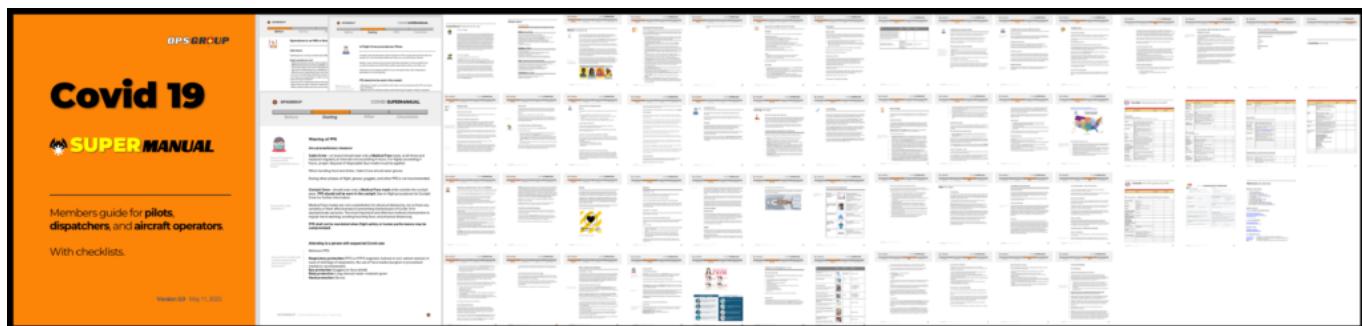


# Hand sanitizers on board: Fire risks

Mark Zee  
21 May, 2020



*This is an extract from the OPSGROUP Covid-19 Supermanual, version 0.9 - May 11, 2020*

## Hand Sanitizers - fire risk

In a documented case in May 2020, an individual suffered first and second degree burns when they made contact with a metal surface and a static discharge ignited the still wet hand sanitizer. Hand sanitizer gels contain large concentrations of alcohol. Once the hand sanitizer is applied, individuals must make sure the gel has suitable time to dry. Alcohol vapors can ignite if exposed to an ignition source, such as light switches or cigarette lighters. Crews should be made aware of this risk, especially in the aircraft operating environment. *Original source here.*

## Dangerous Goods exemption requirements

Alcohol-based hand sanitizers are classified as dangerous goods and are not specifically permitted by the IATA Dangerous Goods Regulations and ICAO Technical Instructions for the Safe Transport of Dangerous goods by Air (DGR 2.5, ICAO Technical Instructions Part 1;2.2) .

Operators that wish to add alcohol-based hand sanitizer to the items carried in galleys or installed in

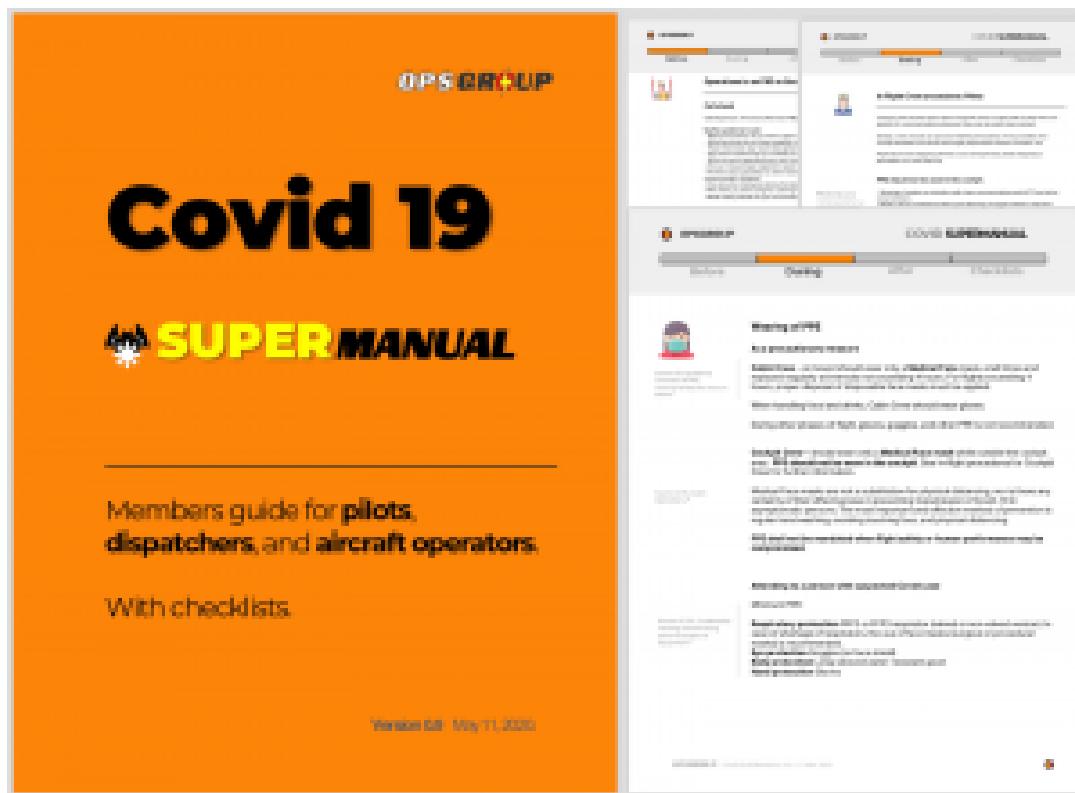
lavatories will need to request authorization from their civil aviation authority (State of the Operator) in accordance with the provision that is set out in Part 1;2.2.1 a) of the ICAO Technical Instructions.

