

# Closed-Circuit Television (CCTV)

The ongoing issue of unruly passengers has led the aviation industry to consider proposals to mandate the installation of a CCTV system in commercial transport aircraft. IFALPA generally supports this installation for both safety and security reasons, provided the system is for the sole use of the flight crew and no downlinking or recording takes place.

## Security Considerations

From a security perspective, although in-flight measures should never be considered as a substitute to ground security and are only a reminder that such ground security can fail, a CCTV system can bring some benefits such as:

- Monitoring by the flight crew of the area immediately outside the flight deck and identification of any suspicious behaviour or potential threat to minimize the risk of intrusion during door operation;
- Visual identification/confirmation by the flight crew of persons requesting access to the flight deck;
- Deterrent effect on potentially unruly passengers, who might be less likely to misbehave in front of a clearly visible camera;
- Visual detection by the flight crew of possible stowaways hiding in the wheel well through the use of a suitably located camera

However, IFALPA strongly opposes any **downlinking** of CCTV images and considers that such feature would be counterproductive and highly endanger the aircraft and its occupants for the following three reasons:

- The Federation is extremely concerned about the uncertainty over the “end users” of CCTV images coming from the aircraft. These may vary from one country to the next, and could be just anybody: police, military, airline management, private security organizations, or even terrorists having hacked into the system and using the video feed to their advantage.
- IFALPA is equally concerned about the potential misreading or misunderstanding of downlinked images, and in particular the type of action that might be taken by external parties such as military jets against an aircraft in flight, based on what would only be an incomplete picture.
- There is no known case of a terrorist act - such as a hijack - that could have been prevented or brought to a satisfactory conclusion by the downlinking of CCTV images.

## Safety Considerations

IFALPA acknowledges that a CCTV system can bring some significant safety benefits to the operation of the aircraft, for example by allowing visual confirmation of control surfaces movements, any ice/snow accumulation, gear extension and smoke and/or fire. Such a system can also help ensuring wing tip/tail clearance from obstructions during taxiing/parking.

In order to be most effective, monitoring cameras should cover the following areas:

**Exterior:** Wings, tail, control surfaces, cargo doors, landing gear, engines.

**Interior:** All cabin zones, upper deck compartments. For cargo holds and areas inaccessible in flight, consideration should be given to the use of infrared cameras, for which relevant training should be given to the flight crew.

## Technical Requirements

IFALPA supports a CCTV system in which images coming from the cameras, preferably in colour and high resolution, are fed to a monitor located in the flight deck, and in such a manner that there is no need for substantial head movement from the normal pilot position. The monitor should be operable from each pilot station and allow for partial or full irreversible disablement from the flight deck in order to prevent any unlawful use.

Standard Operating Procedures should be specified by the aircraft operator for use of the CCTV system and in the event of a system malfunction. The system should have a failure detection and annunciation capability. Any attempt to tamper with the system should generate a warning, and any failure of the system should be repaired at the earliest opportunity in accordance with MEL requirements. The rectification interval should be not less than Category C.

## Recording of CCTV Images

Recordings made in commercial aircraft (such as CVRs) continue to be misused and often end up being leaked to the press and on the public domain and social media to feed the general public's desire for sensationalism. These recordings are also used as evidence for purposes other than aviation safety and security, such as criminal prosecution or punitive measures against flight crews. IFALPA therefore strongly opposes any recording of CCTV images.