

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance.

UNIT 22: ONBOARD PASSENGER OPERATIONS

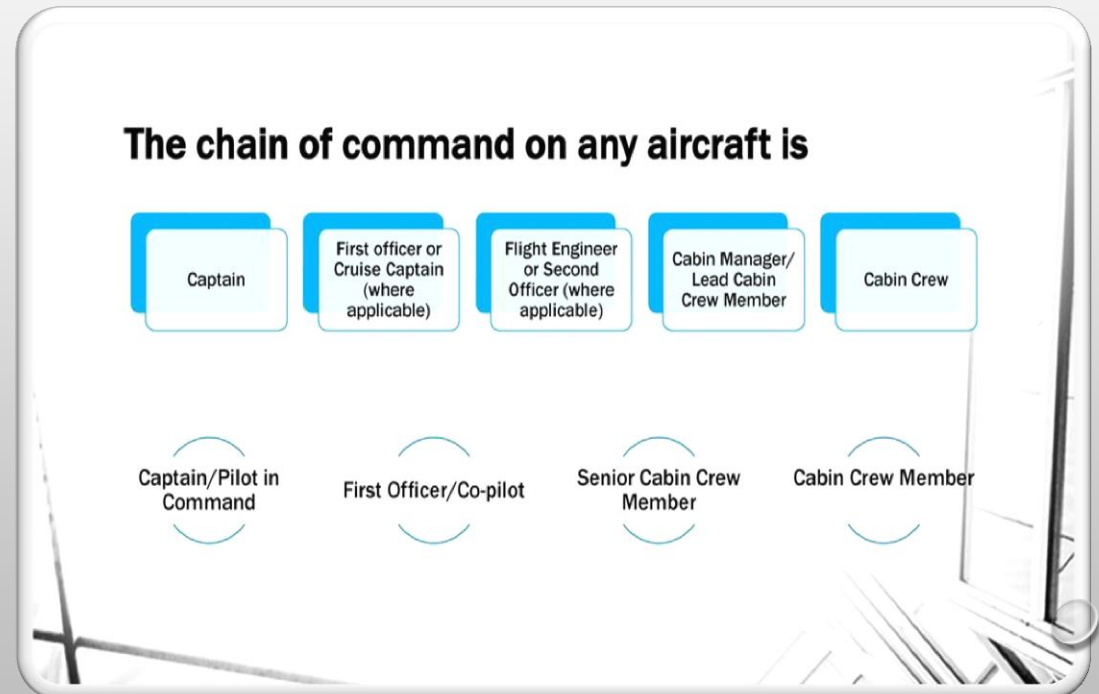
P7 ILLUSTRATE THE CHAIN OF COMMAND ONBOARD AIRCRAFT

P8 EXPLAIN HOW CABIN CREW INTERACT WITH THE FLIGHT CREW DURING ROUTINE FLIGHT OPERATIONS

P9 EXPLAIN HOW THE CHAIN OF COMMAND SYSTEM IS FOLLOWED DURING EMERGENCY DRILLS

CHAIN OF COMMAND ON BOARD AIRCRAFT

- THE 'CHAIN OF COMMAND' IS CRUCIAL FOR EACH CABIN CREW MEMBER. THE PURPOSE OF THIS IS TO SECURE THE SAFETY OF THE AIRCRAFT AND ALL PASSENGERS AND CREW ON-BOARD AS WELL AS THE EFFICIENT MANAGEMENT OF THE AIRLINE OPERATION. THE PILOT/CAPTAIN HAS COMPLETE CONTROL OF THE AIRCRAFT AND HIS ORDER OR COMMAND MUST BE ADHERED TO.



AIRCRAFT TYPES

- SINGLE-AISLED AIRCRAFT

A NARROW-BODY AIRCRAFT OR SINGLE-AISLE AIRCRAFT IS AN AIRLINER ARRANGED ALONG A SINGLE AISLE PERMITTING UP TO 6-ABREAST SEATING IN A CABIN BELOW 4 METRES (13 FT) OF WIDTH.

