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ELECTRICAL SUPPLY

RADIO COMMUNICATION

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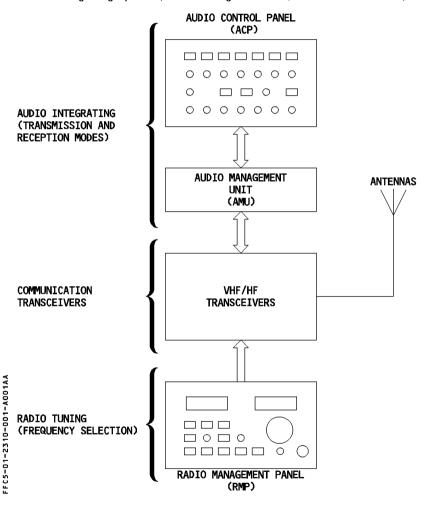
SEQ 001

REV 07

GENERAL

The communications system comprises the following subsystems:

- VHF / HF transceivers
- Radio tuning systems (Radio Management Panels)
- Audio integrating system (Audio Management Unit, Audio Control Panels)





RADIO COMMUNICATION

1.23.10

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SEQ 001

VHF / HF / SELCAL

The flight crew can use either of the three Radio Management Panels (RMPs) to tune each transceiver.

To transmit, the flight crew uses the Audio Control Panel (ACP) to select a VHF or HF system. The ACP works through the Audio Management Unit (AMU). Each system is connected to the RMPs for frequency selection, and to the AMU for connection to the audio integrating and SELCAL (selective calling) systems.

- VHF

Three identical VHF communication systems are installed. Each system has a transceiver in the avionics compartment, and an antenna on the fuselage. Only VHF1 functions in EMER ELEC CONFIG. Its range is from 118.0 to 136.975 MHZ. The VHF has an alarm to indicate if the microphone is stuck (◄). If a microphone is in the emission position for more than 30 seconds, an interrupted tone sounds for 5 seconds, and the emission is turned off. To reactivate the emission, the crew releases the push—to—talk button and presses it again.

- HF

Two identical HF communication systems are installed. Each has a transceiver installed in the avionics compartment, and a common tuner and antenna in the vertical stabilizer. Its range is from 2.8 to 24.0 MHZ.

SELCAL (Selective Calling)

Upon receiving a call code corresponding to that of the aircraft, the SELCAL system aurally and visually advises the flight crew that a ground station is calling the aircraft. The aural signal is inhibited during takeoff and landing.

ALL

RADIO TUNING

DESCRIPTION

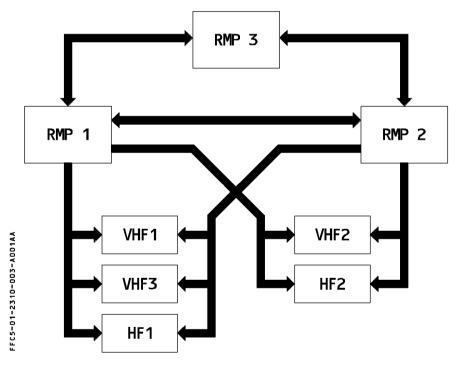
Identical RMPs:

- Give the flight crew control of all radio communication systems (VHF and HF frequency control).
- · Back up to FMGC's for controlling radio navigation systems (Refer to 1.34).

Two RMPs are on the center pedestal and the third on the overhead panel.

Each RMP can control any VHF or HF transceiver. RMP1 and 2 are connected directly to all VHF and HF transceivers, whereas RMP3 is connected to them via RMP1 and 2. RMPs are connected together so that each RMP is updated to the selections made on other RMPs.

Only RMP1 functions in EMER ELEC CONFIG.



If two RMPs fail, the remaining one controls all the VHF and HF transceivers. If ACARS or ATSU is installed, do not use VHF3 for voice communication.

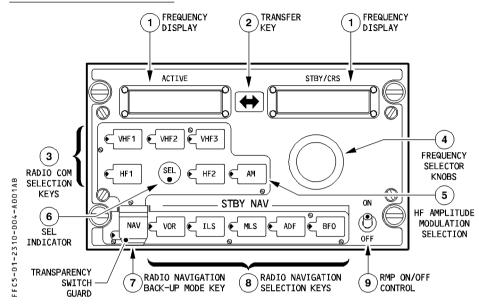
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RADIO COMMUNICATION

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RADIO MANAGEMENT PANEL



1) Frequency displays

- The ACTIVE display window shows the active frequency of the selected radio, which is identified by a green light on the selection key.
 - The STBY/CRS (standby / course display) display window shows a standby frequency that the pilot can activate by pressing the transfer key or change by rotating the tuning knobs.
 - For a description of the CRS function see 1.34.

R (2) Transfer key

- R Pressing this key moves the active frequency to the standby window and the standby frequency to the active window.
- R This tunes the selected receiver to the new active frequency.

R (3) Radio comm. selection keys

- R When the pilot presses one of these keys:
 - The ACTIVE window displays the frequency set on that radio.
- R The STBY/CRS window displays the selected frequency or course.
- R The selected key displays a green monitor light.

