



# Emergency and Safety Equipment



Unit 7

IAC3306 Cabin  
Crew Management

Safety



Security





# Safety

Safety is the practice and procedures for preventing injury and damage.



# Security

Security is the prevention of crime and unlawful acts.

# Safety



- Performing safety duty to turbulence, firefighting, emergency landing, and decompression.
- Managing safe cabin environment.
- Operating of safety equipment and safety system.

# Security

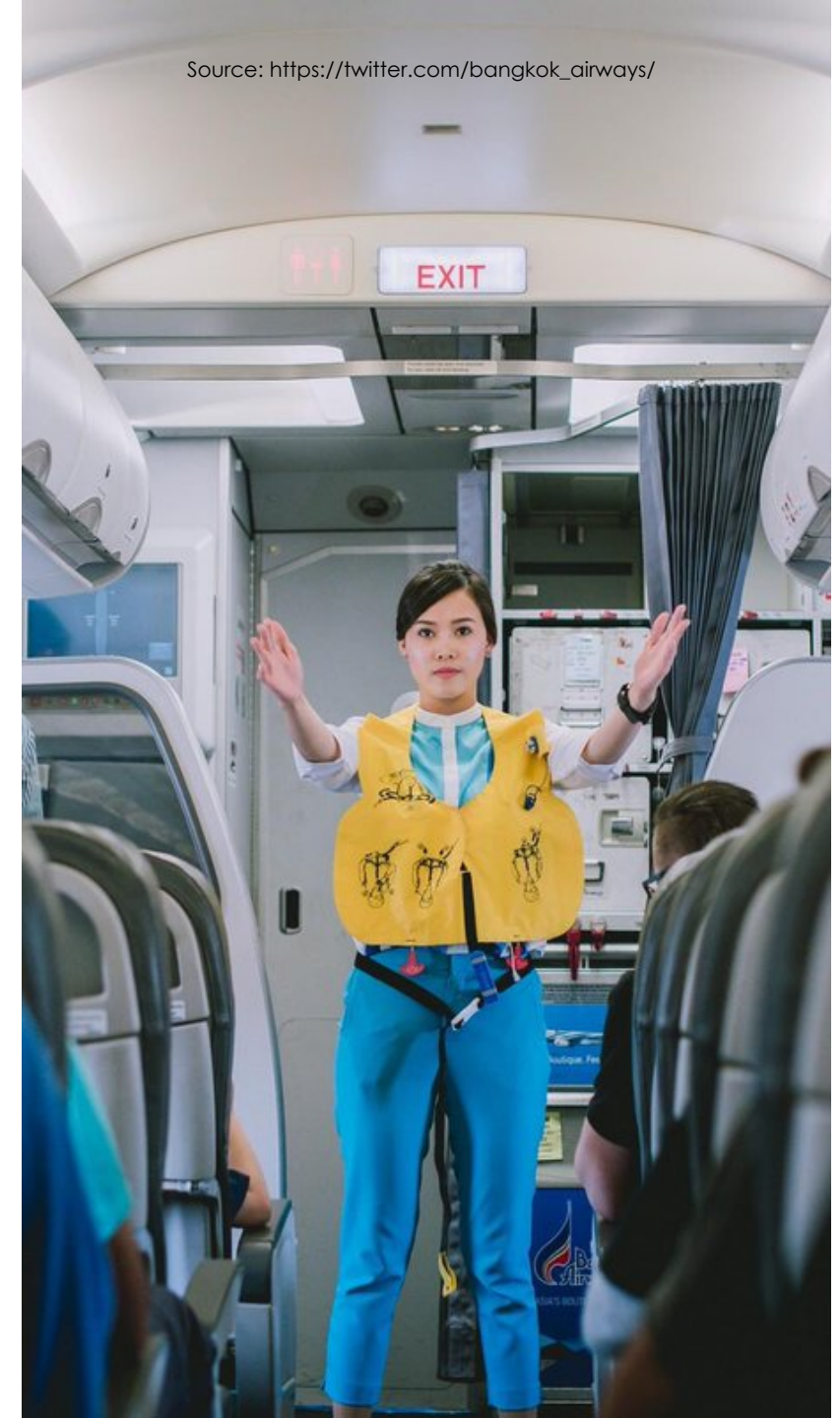


- Performing security check for suspicious items in the cabin.
- Reporting any suspicious persons who have strange behaviors and can be the threats to passengers and crew.
- Confiscating dangerous goods from passengers who bring them in the cabin.



