

**PART**

**EMERGENCY EQUIPMENT**

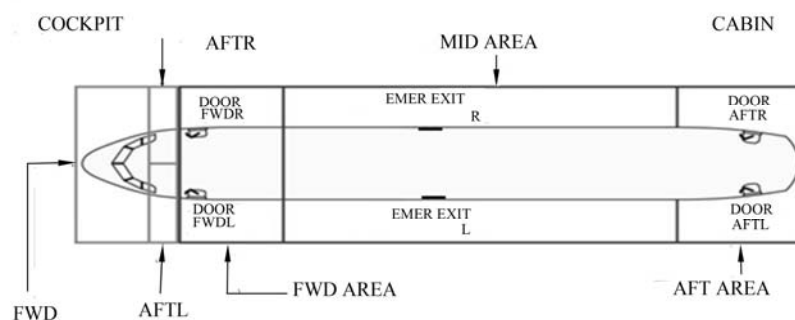
## CHAPTER

# 1

## PORTABLE EMERGENCY EQUIPMENT

### Section 1 Location





The portable emergency equipment is stowed or installed at different locations throughout the whole aircraft, for instance, in the galley area, in the attendant seats area, in the overhead stowage or in the cabin stowage. They provide promotion to the cabin crew during emergency.



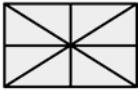









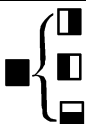








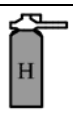






**Figure 1.1 Location of the Portable Emergency Equipment**

The following symbol table and the added graphics give an overview about the type and the location of these parts.







**SYMBOL TABLE**

SYMBOL	TITLE	SYMBOL	TITLE
	02 kit: 02 bottle 02 mask		Respirator
	Breathing hood		Child seat

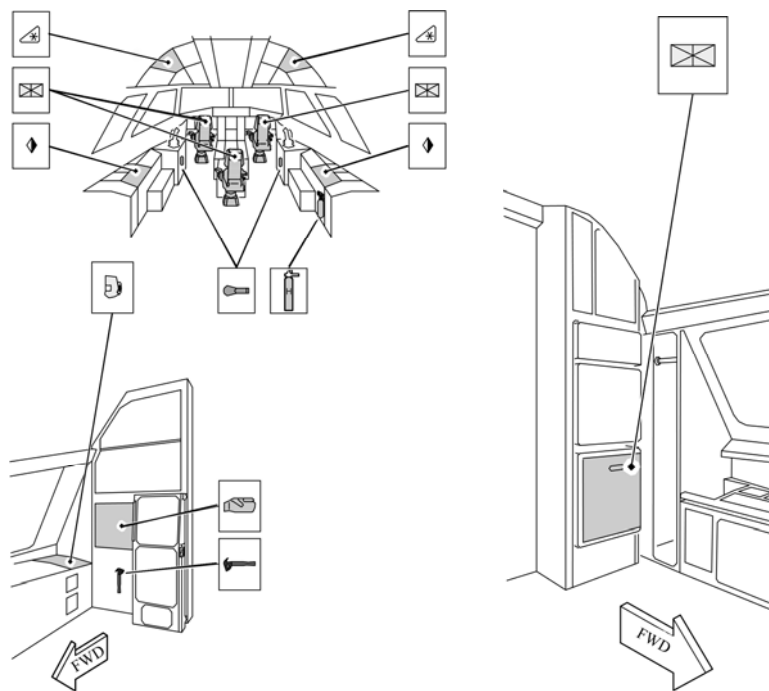
**SYMBOL TABLE**

SYMBOL	TITLE	SYMBOL	TITLE
	Life vest/jacket–cabin crew (one stowed under each C/A seat) Life vest/jacket–flight crew (stowed in cockpit)		Baby cot
	Life vest–passenger (one stowed under each seat or in box under armrest)		Crash axe
	Spare life vest/jacket		Crow bar
	Infant life vest/jacket		Escape rope
	Survival raft		Life line
	Demo pack: life vest O2 mask Demo belt		Flashlight
	Demo pack: life vest O2 mask		Fire gloves
	Demo life vest/jacket		Dangerous goods kit
	Megaphone		Disabled person seat harness
	Hazard Tape		Fire extinguisher (Halon)
	Crew tabard		Fire extinguisher (water)
	Radio beacon		Spare seat belt
	Survival kit		Infant seat belt

### SYMBOL TABLE

SYMBOL	TITLE	SYMBOL	TITLE
	First aid kit		Extension belt
	Defibrillator		Security mirror
	Fire fighting kit		Manual release tool

The table above shows all symbols which are used to identify the installed portable emergency equipment. Depending on the airlines' choices and/or airworthiness requirements, some of these items may be not installed on this aircraft. The location of the installed portable emergency equipment at delivery of this aircraft is shown below.



