FAA Approved Airplane Flight Manual Supplement
G1000 Integrated Avionics Update
with
Options Including Synthetic Vision/Pathways
on
Hawker Beechcraft G58

This Supplement is Applicable to the Following
Manual(s):
58-590000-67

Airplane Serial Number: ____________________________

Airplane Registration Number: _______________________

FAA Approved

By: ____________________

Robert Murray
ODA STC Unit Administrator
Garmin International Inc.
ODA-240087-CE

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LOG OF REVISIONS

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SECTION 1 – GENERAL
This document is to be attached to the Pilot’s Operating Handbook and FAA Approved Airplane Flight Manual Part Number 58-590000-67 when the airplane is equipped with the Garmin G1000 Airframe System Software Version 0857.08

The information in this supplement supersedes or adds to the basic Pilot’s Operating Handbook and FAA Approved Airplane Flight Manual only as set forth within this document. Users of the handbook are advised to always refer to the supplement for possibly superseding information and placarding applicable to the operation of the airplane.

G1000 GNSS (GPS/SBAS) Navigation system Equipment approvals
The Garmin G1000 Integrated Avionics GNSS navigation system installed in this aircraft is a GPS system with a Satellite Based Augmentation System (SBAS) comprised of two TSO-C145a Class 3 approved Garmin GIA 63Ws, TSO-C146a Class 3 approved Garmin GDU 104X Display Units, GARMIN GA36 and GA37 antennas, and GPS software version 3.2 or later approved version. The G1000 GNSS navigation system in this aircraft is installed in accordance with AC 20-138A.

The Garmin G1000 Integrated Avionics GNSS navigation system as installed in this aircraft complies with the requirements of AC 20-138A and is approved for navigation using GPS and SBAS (within the coverage of a Satellite Based Augmentation System complying with ICAO Annex 10) for IFR en route, terminal area, and non-precision approach operations (including those approaches titled “GPS”, “or GPS”, and “RNAV (GPS)” approaches). The G1000 Integrated Avionics GNSS navigation system installed in this aircraft is approved for approach procedures with vertical guidance including “LPV” and “LNAV/VNAV”, within the U.S. National Airspace System.

The Garmin G1000 Integrated Avionics GNSS navigation system as installed in this aircraft complies with the equipment requirements of AC 90-105 and meets the equipment performance and functional requirements to conduct RNP terminal departure and arrival procedures and RNP approach procedures without RF (radius to fix) legs. Part 91 subpart K, 121, 125, 129, and 135 operators require operational approval from the FAA.

The Garmin G1000 Integrated Avionics GNSS navigation system as installed in this aircraft complies with the equipment requirements of AC 90-100A for RNAV 2 and RNAV 1 operations. In accordance with AC 90-100A, Part 91 operators (except subpart K) following the aircraft and training guidance in AC 90-100A are authorized to fly RNAV 2 and RNAV 1 procedures. Part 91 subpart K, 121, 125, 129, and 135 operators require operational approval from the FAA.

The Garmin G1000 Integrated Avionics GNSS navigation system as installed in this aircraft complies with the equipment requirements of AC 90-100A for RNAV 2 and RNAV 1 operations. In accordance with AC 20-138A and FAA Order 8400.12A. The G1000 can be used without reliance on other long-range navigation systems. This does not constitute an operational approval.

The Garmin G1000 Integrated Avionics GNSS navigation system as installed in this aircraft has been found to comply with the requirements for primary means of Class II navigation in oceanic and remote navigation (RNP-10) without time limitations in accordance with AC 20-138A and FAA Order 8400.12A. The G1000 can be used without reliance on other long-range navigation systems. This does not constitute an operational approval.

HAWKER BEECHCRAFT MODEL G58 BARON 190-01180-01
FAA APPROVED Rev. 1
The Garmin G1000 Integrated Avionics GNSS navigation system as installed in this aircraft complies with the accuracy, integrity, and continuity of function, and contains the minimum system functions required for PRNAV operations in accordance with JAA Administrative & Guidance Material Section One: General Part 3: Temporary Guidance Leaflets, Leaflet No 10 (JAA TGL-10 Rev 1). The GNSS navigation system has two ETSO-145 / TSO-C145a Class 3 approved Garmin GIA 63Ws, and ETSO-146 / TSO-C146a Class 3 approved Garmin GDU 104X Display Units. The G1000 Integrated Avionics GNSS navigation system as installed in this aircraft complies with the equipment requirements for PRNAV and BRNAV operations in accordance with AC 90-96A and JAA TGL-10 Rev 1. This does not constitute an operational approval.