What is the best prevention  
of aircraft accident ?

The best safety device  
in any aircraft is  
a well-trained crew.





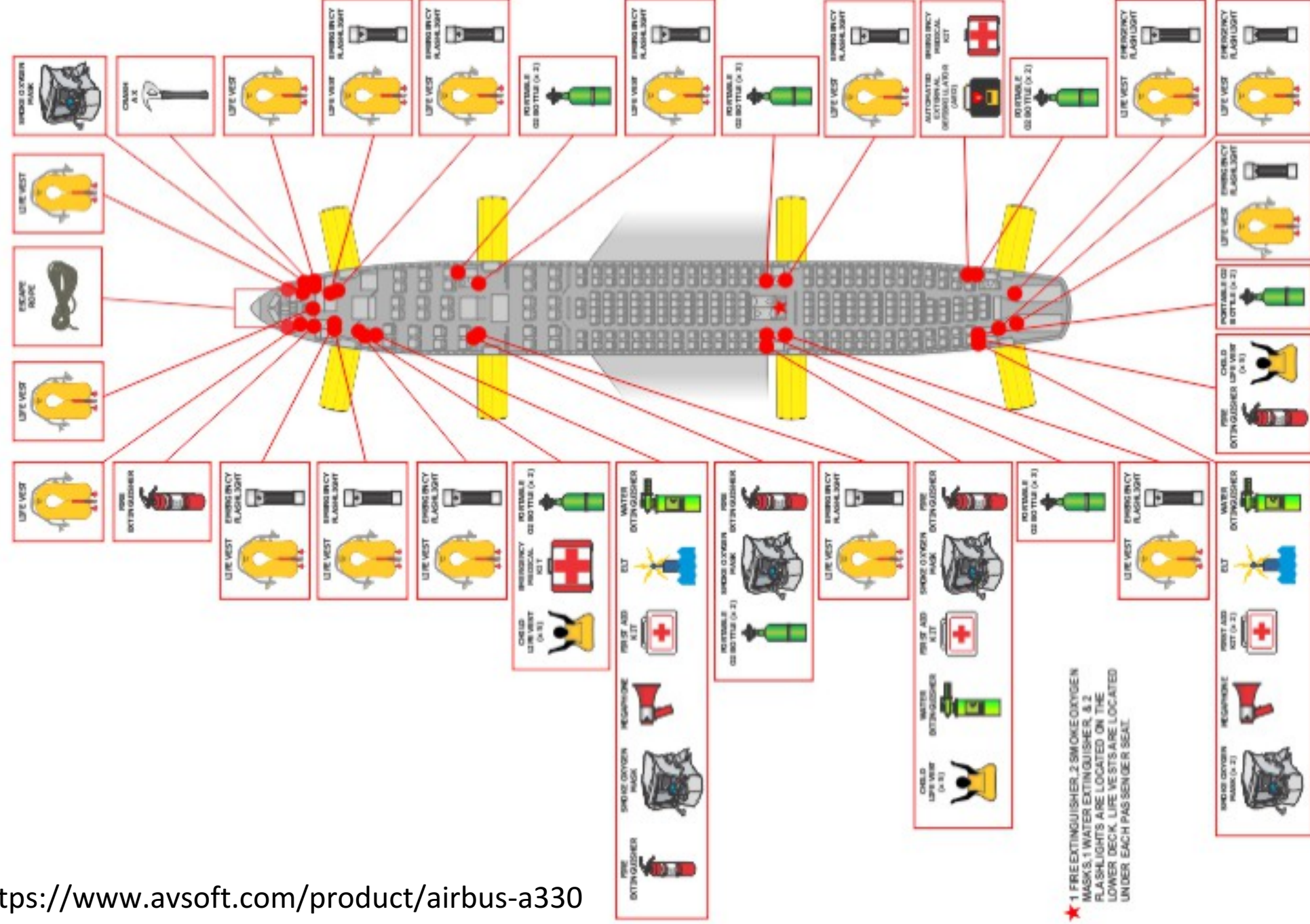
1. Initial training
2. Recurrent





# 1. Initial training

- Cabin configuration
- Cabin layout
- Evacuation slide
- Safety and Emergency Equipment
- Normal and abnormal emergency procedure



★ 1 FIRE EXTINGUISHER, 2 SMOKE OXYGEN MASKS, 1 WATER EXTINGUISHER, & 2 FLASHLIGHTS ARE LOCATED ON THE LOWER DECK. LIFE VESTS ARE LOCATED UNDER EACH PASSENGER SEAT.



