



UNIT 22: ONBOARD PASSENGER OPERATIONS

P10 EXPLAIN HOW PREVENTIVE SECURITY MEASURES HELP TO MAINTAIN
ONBOARD SECURITY

P11 EXPLAIN HOW ACTIONS TAKEN DEAL WITH ONBOARD SECURITY
INCIDENTS



PREVENTATIVE SECURITY MEASURES

THE TERM 'PREVENTIVE MEASURES' IS USED TO DESCRIBE MEASURES TO PRECLUDE OR REMOVE POSSIBLE INSIDER THREATS, OR TO MINIMIZE THREAT OPPORTUNITIES, OR TO PREVENT A MALICIOUS ACT FROM BEING CARRIED OUT.

SECURITY TECHNIQUES USED BY AVIATION AUTHORITIES HAVE CONSISTED OF METHODS SUCH AS THE SECURITY SCREENING PROCESS, WHERE PASSENGERS WALK THROUGH A METAL DETECTOR. WHILST THIS METHOD HAS SUCCEEDED ON MANY LEVELS, THE MEANS BY WHICH THREATS TO AVIATION PRESENT THEMSELVES HAVE EXPANDED AND METHODS OF ENACTMENT HAVE BECOME MORE ELABORATE AND SOPHISTICATED. WHILE THE AVIATION INDUSTRY HAS BEEN SUCCESSFUL IN MEETING THIS CHALLENGE, INCIDENTS SUCH AS SEPTEMBER 11 2001 (9/11), WOULD SEEM TO SUGGEST OTHERWISE. TO HANDLE THESE NEW, COVERT AND MUCH MORE DEADLY THREATS, THE INTERNATIONAL CIVIL AVIATION ORGANIZATION, ALONG WITH OTHER REGULATORY BODIES, HAS INVESTIGATED AND IMPLEMENTED NEW, MORE INTENSE, SECURITY MEASURES.

PREVENTATIVE SECURITY MEASURES (ON-BOARD)

- TRAINING E.G. CONFLICT MANAGEMENT ETC.
- CONTROL OF ACCESS
- AIRCRAFT SECURITY CHECKS
- AIRCRAFT SEARCHES
- REFUSAL OF EMBARKATION
- DIFFUSING OF POTENTIAL INCIDENTS ONBOARD
- HEADCOUNT
- FLIGHT DECK DOOR SECURITY
- USE OF AIR MARSHALLS (AN ARMED GUARD WHO TRAVELS INCOGNITO ON CERTAIN COMMERCIAL FLIGHTS, TRAINED TO TAKE ACTION IN THE EVENT OF A HIJACKING OR OTHER VIOLENT CRIMINAL ACTION)

ACTIONS TO BE TAKEN FOR SECURITY INCIDENTS

- NOTIFY GROUND STAFF
- NOTIFY FLIGHT CREW
- USE ALERT SIGNALS
- FOLLOW SEARCH PROCEDURES
- USE SKILLS TO DIFFUSE SITUATIONS
- ENFORCE LEGAL REQUIREMENTS

HOW DO COMMERCIAL PILOTS SEND ALERT/DISTRESS SIGNALS?

THERE ARE THREE COMMON WAYS TO SEND A DISTRESS SIGNAL:

1. OVER THE RADIO, TO WHOEVER YOU ARE CURRENTLY TALKING TO.

KEY THE MICROPHONE AND ANNOUNCE TO THE WORLD MAYDAY, MAYDAY, MAYDAY, THE FLIGHT'S CALLSIGN, AND A DESCRIPTION OF THE EMERGENCY. THIS IS GENERALLY THE WAY AN EMERGENCY IS DECLARED, PARTICULARLY FOR COMMERCIAL (AIRLINE) SERVICE, AS THEY'RE GENERALLY ALWAYS IN CONTACT WITH AN ATC FACILITY

2. OVER THE RADIO, TO ANYONE MONITORING THE "EMERGENCY" FREQUENCY.

THE VHF FREQUENCY 121.5MHZ IS RESERVED FOR AIRCRAFT EMERGENCY COMMUNICATION. IT IS MONITORED AT MOST AIR TRAFFIC CONTROL FACILITIES, AS WELL AS BY MANY AIRLINERS AND OTHER PILOTS WITH MULTIPLE RADIOS IN THEIR AIRCRAFT. IF YOU'RE NOT ABLE TO MAKE CONTACT WITH THE FACILITY YOU'RE CURRENTLY TALKING TO IN (1) ABOVE.

3. USING THE AIRCRAFT'S TRANSPONDER.

THREE TRANSPONDER CODES ARE RESERVED FOR UNUSUAL/EMERGENCY SITUATIONS:

- 7700 FOR GENERAL EMERGENCIES
- 7600 FOR LOSS OF COMMUNICATION (RADIO FAILURE)
- 7500 FOR HIJACKING OR OTHER UNLAWFUL INTERFERENCE

ALL OF THESE TRANSPONDER CODES ALTER THE WAY THE AIRCRAFT'S RADAR TARGET IS DISPLAYED, TO ALERT THE CONTROLLER TO THE POSSIBLE PROBLEM.

SECURITY INCIDENTS ONBOARD AN AIRCRAFT

- ON THE GROUND, E.G. NO-SHOW PASSENGER, BREACH OF ACCESS ONTO AIRCRAFT, SUSPICIOUS ITEMS
- IN THE AIR, E.G. PASSENGER ACTIONS, BREACH OF FLIGHT DECK DOOR, DISORDERLY BEHAVIOUR, SMOKING, FAILURE TO COMPLY WITH CABIN CREW INSTRUCTIONS, HIJACKING

BIBLIOGRAPHY

- [HTTPS://AVIATION.STACKEXCHANGE.COM/QUESTIONS/2163/HOW-DO-COMMERCIAL-PILOTS-SEND-DISTRESS-SIGNALS](https://aviation.stackexchange.com/questions/2163/how-do-commercial-pilots-send-distress-signals)