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COMMUNICATIONS RADIO COMMUNICATION

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P 5

4 Frequency selector knobs

The pilot uses these concentric knobs to select the STBY frequency or CRS.

The outer knob controls whole numbers: the inner knob controls decimal fractions.

5 AM pb sw

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If the aircraft has HF radios and the flight crew has selected an HF tranceiver, this switch selects the AM mode. (The default mode is the SSB, or single side-band, mode). This key displays a green monitor light when the AM mode is active.

(6) SEL indicator

The SEL indicator comes on white on both RMPs when a transceiver normally associated with one RMP is tuned by another :

- · VHF1 tuned by RMP2 or 3.
- · VHF2 tuned by RMP1 or 3,
- · VHF3, HF1, HF2 tuned by RMP1 or 2.
- (7) NAV pb sw (with transparent switchguard)

The pilot presses this key to be able to select navigation receivers and courses through the RMP. It does not affect the selection of communication radios and their frequencies Refer to 1.34 for additional information.

(8) Radio navigation selection keys

The pilot presses one of these keys to select a navigation radio to control through this RMP. This turns on the green monitor light in the key. (Refer to 1.34) for additional information.

9 ON/OFF sw

This switch controls the power supply of the RMP.

<u>Note</u>: RMP3 is able to control VHF and HF transceivers through RMP1 and RMP2 even when they are OFF.

Γ

P 1

INTERCOMMUNICATION SYSTEM

SEQ 001

1.23.20

REV 09

GENERAL

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Intercommunication is divided into two main systems:

- the audio management system.
- the cabin intercommunication data system.

AUDIO MANAGEMENT SYSTEM

The cudia mone

The audio management system allows the flight crew to use :

- all the radio communication and radio navigation facilities installed on the aircraft in transmission and reception mode.
- the interphone systems
- the call systems
- the passenger address system

R The audio management system includes :

- an audio management unit (AMU)
- three audio control panels (ACPs)
- sockets at each pilot's station
 - \cdot headset jack, boomset connector and hand microphone connector for pilot, copilot, and third occupant
 - · headset jack for the fourth occupant
- one interphone jack socket at the ground power receptacle
 - boomsets for the pilot, copilot, and third occupant and three hand microphones.
- three cockpit oxygen mask microphones
- R one radio press-to-talk switch on each sidestick
- R one SELCAL code selection panel
- R two cockpit loudspeakers with separate volume controls
- R an audio switching facility
- R If audio channel 1 or 2 fails due to a failure eiher in an ACP or the corresponding AMU, the crew can use the AUDIO SWITCHING selector to select the third audio channel.

INTERCOMMUNICATION SYSTEM

1.23.20 SEQ 001

P 2 **REV 17**

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HAND OXY SIDE SPKR BOOMSET MIKE MASK STICK 0 0 0 AUDIO CONTROL 0 0 0

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INTERCOMMUNICATION SYSTEM

1.23.20

SEQ 001

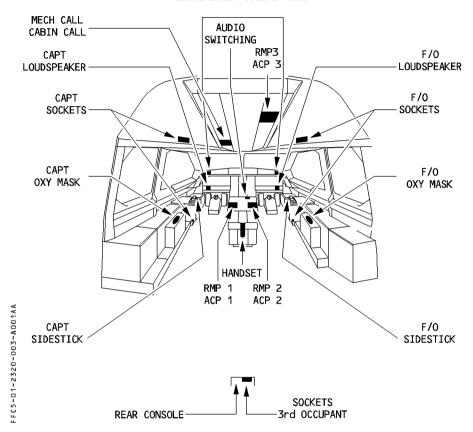
REV 17

P 3

COMPONENTS' LOCATION

R

LOUDSPEAKER VOLUME KNOB





INTERCOMMUNICATION SYSTEM

1.23.20

P 4

SEQ 001

REV 08

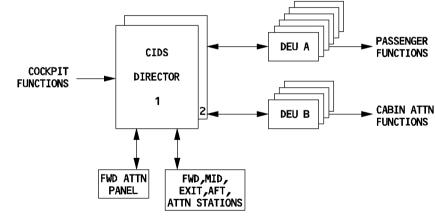
CABIN INTERCOMMUNICATION DATA SYSTEM

The Cabin Intercommunication Data System (CIDS) provides signal transmission, control and processing for the following cabin systems:

- Cabin and service interphone
- Passenger address
- Passenger signs
- Reading lights
- General cabin illumination
- Emergency evacuation signalling
- Lavatory smoke indication
- Passenger entertainment music and video

The CIDS includes the following main components:

- Two CIDS directors connected in parallel, one is active the other in stand-by.
- Forward attendant panel for controls of the cabin systems. It also includes a programming and test module which allows reprogramming in case of cabin configuration changes.
- Attendant stations (FWD, MID, EXIT, AFT).



FFC5-01-2320-004-A001AA

Decoder / Encoder Units (DEUs) are linked to the two directors.

- · Type A (for passengers): installed in three rows (left, center, right). The loudspeakers, signs, CALL buttons, CALL lights and general illumination ballast units are divided into small groups each connected to a DEU A.
- · Type B (for attendants): installed on each cabin side. The Area Call panels, attendant handsets, slide / door pressure sensors, attendant indicator panels are connected to DEU B.

