depressurized. The following placard must be installed in clear view of the pilot:

PRESSURIZED FLIGHT IS PROHIBITED DUE TO A CRACKED SIDE WINDOW. CONDUCT FLIGHT WITH THE CABIN PRESSURE SWITCH IN THE DUMP POSITION.

10. PLACARDS

PLACARDS

POH 2-29

Placards apply to all models unless otherwise specified.

On Overhead Panel in Pilot's Compartment: OPERATION LIMITATIONS — THE MARKINGS AND PLACARDS INSTALLED IN THIS AIRPLANE CONTAIN OPERATING LIMITATIONS WHICH MUST BE COMPLIED WITH WHEN OPERATING THIS AIRPLANE IN THE COMMUTER CATEGORY. OTHER OPERATING LIMITATIONS WHICH MUST BE COMPLIED WITH WHEN OPERATING THIS AIRPLANE IN THIS CATEGORY ARE CONTAINED IN THE AIRPLANE FLIGHT MANUAL. NO ACROBATIC MANEUVERS INCLUDING SPINS ARE APPROVED. THIS AIRPLANE APPROVED FOR VFR, IFR DAY AND NIGHT OPERATION AND IN ICING CONDITIONS.

WARNING

On Overhead Panel in Pilot's Compartment: STALL WARNING IS INOPERATIVE WHEN MASTER SWITCH IS OFF. STANDBY COMPASS IS ERRATIC WHEN WINDSHIELD ANTI-ICE AND/OR AIR CONDITIONER AND/OR HIGH VENT BLOWER AND/OR LANDING LIGHTS ARE ON.

On Overhead Panel in Pilot's Compartment: MAXIMUM IAS KNOTS

	IAS KNOTS
GR EXTENSION	184
GR RETRACT	166
GR EXTENDED	184
APPROACH FLAP	202
FULL DN FLAP	158
MANEUVERING	184

On Pilot's Window Sill: TURN OFF STROBE LIGHTS WHEN TAXIING IN VICINITY OF OTHER AIRCRAFT OR DURING FLIGHT THROUGH FOG OR CLOUDS. STD POSITION LIGHTS TO BE TURNED ON FOR ALL NIGHT OPERATIONS.

WARNING

On Pilot's and Copilot's Window Sills: DO NOT SMOKE WHILE OXYGEN IS IN USE. WITH DILUTER-DEMAND CREW MASK FLOW STOPS WHEN BREATHING STOPS.

CAUTION

On Curved Pedestal Adjacent to Power Levers: REVERSE ONLY WITH ENGINES RUNNING.

WARNING

On Pedestal Near Cabin Pressurization Controller: DE-PRESSURIZE CABIN BEFORE LANDING.

Below Right Circuit Breaker Panel: PILOT'S STATIC AIR SOURCE — NORMAL / ALTERNATE. SEE FLIGHT MANUAL PERFORMANCE SECTION FOR INSTR CAL ERROR.

Below Latch on Forward Side of Forward and Aft Partition Doors: KICK HERE FOR EMERGENCY EVACUATION.

On Cabin Side of Forward and Aft Partitions and Aft Side of Left Aft Partition (350 & 350C): [No-smoking symbol and fasten-seat-belt symbol].

On Emergency Exit Handles: EXIT - PULL.

Below Emergency Exit Handles on Exit Lock Lever (visible only when lever is in locked position): MUST BE UNLOCKED BEFORE TAKEOFF / LOCKED / EXIT LOCK.

Outboard of Each Passenger Chair (350 & 350C): SEAT MUST BE LOCATED IN FULL OUTBD. POSITION FOR TAKEOFF AND LANDING.

On Shoulder Harness Assembly For All Chairs (350 & 350C): SHOULDER HARNESS MUST BE WORN DURING TAKE-OFF AND LANDING WITH SEAT IN OUTBD POSITION, SEAT BACK UPRIGHT AND HEADREST FULLY EXTENDED.

On Tables When Installed: STOW BEFORE TAKE-OFF AND LANDING.

On Outside Surface of First Aid Oxygen Access Door: FIRST AID OXYGEN — PULL.

