Owner's Manual
And
Approved Flight Manual

Supplement Number 3

Sandel SN3500
Navigation Display

When a Sandel SN3500 navigation display is installed in the CH 2000, this supplement is applicable and must be inserted in the CH 2000 Pilot's Operating handbook. This document must be carried in the airplane at all times. Information in this supplement either adds to, supersedes, or deletes information in the basic CH 2000 Pilot's Operating Handbook.

Approved _____

Date: 20 October 2003

Chief, Flight Test
for Director, Aircraft Certification
Transport Canada

SUPPLEMENT NUMBER 3
LOG OF REVISIONS

Revision Date	Revised Pages	Description of Revision
15 Oct 2003	All pages	Initial Issue

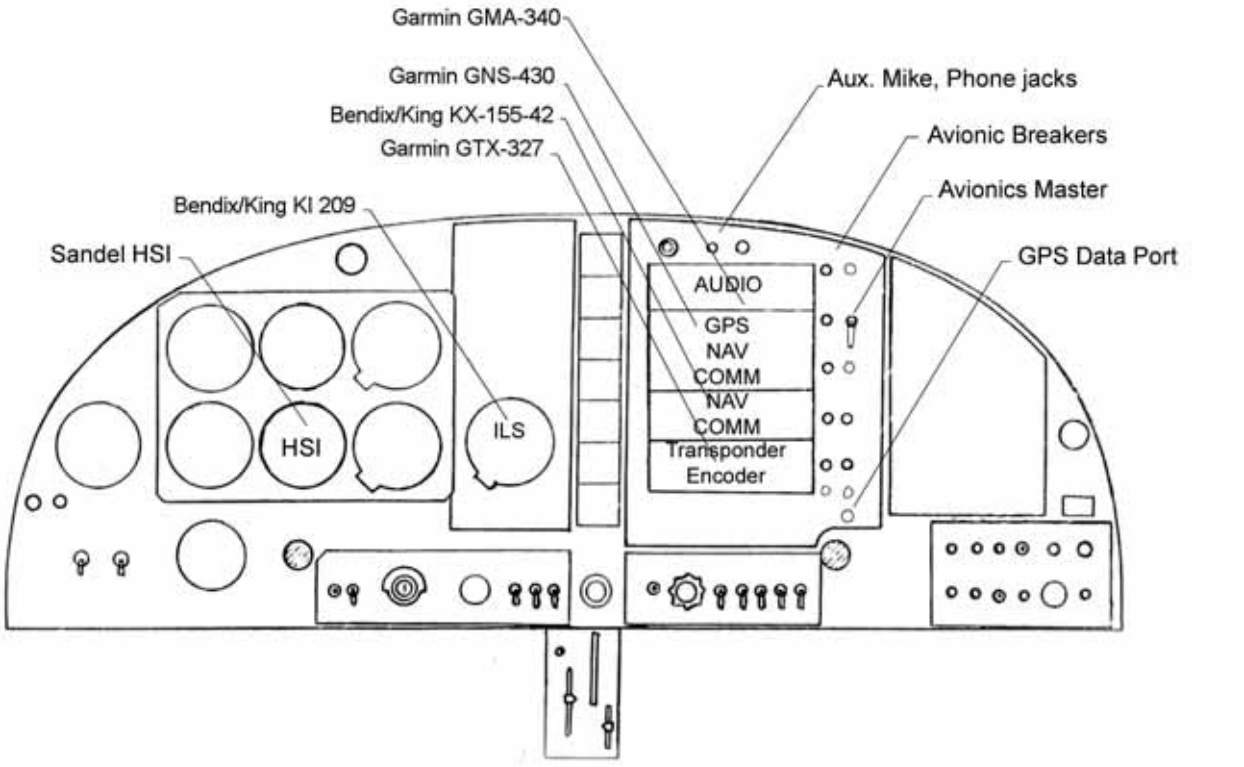
Supplement Number 3	Page	Date
	12-1-APP 12-2-APP 12-3-APP	15 Oct 03 15 Oct 03 15 Oct 03
	12-4-APP 12-5-APP	15 Oct 03 15 Oct 03

SECTION 1 – GENERAL

The Sandel Avionics SN3500 Navigation Display is a compact three-inch instrument which performs the functions of a traditional Horizontal Situation Indicator combined with a two-pointer RMI. The SN3500 Navigation Display also displays a moving map, and marker beacon and GPS annunciator.

In addition to the Sandel Avionics SN3500 Navigation Display, the following are included:

- Equipment in Supplement #2, less Garmin GI-106A indicator;
- Mid Continent remote electric directional gyro (located under the co-pilot seat);
- Mid Continent magnetic fluxgate (located in rear fuselage);
- Amari-King Converter 14V to 28V (located under the co-pilot seat);



Instrument Panel for Sandel HSI with Garmin GNS 430 GPS Navigator

Power to the Sandel HSI is supplied from a 14V to 28V converter, part # AK550-6 that is powered through a 10 amp push breaker, from the aircraft battery, to a 40A in-line fuse at the rear of the aircraft, to the panel mounted Avionics Master Switch Breaker and 5 A push breaker. The Mid Continent magnetic fluxgate power is activated through the aircraft master. The Remote Directional Gyro is powered through a 3 A push breaker.

Power for the Bendix/King KX155 is supplied from the aircraft power bar, through the main aircraft master. With the Avionics Master Switch turned "OFF", the pilot is able to have full use of the Bendix/King KX155 and can communicate by plugging-in the headset to the Aux. Mike, Phone jacks located on top of the Audio Panel.

