## **BENDIX/KING KN 63 DME SYSTEM - ADJUSTMENT/TEST**

## 1. General

A. This section gives the adjustment and test procedures for the Bendix/King KN 63 DME System. For a general overview of the KN 63 DME system refer to, Bendix/King KN 63 DME System - Description and Operation.

## 2. Bendix/King KN 63 DME System Antenna Operational Check

A. Tools and Equipment

NOTE: For the supplier publication part number and manufacturer data, refer to the Introduction - Supplier Publication List.

- (1) Tools and Equipment
  - IFR 6000 Ramp Test Set.
- (2) Special Consumables

None.

- (3) Reference Material
  - Bendix/King KN 63 DME System Description and Operation.
- B. Prepare the Airplane
  - (1) Make sure that the switches that follow are in the OFF position:
    - (a) BATTERY switch.
    - (b) EXTERNAL POWER switch.
    - (c) AVIONICS 1 and 2 switches.
  - (2) Connect external electrical power to the airplane.
    - (a) Adjust the ground power unit (GPU) to 28Vdc, +0.5 or -0.5 Vdc.
  - (3) Make sure that all the circuit breakers on the Avionics circuit breaker panel are engaged.
  - (4) Put the switches that follow in the positions given:
    - (a) External POWER switch to the BUS position.
    - (b) BATTERY switch to the ON position.
    - (c) Avionics 1 and 2 switches to the ON position.
  - (5) After the Garmin G1000 system is fully initiated refer to Garmin G1000 Integrated Avionics System Adjustment/Test and do the steps that follow:
    - (a) Do the Architecture Verification check and make sure all systems are serviceable.
    - (b) Make sure that the correct software and configuration has been installed.
- C. DME Antenna Operational Check
  - (1) On primary flight display (PFD) 1, tune NAV1 to 108.00 MHz (DME frequency of 1041 MHz).
  - (2) On PFD 1 top-level menu select the PFD softkey to enter the PFD mode menu.
  - (3) On the PFD mode menu select DME to activate the DME information window.
    - (a) The window is shown on the lower left of the HSI of each of the two PFD's.
  - (4) From the PFD top level softkeys select DME.
  - (5) On the right side of the PFD bezel, push the FMS knob to highlight the cursor.
  - (6) Use the inner knob, to move the cursor to the DME field.
  - (7) Turn the inner knob to activate the drop down box.
    - (a) Select NAV1.
    - (b) Push the ENT button to enter the data.
  - (8) On the IFR 6000 Ramp Test Set select the DME Softkey to access the DME.
  - (9) Set the DME test set controls as follows, Refer to Table 501.

| Table 501. IFR 6000 DME Test Parameters |            |
|---|------------|
| Parameter                               | Value      |
| VOR                                     | 108.00     |
| RATE                                    | 0 kts STOP |
| RANGE                                   | 195 nm     |
| RF LVL                                  | -50 dBm    |
| % REPLY                                 | 100%       |
| ECHO                                    | OFF        |
| SQTR                                    | ON         |
| IDENT                                   | ON         |

(10) Make sure that DME digital distance on PFD 1 matches the test set distance (195.0nm, +0.1nm or -0.1nm).

- D. KN 63 Audio Check
  - (1) On the GMA 1347 audio panel:
    - (a) Select DME as the audio source.
    - (b) Push the SPKR to select the speaker.
  - (2) On the IFR 6000, select DME IDENT to ON.
    - (a) Make sure that an ident tone (Morse code) is heard at approximately 20 second intervals.
- E. Put the Airplane Back to its Initial Condition.
  - (1) Put the switches that follow to the OFF position:
    - (a) BATTERY switch.
    - (b) EXTERNAL POWER switch.
    - (c) AVIONICS 1 and 2 switches.
  - (2) Disconnect external electrical power from the airplane.