- TWIN-AISLED AIRCRAFT

A WIDE-BODY AIRCRAFT, ALSO KNOWN AS A TWIN-AISLE AIRCRAFT, IS A JET AIRLINER WITH A FUSELAGE WIDE ENOUGH TO ACCOMMODATE TWO PASSENGER AISLES WITH SEVEN OR MORE SEATS ABREAST. THE TYPICAL FUSELAGE DIAMETER IS 5 TO 6 M (16 TO 20 FT). IN THE TYPICAL WIDE-BODY ECONOMY CABIN, PASSENGERS ARE SEATED SEVEN TO TEN ABREAST, ALLOWING A TOTAL CAPACITY OF 200 TO 850 PASSENGERS. THE LARGEST WIDE-BODY AIRCRAFT ARE OVER 6 M (20 FT) WIDE, AND CAN ACCOMMODATE UP TO ELEVEN PASSENGERS ABREAST IN HIGH-DENSITY CONFIGURATIONS.

- DOUBLE-DECKED AIRCRAFT

A DOUBLE-DECK AIRCRAFT HAS TWO DECKS FOR PASSENGERS; THE SECOND DECK MAY BE ONLY A PARTIAL DECK, AND MAY BE ABOVE OR BELOW THE MAIN DECK. MOST COMMERCIAL AIRCRAFT HAVE ONE PASSENGER DECK AND ONE CARGO DECK FOR LUGGAGE AND ULD CONTAINERS, BUT ONLY A FEW HAVE TWO DECKS FOR PASSENGERS, TYPICALLY ABOVE A THIRD DECK FOR CARGO.

CREW TO PASSENGER RATIO EXPLAINED

CABIN CREW MEMBERS PLAY A KEY ROLE WITH REGARD TO PASSENGER AND OPERATIONAL SAFETY. THE NUMBER OF CABIN CREW ON BOARD, AND THEIR PERFORMANCE, ARE SIGNIFICANT FACTORS IN THE SUCCESSFUL EVACUATION OF AIRCRAFT. THEREFORE, A MINIMUM NUMBER OF CABIN CREW MEMBERS ARE REQUIRED TO EFFECTIVELY CONDUCT A TIMELY EVACUATION AND INCREASE THE SURVIVABILITY OF PASSENGERS DURING AN ACCIDENT.

ICAO ANNEX 6 — OPERATION OF AIRCRAFT, PART I — INTERNATIONAL COMMERCIAL AIR TRANSPORT — AEROPLANES REQUIRES THAT AN OPERATOR ESTABLISH THE MINIMUM NUMBER OF CABIN CREW REQUIRED FOR EACH AIRCRAFT TYPE IN ITS FLEET. THE GOAL OF THIS REQUIREMENT IS TO ALLOW FOR A SAFE AND EXPEDITIOUS EVACUATION OF THE AIRCRAFT, AND TO ENABLE CABIN CREW TO CARRY OUT THE NECESSARY FUNCTIONS TO BE PERFORMED IN AN EMERGENCY OR A SITUATION REQUIRING EMERGENCY EVACUATION. ICAO STANDARDS AND RECOMMENDED PRACTICES (SARPS) DO NOT PROVIDE A NUMERIC VALUE (E.G. EXACT NUMBER OF CABIN CREW) NEEDED FOR THE OPERATOR TO COMPLY WITH ANNEX 6 REQUIREMENTS. THE MINIMUM NUMBER OF CABIN CREW MEMBERS REQUIRED FOR EACH AIRCRAFT TYPE IN AN OPERATOR'S FLEET MUST BE APPROVED BY THE STATE OF THE OPERATOR. THE RATIO OF CABIN CREW MEMBERS TO FLOOR-LEVEL EXITS SHOULD ALSO BE CONSIDERED WHEN ESTABLISHING MINIMUM CREW.

