

**SUPPLEMENT A3
TO THE AIRPLANE FLIGHT MANUAL DA 40**

**TRANSPONDER
KT 76A
BENDIX/KING**

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0.2 LIST OF EFFECTIVE PAGES

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1. GENERAL

This Supplement supplies the information necessary for the efficient operation of the airplane when the Transponder KT 76A is installed. The information contained within this Supplement is to be used in conjunction with the complete AFM.

This Supplement is a permanent part of this AFM and must remain in this AFM at all times when the Transponder KT 76A is installed.

2. LIMITATIONS

No change.

3. EMERGENCY PROCEDURES

During Emergency the Transponder can be used with following Codes:

7600 for Communication failure

7700 for Emergencies

4A. NORMAL OPERATING PROCEDURES

No change.

4B. ABNORMAL OPERATING PROCEDURES

No change.

5. PERFORMANCE

No change.

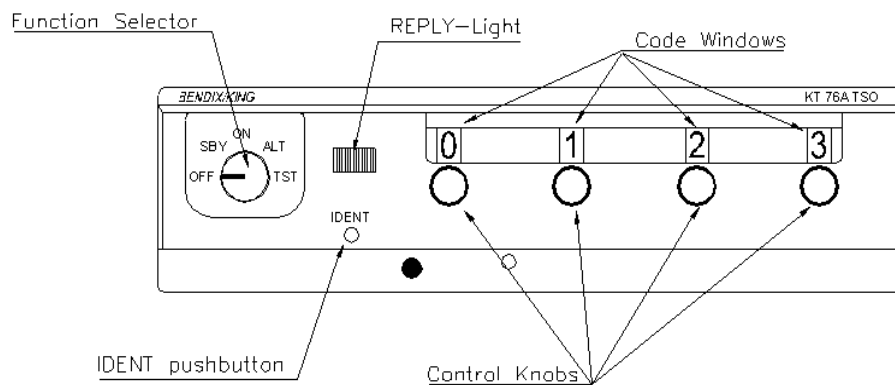
6. MASS AND BALANCE

Upon removal or installation of the Transponder the change of empty mass and corresponding center of gravity of the airplane must be recorded according to Chapter 6 of the Airplane Flight Manual.

7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS

7.14 AVIONICS

FRONT VIEW



DESCRIPTION

The Bendix/King Transponder KT 76A is a radio transmitter and receiver operating on radar frequencies. It receives ground radar interrogations at 1030 MHz and these trigger a coded response of radar pulses at 1090 MHz, which is transmitted back to the ground radar.

The transponder codes have the range from 0000 to 7777, and so 4096 coding options. The codes differ only in the number of pulses transmitted, not in frequency. The transmitter frequency always remains at 1090 MHz. The Transponder's coded reply pulses reinforce the normal 'blip' which appears on ATC Enroute, Approach or Departure Control radar screens. When the 'IDENT' button is pressed, the 'blip' will flash or 'bloom', so the controller can positively identify the airplane and its location. The Bendix/King Transponder KT 76A is installed in the center of the instrument panel. The associated antenna is installed on the bottom of the fuselage, under the pilot's seat.

GENERAL INFORMATION

The Transponder should be turned on only after engine startup, or should be turned off before engine shutdown. This extends the operation life of the Transponder.

NOTE

The control knobs are only allowed to be used in the SBY-mode, to prevent transmitting of a emergency signal.

The transponder should only be used with the Codes 75.., 76.., 77.., in specially emergencies.

Code 0000 should never be used, because the ground radar cannot identify your airplane.

OPERATION

Before operation it is recommended to perform a functional test

FUNCTIONAL TEST (SELFTEST)

- (a) Rotate the Function Selector knob from OFF to SBY. Operate the Transponder ca. 60 seconds in SBY-Mode, to warm the radio tube. To skip the SBY position do not shorten the Warm-Up time.
- (b) Rotate and hold the Function Selector knob to TST. The REPLY-lamp must light up.
- (c) Rotate Function Selector knob back to SBY.

MODE A-OPERATION (FUNCTION SELECTOR KNOB IN ON POSITION)

- (a) Adjust the desired transponder code using the Control Knobs (in SBY-Mode).
- (b) Rotate the Function Selector knob to the ON position.

The transponder now replies requests with the adjusted Code, but it has no altitude reporting. Mode C should be used preferable, instead of Mode A.

MODE C-OPERATION (FUNCTION SELECTOR KNOB IN ALT POSITION)

For Mode C a blind-encoder is installed in the airplane.

- (a) Adjust the desired transponder code using the Control Knobs (in SBY-Mode).
- (b) Rotate the Function Selector knob to the ALT position.

The Transponder replies with the adjusted Code and also reports your altitude to the controller. Mode C should be used preferable.

IDENT-PUSHBUTTON

When the controller asks you to 'squawk ident', press the IDENT-pushbutton briefly. This will cause the transponder to transmit a special identification signal, which helps the controller identify your airplane.

CIRCUIT PROTECTION

A 3 ampère circuit breaker protects the electrical system from overload in case of a short circuit in the Transponder.

8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.