Garmin International holds an FAA Type 2 Letter of Acceptance (LOA) in accordance with AC 20-153 for database Integrity, quality, and database management practices for the Navigation database. Pilots and operators can view the LOA status at www.Garmin.com > Aviation Databases > Type 2 LOA Status.

Navigation information is referenced to WGS-84 reference system.
SECTION 2 – LIMITATIONS

AVIONICS

When in flight, the appropriate Garmin G1000 Cockpit Reference Guide for the Beechcraft Baron G58 must be immediately available to the flight crew.

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G1000 GNSS (GPS/SBAS) NAVIGATION SYSTEM LIMITATIONS

The pilot must confirm at system initialization that the Navigation database is current.

Navigation database is expected to be current for the duration of the flight. If the AIRAC cycle will change during flight, the pilot must ensure the accuracy of navigation data, including suitability of navigation facilities used to define the routes and procedures for flight. If an amended chart affecting navigation data is published for the procedure, the database must not be used to conduct the procedure.

GPS/SBAS based IFR enroute, oceanic, and terminal navigation is prohibited unless the pilot verifies and uses a valid, compatible, and current Navigation database or verifies each waypoint for accuracy by reference to current approved data.

Discrepancies that invalidate a procedure must be reported to Garmin International. The affected procedure is prohibited from being flown using data from the Navigation database until a new Navigation database is installed in the aircraft and verified that the discrepancy has been corrected. Contact information to report Navigation database discrepancies can be found at www.Garmin.com>Support>Contact Garmin Support>Aviation. Pilots and operators can view navigation database alerts at www.Garmin.com > In the Air>NavData Alerts.

For flight planning purposes, in areas where SBAS coverage is not available, the pilot must check RAIM availability. Within the United States, RAIM availability can be determined using the G1000 WFDE Prediction program, part number 006-A0154-01 (010-G1000-00) or later approved version with GARMIN GA36 and GA37 antennas selected, or the FAA’s en route and terminal RAIM prediction website: www.raimprediction.net, or by contacting a Flight Service Station. Within Europe, RAIM availability can be determined using the G1000 WFDE Prediction program or Europe’s AUGER GPS RAIM Prediction Tool at http://augur.ecacnav.com/augur/app/home. For other areas, use the G1000 WFDE Prediction program. This requirement is not necessary if SBAS coverage is confirmed to be available along the entire route of flight. The route planning and WFDE prediction program may be downloaded from the GARMIN G1000 website on the internet. For information on using the WFDE Prediction Program, refer to GARMIN WAAS FDE Prediction Program, part number 190-00643-01, ‘WFDE Prediction Program Instructions’.

For flight planning purposes, operations within the U.S. National Airspace System on RNP and RNAV procedures when SBAS signals are not available, the availability of GPS integrity RAIM shall be confirmed for the intended route of flight. In the event of a predicted continuous loss of RAIM of more than five minutes for any part of the intended route of flight, the flight should be delayed, canceled, or re-routed on a track where RAIM requirements can be met.
For flight planning purposes for operations within European B-RNAV and P-RNAV airspace, if more than one satellite is scheduled to be out of service, then the availability of GPS integrity RAIM shall be confirmed for the intended flight (route and time). In the event of a predicted continuous loss of RAIM of more than five minutes for any part of the intended flight, the flight should be delayed, canceled, or re-routed on a track where RAIM requirements can be met.

For flight planning purposes, operations where the route requires Class II navigation the aircraft’s operator or pilot-in-command must use the G1000 WFDE Prediction program to demonstrate that there are no outages on the specified route that would prevent the G1000 to provide primary means of Class II navigation in oceanic and remote areas of operation that requires (RNP-10 or RNP-4) capability. If the G1000 WFDE Prediction program indicates fault exclusion (FDE) availability will exceed 34 minutes in accordance with FAA Order 8400.12A for RNP-10 requirements, or 25 minutes in accordance with FAA Order 8400.33 for RNP-4 requirements, then the operation must be rescheduled when FDE is available.

Both GIA 63Ws GPS navigation receivers must be operating and providing GPS navigation guidance to their respective PFD for operations requiring RNP-4 performance.