## 2. Recurrent training

- Exit
- Evacuation slide
- Safety and Emergency Equipment
- Normal and abnormal emergency procedure
- Update and review



Exercise 1	Safety and Emergency Training
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- |    |   |
|----|---|
| 1. | What is a safety and security training for new cabin crew?<br><i>Initial training</i>                           |
| 2. | What is a safety and security training for cabin crew in every year?<br><i>Recurrent training</i>               |
| 3. | What kind of safety and security training with the review of recent airplane's incidents and accidents?         |
| 4. | What issues are included in the training about exit?<br><i>Type, number, location, and operation</i>            |
| 5. | What issues are included in the training about safety and emergency equipment?<br><i>location and operation</i> |

# 1

## Safety Equipment

- 1.1. Location
- 1.2. Operation

# 2

## Emergency Procedure

- 2.1 Fire Fighting
- 2.2 Landing
- 2.3 Ditching
- 2.4 Decompression
- 2.5 Brace Command
- 2.6 Evacuation

# 1 Safety Equipment

- 1.1. Location
- 1.2. Number
- 1.3. Readiness

## Emergency Equipment

- a) Oxygen Equipment
- b) Firefighting Equipment
- c) Survival Equipment
- d) Safety Equipment
- e) First Aid Equipment

# Safety and Emergency Equipment

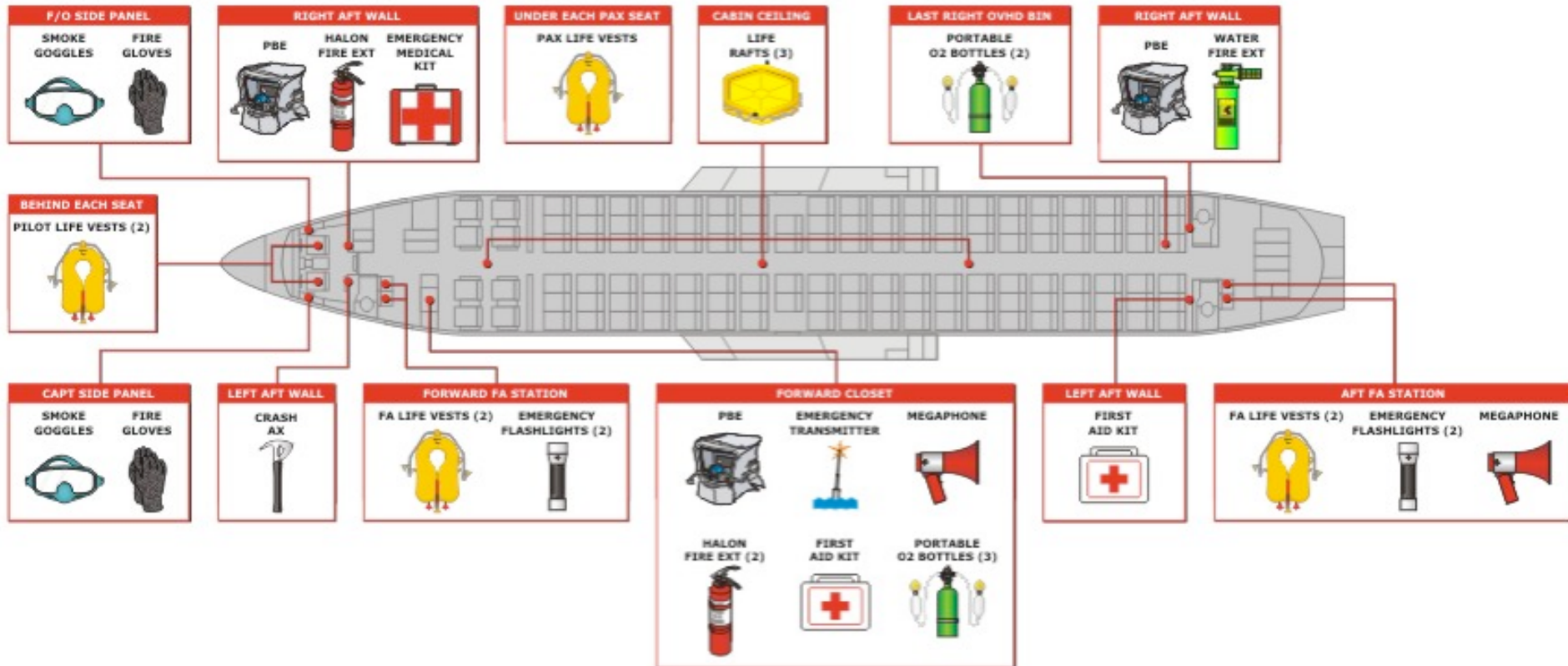




# Emergency Equipment Location



**B737-700**  
**EMERGENCY**  
**EQUIPMENT**  
**LOCATIONS**



1

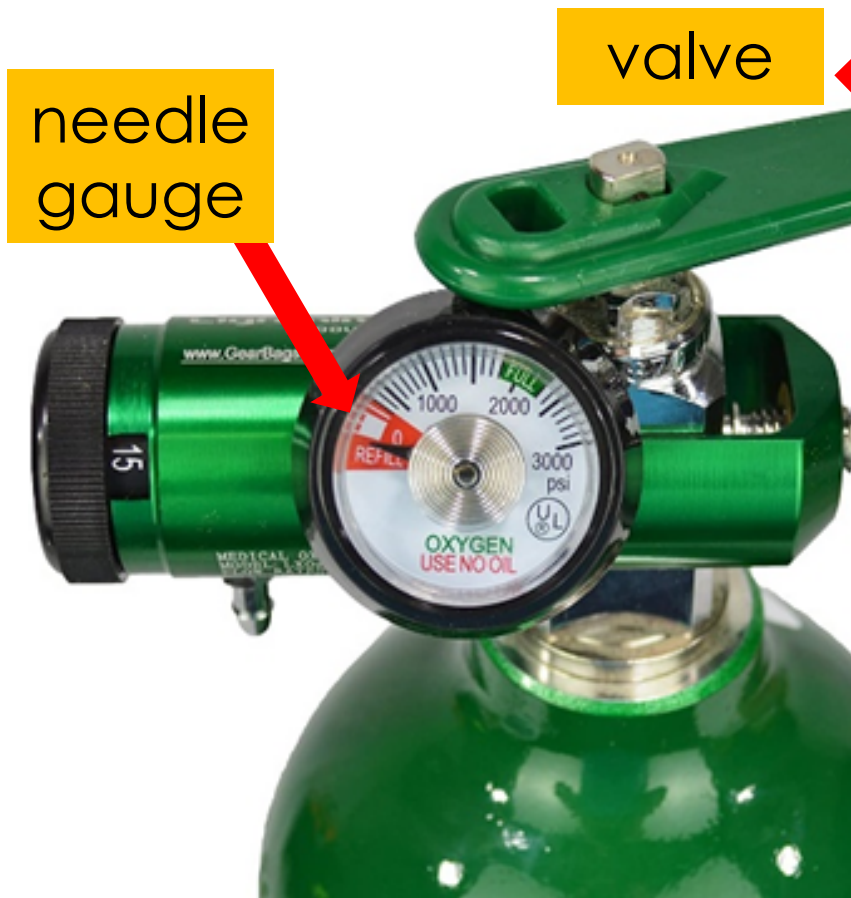
# Safety Equipment

1. Oxygen Equipment
2. Firefighting Equipment
3. Survival Equipment
4. Safety equipment
5. First aid equipment



# 1. Oxygen Equipment

## Portable Oxygen



Oxygen Gauge



Oxygen Bottle/Cylinder



condition

**Serviceability** – Pressure gauge is in the red band



What is it for?

**Description** – Follow-up duty and first aid



How to use it?

**Instruction** –

1. Plug mask into outlet.
2. Open valve fully, then half turn.
3. Check flow of oxygen mask.

## 2. Firefighting Equipment

### Fire Extinguisher



Halon 1.5 kg



Water



Safety pin/ seal

**Serviceability** – Safety pin/seal not teared  
- Pressure gauge is in green band

## **Instruction** –

1. Pull the pin/seal from handle.
2. Aim at base of fire.
3. Squeeze handle.
4. Sweep side by side, Use short bursts or continuously.