METHODS OF COMMUNICATION FOR INTERACTION BETWEEN CABIN CREW AND FLIGHT CREW DURING A ROUTINE FLIGHT:

- **PA'S**

A PUBLIC ADDRESS SYSTEM (PA SYSTEM) IS AN ELECTRONIC SYSTEM COMPRISING MICROPHONES, AMPLIFIERS, LOUDSPEAKERS, AND RELATED EQUIPMENT. IT INCREASES THE APPARENT VOLUME (LOUDNESS) OF A HUMAN VOICE, MUSICAL INSTRUMENT, OR OTHER ACOUSTIC SOUND SOURCE OR RECORDED SOUND OR MUSIC. PA SYSTEMS ARE USED IN ANY PUBLIC VENUE THAT REQUIRES THAT AN ANNOUNCER, PERFORMER, ETC. BE SUFFICIENTLY AUDIBLE AT A DISTANCE OR OVER A LARGE AREA. PILOTS (PARTICULARLY THE CAPTAIN) CAN SPEAK TO ALL PEOPLE IN THE CABIN (INCLUDING FLIGHT ATTENDANTS) THROUGH THE PUBLIC ADDRESS SYSTEM.

- **VERBAL**

A FREQUENTLY USED TYPE OF COMMUNICATION MEDIUM IS SPEAKING TO FLIGHT STAFF FACE-TO-FACE. THIS INCLUDES PRE AND POST FLIGHT BRIEFINGS.

- **USING EQUIPMENT**

MOST PLANES HAVE SOME SORT OF PHONE SYSTEM - YOU WILL OFTEN SEE THE FLIGHT ATTENDANT USE THE HANDSET WHEN MAKING ANNOUNCEMENTS. THIS SAME DEVICE CAN BE USED TO COMMUNICATE BETWEEN THE COCKPIT AND THE FLIGHT ATTENDANTS, OR BETWEEN GROUPS OF FLIGHT ATTENDANTS ON LARGER PLANES.

- **NON-VERBAL**

ALL PLANE PASSENGERS CAN'T HELP BUT OVERHEAR THE DOORBELL-RESEMBLING NOISES THAT SOUND OVERHEAD AT VARIOUS STAGES THROUGHOUT A FLIGHT. BUT AS MANY WOULD HAVE NOTICED, THE ALERTS AREN'T ALWAYS COMMUNICATING THE SEATBELT SIGN. SOMETIMES THE SOUNDS PLAY OUT FOR SEEMINGLY NO REASON AT ALL. THE ALERTS ARE USED AS A SECRET CODE FOR THE AIRLINE STAFF TO COMMUNICATE TO EACH OTHER, WITH DIFFERENT SOUNDS ATTACHED TO DIFFERENT MESSAGES. REVEALED BY AUSTRALIAN AIRLINE QANTAS ON THE CABIN CREW BLOG, THE INFORMATION LETS PASSENGERS IN ON THE FLYING MYSTERY. CREW SAID: "ON OUR AIRBUS AIRCRAFT YOU'LL HEAR THE 'DONG' SOUND SHORTLY AFTER TAKE-OFF – THIS SOUND LETS CREW KNOW THAT THE LANDING GEAR IS BEING RETRACTED. PROCEEDING 'DONGS' USE HIGH OR LOW CHIMES TO COMMUNICATE DIFFERENT MESSAGES. A SINGLE CHIME MEANS A PASSENGER HAS ASKED FOR SERVICE, WHICH LIGHTS UP IN THE GALLEY AND OVER THE PASSENGER'S SEAT. A HIGH-LOW 'DONG' IS THE CREW PHONE RINGTONE FROM ONE GALLEY TO THE NEXT, ASKING FOR SOMETHING LIKE MORE SNACKS FROM ANOTHER SECTION. THREE CHIMES WITH TWO LOW 'DONGS' COMMUNICATES A PRIORITY MESSAGE FROM THE PILOT OR OTHER CREW MEMBERS. THEY EXPLAINED: "THIS COULD BE LETTING THEM KNOW THERE MAY BE TURBULENCE AHEAD, SO THEY SHOULD START PUTTING AWAY THE MEAL CARTS AND BE READY IN CASE THE FASTEN SEAT BELT SIGN COMES ON."