North Atlantic (NAT) Minimum Navigational Performance Specifications (MNPS) Airspace operations per AC 91-49 and AC 120-33 require both GPS/SBAS receivers to be operating and receiving usable signals except for routes requiring only one Long Range Navigation sensor. Each display computes an independent navigation solution based on the on-side GPS sensor. However, either display will automatically revert to the cross-side sensor if the on-side sensor fails or if the cross-side sensor is determined to be more accurate. A “BOTH ON GPS1” or “BOTH ON GPS2” message does not necessarily mean that one GPS has failed. Refer to the MFD AUX-GPS STATUS page to determine the state of the unused GPS.

Whenever possible, RNP and RNAV routes including Standard Instrument Departures (SIDs) and Obstacle Departure Procedures (ODPs), Standard Terminal Arrival (STAR), and enroute RNAV “Q” and RNAV “T” routes should be loaded into the flight plan from the database in their entirety, rather than loading route waypoints from the database into the flight plan individually. Selecting and inserting individual named fixes from the database is permitted, provided all fixes along the published route to be flown are inserted. Manual entry of waypoints using latitude/longitude or place/bearing is prohibited.

“GPS”, “or GPS”, and “RNAV (GPS)” instrument approaches using the G1000 System are prohibited unless the pilot verifies and uses the current Navigation database. GPS based instrument approaches must be flown in accordance with an approved instrument approach procedure that is loaded from the Navigation database.

Not all published Instrument Approach Procedures (IAP) are in the Navigation database. Pilots planning on flying an RNAV instrument approach must ensure that the Navigation database contains the planned RNAV Instrument Approach Procedure and that approach procedure must be loaded from the Navigation database into the FMS flight plan by its name.

IFR non-precision approach approval using the GPS/SBAS sensor is limited to published approaches within the U.S. National Airspace System. Approaches to airports in other airspace are not approved unless authorized by the appropriate governing authority.

The navigation equipment required to join and fly an instrument approach procedure is indicated by the title of the procedure and notes on the IAP chart. Use of the GARMIN G1000 GPS/SBAS receivers to provide navigation guidance during the final approach HAWKER BEECHCRAFT MODEL G58 BARON 190-01180-01 FAA APPROVED Rev. 1
segment of an ILS, LOC, LOC-BC, LDA, SDF, MLS or any other type of approach not approved for “or GPS” navigation is prohibited. When using the G1000 VOR/LOC/GS receivers to fly the final approach segment, VOR/LOC/GS navigation data is must be selected and presented on the CDI of the pilot flying.

Navigation information is referenced to WGS-84 reference system, and should only be used where the Aeronautical Information Publication (including electronic data and aeronautical charts) conform to WGS-84 or equivalent.

TIS AND GTS 820 TAS SYSTEMS

Use of the MAP - TRAFFIC MAP to maneuver the airplane for traffic avoidance without outside visual reference is prohibited. The Traffic Information System (TIS) and GTS820 (TAS) systems are intended as an aid for the pilot to visually locate traffic. It is the responsibility of the pilot to see and manually maneuver the airplane to avoid other traffic.

SYNTHETIC VISION

Use of the Synthetic Vision system display elements alone for aircraft control without reference to the G1000 primary flight instruments or the aircraft standby instruments is prohibited.

Use of the Synthetic Vision system alone for navigation, or obstacle or terrain avoidance is prohibited.

Use of the Synthetic Vision system traffic display alone to avoid other aircraft is prohibited.
SECTION 3 – EMERGENCY PROCEDURES

No Change

SECTION 3A – ABNORMAL PROCEDURES

SVS Displays information inconsistent with G1000 primary flight instrumentation.

On the PFD:
1. PFD key ................................................................. press
2. SYN VIS key .............................................................. press
3. SYN TERR key ............................................................. press
4. SVS is removed from both PFD displays......................... Verify

Use G1000 primary displays for navigation and aircraft control.

G1000 operation in display backup mode is required

Select display backup mode on the G1000 system.

NOTE:

When display backup mode is selected, the MFD will initially present a non-SVS (blue sky over solid brown ground) display. SVS will be presented on the backup display within 20 seconds if it was enabled on the PFD when display backup was selected.
SECTION 4 – NORMAL PROCEDURES
SYNTHETIC VISION DISPLAYS

Turn Synthetic Vision on/off

The SVS system may be turned on or off as desired. To turn the synthetic vision system on or off;

On the PFD;
1. PFD key......................................................................press
2. SYN VIS key ...............................................................press
3. SYN TERR key ......................................... press as desired

The synthetic vision system will cycle on or off with each press of the SYN TERR key. The Flight Path Marker is displayed anytime SYN TERR is selected for display.