A340 SIMULATOR FLIGHT CREW OPERATING MANUAL

COMMUNICATIONS

INTERCOMMUNICATION SYSTEM

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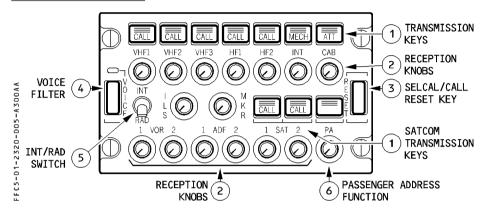
SEQ 300

REV 19

CONTROLS

AIRBUS TRAINING

AUDIO CONTROL PANEL



1 Transmission keys

Pressed : The associated channel is selected for transmission.

The three green lines come on.

The pilot deselects the channel by pressing the pushbutton again, or

by selecting another channel.

CALL It : The legend flashes amber (and buzzer sounds) when the SELCAL

system detects a call.

MECH It : The legend flashes amber (and buzzer sounds) for a call from the nose

gear bay. The MECH light goes off after 60 seconds, if it is not reset. : The legend flashes amber (and buzzer sounds) for a call from a cabin

ATT It : The legend flashes amber (and buzzer sounds) for a call from a cabin attendant. The ATT light goes off after 60 seconds, if it is not reset.

SAT CALL It: The legend flashes amber, when the SATCOM system detects a call.

The three green lines flash during the establishment of air to ground

calls, or when SATCOM calls are on hold.

After call establishment, the three green lines remain steady.

(2) Reception knobs

- Pressing and releasing the knob (knob out) selects the associated audio reception channel and the integral white light comes on.
- Rotating the knob adjusts the volume.
- The ANN LT sel controls the brightness.
- Pressing the knob (knob stays in) disconnects the associated audio reception channel.

R Note: For reception of DME audio navigation signals associated to an ILS or MLS station, the LS pushbutton on the FCU must also be selected.



INTERCOMMUNICATION SYSTEM

1.23.20

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SEQ 001 REV 09

RESET key

Pressing this key extinguishes CALL, MECH and ATT lights and cancells the buzzers.

(4) VOICE key

This key allows the flight crew to inhibit the audio navigation signals (VOR, ADF). Pressing this key filters out ident signals and turns on the green ON light.

(5) INT / RAD sw

This switch operates as a push-to-talk switch for boom mike or oxygen mask mike.

INT

: Boom and mask mikes transmit on interphone regardless of which transmission key is selected. For reception on interphone, the crew member must have the INT selected

(INT reception knob out).

Neutral : Reception is normal. Boom and mask mikes do not transmit.

RAD : Boom and mask mikes transmit on the radio selected on the

audio control panel.

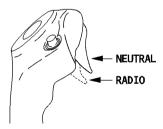
Passenger address (PA) function

PA transmission key and reception knob. (Refer to 1.23.20)

SIDE STICK RADIO SELECTOR

(press and hold)





This selector has the same function as the INT/RAD switch on the ACP.

NEUTRAL (spring-loaded): Boom and mask mikes are dead. Reception is normal.

RADIO (aft position) : Boom and mask mikes transmit the equipment selected by

the transmission key on the ACP.

Note: If RADIO is selected on the side stick when the INT/RAD switch is on INT, the radio function has priority over the interphone function.

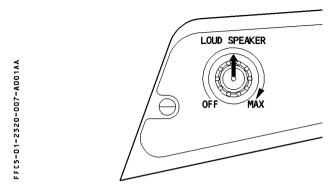
INTERCOMMUNICATION SYSTEM

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SEQ 001

REV 09

LOUDSPEAKER VOLUME KNOB



This knob adjusts the volume of the loudspeaker for radio communication.

OFF : Loudspeaker does not respond to signals from the aircraft's radio

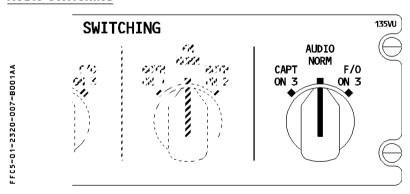
equipment.

Clockwise rotation: Loudspeaker broadcasts signals from the aircraft's radio equipment

at increasing volume.

Note: This knob does not control the loudness of aural alert and voice message.

AUDIO SWITCHING



The crew can switch to the third audio channel if ACP1 or ACP2 fails.

When the crew does this, it takes away the third occupant's access to the acoustic equipment.

NORM : Each crew member uses his dedicated communication equipment.

CAPT ON 3 : The pilot uses his acoustic equipment and the third occupant's ACP.

F/O ON 3 : The copilot uses his acoustic equipment and the third occupant's ACP.



COMMUNICATIONS INTERCOMMUNICATION SYSTEM

1.23.20

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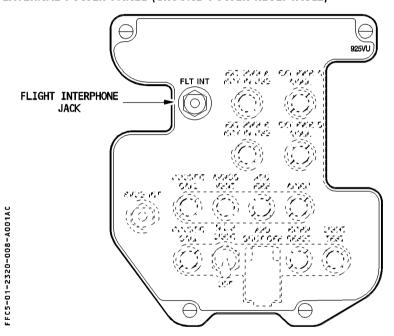
SEQ 001

INTERPHONE SYSTEMS

FLIGHT INTERPHONE SYSTEM

This system allows the flight crew to communicate among themselves and, through a jack on the external power panel, with the ground mechanic.

