



CHALLENGER 350

BD-100-1A10

EMERGENCY EQUIPMENT

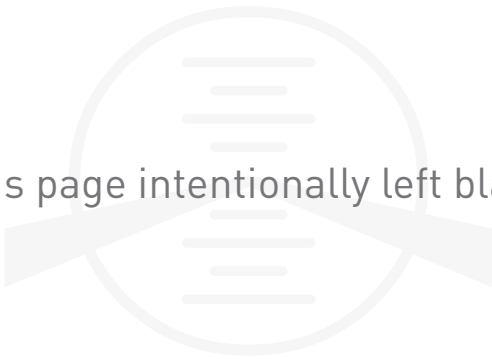
STUDY GUIDE · CARD SYSTEM

A flashcard-style reference for the CL350 Emergency Equipment chapter. Each card covers one focused topic — locations, agent types, donning procedures, and key numbers. Work through the cards, recall the facts, and verify on the reverse.

ATA 25 · EMERGENCY EQUIPMENT

Section EMER · Revision: Original

This page intentionally left blank





EMERGENCY EQUIPMENT CONTENTS

01	Five Things You Must Know	20-4
02	Flight Deck Equipment	20-5
03	Portable Fire Extinguisher	20-6
04	Pbe — Description & Storage	20-7
05	Pbe Donning Procedure	20-8
06	Pbe Abnormal Conditions	20-9
07	Passenger Cabin Equipment	20-9
08	Life Vest	20-10
09	Life Rafts & Placards	20-10
10	Quick Recall — Numbers Grid	20-11

01

FIVE THINGS YOU MUST KNOW

The five highest-value facts for the oral. Memorize numbers cold.

Halon 1211	Agent in all portable fire extinguishers
10 sec	Full extinguisher discharge (lever held ON)
15 min	PBE nominal oxygen production duration
10 years	Useful life of sealed PBE from manufacture
4-person	Capacity of each optional life raft

TIP Five baseline facts about emergency equipment locations and capacities. The cards that follow drill every location, procedure, and abnormal condition.



FLIGHT DECK EQUIPMENT - STUDY CARDS

FLT DECK EQUIPMENT LIST

What emergency equipment is on the flight deck?

- 2 flashlights, 1 PBE, 1 crash axe
- 1 fire extinguisher (Halon 1211)
- 2 life vests

CRASH AXE LOCATION

Where is the crash axe stowed?

- Bulkhead behind the copilot seat
- Immediately accessible from either seat
- Used for structural access in emergency

FLIGHT DECK PBE LOCATION

Where is the flight deck PBE stored?

- Mounted on bulkhead behind pilot's seat
- Vacuum-sealed bag in a container
- Some aircraft: second unit in cabin cabinet

EXTINGUISHER LOCATION (FLT DECK)

Where is the flight-deck fire extinguisher?

- Hand-operated unit in flight compartment
- Stowed in flight compartment in stowage bracket (location per aircraft configuration)
- Halon 1211 — remove, hold upright, discharge

LIFE VEST LOCATION (CREW)

Where are the flight crew life vests?

- Under pilot and copilot seats
- Pull red CO2 release tabs to inflate
- Oral tube backup if CO2 fails

PORTABLE FIRE EXTINGUISHER · STUDY CARDS

EXTINGUISHER AGENT

What agent and fire classes?

- Contains Halon 1211
- Class A, B, and C fires
- Effective on electrical, oil, and fuel fires

EXTINGUISHER COMPONENTS

Key components of the extinguisher?

- Discharge nozzle, discharge lever, clasp
- Pressure gauge (shows normal charge)
- Locking pin and nylon tie

EXTINGUISHER OPERATION

Step sequence to use?

- Remove from bracket; hold upright
- Slide locking pin down with thumb
- Aim at base of fire; press lever

FULL DISCHARGE TIME

How long until fully discharged?

- 10 seconds when lever held fully ON
- Discharge stops when lever is released
- Ventilate compartment promptly after use

POST-DISCHARGE ACTION

What must crew do after cockpit discharge?