INTERACTION BETWEEN CABIN CREW AND FLIGHT CREW DURING A ROUTINE FLIGHT:

- **PRE-DEPARTURE COMMUNICATION**

WHEN YOU BECOME CABIN CREW, ONE OF THE MOST IMPORTANT ASPECTS OF THE DAY IS THE 'PRE-FLIGHT BRIEFING' WHICH IS HELD BEFORE EVERY FLIGHT AT BASE. BRIEFINGS ARE NECESSARY TO CREATE AN ACTION PLAN FOR THE DAY, COMMUNICATE INFORMATION BETWEEN CREW MEMBERS AND CHECK THAT WE ARE ALL ON THE SAME PAGE. A SUCCESSFUL BRIEFING IMPROVES COMMUNICATION AND CO-ORDINATION DURING THE FLIGHT AS WELL AS PROMOTING CABIN CREW TEAMWORK, ENSURING AN EVEN WORKLOAD AND ENCOURAGING OPEN COMMUNICATION.

ON ARRIVAL AT YOUR BASE, YOU WILL CHECK IN AND MAKE SURE THERE ARE NO CHANGES TO YOUR SCHEDULE AND COLLECT ANY SAFETY UPDATES OR COMPANY NEWS. IF YOU HAVE TIME, IT IS WISE TO CHECK YOUR CABIN CREW MANUALS FOR A QUICK REMINDER OF SAFETY AND EMERGENCY PROCEDURES AND AVIATION FIRST AID. AT THE BRIEFING, YOU WILL MEET YOUR SENIOR CABIN CREW MEMBER (SCCM) AND YOUR FELLOW CABIN CREW FOR THE FLIGHT. THE SCCM WILL CHECK WITH YOU THAT HAVE YOUR ESSENTIAL ITEMS: ID, PASSPORT, MANUALS AND INTRODUCE THEMSELVES - THEIR TASK IS TO ORGANIZE THE WORKLOAD AND MAKE SURE THE CABIN CREW KNOW THEIR RESPONSIBILITIES.

THEY MAY ASK EVERYONE TO INTRODUCE THEMSELVES BRIEFLY, AS OFTEN YOU ARE WORKING WITH PEOPLE YOU HAVEN'T WORKED WITH BEFORE OR JUST WORKED WITH ONCE OR TWICE, SO IT'S GOOD TO KNOW A LITTLE BIT ABOUT ONE ANOTHER. THE SCCM WILL EITHER DELEGATE YOUR POSITION ON THE AIRCRAFT FOR THE FLIGHT (EG. DOOR 1 LEFT OR R4 FOR EXAMPLE) OR THE MOST SENIOR CREW MEMBER WILL CHOOSE A POSITION AND THEN THE NEXT MOST SENIOR WILL CHOOSE UNTIL ALL CREW MEMBERS HAVE A WORKING POSITION. YOU WILL FIND OUT MORE ABOUT THE FLIGHT INCLUDING THE FLIGHT TIME, DEPARTURE AND ARRIVAL TIME, DESTINATION AND FLIGHT NUMBER AND AIRCRAFT REGISTRATION. IMPORTANT INFORMATION TO REMEMBER WILL BE GIVEN SUCH AS THE PASSENGER LOAD, ANY MAINTENANCE ISSUES, SPECIAL MEALS (EG. VEGETARIAN, HALAL, DIABETIC ETC) AND PASSENGERS WHO NEED ASSISTANCE (PASSENGERS WITH REDUCED MOBILITY OR HAVE A WHEELCHAIR). EXPECTATIONS OF THE FLIGHT WILL BE DISCUSSED AS WELL AS THE TEAM STANDARDS, AND ANY AIMS FOR THE DAY.