EXTERNAL POWER PANEL (GROUND POWER RECEPTACLE)



COCKPIT OPERATION FOR GROUND MECHANIC COMMUNICATION

	MECH TRANSMISSION KEY ON ACP	INT RECEPTION KNOB ON ACP	INT/RAD SW ON ACP	PUSH TO TALK ON HANDMIKE
BOOMSET OR OXYGEN MASK	PRESSED	OUT	INT OR RAD (maintained)	
HANDMIKE	PRESSED	OUT		PRESSED

INTERCOMMUNICATION SYSTEM

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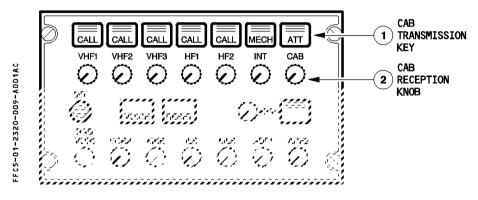
SEQ 001

REV 08

CABIN INTERPHONE SYSTEM

The system provides communication and call facilities between:

- flight crew and attendant stations
- two attendant stations



(1) CAB transmission key

Depressed: Three green lines come on.

Boomset, mask mikes and hand mike may be used for cabin interphone.

(2) CAB reception knob

Depressed and released: The integrated white light comes on.

(knob out) Audio signal from cabin is received.

Rotate knob to adjust volume.

Depressed : The white light goes off.

(knob in) Cabin interphone is disconnected.

COCKPIT OPERATION

	CAB TRANSMISSION KEY ON ACP	CAB RECEPTION KNOB ON ACP	INT/RAD SW ON ACP	PUSH TO TALK ON HAND MIKE
BOOMSET OR OXYGEN MASK	DEPRESSED	OUT	RAD	ı
HANDMIKE	DEPRESSED	OUT	_	PRESSED



INTERCOMMUNICATION SYSTEM

1.23.20

P 10

SEQ 001 | REV 09

SERVICE INTERPHONE SYSTEM

The system allows for communication between:

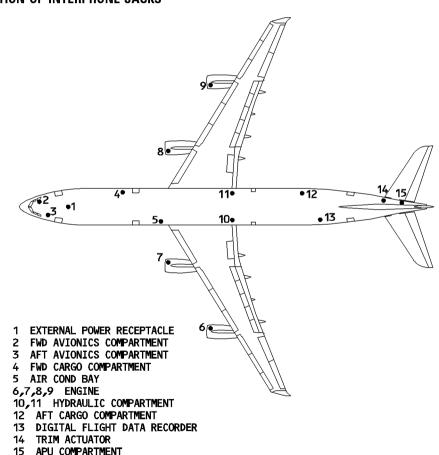
- the flight crew and the service interphone jacks
- the flight attendant stations and the service interphone jacks
- the different service interphone jacks.

The Service Interphone system has:

- fifteen interphone jacks
- an OVRD switch located on the overhead panel.

The audio lines from the interphone jacks are connected to both CIDS directors.

LOCATION OF INTERPHONE JACKS



INTERCOMMUNICATION SYSTEM

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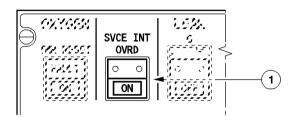
SEQ 001

REV 09

CONTROLS AND INDICATORS AT OVERHEAD PANEL

For maintenance purpose only.

FFC5-01-2320-011-A001AA



(1) SVCE INT OVRD pb sw

Auto: Ground personnel can communicate with the flight crew by means of the service interphone jacks after the aircraft has landed. The landing gear must

be compressed.

ON : Communication is possible when the landing gear is not compressed.

The ON light is white.

COCKPIT OPERATION

	CAB TRANSMISSION KEY ON ACP	CAB RECEPTION KNOB ON ACP	INT/RAD SW ON ACP	PUSH TO TALK ON HANDMIKE	SVCE INT OVRD PB SW
BOOMSET	PRESSED	OUT	RAD (maintained)		ON IF L/G NOT
HANDMIKE	PRESSED	OUT		PRESSED	COMPRESSED



INTERCOMMUNICATION SYSTEM

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SEQ 001

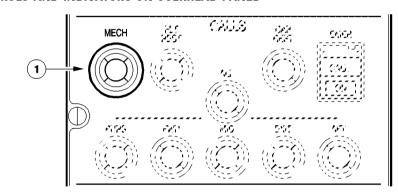
REV 09

CALL SYSTEMS

GROUND MECHANIC CALL

The system allows the flight crew and ground mechanics to communicate each other.

CONTROLS AND INDICATORS ON OVERHEAD PANEL



1 MECH pb

FFC5-01-2320-012-A001AE

Pressed (and held) : COCKPIT CALL lights up blue on the external power panel.

An external horn sounds.

Released : COCKPIT CALL remains lighted.

