

## 1. GENERAL.

This section describes the interior and exterior lighting of the aircraft. Some of the lights described are also connected to the emergency lighting system. The independent, battery-powered emergency lighting system is described in Section 15, SAFETY EQUIPMENT.

## 2. INTERIOR LIGHTS.

The interior lights are:

- Flight compartment lights
- Passenger cabin lights (incl. service area)
- Cargo compartment lights.

### 2.1 Flight compartment lights.

#### Dome lights.

The dome lights are located in the ceiling. They get power from the CENTER HOT BAT BUS and can be switched on without any battery (-ies) on. The DOME switch is on the INT LTS overhead panel.

#### Reading lights.

The two reading lights, one above each pilot station, have ON-OFF-DIM potentiometers, plus area adjustment knobs to control the width of the beam ("zoom control").

#### Glareshield lights.

The four glareshield lights give general light on the instrument panel. They are aligned with the surface of ("flush mounted") the plastic cover below the glareshield panel.

The light intensity is controlled with the inner knob of the FLOOD dimmers, one at each end of the glareshield panel.

#### Map lights.

The map holders (one on each control wheel) have built-in lights, with a dimmer on top.

#### Circuit breaker panel lights.

The four c/b panel lights are on the left and right side panels above the c/b panels. The intensity is controlled with the outer knob of the FLOOD dimmers located at each end of the glareshield panel.

#### Panel lights.

The integrated instrument panel lights are controlled with the two PANEL knobs (on the same axis) on the INT LTS overhead panel.

The inner knob controls the overhead panel and the glareshield. The outer knob controls the instrument panel, the side panels and the center pedestal.

The STATUS IND knob on the same panel controls the mode indication lights on the FCP and DCP.

### 2.2 Passenger cabin lights.

#### Overhead and window lights.

These are of the fluorescent tube type, and are controlled with the OVERHEAD and WINDOW switches on the F/A panel at the entrance door.

#### Reading lights.

There is one reading light for each passenger seat, located in the Passenger Service Unit, PSU. Each light has a push-on/push-off button.

#### Service area lights.

These areas in the front and aft cabin have their own general lighting, controlled with the S AREA switch on the F/A panel.

#### Galley light.

There is a worktop light in the galley; the switch is on the top galley panel.

#### Lavatory light.

The lavatory standby light comes on automatically whenever power is on in the aircraft. The main light comes on automatically when the lavatory door is closed.

**Cabin signs.**

The "NO SMOKING/FASTEN SEAT BELT" signs in the cabin, and the "RETURN TO SEAT" sign in the lavatory are controlled with the SEAT BELT and NO SMOKING switches in the cockpit CABIN LIGHTS overhead panel.

The NO SMOKING switch has three positions: ON, OFF and AUTO. In the AUTO position, the NO SMOKING lights go out when the landing gear has been retracted.

**F/A call button lights.**

Each F/A call button in the PSU has a light that comes on when the button is pushed. On the F/A panel, the F/A can see if the call comes from the cabin or from the lavatory.

**Cargo compartment light.**

The cargo compartment light is connected to the L HOT BAT BUS. The switch is inside the door, at the sill.

The "ON 5 MIN" position will automatically turn the light off after 5 minutes.

**3. EXTERIOR LIGHTS.**

The exterior lights are:

- Landing lights
- Taxi lights
- Navigation lights
- Anti-collision lights (strobe type)
- Wing inspection lights
- Stair (entrance) lights
- Logo lights (optional)
- Wing tip strobe lights (optional).

All exterior lights are controlled from the EXT LIGHTS cockpit overhead panel, with the exception of the stair light, which is controlled from the F/A panel at the entrance door.

**Landing lights.**

There is one 450 W landing light in each wing fairing. They are controlled with the switches L/R LAND.

With the aircraft stationary, and propellers not rotating, the landing lights should not be on for more than 20 seconds at a time, followed by a cool-down period.

**Taxi lights.**

The 450 W taxi light is installed on the nose landing gear. It is controlled with the TAXI switch.

The nose gear relay prevents the lights from coming on if the nose gear is not down and locked.

**Navigation lights.**

There is one navigation light in each wing tip, and one on each side of the rear fuselage. They are controlled with the NAV switch.