On Center of Aft Bulkhead (B300): COMPARTMENT CAPACITY 550 LBS — THIS INCLUDES BAGGAGE AND/OR EQUIPMENT AND/OR OPTIONAL FURNISHINGS. SEE WEIGHT AND BALANCE SECTION OF FLIGHT MANUAL FOR LOADING INSTRUCTIONS.

Centered on Pull Handle Top Edge of Escutcheon, also centered between coat hooks in vestibule (B300): CLOTHING ONLY.

Interior Side of Airstair Door Behind Handle (B300): CAUTION - DO NOT OPEN DOOR WHEN CABIN IS PRESSURIZED. CAUTION - DO NOT ATTEMPT TO CHECK SECURITY OF CABIN DOOR BY MOVING DOOR HANDLE UNLESS CABIN IS DEPRESSURIZED AND AIRCRAFT IS ON THE GROUND. PUSH BUTTON & TURN HANDLE TO OPEN DOOR. OPEN / LATCH / LOCK.

Airstair Door on Bottom Side Folding Step: LIFT STEP TO INSPECT DOOR LOCK.

Airstair Door Between Folding Steps: WHEN HANDLE IS IN LOCKED POSITION-ARM SHOULD BE AROUND PLUNGER AS SHOWN.

Centered on Lip of Lid on Trash Container in Cabinet, or Forward Refreshment Cabinet (350i), and Vanity Cabinet (if installed) (350i): NO CIGARETTE DISPOSAL.

On Floor, Pilot's Side of Pedestal: LANDING GEAR ALTERNATE EXTENSION — 1. REMOVE HANDLE FROM SECURING CLIP AND PUMP. 2. AFTER ALL THREE GREEN INDICATOR LIGHTS ARE ILLUMINATED AND FURTHER RESISTANCE IS FELT, SECURE HANDLE IN STOWED POSITION.

Aft Side of Baggage Partition or Vanity (B300): NO SMOKING AND FASTEN SHOULDER HARNESS AND SEAT BELT WHEN CURTAIN IS CLOSED.

Right Side of Aft Partition, or Adjacent to Toilet (350i): NO SMOKING.

Over Airstair Door: PRESS TO INSPECT DOOR LATCHES.

Below Trim Controls on Pedestal: OXYGEN — PULL ON / SYSTEM READY — PASSENGER MANUAL DROP OUT.

Inside Airstair Door Behind Handle (B300C): CAUTION - DO NOT OPEN OR CHECK SECURITY BY MOVING DOOR HANDLE WHILE AIRCRAFT IS PRESSURIZED AND/OR IN FLIGHT. PUSH BUTTON & TURN HANDLE TO OPEN DOOR. OPEN / LOCK. (Also on Inside Airstair Door Behind Handle (self-lighted panel) (B300C serials FM-15 and after when modified by Kit 130-5323).)

On Escutcheon Near Upper Access Cover of Cargo Door (B300C): LOAD CARGO PER PILOT'S OPERATING HANDBOOK.

On Upper Access Cover of Cargo Door (B300C): CAUTION - DO NOT OPEN OR CHECK SECURITY BY MOVING DOOR HANDLE WHILE AIRCRAFT IS PRESSURIZED AND/OR IN FLIGHT.

On Cargo Door Upper Latch Handle (B300C): PUSH TO RELEASE.

On Lower Access Cover of Cargo Door (B300C): CARGO DOOR LOWER LATCH HANDLE ACCESS.

Inside Lower Access Cover of Cargo Door (B300C): CAUTION - DO NOT OPEN OR CHECK SECURITY BY MOVING DOOR HANDLE WHILE AIRCRAFT IS PRESSURIZED AND/OR IN FLIGHT. OPEN / CLOSED. LIFT HOOK TO RELEASE HANDLE.

On Upper Access Cover of Cargo Door (B300C): CARGO DOOR LATCH HANDLE ACCESS.

On "L-Shaped" Baggage Webbing when center partition is not installed in baggage compartment (B300C): BAGGAGE WEBBING LOADING CAPACITY: 300 LBS.

On Cabin Side of Forward and Aft Partitions, on Forward and Aft Side of Baggage Partition, or, Forward and Aft Side of Vanity Cabinet (if installed) (350i): [No-smoking symbol and fasten-seat-belt symbol].