The ground mechanic can extinguish it by pressing the HORN RESET pushbutton on the external power panel. The

external horn stops sounding.

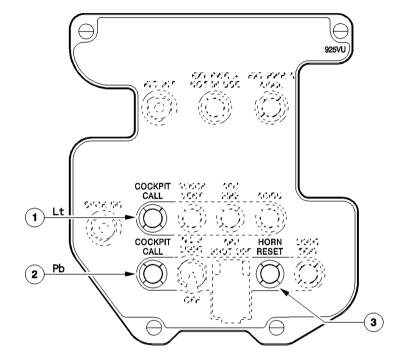
Note: To communicate with the ground mechanic, the flight crew must select the MECH key and the INT reception knob on the ACP must be selected.

INTERCOMMUNICATION SYSTEM

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SEQ 001 | REV 09

CONTROLS AND INDICATORS ON EXTERNAL POWER PANEL



1) COCKPIT CALL It

FFC5-01-2320-013-A001AB

The blue light appears when cockpit calls the ground mechanic. An external horn also sounds.

(2) COCKPIT CALL pb

Pressed : This calls the cockpit.

The MECH lights flash amber on the ACPs and a buzzer sounds.

Released : The MECH lights go out after 60 seconds if they are not reset on the

ACPs. The buzzer stops.

(3) HORN RESET pb

Pressed : The COCKPIT CALL light goes out.

The external horn stops sounding.



INTERCOMMUNICATION SYSTEM

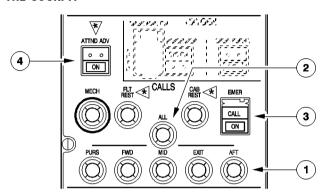
1.23.20 SEQ 001 P 14

REV 09

CABIN CALL SYSTEM

This system is for communication between the cockpit and the cabin.

CALL FROM THE COCKPIT



R (1) FLT REST / CAB REST / PURS / FWD / MID / EXIT / AFT pb

Pressed

FFC5-01-2320-014-AD01AA

: A steady pink light comes on at the corresponding area call panel. CAPTAIN CALL appears at the corresponding attendant indication panel and a green light comes on.

A high-low chime sounds through corresponding loudspeaker.

② ALL pb

Pressed

: All stations respond as above simultaneously CALL ALL CAPT appears on the attendant indication panels.

3 EMER pb sw (guarded)

ON

: Pink light illuminates at all area call panels.

CALL PRIO CAPT appears at all attendant indication panel and a red light

comes on.

High-low chime (repeated 3 times) sounds through all loudspeakers.

ATT amber lights flash on Audio Control Panels.

ON It : This light flashes white for an emergency call from the cockpit to the

cabin.

CALL It: This light flashes amber for an emergency call from the cockpit or cabin.

For an emergency call from the cabin to the cockpit:

The white ON light and amber CALL light flash.

- The amber ATT lights flash on the audio control panels.

- Three long buzzers sound in the cockpit.

The system reset when the attendant hangs up the relevant handset.



INTERCOMMUNICATION SYSTEM

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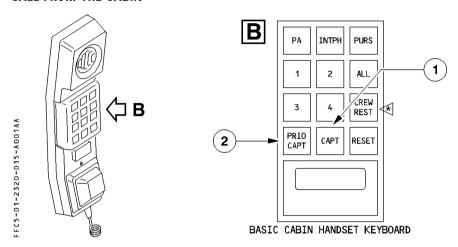
SEQ 001

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(4) ATTND ADV pushbutton <</p>

ON : When pressed, a green light on the attendant area call panel comes on. It is used to inform cabin crew of imminent takeoff or landing. The ON light comes on in blue.

CALL FROM THE CABIN



1 CAPT key

Pressed: In the cockpit, the "ATT" lights up on the ACP, and a buzzer sounds.

In the cabin, "CAPTAIN" appears on the AIP, where the CAPT button was pressed. The buzzer is inhibited during takeoff and landing.

(2) PRIO CAPT key

Pressed: This key is used for emergency calls. In the cockpit, the "ATT" lights up on the ACP, and three buzzers sound.

In the cabin, "PRIO CAPTAIN" appears at the AIP, where the PRIO CAPT

button was pressed. The buzzer is inhibited during takeoff and landing.

R

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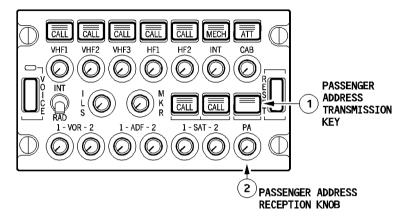
INTERCOMMUNICATION SYSTEM

1.23.20 SEQ 100 P 16

REV 17

PASSENGER ADDRESS

The passenger address system allows flight personnel to make passenger announcements in the cabin via the loudspeakers. It can be operated from the cockpit (with ACP, or handset), or from the cabin (attendant stations).



1) PA transmission key

Pressed and held : The flight crew may use a boom, mask, or hand mike to

make an announcement. Three green lines come on.

Note: The flight crew may use a cockpit handset to make PA announcements

without action on the ACPs.

(2) PA reception knob

Pressed and released (knob out)

: The message goes to the loudspeakers and the integral white light comes on.