All navigation lights are of the dual unit type.

**Anti-collision lights.**

The basic anti-collision light system has two strobe-type beacons, one on top of the vertical stabilizer and the other on the underside of the fuselage. They give high-intensity white flashes.

The beacons can also give red flashes of lower intensity, for ground operations.

The anti-collision lights are controlled with the BCN switch, which has three positions: OFF, LO and HI.

In HI, the two beacons give white flashes with an intensity of minimum 400 candela.

In LO, the belly beacon gives red flashes with an intensity of about 100 candela.

**NOTE**

For a light to qualify as an "anti-collision light" under FAR/JAR 25, it requires a minimum light intensity of 400 candela. Thus, only the more powerful strobe-type lights qualify.

**Wing inspection lights.**

There is one 55 W wing inspection light in each engine nacelle. They are directed towards the outboard wing leading edges and are primarily intended to check ice build-up. They are controlled with the WING switch.

**Stair (entrance) light.**

This light is located aft of the entrance door, and is directed towards the stair area. It is controlled with the STAIR switch on the F/A panel. As an option, Stair-light on each step is available. It is controlled with the STAIR switch on the F/A panel, Mod No. 5333.

**Logo lights (optional).**

The two logo lights, if installed, are in the horizontal stabilizers, one on each side. The light beams are directed towards the vertical stabilizer.

They are controlled with the LOGO switch.