On Shoulder Harness Assembly For All Chairs (350i): SHOULDER HARNESS MUST BE WORN DURING TAXI, TAKE-OFF, AND LANDING WITH SEAT IN OUTBD POSITION, SEAT BACK UPRIGHT AND HEADREST EXTENDED AS REQUIRED TO SUPPORT OCCUPANT'S HEAD.

Outboard of Left Hand, Aft Facing Passenger Chairs (350i): SEAT MUST BE LOCATED IN FULL FWD → AND FULL OUTBD POSITION FOR TAKEOFF AND LANDING WITH HEADREST EXTENDED TO SUPPORT OCCUPANT'S HEAD. LIFE PRESERVER UNDER SEAT CUSHION.

Outboard of Right Hand, Aft Facing Passenger Chairs (350i): SEAT MUST BE LOCATED IN FULL FWD ← AND FULL OUTBD POSITION FOR TAKEOFF AND LANDING WITH HEADREST EXTENDED TO SUPPORT OCCUPANT'S HEAD. LIFE PRESERVER UNDER SEAT CUSHION.

Outboard of Left Hand, Forward Facing Passenger Chairs (350i): SEAT MUST BE LOCATED IN FULL AFT ← AND FULL OUTBD POSITION FOR TAKEOFF AND LANDING. LIFE PRESERVER UNDER SEAT CUSHION.

Outboard of Right Hand, Forward Facing Passenger Chairs (350i): SEAT MUST BE LOCATED IN FULL AFT → AND FULL OUTBD POSITION FOR TAKEOFF AND LANDING. LIFE PRESERVER UNDER SEAT CUSHION.

Outboard of Each Ottoman (if installed) (350i): OTTOMAN NOT TO BE OCCUPIED DURING TAKEOFF AND LANDING.

Outboard of Forward Facing Passenger Chair With Ottoman (if installed) (350i): OTTOMAN MUST BE LOCATED IN FULL FWD POSITION FOR TAKEOFF AND LANDING.

Outboard of Aft Facing Passenger Chair With Ottoman (if installed) (350i): OTTOMAN MUST BE LOCATED IN FULL AFT POSITION FOR TAKEOFF AND LANDING.

Above Latches on Forward and Aft Sides of All Partition Doors (350i): PARTITION DOORS TO BE IN THE OPEN (OUTBOARD) POSITION FOR TAKEOFF AND LANDING.

On Front and Back of Seat High Definition Monitors (if installed) (350i): REMOVE & STOW FOR TAKEOFF AND LANDING.

On Front of Cabin High Definition Monitors (350i): STOW BEFORE TAKEOFF AND LANDING.

Below Each Outlet (350i): 115VAC 60Hz.

Below Each Outlet (if installed) (350i): 230VAC 50Hz.

Below Front of Toilet (350i): LIFE PRESERVER INSIDE.

On Forward Side of Aft Baggage Partition, or on Forward Side of Vanity Cabinet (if installed) (350i): FIRE EXTINGUISHER →.

Below Coat Rods in Baggage Area (350i): CLOTHING ONLY. COAT HANGER MAX WEIGHT CAPACITY 25 LBS.

On Forward Side of Right Aft Partition, or Forward Side of Aft Entertainment Cabinet (if installed) (350i): NO SMOKING IN LAVATORY.

Inside Forward Entertainment Cabinet Door and Aft Entertainment Cabinet Door (if installed) (350i): NO STORAGE.

11. KINDS OF OPERATION

KINDS OF OPERATIONS

POH 2-48

The Models B300 and B300C are approved for the following types of operations when the required equipment, as shown in the KINDS OF OPERATIONS EQUIPMENT LIST, is installed and operable. 1. VFR Day; 2. VFR Night; 3. IFR Day; 4. IFR Night; 5. Icing Conditions.

KINDS OF OPERATIONS EQUIPMENT LIST

POH 2-48

This airplane may be operated in day or night VFR, day or night IFR, and icing conditions when the required systems and equipment are installed and operable. The following equipment list identifies the systems and equipment upon which type certification for each kind of operation was predicated. The systems and equipment listed must be installed and operable for the particular kind of operation indicated unless: 1. The airplane is approved to be operated in accordance with a current Minimum Equipment List (MEL) approved by the FAA. or; 2. An alternate procedure is provided in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual for the inoperative state of the listed system or equipment and all limitations are complied with.