The flight crew can rotate the knob to adjust the volume.

Pressed : The PA system is disconnected (knob in) The white light goes out.

R

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INTERCOMMUNICATION SYSTEM

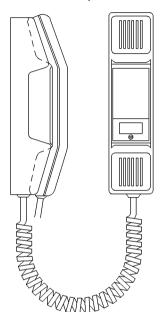
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REV 20

SEQ 001

Cockpit handset

R The cockpit handset at the bottom of the pedestal is used for PA announcements.





INTERCOMMUNICATION SYSTEM

1.23.20

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SEQ 001 REV 09

PA from cockpit

	PA TRANSMISSION KEY ON ACP	PA RECEPTION KNOB ON ACP	PUSH TO TALK ON HANDMIKE	PUSH TO TALK ON HANDSET
BOOMSET OR OXYGEN MASK	PRESSED (held)	OUT		
HANDMIKE	PRESSED (held)	OUT	PRESSED	
HANDSET				PRESSED

A340 SIMULATOR FLIGHT CREW OPERATING MANUAL

COMMUNICATIONS

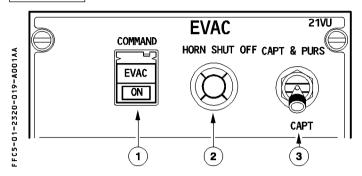
INTERCOMMUNICATION SYSTEM

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REV 16

SEO 001

EMER EVAC



1 COMMAND pb

ON : In the cockpit : - EVAC light flashes red.

In the cabin $\,:\,$ - EVAC RESET lights flash at all attendant

panels.

 "EVACUATION ALERT" appears on all attendant indication panels and a red light

flashes.

Specific evacuation tone sounds.

Off : The alert is stopped.

The EVAC light flashes red when the alert is activated.

(2) HORN SHUT OFF pb

This button silences the cockpit horn (generated when evacuation is activated from the cabin).

(3) CAPT and PURS / CAPT sw

CAPT and PURS: The alert may either be activated from the cockpit or the cabin.

CAPT : The alert may only be activated from the cockpit.

If one of the cabin EVAC CMD keys is pressed, only the cockpit

horn sounds for 3 seconds.

R

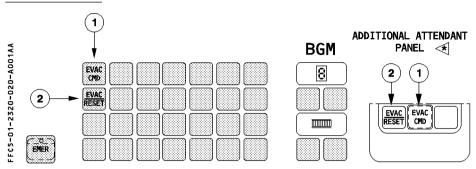
R



INTERCOMMUNICATION SYSTEM

1.23.20 SEQ 001 P 20 REV 14

PURSER STATION



1 EVAC CMD key

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When this key is pressed:

In the cockpit: — The cockpit horn sounds.

EVAC It flashes red.

In the cabin : - EVAC RESET lights flash red at all attendant stations.

- EVAC CMD light comes on green on the forward attendant panel.
- "EVACUATION ALERT" is displayed on all attendant indication panels.
- The EVAC tone sounds.

(2) EVAC RESET key

R Pressing this key silences the EVAC tone.

COCKPIT VOICE RECORDER

1.23.30

SEQ 001

P 1 REV 09

DESCRIPTION

The cockpit voice recorder (CVR) records:

- direct conversations between crew members in the cockpit
- all aural warnings sounded in the cockpit
- communications received and transmitted by radio
- intercom conversations between crew members
- announcements transmitted over the passenger address system, if PA reception is selected on third audio control panel.

Only the last 30 minutes of recording are retained.

The CVR system consists of :

- a remote microphone behind overhead panel,
- a crashproof four-track recorder, equipped with an underwater locating beacon, in the aft section of the aircraft
- a control panel on the overhead panel.

It is energized automatically:

- on ground during the first 5 minutes after the aircraft electrical network is energized
- on ground with one engine running,
- in flight

It is stopped automatically 5 minutes after last engine shutdown.

On the ground, personnel can energize the CVR manually by pressing GND CTL pushbutton.



COCKPIT VOICE RECORDER

1.23.30 SEQ 001 P 2

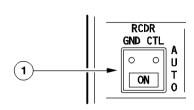
REV 17

CONTROLS AND INDICATOR ON OVERHEAD PANEL

RECORDER

FFC5-01-2330-002-A001AA

R



GND CTL sw (spring-loaded)

ON : The CVR and the digital flight data recorder (DFDR) are energized. R

The ON light comes on in blue.

AUTO: The CVR and DFDR are automatically energized according to the logic (see

page 1).

The ON light goes off.

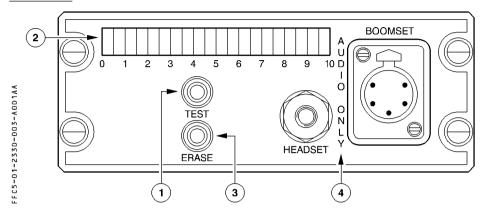
COCKPIT VOICE RECORDER

1.23.30 P 3

SEO 001

REV 15

CVR PANEL



TEST pb

Pressed

: This activates the test, if the CVR is energized. The result of the test is visible on the test result indicator. If an acoustic equipment is plugged into the jack, the test will be heard as low-frequency signal.