- All crew must don oxygen masks
- Select EMERGENCY (100% O₂) — FCOM-specified action
- Smoke/fumes protocol may apply; smoke goggles not specified in FCOM cockpit-discharge warning

WEATHER SUITABILITY

Is the extinguisher cold-weather rated?

- Suitable for use in cold weather
- Effective on all three fire classes
- Halon 1211 remains effective at low temps

FIRE EXTINGUISHER — QUICK SEQUENCE

- Remove from stowage bracket
- Hold upright — either hand
- Slide locking pin DOWN with thumb
- Aim nozzle at base of fire
- Press lever — release to stop discharge
- Full discharge: 10 seconds (lever fully ON)
- After use in cockpit: don O₂ masks + select EMERGENCY (100% O₂) (FCOM-specified)



PBE — DESCRIPTION & STORAGE · STUDY CARDS

PBE PURPOSE

What does the PBE protect against?

- Eyes and respiratory system
- From harmful atmosphere of cabin fire
- Used by crew when fighting cabin fire

PBE CONSTRUCTION

How does the PBE work?

- Hood with visor placed over head
- Seals around neck
- Oxygen-generating canister provides O₂

PBE DURATION

How long does the PBE provide oxygen?

- Nominally 15 minutes
- Varies with work rate and user size
- Operational life ends when canister exhausted

PBE USEFUL LIFE

What is the shelf life of a sealed PBE?

- 10 years from date of manufacture
- Vacuum seal must be maintained
- Chemicals react with moisture if seal broken

PBE DISPOSABLE RULE

When must the PBE be replaced?

- Whenever the vacuum seal is broken
- Disposable — not reusable
- Returned to maintenance after use

PBE CABIN LOCATIONS

Where are PBEs stored in the cabin?

- Behind pilot's seat (mounted container)
- Lavatory (additional unit)
- Some aircraft: second unit in cabin cabinet

PBE DONNING PROCEDURE · STUDY CARDS

REMOVE FROM MOUNTED CONTAINER

How do you open the mounted PBE container?

- Grasp red access handle firmly
- Pull forcibly to disengage cover
- Immediately drop cover (bag stays in container)

REMOVE FROM PORTABLE CONTAINER

How do you open the portable PBE container?

- Lift single latch on cover and lift
- Remove vacuum-sealed bag from container
- Tear bag open via red I.D. tag — pull sharply

DONNING THE HOOD

How do you put on the PBE?

- Hands inside neckseal, palms facing each other
- Head bent forward; guide neckseal over head
- Shield face and glasses from oronasal mask cone

ACTUATING OXYGEN

How is oxygen generation started?

- Grasp adjustment straps at lower visor corners
- Pull outward sharply — actuates starter candle
- Rushing noise heard within 1–5 seconds

HOOD INFLATION

What happens after actuation?

- Hood inflates over 15–20 second period
- Starter candle ceases after inflation
- Slight rustling on inhalation/exhalation is normal

HAIR WARNING

What hair-related hazard exists?

- Human hair is highly flammable
- Hair protruding through neckseal can ignite
- Keep neckseal fully sealed around neck

PBE DONNING — SEQUENCE

- Open container (mounted: red handle; portable: lift latch)
- Tear bag open via red I.D. tag — pull sharply
- Hands inside neckseal, palms facing, visor down
- Head bent forward — guide neckseal over head
- Pull lower visor straps outward sharply → starter candle actuates
- Oxygen rush heard in 1–5 sec; hood inflates in 15–20 sec



06

PBE ABNORMAL CONDITIONS · STUDY CARDS

STARTER CANDLE FAILURE

What if the starter candle doesn't actuate?

- Additional sharp pull on strap may work
- Hood still functions — initial purge capability lost
- Stick fingers into neckseal to increase breathing volume

INADEQUATE MASK SEAL

Signs of a poor oronasal mask seal?

- Moisture / fogging on visor
- Sensation of air escaping around nose/eyes
- Breathing distress — rapid, labored breathing

CO2 BUILD-UP FIX

How to correct CO2 build-up?

