SUPPLEMENT A7
TO THE AIRPLANE FLIGHT MANUAL DA 40

AUDIO AMPLIFIER/INTERCOM/MARKER BEACON RECEIVER
KMA 28
BENDIX/KING

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0.1 RECORD OF REVISIONS

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1	all	all	20 Apr 2001		

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 Audio Amplifier/Intercom/Marker Beacon Receiver KMA 28 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 KMA 28 is installed.

2. LIMITATIONS

No change.

3. EMERGENCY PROCEDURES

| In the event off a power failure of the KMA 28, the KMA 28 turns automatically to the
| 'Emergency Mode'. In the 'Emergency Mode‘, the pilot is connected directly to Com 1.
| This allows communication capability regardless of unit condition. Any time power is
| removed or turned off, the audio selector will be placed in the 'Emergency Mode'.

4A. NORMAL PROCEDURES

No change.

4B. ABNORMAL PROCEDURES

No change.

5. PERFORMANCE

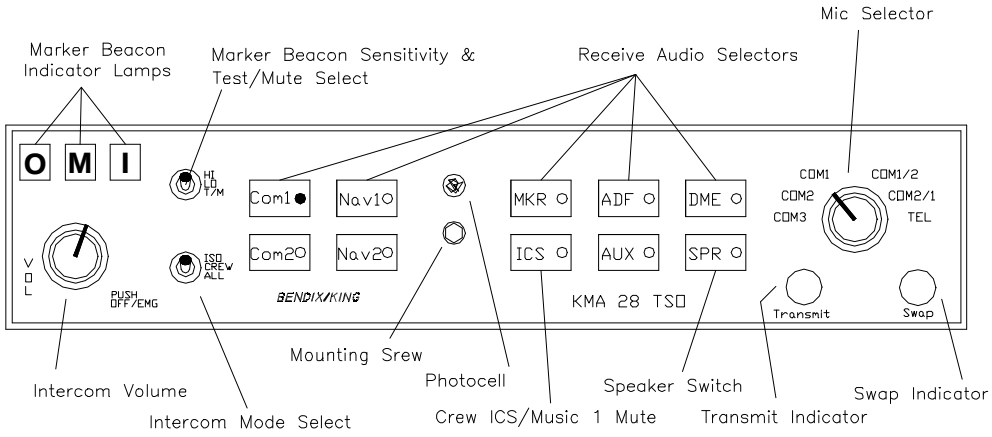
No change.

6. MASS AND BALANCE

| Upon removal or installation of the KMA 28 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



OPERATION

RECEIVE AUDIO SELECTORS

Receive audio is selected through two momentary and six latched, push-button, backlit switches. Com 1 and Com 2 are the momentary switches.

Because the rotary microphone selector switch controls what transceiver is being heard, the Com 1 and Com 2 push-buttons are of the momentary type and do not remain in when selected. This is also part of the 'auto‘ function. You will always hear the audio from the transceiver that is selected for transmitting by the rotary mic selector switch.

The users can identify which receivers are selected by noting which of the green switch LEDs are illuminated. Push buttons labeled Nav 1, Nav 2, DME, MKR (Marker), ADF, AUX (auxiliary), and SPR (Speaker) are 'latched‘ type switches. When one of these buttons is pressed, it will stay in the 'in‘ position. Press the switch again and it will be in the 'out‘ position and remove that receiver from the audio.

Key 'click‘

The KMA 28 is equipped with an electronic 'click‘ to provide additional feedback for button operation. To activate the key click, push and hold BOTH COM 1 and COM 2 receiver buttons for five seconds, and release. Repeat to defeat the click.

Speaker Amplifier

The 'SPR‘ in the push-button section stands for speaker. This switch will place all selected audio on the cockpit speaker when this switch is selected.

POWER SWITCH / EMERGENCY (EMG) OPERATION

Unit power is turned on and off by pushing the volume knob. In the off or 'Emergency' position, the pilot is connected directly to Com 1. This allows communication capability regardless of unit condition. Any time power is removed or turned off, the audio selector will be placed in the emergency mode.

The power switch also controls the audio selector panel functions, intercom, and marker beacon receiver. Unless the mic selector is in Com 3 mode, at least one of the selected audio LEDs will be on (Com 1 or Com 2).

MICROPHONE SELECTOR

When the mic selector switch is in the Com 1 position, both pilot and copilot will be connected to the Com 1 transceiver. Only the person who presses their PTT (Push To Talk), will be heard over the airplane radio. Turning the rotary switch to the Com 2 position will place pilot and copilot on Com 2.

The KMA 28 gives priority to the pilot´s PTT. If the copilot is transmitting, and the pilot presses his PTT, the pilot´s microphone will be heard over the selected com transmitter.

Turning the mic selector fully counterclockwise places the pilot and copilot on Com 3. Com 3 receive audio is automatically placed in the headset (and speaker if selected). Com 1 and/or Com 2 receiver audio can be selected to monitor those transceivers.

The KMA 28 has an automatic selector mode. Audio from the selected transceiver is automatically heard in the headsets and speaker. You can check this function by switching from Com 1 to Com 2 and watch the selected audio light on the selector change from COM 1 to COM 2. This ensures the pilot will always hear the audio from the transceiver he is transmitting on.

