

CARBON MONOXIDE CONTAMINATIONS IN AIRCRAFT

1. All concerned are warned of the possibility of dangerous carbon monoxide concentrations in aircraft. All aircraft types may be affected, but this Notice relates mainly to light aircraft.

Note: Carbon Monoxide (CO), a poisonous gas, is a product of incomplete combustion and is found in varying degrees in all smoke and fumes from burning carbonaceous substances. It is colorless, odorless and tasteless.

2. There are two main sources of contamination:
 - (a) Modifications, such as those involving the introduction of additional openings in the fuselage or the removal of windows and doors, e.g. for camera installations or parachutists: before approval can be given for such modifications, aircraft must be tested to ensure that the cockpit/cabin is free from unacceptable concentrations. Aircraft modified in accordance with an approved scheme must also be subjected to a similar test.
 - (b) Defective heating systems of the type which utilize an exhaust heat exchange: physical inspections of such systems should be carried out according to manufacturer's instructions at the intervals specified and whenever carbon monoxide contamination is suspected.
3. The other possible sources of contamination:
 - (a) Apertures in fire walls of single-engine aircraft, ineffective seals at fuselage strut attachments, defective exhaust manifold slip joints, exhaust system cracks or holes, discharge at engine breathers, defective gaskets in exhaust system joints and faulty silencers: aircraft should be carefully examined for defects of this nature during routine inspections which should occur at sufficiently regular intervals.
 - (b) Exhaust from other aircraft during ground holding and taxiing: the obvious precaution in this case is that ground holding and taxiing should be carried out cleared of the exhaust area of preceding aircraft.
4. The DCA should be contacted in cases where the presence of Carbon Monoxide is suspected and a test for concentration is considered desirable.