Turn Pathways on/off

On the PFD;
1. PFD key......................................................................press
2. SYN VIS key ...............................................................press
3. PATHWAY key ......................................... press as desired

The Pathway display will cycle on or off with each press of the PATHWAY key. The Pathway can be displayed separately or in conjunction with the flight director.

NOTE:
If displayed, the Pathway may be quickly turned off by pressing the PFD softkey at the bottom of the PFD followed by two presses of the far left PFD soft key.

Turn Horizon Heading on/off

On the PFD;
1. PFD key......................................................................press
2. SYN VIS key ...............................................................press
3. HRZN HDG key ........................................ press as desired

The horizon heading display will cycle on or off with each press of the HRZN HDG key.

Turn Airport Signs on/off

On the PFD;
1. PFD key......................................................................press
2. SYN VIS key ...............................................................press
3. APTSIGNS key......................................... press as desired

Airport Signs will cycle on or off with each press of the APTSIGNS key.

Use of Pathway

If Synthetic Terrain is displayed on the PFD, the Pathway may be used to assist the pilot’s awareness of the programmed lateral and vertical navigation path. The following
sections describe the basic use of the Pathway in various flight segments. For more detailed information, consult the G1000 Pilot’s Guide.

**Departure**

Prior to departure, load and activate the desired flight plan into the G1000 FMS, set the initial altitude on the G1000 altitude selector and select GPS on the HSI display just as you would without the SVS system. The programmed flight path will be displayed as a series of magenta boxes along the path at the flight plan altitude subject to the following conditions:

- If the first segment of the flight plan is a heading to altitude leg, the Pathway will not be displayed for that segment. The first Pathway segment displayed will be the first GPS course leg.
- The Pathway must be within the SVS field of view of 30 degrees left and 35 degrees right. If the programmed path is outside that field of view, the Pathway will not be visible on the display until the aircraft has turned toward the course.
- The Pathway will be displayed at either the altitude selected on the G1000 selector OR the altitude published for the procedure (e.g. SID) WHICHEVER IS HIGHER.

After departure, the primary aircraft control must be by reference to the primary aircraft instruments. The SVS and Pathway displays should be used to aid in awareness of the terrain and programmed flight path. Prior to intercepting the programmed course, the Pathway will be displayed as a series of magenta “boxes” with pointers at each corner that point in the direction of the programmed course. The Pathway boxes will not be displayed on portions of the course line that would lead the pilot to intercept the course in the wrong direction. As the aircraft approaches the center of the programmed course and altitude, the number of Pathway boxes will decrease to a minimum of four.

**Enroute**

When enroute, the Pathway will be displayed along the lateral path defined by the flight plan, at the altitude selected on the G1000 altitude selector. Flight plan changes in altitude that require a climb will be indicated by the Pathway being displayed as a level path at the altitude entered for the current flight plan leg. Because the G1000 system does not have information available to it about aircraft performance, climb profiles are not displayed by the Pathway. If the programmed flight plan includes one or more defined VNAV descent segments, the descent path(s) will be displayed by the Pathway as prompted by the G1000 FMS. If the flight plan includes a significant change in course at a waypoint, the Pathway boxes toward the currently active waypoint will be magenta in color. The boxes defining the next flight plan segment may be visible, but will be displayed in a white color.
Pathways may be enabled for a missed approach as desired by the pilot. When the missed approach is selected on the G1000 FMS, the Pathway to the Missed Approach Holding Point will be displayed just as described for the departure segment. The pilot must assure that the aircraft path will, at all times, comply with the requirements of the published missed approach procedure. If the initial missed approach leg is heading-to-altitude or a leg defined by other than a GPS course, the Pathway will not be displayed for that segment.

If the course to the Missed Approach Holding Point is out of the SVS field of view during the initial missed approach climb, the Pathway will not be visible on the PFD until the aircraft is turned toward the course.

