

The "SAVIB 69" voice alert and Airborne Intercommunication System comprises a number of components which enable the functioning of :

- the plane's external and internal communications
- the vocal alert system (ADAV voice alert mode).



SYSTEM COMPONENTS

The "SAVIB" consists of :

- 1 audio management unit CTA 3488 (including the voice alert)
- 1 to 2 audio control panels depending on the type of the airplane (single or two-seater)
- 1 fuselage ground connection
- 1 telebriefing connection

USER AIRCRAFT

It is planned to instal this system on the Rafale airplane for the Air Force (single and two-seater) and the Navy studied by Dassault Aviation.

CHARACTERISTICS

- Each control panel provides an automatic transmit/receive function on the interphone channel.
- The ADAV system memory capacity of 255 messages corresponds to a global alert time of 5 minutes.

PURPOSE AND USE

The system allows for a maximum interface of :

- 4 transmitters/receivers (selective, tunable)
- 6 navigation channels (tunable)
- 4 listening channels (audio fixed level)
- 1 telebriefing connection
- 1 double track audio recording system
- 24 discrete signals corresponding respectively to one alert.

Each Audio Control Panel transmits the control status of its front panel to the Audio Management Unit via the ARINC 429 links. It is not involved in the processing of the audio signals.

The Audio Management Unit combines the audio signals from two processing channels. Each one is physically and electrically independant of the other and, in particular, each has its own power supply. The processing channels, identical and modular, can be switched and easily replaced.

The ADAV mode provides the crew with a listening monitor on a signal fixed level. Moreover, should this breakdown, the functioning of the A.M.S. would not be affected.

EMERGENCY

This emergency can be released by the pilot or co-pilot enabling the audio channel to be switched around in order to provide an operational system.

If several alarms occur simultaneously, the vocal alert mode is able to handle the priorities.

The "SAVIB" system is connected to the plane's redundant 1553B BUS which is managed by the ADAV mode. This bus is used for the maintenance and automatic control mode of the "SAVIB"

GENERAL CHARACTERISTICS

		BCA	CTA
Height	mm	65	194
Width	mm	146	60
Depth	mm	110	320
Weight	kg	0,7	3
Power consumption	W	10	20
MTBF	F~H	10,000	4,500
Supply	V	17 - 32	17 - 32

ELECTRICAL CHARACTERISTICS

Microphone input	High Level
Transmit microphone output	250 mV / 100 Ohms
Audio output	
Telebriefing	Stanag 4339
Recording	2,5 V / 4,7 Kohms
Audio headset	3,85 V / 600 Ohms
Bandwidth	300 ~ 5,000 Hz ± 3 dB
Distorsion	< 5%
Signal/noise ratio	> 65 dB
Anticrosstalk	> 80 dB ~ 1,000 Hz
Audio input receiver	7.75 V / 600 Ohms or 5.5 V / 600 Ohms

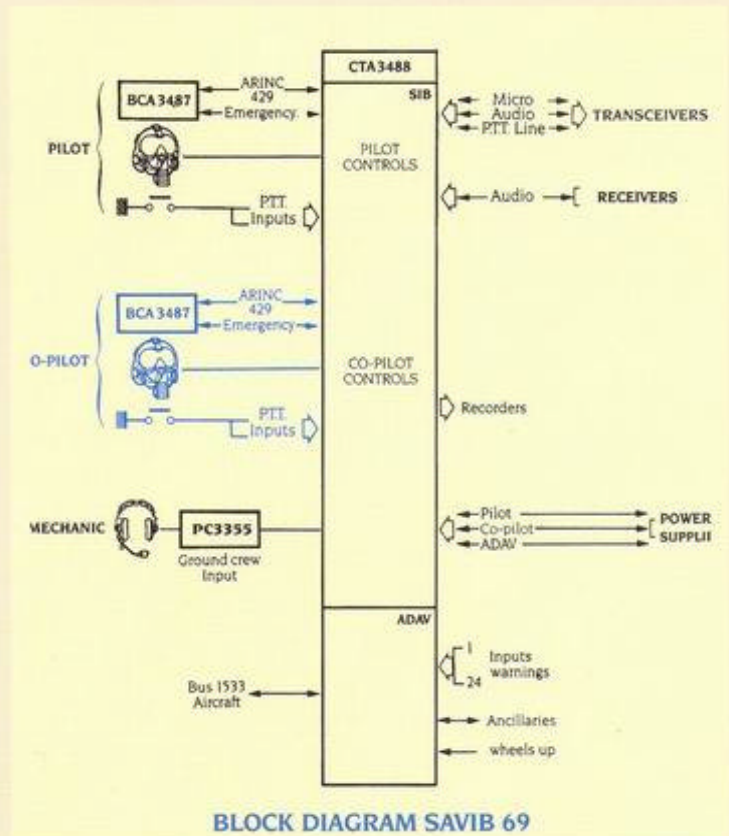
OPERATING CONDITIONS

According to the operations specified for the RAFALE.

STANDARD

It complies with the following standards :

- MIL STD 1553B
- STANAG 4339
- NFL 65211
- AIR7251 C, 9490
- DO160C
- DO178A
- AIR8490



BLOCK DIAGRAM SAVIB 69