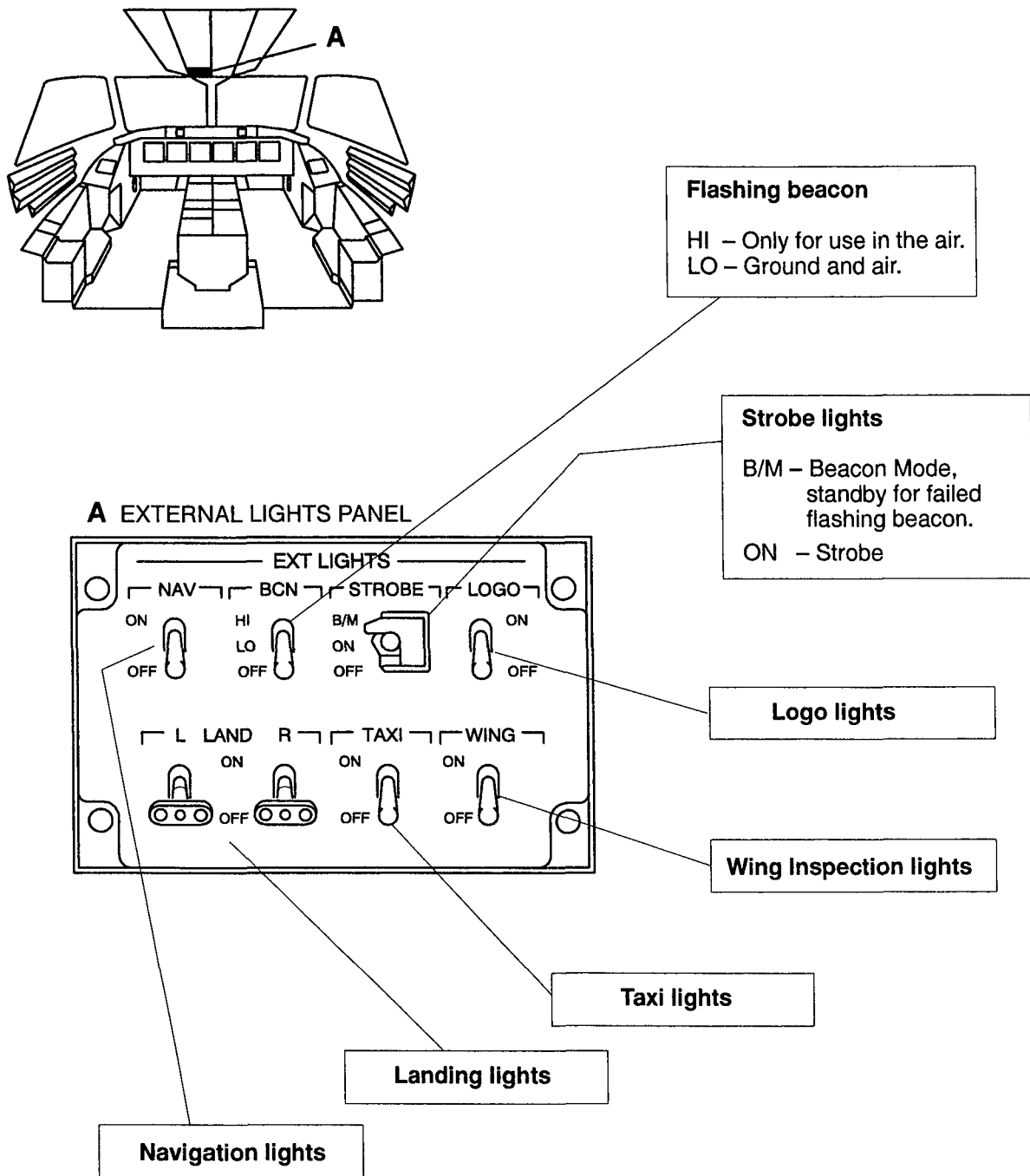
**Wing tip strobe lights (optional).**

These strobe lights, if installed, are in the wing tips. When switched to ON they give very high intensity white flashes of about 2000 candela in the forward direction.

When switched to B/M they give high intensity white flashes of minimum 400 candela in all directions required by FAR/JAR 25 for anti-collision lights.

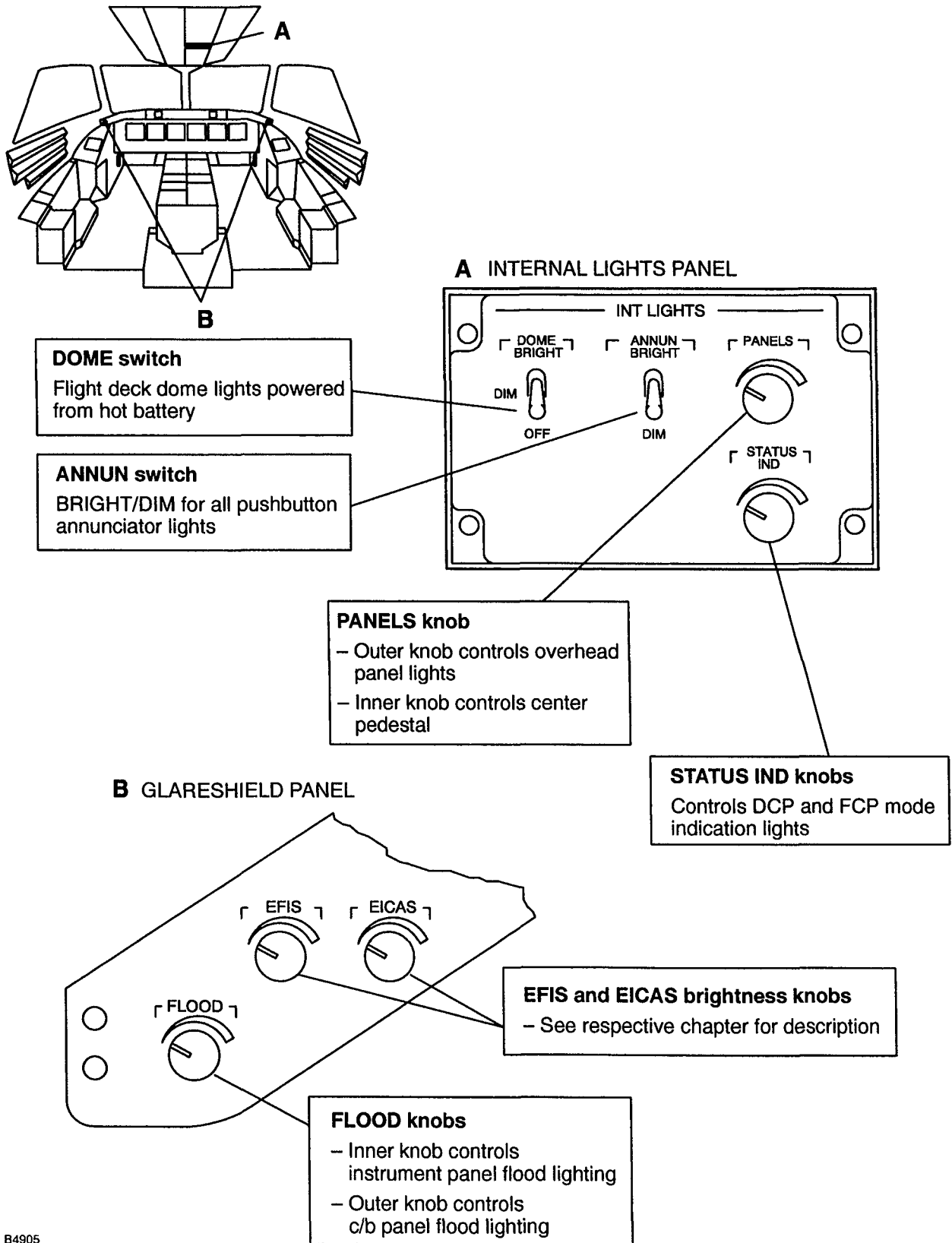
They are controlled with the STROBE switch on the EXT LTS overhead panel. It has three positions: ON, OFF and B/M.