IATA recommends that the request for authorization addresses the following:

- The classification and UN number of the hand sanitizer. For example, UN 1987, Alcohols, n.o.s. (ethyl alcohol mixture), UN 1170, Ethanol solution. However, the safety data sheet from the manufacturer of the hand sanitizer should be checked for the classification;
- The quantity of hand sanitizer in each container and the number of containers to be carried on the aircraft;
- What steps will be taken to ensure that the hand sanitizer is kept away from sources of heat or ignition;
- Provision of information to crew members on the carriage of the hand sanitizer. For example, that crew members will be advised on the procedures through a bulletin or other appropriate method.

Crews can take hand sanitizers as carry on, each bottle max 0.5L, under the IATA Dangerous Goods regulations, total for toiletries is 2L.

## What else is in the manual?



We've divided the manual into four areas around phases of flight: Before, During, After ... and a Checklists section.

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About Covid, Precautions, Off duty crew and staff

Going to work, Health Check, Illness at work, Dispatchers

Flight Crew - Fit to fly, License, medical and recency, keeping aircraft and crew current

Wellbeing and Mental Health: How to find calm, Be Kind  
Planning a flight, Crew pairings and planning  
Aircraft cleaning and preparation, Risks: Hand Sanitizers, Dangerous Good regulations  
Catering and Food preparation, Operations to an FBO or Executive Terminal, Passengers  
Arriving at work, Briefings

## **During our flight**

In-flight considerations  
Aircraft Setup, Boarding, Temperature Checks, Baggage, Seating  
Wearing of PPE (Personal Protective Equipment)  
Additional Aircraft Equipment  
In flight Crew procedures: Pilots, Flight Attendants, In-flight Service  
Illness in Flight – Crew actions, Dispatch actions, Cleaning procedure

## **After - back home (or downroute)**

Disembarking  
Tech Stops and Turnarounds, Interim Cleaning, Walkaround  
Arrival at Destination, Waste Disposal, Cleaning at outstation  
Overnights/Layovers, Hotel guidance, Crew PPE kits  
Crew Illness away from Home base  
AOG/Unplanned overnight  
Arrival at Home base,  
Aircraft Cleaning, Cockpit cleaning  
Crew exposure, Contact tracing

## **Checklists**

Checklist: Trip planning in Covid-19  
Checklist: Aircraft supplies  
Passenger Health Screening form example

**For more about the Covid-19 Supermanual contents, and to download a copy, use this link.**

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# **Covid SuperManual for Flight Operations**

Mark Zee  
21 May, 2020

# Covid 19



Members guide for **pilots**,  
**dispatchers**, and **aircraft operators**.

With checklists.

What procedures do you have in place?  
What personal protective equipment (PPE) do you have available?  
Are there individual items you are not comfortable using?  
Are there items you are required to wear?  
Are there items you are not required to wear?  
What are the requirements for wearing PPE?  
Who have you been using for training?  
What items/tools are you recommended?