IF YOU ARE STAYING DOWN-ROUTE, THE SCCM WILL MENTION THE HOTEL AND DESTINATION ALONG WITH ANY SPECIAL RECOMMENDATIONS. YOU MAY ALSO RECEIVE A BRIEFING SHEET WITH ALL THE INFORMATION DISCUSSED OR IT IS ADVISABLE TO HAVE PEN AND PAPER TO HAND TO MAKE NOTES.

INTERACTION BETWEEN CABIN CREW AND FLIGHT CREW DURING A ROUTINE FLIGHT:

- **PROTOCOL FOR ENTRANCE INTO THE FLIGHT DECK**

CONTROLLING ACCESS TO THE FLIGHT DECK IS PART OF THE PROCESS OF ENSURING THAT LEGITIMATE CONTROL OF AN AIRCRAFT CAN BE MAINTAINED. EXCEPT ON VERY SMALL PASSENGER AIRCRAFT THE DOOR MUST BE LOCKABLE AND OF REINFORCED CONSTRUCTION SO THAT ACCESS IS ONLY POSSIBLE IF IT IS OPENED NORMALLY AND SUCH THAT IT IS RESISTANT TO PENETRATION (E.G. WITH A BULLET) OR INTRUSION (E.G. BY BEING HIT BY A TROLLEY) WHEN CLOSED. ACCESS THROUGH THE DOOR TO THE FLIGHT DECK SHOULD BE PROCEDURALLY CONTROLLED BOTH IN THE AIR AND ON THE GROUND AND SHOULD BE LIMITED TO PERSONNEL FOR WHOM ENTRY IS ESSENTIAL. ON THE GROUND, THIS MEANS THAT ONLY DESIGNATED FLIGHT CREW AND MAINTENANCE PERSONNEL SHOULD NORMALLY HAVE ACCESS; IF CLEANERS NEED TO ENTER, THEN THEY SHOULD HAVE ALREADY BEEN SUBJECT TO AN IDENTITY VALIDATION CHECK AT AIRCRAFT BOARDING AND BE DIRECTLY SUPERVISED BY AUTHORISED OPERATIONAL OR ENGINEERING PERSONNEL WHILST IN THE FLIGHT DECK.

IN THE AIR, PROCEDURES VARY FROM AIRLINE TO AIRLINE AND FROM REGION TO REGION, BUT THE PRINCIPLE THAT ONLY THOSE WITH LEGITIMATE NEED MUST BE PERMITTED FLIGHT DECK ACCESS MUST BE PARAMOUNT. BEYOND THE PILOTS AT THE CONTROLS, THIS WILL INCLUDE RELIEF, CHECK AND TRAINING PILOTS. EXCEPTIONALLY, SUCH FLIGHT DECK OCCUPANCY MAY EXCEPTIONALLY BE EXTENDED TO INCLUDE OTHER SPECIFICALLY-AUTHORISED EMPLOYEES OF THE OPERATOR - PILOTS, CABIN CREW AND MAINTENANCE PERSONNEL. FLIGHT OPERATIONS INSPECTORS CARRYING OUT OBSERVATIONS ON BEHALF OF THE STATE REGULATORY BODY MAY ALSO BE PERMITTED ACCESS AT THE DISCRETION OF THE AIRCRAFT COMMANDER SUBJECT TO VALID IDENTIFICATION BEING PRESENTED PRIOR TO ENTRY APPROVAL. IN FLIGHT, THE DOOR SHOULD ALWAYS REMAIN LOCKED UNLESS THERE IS A LEGITIMATE REASON TO OPEN IT AND IT SHOULD REMAIN OPEN ONLY LONG ENOUGH FOR SOMEONE TO PASS THROUGH IT. THERE MUST BE SOPS IN PLACE FOR ACCESS TO / EXIT FROM THE FLIGHT DECK BETWEEN ENGINE START AT THE BEGINNING OF A FLIGHT AND THE COMPLETION OF ENGINE SHUTDOWN PROCEDURES AT THE END OF A FLIGHT.