**Figure 1.2 Portable Emergency Equipment–Cockpit**



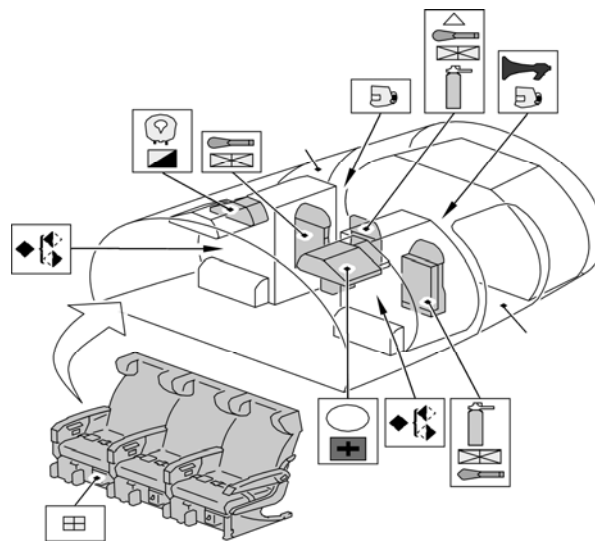


Figure 1.5 Portable Emergency Equipment–Aft Cabin Area

## Words and Expressions

portable [ˈpɔːtəbl] *adj.* 便于携带的；手提式的

stow [stəʊ] *vt.* 装载

respirator [ˈrespəreɪtə] *n.* 呼吸器

hood [hʊd] *n.* 帽状物（烟囱帽、灯罩等）；头罩

megaphone [ˈmegəfəʊn] *n.* 扩音器

harness [ˈhɑːnɪs] *n.* 马具，挽具

extinguisher [ɪkˈstɪŋɡwɪʃə] *n.* 消火器，熄火器，灭火器

tabard [ˈtæbəd] *n.* 无袖短外套

beacon [ˈbiːkən] *n.* 无线电台或发射台；信号站

extension [ɪksˈtenʃən] *n.* 延伸，扩展；增加部分

defibrillator [diːˈfɪbrɪleɪtə] *n.*（电击）除颤器

manual [ˈmænjuəl] *adj.* 用手的，手工的

*n.* 手册，指南

survival [səˈvaɪvəl] *n.* 幸存，生存；幸存者；残存物

raft [rɑːft] *n.* 筏，桴，木排

## Technical Terms

life vest	救生衣
demo life vest	演示用救生衣
baby cot	婴儿床
crow bar	撬棒
radio beacon	无线发报机
survival kit	救命包

## Notes

1. The portable emergency equipment is stowed or installed at different locations throughout the whole aircraft. 便携应急设备储藏并安装在整架飞机不同的位置。
2. The table above shows all symbols which are used to identify the installed portable emergency equipment. 上面的表格是机上便携式应急设备相对应的符号标识。
3. Depending on the airlines' choices and/or airworthiness requirements some of these items are maybe not installed on this aircraft. 根据航空公司或者适航要求，机上的某些应急设备可能没有安装。

## Exercises

**Please answer the following questions.**

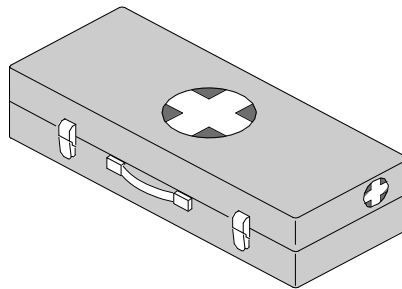
1. According to the text, find out the general locations of portable emergency equipment.
2. What are the symbols used to identify the installed portable emergency equipment?
3. If the flight attendant wants to check out the emergency equipment location, what should he/she do?

## Section 2 First Aid Kit

A first aid kit is a collection of supplies and equipment for use in giving first aid and can put together for the purpose (by an individual or organization, for instance), or purchased complete.

Usually there must be at least one first aid kit on board the aircraft. Maybe there is no first aid kit installed at the day of aircraft delivery; however, the airline is responsible to install the first aid kit(s) before operating the aircraft.

Each first aid kit should be installed on certain place; it is recommended that all kits are in a clean, waterproof container to keep the contents safe and aseptic. Kits should also be checked regularly and restocked if any items are damaged or expired. Each has a content list inside, which includes bandage, triangular bandages, alcohol rub, medical glove, adhesive bandages, scissors, etc.