The Pathway will be displayed at the published missed approach altitude OR the altitude set on the G1000 altitude selector WHICHEVER IS HIGHER. If the G1000 altitude selector is set to MDA on the final approach segment and not reset during the initial missed approach, the Pathway will still be displayed at the published missed approach altitude.
TRANSPONDER (GTX33 or GTX33ES)

The Garmin Transponder is a solid-state transponder that replies to Mode A (4096 codes), Mode C and Mode S interrogations. It is capable of responding with transponder capability and airplane Flight ID to ground stations interrogation to support elementary surveillance. If the airplane is not equipped with the optional GTS820 system or it is not operational, the transponder will work with the Traffic Information Service (TIS). Where TIS is available, the G1000 system will display all responding ATCRBS Mode A and Mode C transponder equipped airplanes within seven nautical miles, from 3000 feet below to 3500 feet above the airplane. The TIS system only operates while in the ground-based service area. Transponder codes and mode selection are accessed by the XPDR softkey at the bottom of the PFD. Squawk codes can also be entered using the PFD FMS knob.

SYNTHETIC VISION SUBSYSTEM

General
The SVS sub system is dependent upon terrain data provided by the underlying G1000 system. If, for some reason, the terrain data is not available from the G1000, all of the components of the SVS system will be unavailable. The flight path marker, horizon heading, and airport signs are all sub-components of the Synthetic Terrain display and are only available when Synthetic Terrain is enabled. Those features are selected or de-selected using the PFD softkeys on the SVS menu.

Synthetic Terrain

The synthetic (3D) terrain display on the PFD provides a perspective view of the terrain ahead of the aircraft showing ground features up to 30 degrees left and 35 degrees right of the airplane heading. The terrain display is derived from the same terrain data contained in the G1000 system that is optionally used to display terrain on the MFD map display. The terrain data has a resolution of 9 arc-seconds, this means that the
terrain elevation contours in the database are stored broken down into squares 9 arc-seconds on each side. That data is processed and smoothed by the G1000 system to provide the synthetic terrain display. In some instances, terrain features such as lakes in mountainous areas may be presented by the SVS system as if the lake water extends somewhat up the mountainside. This is due to the limitations of the terrain database resolution but is not significant for the approved uses of the SVS system.

The SVS terrain display will show land contours; large water features; and, towers and other obstacles over 200 ft AGL (including buildings), that are included in the G1000 obstacle database. In order to provide a clean, uncluttered PFD display, cultural features on the ground such as; roads and highways, railroad tracks, cities, and political boundaries (state / county lines) are not displayed on the PFD even if those features are selected for display on the MFD. The colors used to display the terrain elevation contours are similar to those used on the MFD map. The terrain display also includes a north-south, east-west grid to assist in orientation relative to the terrain. The terrain display is intended to serve as an awareness tool only. It may not provide either the accuracy or fidelity, or both, on which to solely base decisions and plan maneuvers to avoid terrain or obstacles. Navigation must not be predicated solely upon the use of the TAWS, Terrain or Obstacle data displayed by the G1000 SVS system.

- The Terrain Database has an area of coverage from north 75° latitude to south 60° latitude in all longitudes.
- The Airport Terrain Database coverage area includes airports from north 75° latitude to south 60° latitude in all longitudes.
- The Obstacle Database coverage area includes the United States and Europe.

**NOTE**
The area of coverage may be modified, as additional terrain data sources become available.

### Obstacle and Terrain Alerts and Warnings

Obstacles and terrain displayed on the SVS system may be highlighted if an alert or warning is generated by the G1000 Terrain or TAWS system. If an obstacle alert is presented for an obstacle that is in the SVS field of view, the obstacle symbol on the PFD will turn yellow in color. If an obstacle warning is generated by the G1000 system, the obstacle symbol on the PFD will turn red.

If the G1000 Terrain or TAWS system generates a terrain alert or warning, the terrain feature displayed on the PFD will be colored yellow for an alert or red for a warning for as long as the alert remains valid.

Because the area monitored by the Terrain or TAWS system can be wider than the field of view that can be displayed by the SVS system, it is possible to receive an obstacle or terrain audible alert for an obstacle or terrain that is not shown on the SVS display. In those cases, the object generating the alert will be left or right of the aircraft. Refer to the other displays in the aircraft to determine the cause of the message.

![Flight Path Marker](image)

### Flight Path Marker

The SVS display includes a green circular barbed symbol called the Flight Path Marker (FPM) that represents the current path of the airplane relative to the terrain display. The FPM is always displayed when synthetic terrain is displayed and the aircraft ground speed exceeds 30 kt. The FPM indicates the current lateral and vertical path of the airplane as determined by the GPS sensor. If the FPM is above the horizon line,
the airplane is climbing, and similarly if the FPM is below the horizon line, the airplane is descending. If the airplane is flying in a crosswind, the FPM will be offset from the center of the display. In that case, the center of the PFD airplane reference symbol indicates the airplane heading and the FPM indicates the direction that the airplane is actually moving, taking into account the crosswind.