NOTE

Numbers in the Kinds of Operations Equipment List refer to quantities required to be operative for the specified condition. The list does not include all equipment that may be required by specific operating rules. It also does not include components obviously required for the airplane to be airworthy, such as wings, empennage, engine, etc.

COMMUNICATIONS

POH 2-49

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Static Discharge Wick	22*	22*	22*	22*	22*	* One wick per surface may be damaged or missing.

ELECTRICAL POWER

POH 2-49

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTION S
1. Battery	1	1	1	1	1	
2. Standby Battery (ESIS)	1	1	1	1	1	
3. BAT TIE OPEN Annunciator	1	1	1	1	1	
4. DC Generator	2	2	2	2	2	
5. L & R DC GEN Annunciators	2	2	2	2	2	
6. DC Load Meter	2	2	2	2	2	
7. DC Voltmeter/Battery Ammeter and Select Switch	1	1	1	1	1	
8. GEN TIE OPEN Annunciator	2	2	2	2	2	

ENGINE INDICATIONS

POH 2-49

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTION S
1. Multifunctional Display (MFD)	1	1	1	1	1	

ENGINE OIL

POH 2-49

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTION S
1. Chip Detector System Including L & R CHIP DETECT Annunciators	2	2	2	2	2	
2. Oil Pressure Indicator in MFD	2	2	2	2	2	
3. Oil Temperature Indicator in MFD	2	2	2	2	2	
4. L & R OIL PRES LO Annunciator	2	2	2	2	2	

ENVIRONMENTAL

POH 2-49

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. BLEED FAIL Annunciator	2	2	2	2	2	
2. Bleed Air Shutoff Valve	2	2	2	2	2	
3. CABIN ALT HI Annunciator	2	2	2	2	2	
4. Cabin Rate of Climb Indicator	1	1	1	1	1	
5. Outflow Valve/Safety Valve	2	2	2	2	2	
6. Pressurization Controller	1	1	1	1	1	
7. Differential Pressure/Cabin Altitude Indicator	1	1	1	1	1	
8. DUCT OVERTEMP Annunciator	1	1	1	1	1	
9. CABIN DIFF HI Annunciator	1	1	1	1	1	
10. Cabin Altitude Aural Warning	1	1	1	1	1	

EQUIPMENT/FURNISHINGS

POH 2-50

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Exit Sign Self-Illuminating	2	2	2	2	2	
2. Emergency Locator Transmitter	1	1	1	1	1	
3. Seat Belt	*	*	*	*	*	* One per occupied seat
4. Shoulder Harness for Crew Seat	2	2	2	2	2	
5. Cockpit Checklist	1	1	1	1	1	
6. First Aid Kit	1	1	1	1	1	
8. Passenger Briefing Card	*	*	*	*	*	* One per passenger seat (Required for 14 CFR Part 135 operation only)

FIRE PROTECTION

POH 2-50

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Engine Fire Detector System	2	2	2	2	2	
2. Engine Fire Extinguisher	2	2	2	2	2	
3. Portable Fire Extinguisher	2	2	2	2	2	

FLIGHT CONTROLS

POH 2-50

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Flap Position Indicator	1	1	1	1	1	
2. Flap System	1	1	1	1	1	
3. Trim Tab Position Indicator (Rudder, Aileron, Elevator)	3	3	3	3	3	
4. Stall Warning System	1	1	1	1	1	
5. Yaw Damp	1	1	1	1	1	
6. Rudder Boost System Including Annunciator	1	1	1	1	1	

FLIGHT INSTRUMENTS

POH 2-50

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Primary Flight Display (PFD)	2	2	2	2	2	
2. Magnetic Compass	1	1	1	1	1	
3. Electronic Standby Instrument System (ESIS)	1	1	1	1	1	
4. AHRS	2	2	2	2	2	
5. Air Data Computer (ADC)	2	2	2	2	2	
6. Outside Air Temperature	1	1	1	1	1	
7. Overspeed Aural Warning	1	1	1	1	1	
8. Clock	0	0	1	1	1	