## 4. CONTROLS AND INDICATORS.



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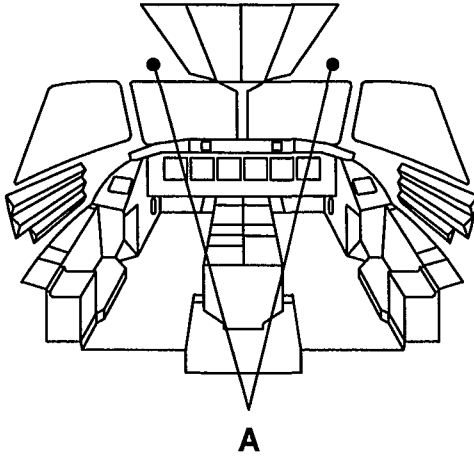
FIG.1. External lighting controls.



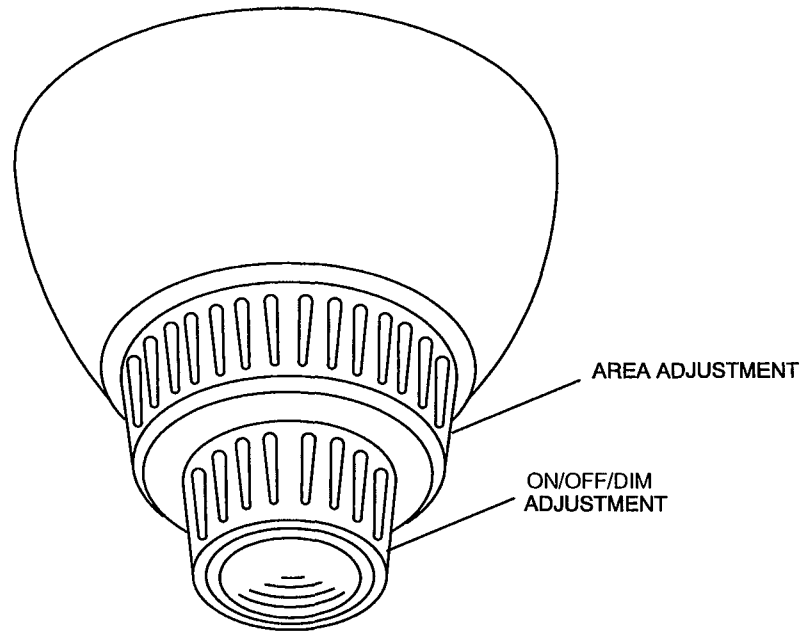
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FIG. 2. Flight compartment light intensity controls.

Applicable to a/c without Mod No. 5501 installed.