(2) Test result indicator

Green and red LEDs compose the indicator.

Illumination of one or more green LEDs indicates that the test result is good.

(3) ERASE pb

R

: This erases the tape completely, if the aircraft is on the Pressed for 2 seconds

ground, and the parking brake is on.

(4) Headset and Boomset jacks

When a headset or boomset is plugged into the jack:

- Cockpit sounds, picked up by the microphone, are audible.
- The test tone is audible, when the TEST pushbutton is pressed.
- The erase tone is audible when the ERASE pushbutton is pressed.



COMMUNICATIONS SATCOM

1.23.45

P 1

SEQ 100

REV 14

GENERAL

R

R

R

R

The Satellite Communication (SATCOM) system allows the exchange of information between the aircraft and a Ground Earth Station (GES), via geosynchroneous satellites. It provides up to six independent channels:

One channel is used for data transmissions (ATSU or ACARS). Two or five channels are used for voice transmissions (cockpit or cabin voice). The cockpit voice function must be activated, in order for it to be available. The cabin telephone system must be installed, to be able to use cabin voice function.

ACARS or ATSU communications normally transmit via VHF3. They automatically switch to SATCOM when VHF3 is not available.

The cockpit voice interface is controlled by the Audio Control Panels (ACPs) for call set-up and call termination, and by the MCDU for the call number selection. It allows the crew:

- To initiate air to ground calls and to receive ground to air calls.
- To select the call priority, in case of air to ground calls.
- To use manual dial or pre-recorded phone numbers.

SATCOM functions are programmed through the Owner Requirement Table (ORT), according to airline needs.

Due to the highly customized programming, the SATCOM functions may vary for different airlines and are, therefore, not described in detail.



SATCOM

1.23.45 SEO 202 P 2 REV 16

CONTROLS AND INDICATORS

ACP INTERFACE

Refer to the 1.23.20 description.

MCDU INTERFACE

SATCOM MAIN MENU PAGE

The crew accesses this page by selecting SAT on the MCDU MAIN page.

FFC5-01-2345-002-A202AA



2L (4L) : This field displays the SATCOM channel 1 (2) status :

 $(Label\ line) \ \ -\ READY\ TO\ CONNECT \ \ :\ The\ channel\ is\ ready\ to\ support\ a\ call.$

logged).

DIALING : Cockpit call in progress.

INCOMING CALL : Advises of an incoming ground to air call.

CONNECTED : The circuit is connected.

CALL FAILED : The transmission is interrupted.

2L (4L) : This field displays :

(Data line) - The title of the selected phone number, in case of an air to ground call.

The number, if the MANUAL DIAL option is used.
 GRND-AIR CALL, in case of a ground to air call.

5R : This key provides access to the Manual Dial page. This page allows the

dialing of a phone number.

6L : This key provides access to the SATCOM STATUS page, which contains LOG

ON and channel status information.

6R : This key provides access to the SATCOM DIRECTORY PAGE.



SATCOM

1.23.45 P 3

SEQ 102

REV 16

SATCOM DIRECTORY PAGE

This page provides access to 4 phone number lists, where phone numbers can be memorized, according to their priority.

2 A A	[SATCOM DIRECTORY)
A 10	1L	<emergency< td=""><td>1R</td></emergency<>	1R
0 3	2L	<safety< td=""><td>2R</td></safety<>	2R
2-0	(3L	<non-safety< td=""><td>3R</td></non-safety<>	3R
234	4L	<public< td=""><td>4R</td></public<>	4R
110	[5L]		5R
- 53	(d.	<return< td=""><td>6R</td></return<>	6R
E.	Į		J

1L: EMERGENCY for Priority 1 - Reserved for emergency and distress phone

numbers only.

2L : SAFETY for Priority 2 - Reserved for regulatory and flight safety phone

numbers only.

3L: NON-SAFETY for Priority 3 - Reserved for non flight safety phone numbers.

4L: PUBLIC for Priority 4 - Reserved for personal phone numbers.

6L: This key is used to return to the SATCOM MAIN MENU page.



SATCOM

1.23.45 SEQ 102

P 4 REV 16

SATCOM CATEGORY NUMBERS PAGE

The CATEGORY NUMBERS page provides access to the pre-recorded phone numbers. As an example, the following figure shows the SAFETY CATEGORY NUMBER page.



SATCOM SAFETY 1L *IOR CONTROL 1R 00495218796214 SF *CDG ARPT 2R E00985647213369853 3R 3L *HGK ARPT 004632189752123 4R 4L ***ORD ARPT** SORT* 4533356722268 [5L] 5R *ORY ARPT FIND* E0044335662137 6L 6R <RETURN

1L, 2L, 3L, 4L, 5L

: These fields display the phone numbers and their titles.

When pressed, they dial the corresponding phone number.

There are two types of numbers:

- Protected : Displayed in green.

- Unprotected : Displayed in blue brackets.

1R : This field displays the selected SATCOM channel.

4R : This function alphabetically sorts the phone numbers, within the

category, by title,

5R : This function automatically searches for a phone number from the beginning of this category, by entering up to the first three

letters of the title into the scratchpad, and by pressing 5R.