Identify areas that require personal protective equipment. First priority: Hand protection. Hand protection should be thoroughly washed before each use. Flight deck crew members will not shower during the day. Face mask usage is permitted.  
**PPE should not be used in the cockpit.**  
- Flying is made easier with close communication with ATC and other crew members.  
- Masks can be uncomfortable; quick donning of oxygen masks is required.

OPSGROUP

COVID SUPERMANUAL

Before During After Checklists



## Wearing of PPE

As a precautionary measure

Source: ICAO Guidance  
Circular of PPE  
recommended for crew  
members.

**Cabin Crew** – on board should wear only a **Medical Face mask**, at all times and replaced regularly at intervals not exceeding 4 hours. For flights exceeding 4 hours, proper disposal of disposable face masks must be applied.

When handling food and drinks, Cabin Crew should wear gloves.

During other phases of flight, gloves, goggles, and other PPE is not recommended.

Source: ICAO Cabin  
Operations.

**Cockpit Crew** – should wear only a **Medical Face mask** while outside the cockpit area. **PPE should not be worn in the cockpit.** See In-flight procedures for Cockpit Crew for further information.

Medical Face masks are not a substitution for physical distancing, nor is there any certainty of their effectiveness in preventing the transmission of Covid-19 in asymptomatic persons. The most important and effective method of prevention is regular hand washing, avoiding touching face, and physical distancing.

**PPE shall not be mandated when flight safety or human performance may be compromised.**

Source: CDC Guidance  
wearing and removing  
personal protective  
equipment.

## Attending to a person with suspected Covid case

Minimum PPE:

**Respiratory protection** FFP2 or FFP3 respirator (valved or non-valved version). In case of shortage of respirators, the use of face masks (surgical or procedural mask) is recommended.

**Eye protection** Goggles (or face shield)

**Body protection** Long-sleeved water-resistant gown

Hand sanitization (Gel)

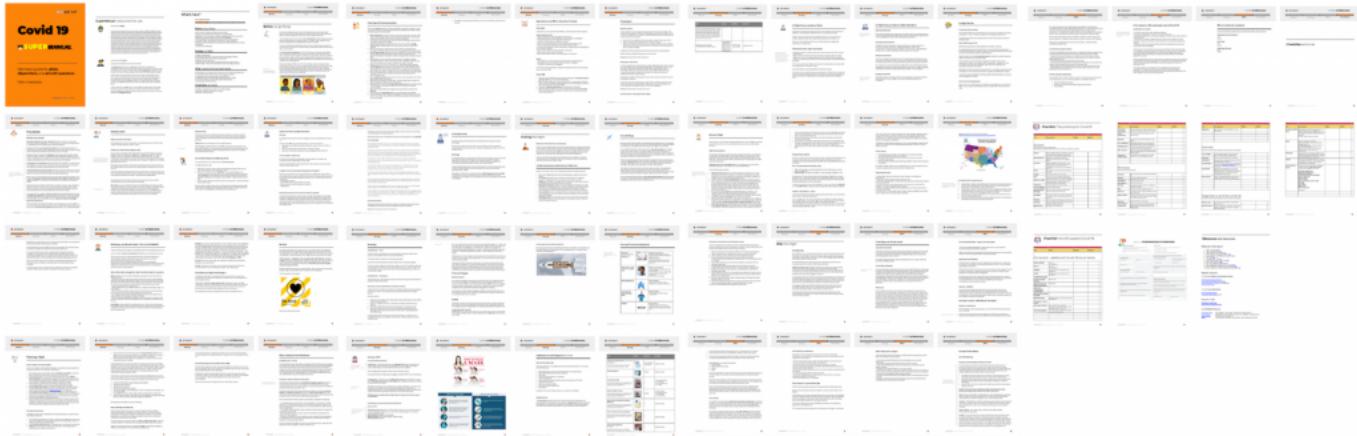
Members guide for **pilots**,  
**dispatchers**, and **aircraft operators**.

With checklists.

Version 0.9 - May 11, 2020

**This is OPSGROUP at its best** - you guys coming together to share your piece of the puzzle, and then we put them all together and get the full picture out to the whole group. So, well done everyone!

## What's in the "Covid Super Manual" ?



We've divided the manual into four areas around phases of flight: Before, During, After ... and a Checklists section.