The FPM indicates the current path of the airplane but does not predict the future path. If aircraft attitude, power setting, airspeed, crosswind, etc. are changed, the FPM will move to indicate the new path resulting from those changes.

If the FPM is below the terrain or obstacle displayed behind it on the PFD, the current aircraft path will not clear that terrain or obstacle. If the FPM is above that terrain or obstacle, the aircraft will clear the terrain or obstacle IF, AND ONLY IF, THE CURRENT AIRCRAFT CONFIGURATION IS MAINTAINED, AND THE AIRCRAFT PERFORMANCE WILL PERMIT YOU TO MAINTAIN THE CURRENT VERTICAL (CLIMB) GRADIENT UNTIL PAST THE TERRAIN OR OBSTACLE.

Pathway

If PATHWAY is enabled on the SVS menu of the PFD and a defined navigation path has been entered on the G1000, the SVS system will display a pathway, sometimes called a “highway in the sky” or HITS. The pathway is a perspective representation of the programmed flight path. When the aircraft is well off course, the pathway will be displayed as a number boxes floating in the sky along the programmed lateral and vertical path. As the aircraft intercepts the programmed flight path, the number of boxes displayed will be reduced to a maximum of four to avoid cluttering the PFD display. The pathway is only displayed for navigation paths that are fully defined by the sensor in use. Because a fully defined lateral and vertical path through space is not defined by them, a Pathway is not displayed for heading legs, VOR, LOC only, BC or ADF segments. When the Pathway is displayed, the color of the boxes indicates the sensor generating the path. If the GPS sensor is in use, the boxes will be magenta colored. If the LOC sensor is defining the path in use, the boxes will be green.

The Pathway boxes are ±100 ft in vertical dimension and approximately ±380 ft (0.06nm) horizontally from the center of the box. The Pathway presentation is intended only to aid the pilot in awareness of the programmed flight path location relative to the airplane’s current position. The pathway is not intended for use as a primary reference in tracking the navigation path.

If a GPS based descent profile has been programmed either on the G1000 flight plan page or as part of an approach or STAR, the descent will be displayed by the Pathway. Climb paths are never displayed by the Pathway. If a profile requires a climb, the Pathway will be displayed as a level segment at the higher of the altitude defined by the programmed path or the G1000 altitude selector.

Traffic

If traffic that is within the SVS field of view is detected by the G1000 system, a symbol will be displayed on the PFD indicating the direction and relative altitude of the traffic. The traffic will be displayed as a white diamond unless it generates a traffic alert.
Traffic that causes an alert will be displayed as a solid yellow circle accompanied by a yellow TRAFFIC annunciator to the right of top of the airspeed display tape.

**Horizon line**

The SVS display includes an always visible white horizon line that represents the true horizon. Terrain will be presented behind the horizon line, and terrain shown above the horizon line is above the current aircraft altitude. Terrain that is shown below the horizon line is below the aircraft altitude.

**Horizon Heading**

A heading scale may be displayed on the PFD horizon line, if selected by the pilot. The heading marks are spaced in even 30 degree increments and are presented just above the horizon line with tic marks that intersect the horizon line. The horizon heading will correspond to that presented by the HSI. Because the horizon heading is only displayed in 30 degree increments, it should only be used for general heading awareness and not be used to establish the aircraft heading.

**Airport Signs and runway highlight**

If APTSIGNS is selected, a “sign post” along with a representation of the runways will be plotted on the SVS display for nearby airports that are contained in the G1000 airport database. The signpost will become visible when you are within approximately 15nm of the airport. The text identifier for the airport will be displayed inside the airport sign when the aircraft reaches approximately 8 nm from the airport. Once the aircraft reaches approximately 4.5 nm from the airport, the airport sign will be removed but the runways presentation will remain. If an approach to a specific runway has been loaded and activated, that runway will be highlighted on the SVS display.

When on an approach, the highlight for the approach runway will be considerably larger than “normal” to assist in visually acquiring the runway. The oversized highlight will automatically shrink around the runway depiction so that the runway is proportionally displayed when the aircraft is within approximately ½ nm of the threshold. Runway highlighting is displayed even if APTSIGNS are turned off.

**SECTION 8 – HANDLING, SERVICING AND MAINTENANCE**

No Change