SECTION 2 – LIMITATIONS

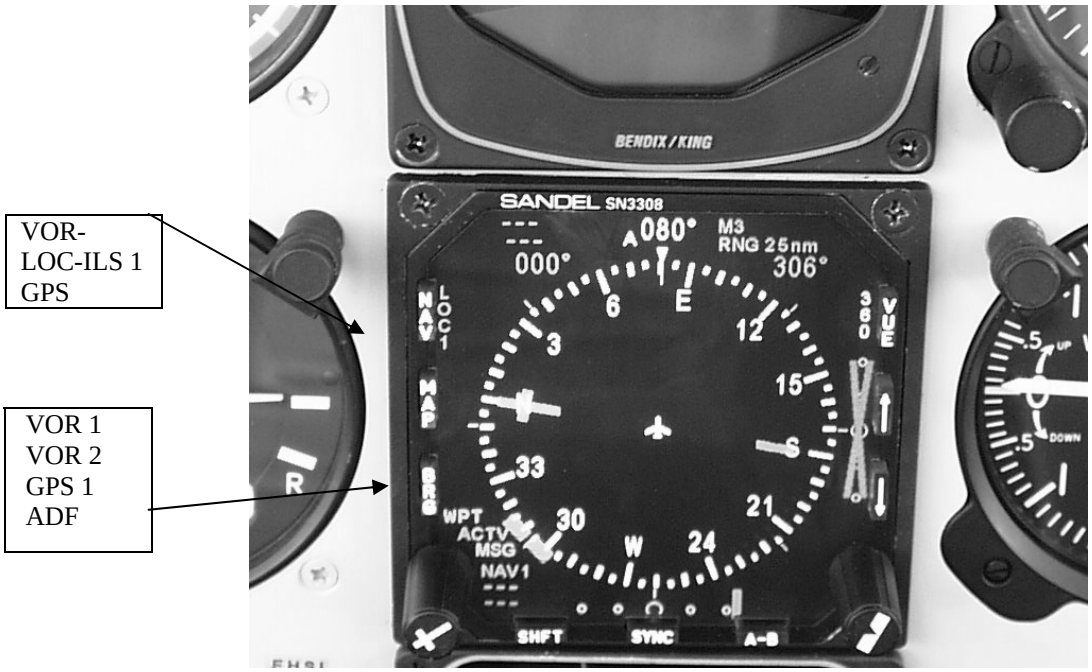
1. The SN3500 Navigation Display Pilots Guide, SPN 82005-PG-B (applicable revision) must be immediately available to the flight crew.

2. The "CRC Self Test Failed" message must not appear on power-up if flight operations are predicated on the use of the SN3500 Navigation Display.

SECTION 3 – EMERGENCY PROCEDURE

1. If the SN3500 Navigation Display fails to operate, use the magnetic compass as a heading source. One can still operate the GPS if functional. It will work without the 3500.
2. If the remote electric directional gyro (DG) becomes inoperative the magnetic fluxgate will provide the heading, and the resulting heading display will respond much more slowly than normal. The compass rose changes color from white to amber, and digital heading numbers will be redlined.
3. If the fluxgate fails, the SN3500 Navigation Display will continue to display heading based on the remote directional gyro (DG) input. The compass rose changes color from white to amber, heading numbers will be redlined.
3. The circuit breaker for the SN3500 Navigation Display is located on the lower right circuit breaker panel labeled EHSI.
4. Refer to the SN3500 Navigation Display Pilots Guide for other error messages and alerts.

SECTION 4 – NORMAL PROCEDURES



Sandel Avionics SN3500 Navigation Display

Activate Sandel HSI

Avionics Master Switch Breaker - on panel ---------- ON

1. The selection of the primary navigation source between VOR-LOC-ILS 1 and GPS is accomplished by the use of the **NAV** switch and will connect the source to the HSI course pointer.
2. ILS override will prevent selection of the GPS as long as an ILS frequency is tuned on VOR-ILS 1. This will be annunciated on the SN3500 Navigation Display.
3. The selection of the bearing pointer source between VOR 1, VOR 2, GPS, or ADF is accomplished by the use of the **BRG** switch. VOR 1 is from the Garmin GSN-430 and VOR 2 is from the Bendix\King KX155 NAV.
4. Annunciation of all GPS modes is accomplished by discrete annunciator lamps as well as on-screen annunciation on the SN3500 Navigation Display

SECTION 5 – PERFORMANCE

No change from basic Handbook.

SECTION 6 – WEIGHT & BALANCE

No change from basic Handbook

SECTION 7 – SYSTEMS DESCRIPTION

For a full description of the Sandel SN3500 Navigation Display, refer to the Sandel Avionics SN3500 Navigation
Display Pilot's Guide, SPN 82005-PG-B or later revision, This airplane is equipped with a Sandel SN3500 Navigation Display to provide course data from Nav 1 or GPS and bearing data from Nav 1, Nav 2, GPS. The Navigation display also indicates heading, glideslope, and marker beacon. Heading information is provided by a gyro stabilized flux detector. VOR, ILS, and GPS course data is derived from the primary GNS 430 Nav Receiver. Power is supplied through the 5-amp HSI circuit breaker on the panel. Power for the Mid Continent remote electric gyro is supplied through the 3-amp circuit breaker on the panel.