For class A B C fire

# Emergency Equipment Operation

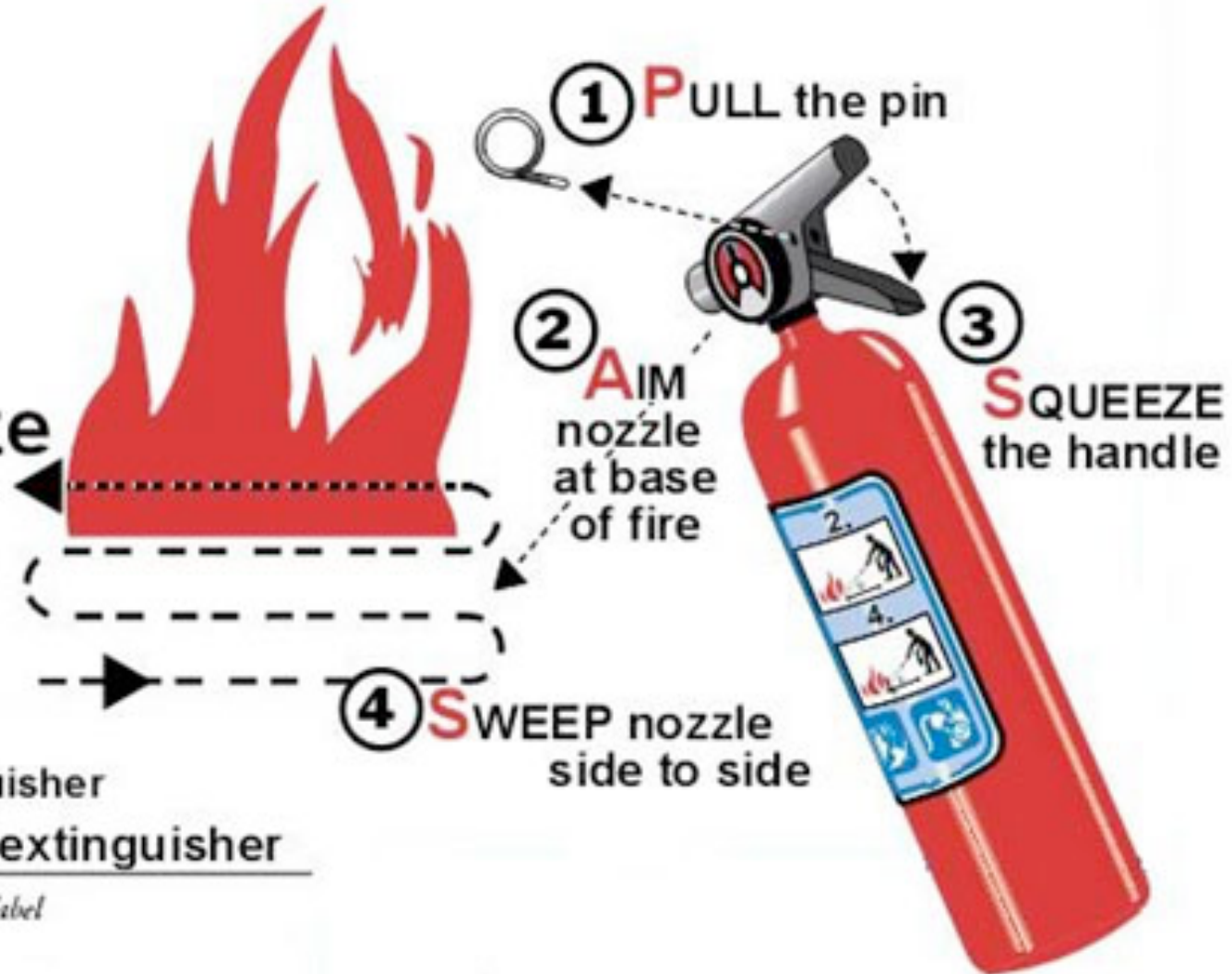
To operate an extinguisher:

**P**ull

**A**im

**S**queeze

**S**weep



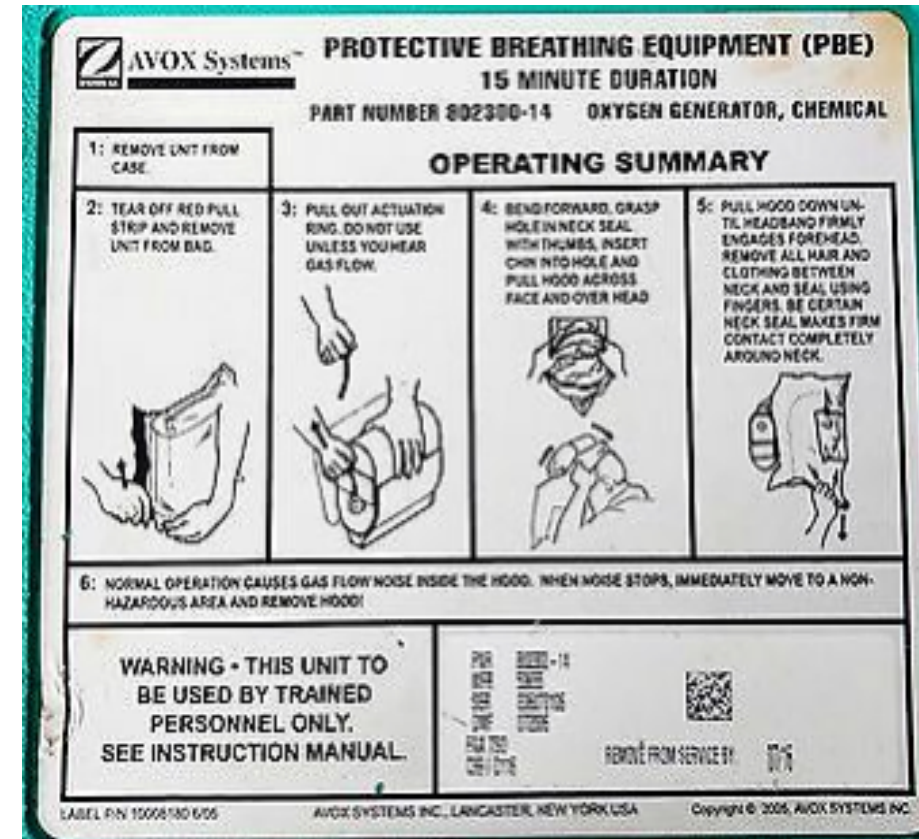
Know your extinguisher

Use the correct extinguisher

*(Check your own extinguisher's label for detailed instructions.)*

# Firefighting Equipment

## Protective Breathing Equipment - PBE







**Serviceability** – Foil pack vacuum seal is intact

- Expiry date

**Description** – Protect wearer's respiratory

**Instruction** –

1. Pull it out and shake it.
2. Put hand through the neck seal
3. Widen neck seal with hands.



**Serviceability** – Foil pack vacuum seal is intact

**Description** – Protect wearer's respiratory

**Instruction** –

5. Put mask over mouth and nose.
6. Pull neck seal to protect collar and shoulder area.
7. Pull strap forward to activate O<sub>2</sub>.
8. Pull strap backward to secure the mask.

## Exercise 2

## Oxygen Equipment, Firefighting Equipment

1.

What is a serviceability of a portable oxygen? Pressure gauge is in the red band

2.

What is a portable oxygen used for? Follow-up duty and first aid

3.

What is a serviceability of a fire extinguisher? Red plastic disc is in place on the rear of the handle, ring is intact

4.

What are instructions of using a fire extinguisher? Pull, aim, squeeze, sweep

5.

What is PBE for? To protect wearer's respiratory systems and eyes when fighting in-flight fire.

# Survival Equipment

light

Adult Lifejacket

mouthpiece

tag

Batteries  
strap





<https://www.pinterest.com/>



## Serviceability – Present

Description – Yellow in color

### Instruction –

1. Pass over head.
2. Pass tape around waist and clip at front
3. Inflate by pulling red tags on jacket.
4. Top up by oral inflation using mouthpiece.
5. Whistle to attract attention.
6. Salt water activated light.