6L : This key is used to return to the SATCOM DIRECTORY page.



COMMUNICATIONS SATCOM

P 5

SEQ 102

1.23.45

REV 16

SATCOM MANUAL DIAL PAGE

The MANUAL DIAL PAGE enables the crew to initiate an air to ground call by manually entering a phone number.



2L (data line): This field displays the phone number in blue brackets, after having

been entered in the scratchpad.

4L : This field displays the selected SATCOM channel.

5L : This field displays the priority for the manual dial number. The priority

can be changed by pressing the slew up or down keys on the MCDU

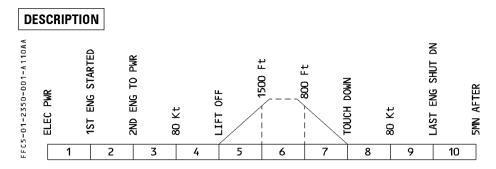
keyboard.

6L : This key is used to return to the SATCOM MAIN MENU page.



COMMUNICATIONS WARNINGS AND CAUTIONS

1.23.50 P 1 SEQ 110 REV 14



E / WD: FAILURE TITLE conditions	AURAL WARNING	MASTER LIGHT	SD PAGE CALLED	LOCAL WARNING	FLT PHASE INHIB
VHF 1 (2) (3) EMITTING HF 1 (2) EMITTING Transceiver emitting more than 60 s CIDS 1 + 2 FAULT Total loss of CIDS CIDS PA FAULT Loss of passenger address part	SINGLE CHIME	MASTER CAUT			3,4,5
ACARS 1 (2)(1+2) FAULT < 4	NIL	NIL			
SATCOM FAULT Telephone and ACARS transmissions are lost. SATCOM DATA FAULT ACARS transmissions via SATCOM are lost. Telephone transmissions are still available. SATCOM VOICE FAULT Telephone transmissions are lost, ACARS is still	NIL	NIL	NIL	NIL	1*,3, 4,5 7, 8, 10* 3,4,5, 7,8
transmitted via SATCOM.	SINGLE	MASTER			3,4,5 7,8
VHF3 DATA FAULT ⊲	CHIME	CAUT			

^{*} The SATCOM FAULT message is inhibited in flight phases 1 and 10, when the IRS are not aligned.



WARNINGS AND CAUTIONS

1.23.50

P 2

SEQ 100 | REV 17

MEMO DISPLAY

- Displays "SEAT BELTS" and "NO SMOKING" messages in green, when the corresponding sign on the overhead panel is on.
- Displays "AUDIO SWTG" in green, if the AUDIO SWITCHING selector is not on NORM.
- Displays "PA IN USE" (optional) in green, during passenger address operation.
- Displays "VIDEO IN USE" (optional) in green, during video operation in the cabin.
- Displays "CABIN READY" in green (pulses for 10 seconds, then steady), when a signal
 is sent from the cabin crew, and in the takeoff and landing memo. ◄

In addition, if ACARS is installed, the display shows:

- ACARS VHF 3, VOICE in green, flashes continuously, if VHF 3 is operating in voice mode and ACARS communication is interrupted.
- ACARS MSG in green, if ACARS has received a message from the ground, and a continuous buzzer sounds.
- ACARS STBY in green, if ACARS communications between the aircraft and the ground are lost.
- ACARS CALL in green, when an uplink message requests voice communication.
- ACARS ALERT in green, when an uplink alert message has been received.

If ATSU is installed, the displays shows:

- VHF3 VOICE in green, flashes for 10 seconds if VHF3 is operating in voice mode.
- HF: VOICE in green, flashes for 10 seconds if both HFs (◄) are operating in voice mode.
- GND HF DATA in green, when HF (\triangleleft) is operating in data mode on the ground.

If SATCOM is installed, the display shows "SATCOM ALERT" in green, when a message with a priority level below 4 is received from the ground.

R



ELECTRICAL SUPPLY

1.23.60 P 1

SEQ 001

REV 17

BUS EQUIPMENT LIST

R

		NORM		EMER ELEC			
		AC	DC	DC BAT	AC ESS	DC ESS	нот
	VHF1					Х	
	VHF2		DC 2				
	VHF3		DC 1				
	HF1	AC1-2					
	HF2	AC2-3					
	RMP1					Х	
	RMP2		DC 2				
RADIO	RMP3		DC 1				
COMMUNICATIONS	CAPT ACP					Х	
	F/O ACP					Х	
	THIRD ACP		DC 1				
	SELCAL		DC 1				
	FLT INTERPHONE					Х	
	CAPT LOUDSPEAKER					X (1)	
	F/O LOUDSPEAKER					X (1)	
	EXT HORN						HOT 2
CABIN	CIDS1		GND/FLT			Х	
INTERCOMM	CIDS2		GND/FLT			Х	
data sys	DEU (A/B)		GND/FLT			Х	
COCKPIT VOICE	CVR CTL		DC 1				
RECORDER	CVR				SHED		

⁽¹⁾ Normal supply is from DC ESS BUS. DC BUS 1 supplies CAPT (or F/O) loudspeaker when AUDIO SWITCHING selector is set to CAPT (or F/O) on 3.