### Before we go flying

About Covid, Precautions, Off duty crew and staff

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## Checklists

Checklist: Trip planning in Covid-19

Checklist: Aircraft supplies

Passenger Health Screening form example

**Some things to highlight:** these were the most discussed areas in the SuperManual work group:

- **Cockpit PPE, to wear or not to wear.** Although there is no specific guidance (yet) from authorities, the vast majority of operators are opting for the rule “No PPE to be worn on the Flight Deck” – considering the risks and impact on ATC comms, intra-crew comms, quick donning of oxygen masks, and the unknown potential impact of wearing masks and gloves. We have therefore opted for this play-it-safe approach – the safety of the flight comes before any potential (and seemingly unlikely) benefit from wearing masks while flying.
- **Dangerous Goods regulations.** Operators need to check the rules as they apply to your own operation, but for most, carrying hand sanitizers on board in galleys and cabins requires approval from your Aviation Authority.
- **Aircraft Cleaning.** Before you rush to wipe everything down, check the section on cleaning for some materials that should not be used as they will degrade the paintwork and cause damage to aircraft parts.
- **Illness in Flight.** We saw this in almost every manual, with some wildly differing versions. So, in the SuperManual, there are 2 full pages on how to handle this, have a read.

## How to use the SuperManual

- Use it as a “Oh, I hadn’t thought of that” – read through and see what might apply to your operation
- Remember that OPSGROUP is a **mix of operators:** some airline, some corporate, charter, private ops, military, and others. Not everything will apply to your operation. So, when you copy and paste into your own manual, apply common sense
- Use the sources in the left column to double check the latest situation and guidance from authorities. Things are changing fast, and this might be out of date soon. Also, it might just be plain wrong. Don’t believe everything you read!

**Example page with source notes:**



## In Flight Crew procedures: Pilots

Cockpit crews should reduce their entry/exit of the cockpit and use the intercom system for communication whenever they can, to avoid close contact.

Ideally, crews should use personal/individual headsets. If not provided, then cockpit headsets should be thoroughly wiped down before and after use.

Flight deck mask swapping will not occur during the day. Face swapping is permitted on a multi-day trip.

### PPE should not be used in the cockpit.

- Wearing of masks can interfere with clear communications with ATC and other cabin crew.
- Masks can be a hindrance when quick donning of oxygen masks is required.
- Masks can create an unbreathing atmosphere in the cockpit and be distracting.
- There is no research yet conducted as to the safety impact of wearing PPE while operating.

If you must use laundry inflight, use mask when entering cabin, and wash hands thoroughly before entering the cockpit.

Use hand sanitizer to clean and disinfect hands/before meals.

If carrying out any cockpit cleaning beyond simple use of Sani-Cloth or similar wet wipes, see the Aircraft Cleaning section for specifics of substances allowed to be used. Note that Chlorine Wipes, Ethanol, and Sodium Hypochlorite must not be used.

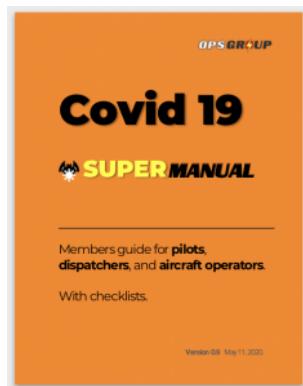
OPS GROUP COVID SUPERMANUAL, v0.9 | 11 May 2020



## Take part in the next round

- This is version 0.9. We might not get to a v1.0 for a while, until more of the manual is backed up by official guidance, but this is everything we've seen and know in the group right now.
- **If you want the next version sent to you directly**, send us what you have. As with all the 100 or so manuals we've already received, none of the original manual is shared or identified, everything is anonymous, and once we've had a look we'll delete the manual. Top secret stuff, we know!

## Download the Covid SuperManual:



- **Get it** in your Dashboard: right here
- Or, check your email - all members received a copy on publication.



**Wednesday, May 13th @ 4pm Eastern, 8pm UTC**

A special OpsChat around Flight Operations and Covid-19, to coincide with the release of the OPSGROUP Covid-19 SuperManual. More on that [here](#).

**A recording of the OpsChat will be available in the Dashboard shortly.**

### **Questions?**

Let us know – [team@ops.group](mailto:team@ops.group). We'd love to hear feedback on the manual, what might make it better, additions, corrections, improvements ... and if you have a manual to share for the next version, please do send it to us.

Cheers,  
The OPSGROUP Team.