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTION S
1. Fuel Transfer System Including Annunciator	2	2	2	2	2	
2. Standby Electric Fuel Pump	2	2	2	2	2	
3. FUEL PRES LO Annunciator	2	2	2	2	2	
4. Fuel Quantity Indicating System including Annunciator	2	2	2	2	2	
5. Firewall Fuel Shutoff System including Annunciator	2	2	2	2	2	
6. Engine Driven Boost Pump	2	2	2	2	2	
7. Fuel Crossfeed System including Annunciator	1	1	1	1	1	

ICE AND RAIN PROTECTION

POH 2-51

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Alternate Static Air System	1	1	1	1	1	
2. Engine Auto-Ignition System including Annunciators	2	2	2	2	2	
3. Engine Anti-Ice System including Annunciators	2	2	2	2	2	
4. Heated Fuel Vent	0	0	2	2	2	
5. Heated Windshield	0	0	0	0	2	
6. Pitot Heat System including Annunciators	0	0	2	2	2	
7. Pneumatic Pressure Indicator	0	0	1	1	1	
8. Stall Warning Heat (Lift Transducer and Mounting Plate)	0	0	0	0	1	
9. Surface Deicer System	0	0	0	0	1	
10. WING DEICE Annunciator	0	0	0	0	1	
11. TAIL DEICE Annunciator	0	0	0	0	1	
12. Propeller Deicer System	0	0	0	0	1	
13. Wing Ice Light	0	0	0	0	2	

LANDING GEAR

POH 2-51

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Landing Gear Position Indicator Light	3	3	3	3	3	
2. Landing Gear Handle Light	1	1	1	1	1	
3. Landing Gear Aural Warning	1	1	1	1	1	
4. Landing Gear Hydraulic Power Pack	1	1	1	1	1	
5. HYD FLUID LOW Annunciator	1	1	1	1	1	
6. Emergency Extension Hand Pump	1	1	1	1	1	

LIGHTS

POH 2-52

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Cockpit and Instrument Lighting System	0	1	0	1	0	
2. DOOR UNLOCKED Annunciator	1	1	1	1	1	
3. Landing Lights	0	2	0	2	0	
4. Position Lights	0	5	0	5	0	Two lights are installed at each wing position and one light on the tail. All must be operable.
5. Anticollision Lights	0	2	0	2	0	
6. Passenger Notice System (NO SMK FSB)	1	1	1	1	1	
7. Self-Illuminating Emergency Exit Signs	2	2	2	2	2	
8. Caution Flasher Annunciators	2	2	2	2	2	
9. Warning Flasher Annunciators	2	2	2	2	2	

MISCELLANEOUS EQUIPMENT (Single Pilot Operation Only)

POH 2-52

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Headset	1	1	1	1	1	
2. Boom-Mounted Microphone	1	1	1	1	1	
3. Emergency, Abnormal, and Normal Procedures Checklist	1	1	1	1	1	
4. Kit 130-5015	1	1	1	1	1	All passenger seats in excess of nine (9) must be rendered nonoccupiable by "DO NOT OCCUPY" seat belt tube assembly.

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Oxygen System Including Indicator	1	1	1	1	1	
2. Oxygen Pressure Gage (Cockpit)	1	1	1	1	1	
3. OXY NOT ARMED Annunciator	1	1	1	1	1	
4. PASS OXYGEN ON Annunciator	1	1	1	1	1	

PROPELLER

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Autofeather System including Annunciators	1	1	1	1	1	
2. Propeller Reversing System including Annunciators	2	2	2	2	2	
3. Propeller Governor Test Switch	1	1	1	1	1	
4. Propeller Overspeed Governor	2	2	2	2	2	
5. Propeller Electric Ground Idle Stop	2	2	2	2	2	
6. PROP PITCH Annunciator	2	2	2	2	2	

VACUUM SYSTEM

SYSTEM and/or EQUIPMENT	VFR DAY	VFR NIGHT	IFR DAY	IFR NIGHT	ICING	REMARKS and/or EXCEPTIONS
1. Vacuum Gage	1	1	1	1	1	