- Adjust mask straps and mask position
- Minimize leakage to reduce CO2
- If distress persists — retire to safe area

LOSS OF INFILTRATION SEAL

Signs the neck seal is leaking?

- Persistent irritating odors inside hood
- Eye and respiratory tract discomfort
- Check seal for clothing, jewelry, or hair

EXHAUSTION INDICATORS

How do you know the PBE is exhausted?

- Hood collapses tightly at end of inhalation
- Rapid heat and moisture build-up in hood
- Retire immediately to safe breathing area

07

PASSENGER CABIN EQUIPMENT · STUDY CARDS

CABIN EQUIPMENT LIST

What emergency equipment is in the cabin?

- 1 first aid kit
- 2 fire extinguishers (lavatory + forward closet)
- 1 life vest under each seat + 1 PBE

CABIN EXTINGUISHER LOCATIONS

Where are the cabin fire extinguishers?

- One in the lavatory
- One in the forward closet
- Both contain Halon 1211

FIRST AID KIT

What is provided and where?

- One first aid kit in the passenger cabin
- Location identified by placard
- Accessible for crew and passenger use

PASSENGER LIFE VESTS

Where are passenger life vests stored?

- Compartment under each passenger seat
- One per seat throughout cabin
- Pull red CO2 tabs to inflate

LIFE VEST · STUDY CARDS

LIFE VEST INFLATION

How is the life vest inflated?

- Pull red CO2 release tabs
- CO2 cartridge inflates vest automatically
- Oral inflation tube if CO2 fails

INFLATE TIMING

When should the life vest be inflated?

- Just before jumping out of the airplane
- If overwing exit — inflate when on wing (per life vest manufacturer guide; manufacturer-specific)
- Do NOT inflate while still inside aircraft

LIFE VEST COMPONENTS

Key components of the life vest?

- Waist strap and clip tab
- Oral inflation tube + CO2 inflation tab
- Automatic seawater battery + signal light

CHILD USE

How is a vest adapted for children?

- Pass straps between legs, fasten hooks
- Inflate only one chamber (per life vest manufacturer guide; manufacturer-specific)
- Adult/child vest works for children

DONNING SEQUENCE

Steps to don the life vest?

- Find vest under seat; put over head
- Fasten rings to catch; pull straps tight
- Jerk down on inflation tabs to inflate

LIFE RAFTS & PLACARDS · STUDY CARDS

LIFE RAFTS

What life rafts are available?

- Two optional 4-person life rafts
- Self-contained units for crew and passengers
- Location varies with cabin configuration

LIFE RAFT LOCATIONS

Where can life rafts be found?

- Bottom shelf of galley, OR
- Crew closet, OR aft pyramid cabinet
- Depends on aircraft cabin configuration

ELT REFERENCE

Where is ELT information found?

- Refer to Chapter 06 — Communications
- ELT information not in this chapter
- Emergency Locator Transmitter per ATA 23

PLACARDS

What emergency placards are used on the CL350?

- O2 — oxygen cylinder location
- CREW MEMBER LIFE-VEST UNDER SEAT
- HALON FIRE EXTINGUISHER · FIRST AID KIT

PBE DISPOSAL RULE

How must an expended PBE be disposed?

- Must be turned over to maintenance
- Authorized disposal only
- Contains unreacted oxidizing + strong alkali



10

QUICK RECALL · NUMBERS GRID

Cover the labels and recite the number; reverse and recite the label.
Repeat until automatic.

Halon 1211 Extinguisher agent	Class A/B/C Fire classes covered	10 sec Full extinguisher discharge	100% O2 Mask mode after cockpit discharge
15 min PBE O2 duration (nominal)	10 years Sealed PBE shelf life	1–5 sec O2 rush after PBE actuation	15–20 sec Hood inflation time
2 Flight deck flashlights	2 Cabin fire extinguishers	1 each Life vest per seat	4-person Life raft capacity (optional)
2 Optional life raft count	Bulkhead Crash axe location (co-pilot side)	Lavatory Additional PBE location	Maint only PBE disposal requirement

This page intentionally left blank