**Figure 1.6**

It should be used for traumas on board. Only those who are specifically trained and/or the on-the-spot medical personnel or other people who are well trained can use this kit. However, the off-duty flight attendants can use it only when they can improve his or her identity. After using, it should be documented for two copies: one is for the purse or the captain; one is required to put into the kit which will be handed into the medical center.

### Words and Expressions

waterproof [ˈwɔːtəpruːf] *adj.* 不透水的，防水的；用防水材料处理过的



*vt.* 证明；记录；为……提供证明

1. It is recommended that all kits are in a clean, waterproof container to keep the contents safe and aseptic. 建议急救箱物品放置在干净防水的盒子里，以保持物品的安全性，防止污染。
2. Kits should also be checked regularly and restocked if any items are damaged or expired. 定期检查急救箱，如果有任何物品损坏或过期，应及时更换。
3. Only those who are specifically trained and/or the on-the-spot medical personnel or other people who are well trained can use this kit. 只有那些经过专门训练的，或者在场的医务人员，或者其他训练有素的人员可以使用急救箱。

## Exercises

Please answer the following questions.

1. What does the first aid kit consist of?
2. Who is qualified to use the first aid kit?
3. Is the first aid kit available to anyone on board the aircraft? Why?

## Section 3 Flashlight

### Flashlight Cabin

A lot of flashlights are installed throughout the aircraft. The flashlight is explosion proof and powered by dry batteries. The flashlight is ON automatically, when removed from the retention bracket. The flashlight is OFF automatically, when put into the retention bracket.

To remove the flashlight from the retaining clip, one should hold the body of the flashlight, and then pull it from the retaining clip of the retention bracket; the tamper shield will be disconnected.

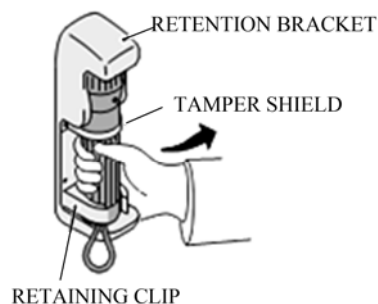


Figure 1.7

To install the flashlight back, one should hold the body of the flashlight, noting that the fin has to point to the retention bracket and the LED has to point

away from the retention bracket. Then let the fins of the flashlight move into the recess of the retention bracket. At last, push the body of the flashlight into the retaining clip.

### Flashlight Cockpit

The flashlight is powered by 2 alkaline manganese dioxide batteries. The main components of the flashlight are: a body, a reflector assembly, a lens, a switch assembly, with button and cap.

A cracked or broken flashlight bulb that remains glowing has the potential to cause an explosion in hazardous atmospheres.

The flashlight is usable for constant light and impulse light. For constant light, slide back the cap of the switch assembly, firmly press the button until it engages, the light comes on. For impulse light, slide back the cap, firmly press the button until it engages, the light comes on; light pressing on the button lets the light goes off and releasing the button, let the light comes on again.

The S.O.S.signal can be transmitted by the flashlight. The S.O.S.signal is three times a short signal (for S), three times a long signal (for O), and three times a short signal (for S). To operate, firmly pressing the button until it disengages; the light goes off, sliding back the cap of the switch assembly; firmly pushing the body of the flashlight into the bracket.