12. V-SPEED DEFINITIONS (GENERAL REFERENCE)

Takeoff and Initial Climb

V-Speed	Name	Meaning
V1	Takeoff decision speed	Maximum speed at which a reject may be initiated; at or above it the takeoff must be continued.
Vr	Rotation speed	Speed at which the pilot rotates to raise the nose.
Vlof	Lift-off speed	Speed at which the aircraft first becomes airborne.
V2	Takeoff safety speed	Target climb speed with the critical engine inoperative.
V2min	Minimum takeoff safety speed	Lowest allowable V2 .
Vef	Engine-failure speed	Speed at which the critical engine is assumed to fail (certification).
Vmu	Minimum unstick speed	Slowest speed at which the aircraft can safely lift off.
Vfto	Final takeoff speed	Speed in the final takeoff / climb segment.

Climb Performance

V-Speed	Name	Meaning
Vx	Best angle of climb	Most altitude gained per distance over the ground.
Vy	Best rate of climb	Most altitude gained per unit of time.
Vxse	Best angle, single-engine	Vx with one engine inoperative (multiengine).
Vyse	Best rate, single-engine	Vy with one engine inoperative — the blue line .

Stall Speeds

V-Speed	Name	Meaning
Vs	Stall speed	Minimum steady flight speed at which the aircraft is controllable.
Vs0	Stall speed, landing configuration	Stall with full flaps and gear down — bottom of the white arc.
Vs1	Stall speed, clean configuration	Stall in a specified (usually clean) configuration — bottom of the green arc.
Vsr	Reference stall speed	Certification reference stall speed.
Vsse	Safe single-engine speed	Minimum speed for intentionally cutting one engine.
Vsw	Stall warning speed	Speed at which the stall warning activates.

Airspeed Indicator Limit Speeds

V-Speed	Name	Meaning
Va	Design maneuvering speed	Maximum speed for full or abrupt control inputs without overstress.
Vno	Maximum structural cruising speed	Normal operating limit — top of the green arc, start of the yellow arc.
Vne	Never-exceed speed	The red line — never exceed.
Vfe	Maximum flap-extended speed	Top of the white arc.
Vle	Maximum landing-gear-extended speed	Maximum speed flying with the gear down.
Vlo	Maximum landing-gear-operating speed	Maximum speed to extend or retract the gear.
Vmo / Mmo	Maximum operating limit speed / Mach	Maximum operating airspeed and Mach number.

Approach and Landing

V-Speed	Name	Meaning
Vref	Landing reference speed	Threshold-crossing speed, typically 1.3 x Vs0 .
Vapp	Approach speed	Target speed on final approach.
Vbg	Best glide speed	Speed for maximum glide distance (best lift-to-drag ratio).

Multiengine Control

V-Speed	Name	Meaning
Vmc / Vmca	Minimum control speed (airborne)	Minimum speed to maintain control with the critical engine inoperative — red radial line.
Vmcg	Minimum control speed (ground)	Minimum control speed on the takeoff roll.
Vmcl	Minimum control speed (landing)	Minimum control speed in the landing configuration.
Vmbe	Maximum brake energy speed	Maximum speed from which the brakes can absorb a rejected takeoff.

Design and Certification Speeds

V-Speed	Name	Meaning
Vb	Design gust-intensity speed	Turbulence-penetration design speed.
Vc	Design cruising speed	Certification design cruising speed.
Vd / Vdf	Design / demonstrated diving speed	Certification dive speed.
Vf	Design flap speed	Certification design flap speed.
Vh	Maximum level-flight speed	Maximum speed in level flight at maximum continuous power.

NOTE

These are certification design speeds. They are rarely referenced in day-to-day operations.

Airspeed Indicator Colour Markings

V-Speed	Name	Meaning
White arc	Flap operating range	Vs0 to Vfe .
Green arc	Normal operating range	Vs1 to Vno .
Yellow arc	Caution range	Vno to Vne — smooth air only.
Red line	Never exceed	Vne .
Blue line	Best rate, single-engine	Vyse (multiengine).
Red radial	Minimum control speed	Vmc (multiengine).

NOTE

The colour markings are defined by the V-speeds above, so a change to a limitation speed changes the arc.