FLIGHT CREW CABIN SURVEILLANCE SYSTEMS AND ELECTRONIC OR MANUAL LOCKS WHICH CAN BE OPERATED BY THE FLIGHT CREW WITHOUT LEAVING THEIR SEATS, AND SOMETIMES ALSO FROM THE PASSENGER CABIN, ARE ESSENTIAL AND OFTEN EXIST AS REGULATORY REQUIREMENTS. ROBUST PROCEDURES MUST BE IN PLACE TO PREVENT UNAUTHORIZED ENTRY TO THE FLIGHT DECK, ESPECIALLY WHEN THE DOOR IS OPENED TO ALLOW A PILOT TO EXIT THE FLIGHT DECK FOR (E.G.) A COMFORT BREAK AND ANOTHER CREWMEMBER TO TAKE THEIR PLACE AND WHEN THE PILOT RETURNS TO THE FLIGHT DECK. CREWS SHOULD BE AWARE THAT DISTURBANCE MIGHT BE GENERATED IN THE PASSENGER CABIN IN ORDER TO DISTRACT THE OPERATING CREW FROM THEIR NORMAL SOPS AND THAT, IN SUCH CIRCUMSTANCES, IT SHOULD BE EXPECTED THAT THE FLIGHT CREW WILL REMAIN ON THE FLIGHT DECK WITH ENTRY DENIED.

INTERACTION BETWEEN CABIN CREW AND FLIGHT CREW DURING A ROUTINE FLIGHT:

- REGULAR CHECKS ON FLIGHT CREW

DURING THE FLIGHT CABIN CREW COMPLY WITH FLIGHT CREW COMMANDS REGARDING SUSPENSION OF CABIN SERVICE DURING TURBULENCE AND NECESSITY FOR CABIN CREW TO ALSO BE SEATED IN EXCEPTIONAL CIRCUMSTANCES. IN THE ABSENCE OF COMMANDS FROM THE FLIGHT CREW DURING TURBULENCE, THE SENIOR CABIN CREW MEMBER (SCCM) MAY DISCONTINUE WITH SERVICE DUTIES IN ORDER TO PREVENT INJURY TO CABIN CREW AND PASSENGERS.

OTHER ROLES INCLUDE:

- PROVIDE FOOD AND DRINK TO FLIGHT CREW MEMBERS IN ACCORDANCE WITH OPERATOR SECURITY PROCEDURES REGARDING THE LOCKED FLIGHT DECK DOOR (IF INSTALLED);
- CARRY OUT GENERAL SURVEILLANCE OF TOILETS, GALLEYS, **FLIGHT DECK**, AND CABIN.
- ENSURE FLIGHT CREW ARE ADVISED THAT THE CABIN IS SECURE FOR LANDING;

CHAIN OF COMMAND DURING DIFFERENT TYPES OF EMERGENCY DRILL:

- PLANNED EMERGENCY SITUATIONS AND DRILLS (DITCHING, LANDING, NITS BRIEFINGS (NATURE OF EMERGENCY, INTENTIONS OF FLIGHT CREW, TIME REMAINING, SPECIAL INSTRUCTIONS))
- UNPLANNED EMERGENCY SITUATIONS, E.G. SEVERE TURBULENCE, DECOMPRESSION, FIRE, EVACUATION
- SECURITY INCIDENT, E.G. DISRUPTIVE PASSENGER, HIJACKING
- PILOT INCAPACITATION
- CABIN CREW INITIATED EMERGENCY EVACUATIONS, E.G. MAJOR FIRE, SOUNDS OF THE AIRCRAFT BREAKING UP, UNUSUAL ATTITUDE OF THE AIRCRAFT, DENSE SMOKE, DITCHING
- MEDICAL EMERGENCIES, E.G. HEART ATTACK, STROKE, DIABETIC COMA

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