When transmitting, the COM 1 or COM 2 LED in the KMA 28 audio selector will blink as a further indication of the selected transmitter.

When switching the mic selector rotary switch from Com 1 to Com 2, while Com 2 audio had been selected, Com 1 audio will continue to be heard. This eliminates the pilot having to switch Com 1 audio back on, if desired.

When switching from Com 1 to Com 2 while Com 2 has NOT been selected, Com 1 audio will be switched off. In essence, switching the mic selector will not affect the selection of Com audio.

Split Mode

Turning the rotary switch to Com 1/Com 2 places the KMA 28 into 'Split Mode‘. This places the pilot on Com 1 and the copilot on Com 2. An example of this useful feature is when the pilot may want to talk to Air Traffic Control, while the copilot may be speaking to Flight Watch, although this mode has limitations as shown below.

Switching to Com 2/Com 1 will reverse the 'Split Mode‘ radio selection. The pilot will be on Com 2, and the Copilot will be on Com 1.

NOTE

Due to the nature of VHF communications signals, and the size constraints in general aviation airplane, it is probable that there will be some crossover in the Split mode, particularly on adjacent frequencies. In addition, if the Com radios in the installation utilize a 'transmit interlock‘ system, the split mode may not work properly unless the interlock feature is disabled.

NOTE

Split Mode does not turn off other (Nav, ADF, etc.) selected communications receiver and unswitched audio.

Split Mode ICS

In split mode, the pilot and copilot are isolated from each other on the intercom, simultaneously using their respective radios. Depressing the ICS button in the Split Mode will activate VOX intercom between the pilot and copilot positions. This permits intercommunication when desired between the crew. Pressing the ICS button again disables this crew intercom function.

INTERCOM SYSTEM

IntelliVox™ VOX-Squelch

No adjustment of the IntelliVox™ squelch control is necessary. Through three individual signal processors, the ambient noise appearing in all six microphones is constantly being sampled. Non voice signals are blocked. When someone speaks, only their microphone circuit opens, allowing him or her to communicate on the intercom.

The system is designed to block continuous tones; therefore people humming or whistling in monotone may be blocked after a few moments.

For best performance, the headset microphone must be placed within $^{1}/_{4}$ inch of your lips, preferably against them. It is also a good idea to keep the microphone out of a direct wind path. Moving your head through a vent air stream may cause the IntelliVox™ to open momentarily. This is normal.

Volume Control

The volume control knob adjusts the loudness of the intercom for the pilot and copilot only. It has no effect on selected radio levels or passengers volume level.

Adjust the radios and intercom volume for a comfortable listening level for the pilot. The Telex Echelon headsets have built-in volume controls; therefore, passenger volume can be adjusted at the headset.

Intercom Modes

The lower switch on the left side is a 3-position mode switch that allows the pilot to tailor the intercom function to best meet the current cockpit situation.

ISO (Up Position): The pilot is isolated from the intercom and is connected only to the airplane radio system. He will hear the airplane radio reception (and sidetone during radio transmissions). The copilot will hear passengers intercom, while the passengers will hear copilot intercom. Neither will hear airplane radio receptions or pilot transmissions.

ALL (Middle Position): All parties will hear the airplane radio and intercom.

CREW (Down Position): Pilot and copilot are connected on one intercom channel and have exclusive access to the airplane radios. Passengers can continue to communicate with themselves without interrupting the Crew.

Anytime the KMA 28 is in either the Com 1/Com 2, Com 2/Com 1, ('Split Mode'), the pilot and copilot intercom is controlled with the ICS button. The passengers will maintain intercommunications, but never hear airplane radios.

Mode	Pilot Hears	Copilot Hears	Passengers Hears	Comments
Iso	A/C Radios Pilot Sidetone (during radio transmission)	Copilot and passenger intercom	Passengers and Copilot intercom	This mode allows the pilot to communicate without the others bothered by the conversations. Copilot and passengers can continue to communicate.
All	Pilot Copilot A/C Radio Passengers	Copilot Pilot A/C Radio Passengers	Passengers Pilot Copilot A/C Radio	This mode allows all on board to hear radio reception as well as communicate on the intercom.
Crew	Pilot Copilot A/C Radio	Copilot Pilot A/C Radio	Passengers	This mode allows the pilot and copilot to concentrate on flying, while the passengers can communicate amongst themselves.

MARKER BEACON OPERATION

The Marker Beacon Receiver uses visual and audio indicators to alert you when the airplane passes over a 75 MHz transmitter.

The audio from the Marker Beacon Receiver can be heard by selecting the 'MKR' push-button switch.

A three-position switch is used to set the receiver sensitivity and to test the indicator lamps. Use 'High' sensitivity initially. This allows you to hear the outer marker beacon about one mile out. Then select the 'Low' sensitivity to give you a more accurate location of the Marker. When used only for approach markers, many pilots choose to leave the switch in the low sensitivity position.

The momentary down switch position is labeled 'T/M' (Test/Mute) and illuminates all three lamps simultaneously to assure they are in working order.

The 'T/M' position is also a Marker Beacon 'Mute' function. Pushing this switch while receiving a marker beacon signal will cause the audio to be temporarily silenced. No action is required to restore the audio in time for the next beacon.

8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.