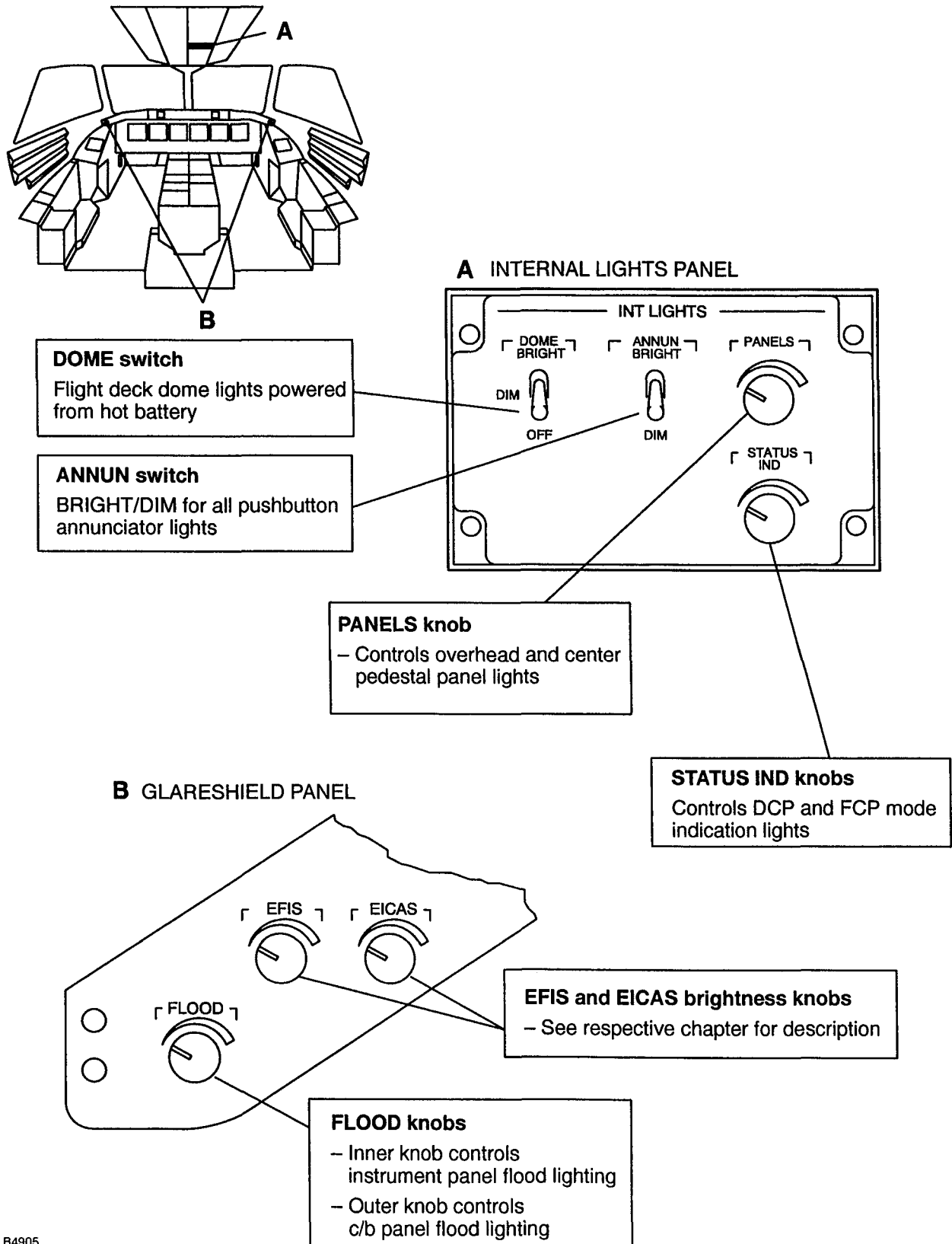


**A** READING LIGHT



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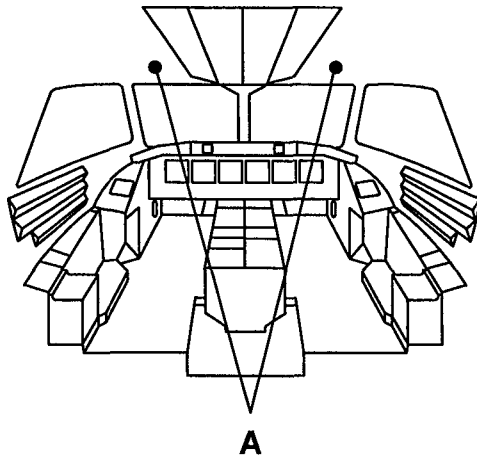
FIG. 3. Flight deck reading light.