# Survival Equipment

## Infant Lifejacket



## Instruction –

1. Distribute by cabin crew .
2. Demonstrate by cabin crew.
3. Cabin crew advise passengers to use in the emergency situation (Ditching)

<https://www.swiflik.com/aviation/airlines/infant>



Serviceability – Present

Description – Yellow in color

Instruction –

1. Place infant's arms through armholes.
2. Clip buckles at back and tighten straps.

# Survival Equipment



Emergency Locator  
Transmitter (ELT)  
Radio Beacon





## Serviceability – Present

Description – At designates locations

Instruction –

1. Retrieve beacons from the aircraft.
2. Erect antenna.
3. Throw the beacon into water.
4. Put lower end of beacon in plastic bag fill with impure water and keep it in a vertical position.



# Safety Equipment

## Seat Belt



<https://www.huffingtonpost.ca>

### Seat Belt



<https://www.ems1.com/ems-products>

### Shoulder Harness



<https://www.huffingtonpost.ca>

Serviceability – Present

Description – lap belt or shoulder harness

Instruction –

1. Fit lab belt firmly across the waist.
2. Fit shoulder harness.
3. Lift and release clasp on the buckle.



<https://www.emsl.com/ems-products>

# Safety Equipment

## Infant Extension Seat Belt



# Extension Belt



## Exercise 3

## Survival Equipment, Safety Equipment

1.

What is a serviceability of an adult lifejacket? present

2.

Where is a location of an adult life jacket in Economy Class? Under the passenger seat.

3.

When a life jacket is required to be inflated? While exiting the aircraft

4.

Where is the location of survival beacon? At the designated location or with life rafts of some aircraft types

5.

What is a survival beacon for? Transmit GPS or non-GPS signal to satellite, indicate location

# First Aid Equipment

## First Aid Kits



## Physician's Kits



## First Aid Kits

Serviceability – Present

Description – General first aid equipment and medication (day-to-day use).







## Medical / Physician's Kits

Serviceability – Present

Description – Purser or doctors or physician practitioner are permitted to use the kits.

# First Aid Equipment

## Heart-start Defibrillator



<https://www.nucotraining.com/automated-external-defibrillators-on-aircraft-2/>



<https://marketresearch.biz/report/external-defibrillator-market/>

## Serviceability – Present

**Description** – Heart-start defibrillator for unconscious, no breathing and no pulse.

- Instruction** –
1. Press green button.
  2. Follow voice prompts.
  3. Apply pads to bare chest.
  4. Plug in pad connector.
  5. Press shock button if instructed.



# Emergency and Safety Equipment Check Procedure



The Purser calls cabin crew to be at their stations by phrase *“Cabin crew safety and emergency check.”* on PA when cabin crew are ready in the passenger cabin.

# Safety Equipment Checklist

<b>Cabin Crew Preflight Emergency and Safety Equipment Checklist</b>			
Station 1L			
- Items are needed to be checked before each takeoff.			
- Any irregularities must be reported to the Purser.			
<b>Location</b>	<b>Quantity</b>	<b>Description</b>	<b>Check</b>
L1	1	Cabin crew preflight checklist	
	2	Cabin Emergency and Safety Equipment Checklist	
	1	Life Vest, red	Expire date
	1	Flashlight	Light intensity
	1	Oxygen bottle, with mask	Min press 1500 PSI, gauge in red sector
	1	Halon or BCF fire extinguisher	Sealed, press indicator in green sector
	1	PBE (Smoke hood)	Sealed

Note: All emergency doors and slide pressure will be checked.

Adapted from: Thai Airways. (2010). *Cabin Attendant Emergency Procedure*.

Bangkok: Thai Airways. \_\_\_\_\_

# Emergency and Safety Equipment Check Procedure



Cabin crew report their stations one by one to the Purser on conference line interphone by phrase

*“Station (L1), emergency and safety equipment check is completed.”*

Exercise 4

**Safety Equipment, First Aid Equipment**

1.	How to release the seat belt? Lift the clasp of flat on the buckle
2.	Where is an extension seat belt? Cabin crew distribute to passenger when he ask for .
3.	Who can use the first aid kits? Cabin crew and others
4.	Who can use the physician/ Medical's kits? Purser, doctors
5.	What is a heart-start defibrillator for? Unconscious, no breathing, no pulse
6.	What is a cabin crew report of emergency and safety equipment check?