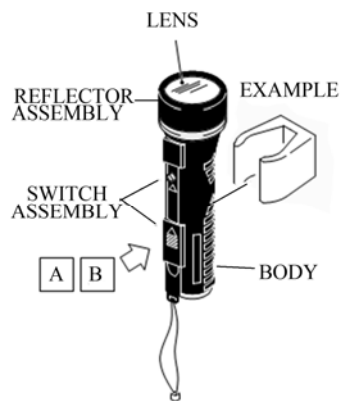


Figure 1.8

## Words and Expressions

automatically [ˌɔ:təˈmætɪkəli] *adv.* 自动地，机械地

retention [rɪˈtenʃən] *n.* 挡住，拦阻；保持，保留，容纳

bracket [ˈbrækɪt] *n.* 壁架，托架；括弧

retain [rɪˈteɪn] *vt.* 保持；保留；止住；容纳

clip [klɪp] *n.* 夹子，回纹针，别针

tamper [ˈtæmpə] *vt.* 篡改；瞎摆弄；瞎搞；玩弄

fin [fɪn] *n.* 鳍，鱼翅；鳍状物；汽车尾部的突起装饰物

LED *abbr.* light-emitting diode 发光二极管

recess [rɪˈses] *n.* (墙壁、山脉等的)凹进处(部分), 凹口(座、槽); 壁龛

alkaline [ˈælkəlaɪn, -ˈleɪn] *adj.* 碱的，碱性的

manganese [ˈmæŋɡəˈniːz, -ˈniːs] *n.* 化 锰

dioxide [daɪˈɒksaɪd] *n.* [化]二氧化物

reflector [rɪˈflektə] *n.* 反射器；反射光(热、声音)的物体

assembly [əˈsembli] *n.* 集合；集会；部件，组(合)件；成套件；联合装置

lens [lenz] *n.* 透镜；(凹、凸)镜片；一组透镜

bulb [bʌlb] *n.* 玻璃泡；灯泡

glow [ɡləʊ] *vt.* 发白热光，灼热；发光(热)

hazardous [ˈhæzədəs] *adj.* 危险的，冒险的

constant [ˈkɒnstənt] *adj.* 经常的，稳定的，不断的

impulse [ˈɪmpʌls] *n.* 推动，冲力，刺激，推动力

engage [ɪnˈɡeɪdʒ] *vt. & vi.* (使)从事于，(使)忙于；吸引，占用

sequence [ˈsiːkwəns] *n.* 先后次序，顺序，连续

## Technical Terms

alkaline manganese dioxide battery	碱性锰电池
constant light	连续/持续光照
impulse light	脉冲光
reflector assembly	反射组件
switch assembly	开关组件

## Notes

1. The flashlight is powered by 2 alkaline manganese dioxide batteries. 手电筒是由两节碱性锰电池提供光源。
2. A cracked or broken flashlight bulb that remains glowing has the potential to cause an explosion in hazardous atmospheres. 有裂纹或者破损的灯泡，如果在危险的环境下持续发光，有可能造成爆炸。
3. The flashlight is usable for constant light and impulse light. 手电筒可以提供连续光和脉冲光两种形式的光照。
4. The S.O.S. signal can be transmitted by the flashlight. 可以使用手电筒来发送 SOS 信号。

注：S.O.S.是国际莫尔斯电码救难信号，并非任何单词的缩写，但也有人认为是“save our souls 拯救我们的灵魂”的意思。20 世纪初，海难事件频繁发生，由于不能及时发出求救信号和最快组织施救，造成很大的人员伤亡和财产损失。鉴于此，国际无线电报公约组织于 1908 年正式将它确定为国际通用海难求救信号。其实这三个字母的组合没有任何实际意义，只是因为它的电码“...---...”在电报中是发报方最容易发出，接报方最容易辨识的电码。

## Exercises

**Please answer the following questions.**

1. What are the features and operation of the flashlight on board?



## REFERENCES

2. How is the S.O.S. signal made by using a flashlight?
3. What are the main differences between two kinds of flashlights on board?

## Section 4 Megaphone

A megaphone is a portable, usually hand-held, cone-shaped horn used to amplify a person's voice or other sounds towards a targeted direction. The on-board megaphones are powered by 8 alkaline batteries (AA-size) each, with a mouthpiece and a push-button switch.

Here is the operation of the megaphone. Hold the megaphone to the mouth. But do not place the hand around the mouthpiece. Point the megaphone towards the passengers. Do not point it to the bulkhead. When the natural human voice is sent through a megaphone, the sound is concentrated in a given direction and the coupling of its energy to the air is optimized, while if a listener is to the side, it is more difficult to hear what is being said. Do not operate the megaphone near a person's ears, amplified sound or howling can cause damage to the inner ear. Contact the mouthpiece of the megaphone with the lips. Push the push-button switch and then speak slowly with a strong voice so that it can be heard clearly.

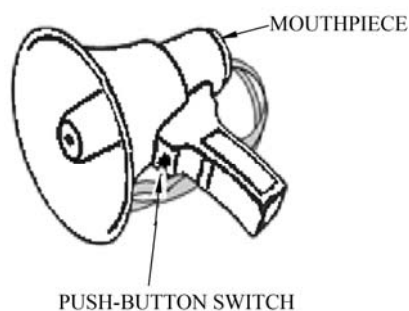


Figure 1.9

### Words and Expressions

amplify [ˈæmplɪfaɪ] *vt.* 放大, 扩大, 增强

howling [ˈhaʊlɪŋ] *n.* 呼啸, 轰鸣

couple [ˈkʌpl] *vt. & vi.* 连在一起, 连接

optimize [ˈɒptɪˈmaɪz] *v.* 使最优化, 使尽可能有效



## REFERENCES