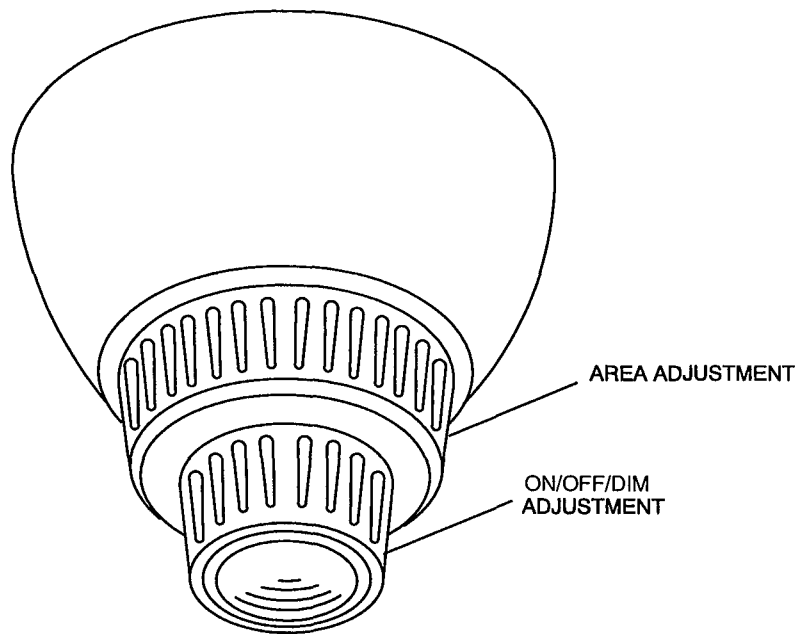
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FIG. 2. Flight compartment light intensity controls.

Applicable to a/c with Mod No. 5501 installed or aircraft 40-up.



A READING LIGHT



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FIG. 3. Flight deck reading light.



