



MISSION CRITICAL SYSTEMS DESIGNER, INTEGRATOR AND OPERATOR

SAF 3000 VOICE OPERATION PANELS



Any Aircraft in controlled airspace is handled by an Air Traffic Control centre. The controllers perform their mission using radar, radio and telephone services.

The controller communicates with the pilot using radio and with the other controllers using telephone and intercom.

The controller necessary equipments are all grouped on a control desk called Operator Position (OP). These equipments allow to :

- Set the communications with the other air controllers of local centre or adjacent centres,
- Select the necessary transceivers to communicate with the aircrafts according to the controlled airspace zones.

PRESENTATION

The new generation of "SAF 3000" equipments developed by CS (Communication and Systems) company includes the VOICE OPERATION PANELS associated to the Multifunction Terminal (MFT) to form an Operator Position.

Designed to be user-friendly, the panels allow the operator to operate the radio, telephone and intercom communications that are requested for the air flight control mission.

The main panels are :

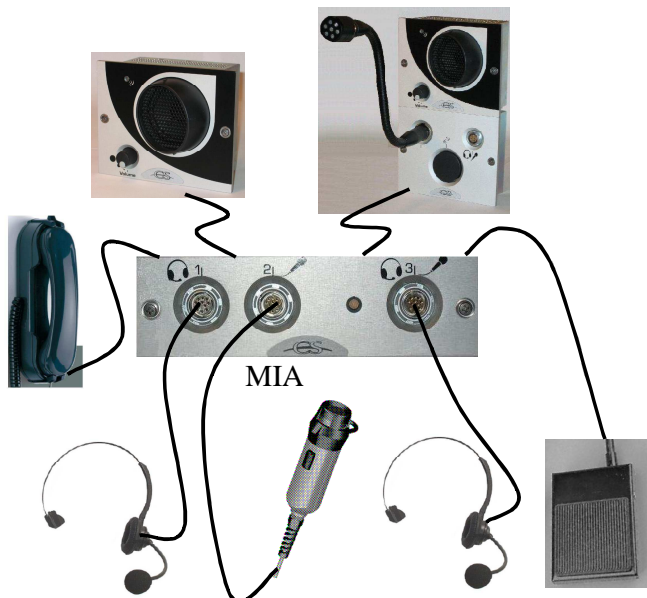
- MIA panel (connection of audio devices such as : headset, hand microphone, telephone handset, etc.),
- Radio Loudspeaker panel,
- Loudspeaker panel and microphone, dedicated to intercom service.



SAF 3000 VOICE OPERATION PANELS

GENERAL DESCRIPTION

- All panels and audio devices are organized around the MIA panel that is connected to the Multifunction Terminal.



RADIO LOUDSPEAKER PANEL

- The radio loudspeaker panel is connected to the MIA panel.



Characteristics

- Audio
 - output power : 2W
 - bandwidth : 300 - 3400Hz
 - harmonic distortion : <1%
 - volume adjustment with a minimum level threshold
 - power limitation command (prevent from audio feedback).
- External dimensions :
 - Width : 150 mm
 - Height : 150 mm
 - Depth : 85 mm

MIA PANEL

- The MIA panel is connected to the Multifunction Terminal and to the various operation panels (loudspeaker, microphone, etc.). On the front side, two headsets (one or two earphones) and one microphone with PTT.



Characteristics

- External dimensions :
 - Width : 170 mm
 - Height : 50 mm
 - Depth : 235 mm

Connectors

- Connector to MFT and other panels are SubD type.
- Connector to Headset, Handmike and Earphone are cylindric PushPull type

INTERCOM OPERATION PANEL

- The intercom operation set includes :
 - One loudspeaker panel,
 - One microphone panel.



- The microphone panel allows to use one headset and two other types of microphones :
 - gooseneck microphone,
 - microphone with PTT,
 - headset microphone.

Characteristics

- Audio
 - microphone sensitivity : 50mV gooseneck microphone, 250mV for other microphones,
 - earphone output power : 10mW on 600 Ohms
 - bandwidth : 300 - 3400Hz
 - harmonic distortion : <1%
 - Audio loudspeaker attenuation when PTT active
- The microphone panel dimensions are identical to the loudspeaker panel ones.

