

# **About Transponders**

Your Bendix/King transponder is a radio transmitter and receiver which operates on radar frequencies. Receiving ground radar interrogations at 1030 MHz, it returns a coded response of pulses to ground-based radar on a frequency of 1090 MHz.

As with other Mode A/Mode C transponders, the KT 76A replies with any one of 4,096 codes, which differ in the timing and number of pulses transmitted. By "replying" to ground transmissions, your KT 76A enables ATC computers to display aircraft identification, altitude and ground speed on Enroute, Approach or Departure Control radar screens. When the IDENT button is pressed, your aircraft will be positively identified to the Air Traffic Controller.



# Operating the KT 76A

To operate your KT 76A, first be sure that the Function Selector Knob (1) (or your avionics master switch) is turned OFF before starting the aircraft's engine(s). Then, select the proper reply code by rotating the four Control Knobs (2). The reply code will be displayed in the Code Windows (3).

After engine start, turn the Function Selector to SBY (Standby), giving your transponder about 45-50 seconds to become operational. As soon as you are airborne, turn the Function Selector to ON, which places the KT 76A in normal Mode A operation.

If your aircraft is equipped with an encoding altimeter, turn the Function Selector to the ALT (Altitude) position, for altitude reporting (Mode C) to ATC. Altitude reports are automatically updated in 100-foot increments, from – 1,000 feet to 35,000 feet.

#### **Important Codes**

Here are some of the more important ATC reporting codes you should know:

Code 7700: Reserved for emergencies. Use it to gain immediate attention and help from Air Traffic Control monitoring your location.

Code 7600: Signifies communications failure. Use it to tell the controller that your COMM radio is not working. If you can still receive transmissions, respond to ATC with your transponder, following ATC instructions.

Code 7500: Used to report a hijacking.

Code 0000: Reserved for military aircraft. Do not use this code!

### Squawk Ident

When you are asked to "ident" by ATC, briefly press the Ident pushbutton (4). Your aircraft will be positively identified to the Air Traffic Controller.

### **Reply Light**

During normal operation, the flashing Reply Light (5) indicates that the KT 76A is functioning properly and replying to interrogations from ground radar. Interrogations occur at 10-15 second intervals, corresponding to each radar sweep. Frequently, the reply light will blink almost continuously, meaning that the transponder is responding to interrogations from several radar stations.