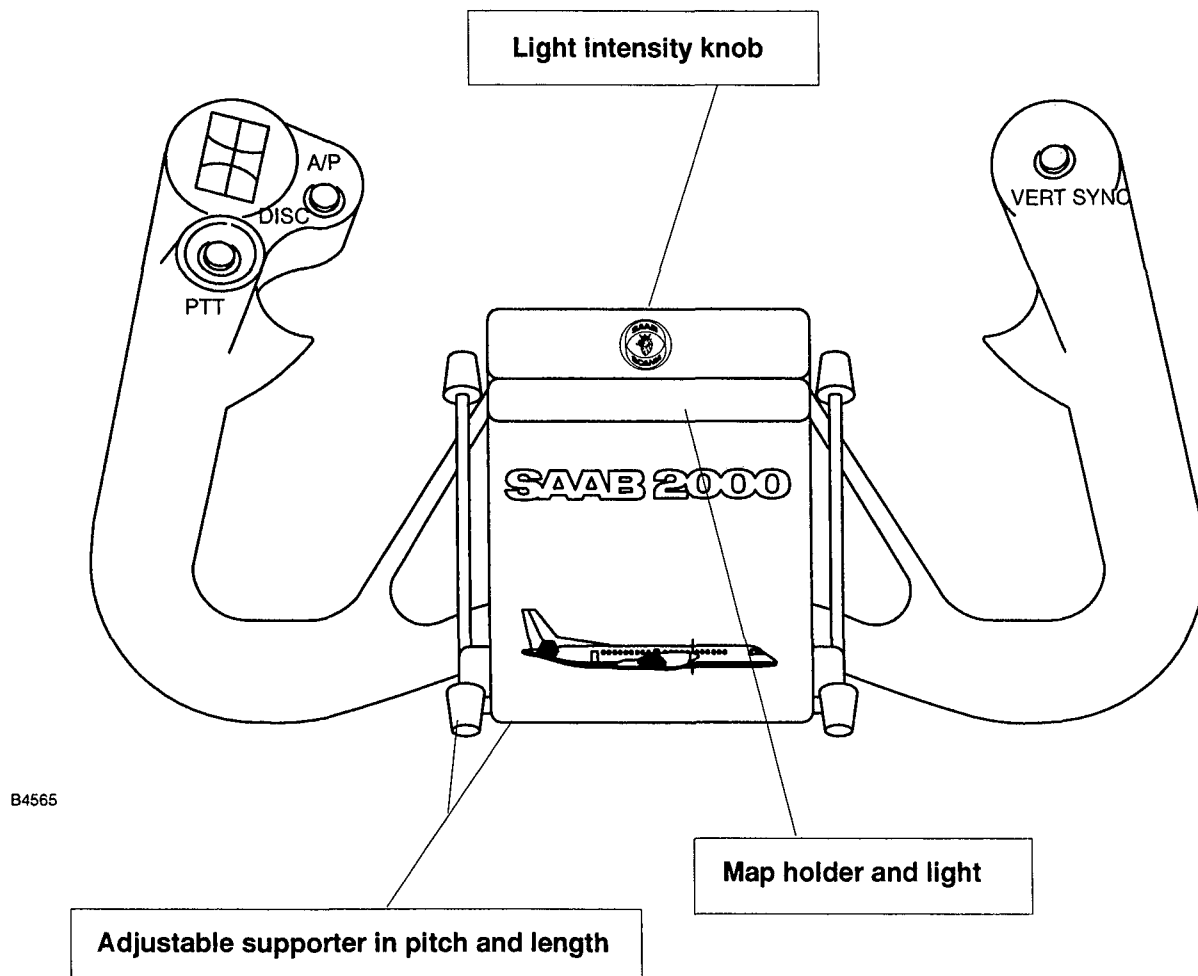


FIG. 4. Control wheel – map lights.

### 5. ELECTRICAL POWER SUPPLY.

#### External lights

		EXT LTS	
L landing .....	L AC GEN BUS	F - 29	L LAND
R landing .....	R AC GEN BUS	M - 29	R LAND
Taxi power .....	L UTILITY BUS	F - 28	TAXI PWR
Taxi control .....	L UTILITY BUS	F - 27	TAXI CTL
L strobe .....	L MAIN BUS	F - 26	STROBE L WING
R strobe .....	R MAIN BUS	M - 26	STROBE R WING
Nav lamp set 1 .....	R BAT BUS	F - 24	NAV LTS 1
Nav lamp set 2 .....	L UTILITY BUS	M - 24	NAV LTS 2
Beacon fin .....	R MAIN/BAT BUS	M - 25	BCN FIN
Beacon fuselage .....	L MAIN/BAT BUS	F - 25	BCN FUS
Wing inspection .....	R UTILITY BUS	M - 28	WING
Logo .....	R FWD AC GEN BUS	M - 27	LOGO

#### Flight deck lights

		INT LTS FLT DECK	
Lower panels .....	L AC GEN BUS	E - 24	LOWER PANELS
Flood lights .....	L MAIN/BAT BUS	E - 25	FLOOD
Dome lights .....	CENTER HOT BAT BUS	E - 26	DOME
Reading lights .....	L MAIN/BAT BUS	E - 27	READ
Upper panels .....	R AC GEN BUS	L - 24	UPPER PANELS
Status indication etc. ....	R MAIN BUS	L - 25	STATUS IND
Map light .....	R BAT BUS	L - 26	IAL

#### Cabin lights

		INT LTS CABIN	
Ceiling FWD/AFT + service lights ..	CENTER HOT BAT BUS	E - 28	CEILING FWD/AFT
Ceiling middle section .....	CENTER HOT BAT BUS	E - 29	CEILING MID
Cabin signs .....	R MAIN/BAT BUS	L - 27	SIGNS
Window lights .....	R FWD AC GEN BUS	L - 28	WINDOW
Passenger reading lights .....	R AC UTILITY BUS	L - 29	READ
Overhead bin lights .....	R AC UTILITY BUS	L - 30	CEILING

#### Miscellaneous

Cargo lights .....	L HOT BAT BUS	E - 30	INT LTS CARGO
Stair lights .....	C HOT BAT BUS		No CB on flight deck