



COVID-19 FLIGHT OPERATIONS GUIDE

RESUMING AND SUSTAINING OPERATIONS

Resuming operations after shutdown due to the COVID-19 pandemic involves moving from risk “avoidance” to risk management. The decision entails accepting some level of risk and implementing steps to minimize impact to personnel, operations, and to the community at large. This document provides some thoughts to assist making the decision to open, and then offers suggestions on steps to open carefully while monitoring the operation for signs of sustained strength and health. Every business will have specific circumstances and issues to consider, so the information provided here should not be considered definitive or exhaustive.

Health risks from Coronavirus aren't the only considerations. Rusty or lapsed pilots and dormant aircraft can be, by themselves, problematic. In combination they present an expanded risk to aviation safety, which must also be a factor in making operational decisions to open and sustain operations. Operators are encouraged to consider pilot and instructor proficiency and implement measures to mitigate the risks from degraded proficiency and idle aircraft.

SECTION 1: FACTORS INVOLVED IN DECISION CRITERIA TO RESUME OPERATIONS:

- a. **Determine your state and local guidance.** Start by reviewing [AOPA's list of COVID-19 Restrictions by State](#). State executive orders and health department guidance is ambiguous and leaves wide room for interpretation. With ambiguous guidance, decisions may vary within the same location by operators providing similar service. It is imperative to assess the available guidance and have clear rationale that you can articulate to your employees, clients, and local officials. Consider consulting with your attorney, [your state aviation department](#), and/or similar operators to gain consensus on interpretation of state and local guidelines. Open an ongoing channel to stay connected and share perspectives on the situation as it develops. Your local chamber of commerce may prove beneficial to tie into the local business climate.
- b. **The question of “essential.”** Some locations may still be under current guidance that only essential businesses can open. The definition of “essential” is often unclear. For example, some state executive orders define certain recreational activities as “essential” (including hiking, biking, canoeing, etc.), provided CDC social distancing guidelines can be met. [Guidance from the Cyber and Infrastructure Security Agency \(CISA\)](#) lists flight instructors as essential critical infrastructure workers, which supports the idea that flying operations can be considered essential. Be aware that CISA guidance is advisory only and does not constitute a federal directive or standard. Operations considered “non-recreational” that meet the most stringent guidelines may include:
 - a. Flight reviews, IPCs, currency checks, and flights to meet proficiency requirements
 - b. Flight training leading to advanced ratings: CFI, CFI-I, Commercial, MEI
 - c. Training leading to an instrument rating where the pilot will fly the airplane for business or is training for a career as a professional pilot
 - d. Single pilot operations in pursuit of any of the ratings listed above

- c. **Assess and monitor local infection rates, death rates, and hospitalization rates.** In the absence of clear local guidance, operators in areas with high or expanding infection and death rates should consider delaying operations until those rates-per-capita plateau as indicated by [data from the CDC](#). A flat or descending trend in the hospitalization rate may prove a strong leading indicator that will predict death rates. Infection rates and death rates are helpful to assess, though these metrics tend to be delayed and can vary based on collection and reporting methods as well as timing and assessment criteria. Bottom line, these metrics should be flat or descending. If a rise in these rates appears, consider re-assessing your operation.
- d. **Assess the demographics of your operation** (percentage of high-risk people). Those at higher risk based on currently available information and clinical expertise include older adults and people of any age who have serious underlying medical conditions. Such conditions include lung disease, asthma, serious heart disease, compromised immune systems, severe obesity, and liver disease. Consider opening your operation in stages, at first excluding anyone known to be in a high-risk category until your processes are fully implemented and confidently effective. Frequently consult [the latest CDC guidelines](#) for high-risk persons.
- e. **Assess your facility and resources.** Your facility must allow social distancing standards and sterilization recommendations. Operations should resume only after a thorough review of procedures with employees, who must accept decisions from management in implementing and upholding new procedures.
- f. **Evaluate your insurance coverage.** Review with your insurance broker your applicable insurance coverages such as your Commercial General Liability (CGL) coverage to determine if you have coverage for COVID-19 events:

SECTION 2: IMPLEMENTATION PROCEDURES, ONCE A DECISION IS MADE TO REOPEN:

Facilities. Prior to re-opening, follow the [CDC's guidelines](#) to ensure your entire facility is cleaned, sanitized, and configured to promote social distancing. CDC guidelines indicate seven days of facility closure (non-access) is sufficient to eliminate the risk of residual COVID-19 contamination. The following steps will offer added confidence for preparing facilities:

- a. **Pre-opening cleaning.** Open doors and windows to circulate fresh air through the facility to the extent possible for at least 24 hours before cleaning. Clean the entire facility with emphasis on a walk-through to wipe each surface or object that is touched or handled with sanitary wipes or disinfectant under normal business operations.
- b. **Establish and educate staff on procedures that limit the need for facility access.** Consider booking, dispatching, check-in, and payment programs that do not require facility access. Communicate that access is limited to specific operational needs, which must be listed in new operational procedures or specifically approved by management.
- c. **Establish controlled entry points.** Stock each entry point with hand sanitizer, disinfectant wipes, and a method for checking body temperatures.
- d. **Post new procedures.** Post new procedures prominently at entry points, briefing rooms, restrooms, and in common areas. Post signage reminding personnel to wash hands or use hand sanitizer frequently.

- e. **Reposition furniture.** Limit seating and congregation areas to the minimum. Ensure at least six feet of separation between chairs. Close common congregation areas.
- f. **Position panels.** Install clear plastic panels at the front desk and other fixed locations to prevent the spread of germs and viruses to/from other personnel.
- g. **Clean facilities.** Establish policies to ensure facilities are cleaned thoroughly every day. Have on-scene personnel wipe hard surfaces twice a day.
- h. **Special considerations.** Every facility will be different. Evaluate your environment to determine if there are unique factors that need to be addressed.

Aircraft. Prior to resuming flight operations, disinfect aircraft with area sprays, such as Lysol, while being careful to avoid overspray on avionics screens. Use disinfectant wipes on all areas accessed by hands: door latches, oil dipsticks, switches, levers, avionics buttons, yoke, throttles, door and ignition keys, etc. Consider “chair-flying” a mission from pre-flight to post-flight in each aircraft and use sanitizing wipes throughout. Establish the following procedures for operations:

- a. **Hand washing** – All personnel must wash hands before and after accessing aircraft.
- b. **Pre-flight wipes** – Make sanitizing the aircraft part of the pre-flight and post-flight checklist. Remember external items like dipsticks, fuel caps, pitot covers, cowl plugs, keys, and more.
- c. **Headsets, hoods, other items** – Do not share headsets, view-limiting devices, kneeboards, or pens and pencils. Require pilots to use their own items or assign such items permanently to specific pilots.
- d. **Sterile aircraft** – Require removal of all material not specifically assigned for permanent placement in the aircraft. With emphasis on trash, water bottles, etc.
- e. **Sterile avionics** – [Garmin offers suitable guidance](#) for sterilizing avionics. Solutions with ammonia should be avoided. Instead use solutions with up to 91% isopropyl alcohol. 70% isopropyl alcohol evaporates slower than 91% solutions, giving it more time to work, which might make it more effective in killing viruses and germs. Wipes, or spraying the solution on wipes is best to prevent saturation of the equipment to the extent moisture could seep behind the exterior surface.
- f. **Cockpit checklists** - Establish checklists with protective surfaces and sanitize them before and after each flight. Implementing policies for use of electronic checklists in e-flight bags where appropriate can limit potential exposure.
- g. **Post-flight wipes** – Require after each flight a wipe-down of any interior and exterior surfaces that were likely touched.
- h. **Gloves** - Protective gloves should be considered optional. If used, encourage people to remember gloves only protect the hands inside them. Gloves can pick up and transmit germs and viruses, and any surface touched by them should be sanitized afterwards.
- i. **Safety of flight** – Safety of flight must not be compromised. If these procedures conflict with the safety of any flight, encourage personnel to discontinue them, and report the flight and the situation to management.

Personnel. Human-to-human transfer is believed to be the most potent avenue for COVID-19 infection. Establish guidelines for personnel who may participate in operations and require them to acknowledge and sign the guidelines. Some criteria to consider:

- a. **Agreements.** Require all who participate to sign an agreement to abide by new procedures and discuss with your attorney possible use of a waiver that acknowledges risk of operations under a pandemic.
 1. Consider a specific counseling waiver for those considered in the high-risk category for COVID-19 (i.e., older people and those with serious medical conditions listed in Section 1d above).
- b. **Require daily signed certifications.** Maintain signed statements/certifications from personnel entering the facility that they have not experienced symptoms of COVID-19 or had a body temperature of over 100.4 degrees within the last 24 hours. Also include confirmation that they have not travelled internationally within the last two weeks or knowingly been in contact with anyone who has experienced COVID-19 symptoms. Symptoms include persistent cough, shortness of breath, fever, chills, muscle pain, recent loss of sense of taste or smell, and sore throat. Refer to the [CDC website](#) for more information about Coronavirus symptoms. Personnel must also confirm they have not flown with any other operation within the last 14 days.
- c. **Require temperature checks on first entry of the day.** Every time someone enters the facility for the first time each day, they must not exhibit a body temperature over 100.4 degrees. If at any time throughout the day, while in the facility or conducting operations, personnel feel feverish or experience other symptoms, they must immediately report their status and depart the premises.
- d. **Masks.** Consider requiring all personnel to wear masks upon entering the facility and while engaged in activities on the premises including inside and around aircraft.
- e. **Sick personnel.** Require anyone who exhibits COVID-19 symptoms to notify a manager if on-site or, if off-site, email a manager/supervisor and follow up with a phone call providing:
 1. Date/time when symptoms appeared
 2. All visits to the facility (dates and times)
 3. Personnel they interacted with
 4. Facilities they entered, including exact rooms, chairs, etc. and equipment and items they touched or used (aircraft, keys, aircraft covers, POHs, notebooks, computers, storage cabinets, simulators, etc.)
 5. Their plans for regaining health (self-quarantine, hospital, etc.)

SECTION 3. SEQUENTIAL OPENING. Opening operations sequentially, beginning with lower health-risk operations, will allow monitoring of the effectiveness of operational procedures before full operations resume. Some sequential considerations include:

- a. **Solo flight and/or single entity independent aircraft rentals.** From a health perspective (not an operational perspective), solo flights or flights involving single entities (families, etc.) involve the least amount of health risk. They can be conducted even under the most stringent controls and higher health risk scenarios. Approvals, aircraft dispatching and check-ins, and most interactions with instructors can be performed remotely. Risk of transmitting or receiving the virus during these operations is limited to physical transfer from surfaces, which the CDC seems to indicate to be low risk.
- b. **Dual instruction.** Dual instruction presents the highest risk due to the proximity of instructor and student. Mandating masks while in the aircraft can reduce the risks. Masks are being used throughout the country during dual flights without significant interference. Consider limiting students and instructors to assigned pairs to limit the possibility of expanded contagion. Instructors who fly with multiple students are the highest risk to become potential transmitters, therefore they must be hypervigilant to COVID-19 symptoms and must agree to limit their interactions during non-work activities.
- c. **Ground school.** Ground schools can increase the health risks due to a grouping of people within a confined area. Limit ground school to online platforms as much as possible. If in-person school is necessary, limit classes to 10 people or numbers allowed by your state, maximize seat spacing to at least six feet and require masks for all attendees.

Ongoing Assessment

- a. **Continuous monitoring.** Constantly review the opening criteria in section one. As the situation changes, re-assess the risks and expand or and expand or roll back operations as necessary. Also be particularly vigilant to assure compliance with the processes that you have adopted.
- b. **Reported illness.** In the event any person engaged in the operation reports symptoms of COVID-19, immediate response is required. Evaluate whether a total shutdown is necessary or whether you may be able to isolate the affected people and equipment and continue operations.
 - 1. Track the symptomatic person's contact and engagement throughout the operation: facilities, aircraft, equipment, and most importantly, personnel. Realize people are contagious before showing symptoms. Shutter facilities and aircraft that the infected person may have contacted. Return to the opening steps above to re-sanitize the environment and wait seven days to reopen.
 - 2. Notify all personnel who came in contact with the facilities, aircraft, equipment, or the symptomatic person. Advise them to be vigilant for symptoms and to report any onset of symptoms to their medical providers and your operations manager. Prohibit anyone who came in contact with the infected person from accessing the facility or from using aircraft or equipment for 14 days.

COVID-19 FLIGHT OPERATIONS GUIDE RESOURCES

AOPA COVID-19 State-by-State Guidelines

<https://pic.aopa.org/blogs/70>

State Aviation Offices

https://www.faa.gov/airports/resources/state_aviation/

Cybersecurity and Infrastructure Security Agency (CISA) Guidance

https://www.cisa.gov/sites/default/files/publications/Version_3.0_CISA_Guidance_on_Essential_Critical_Infrastructure_Workers_4.pdf

CDC COVID-19 Data Tracker

<https://www.cdc.gov/covid-data-tracker/index.html>

CDC Higher Risk Guidelines

<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>

CDC Cleaning and Disinfecting Guidelines

<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>

Garmin Service Advisory 2051: Cleaning/Disinfecting Guidance

<https://www.garmin.com/en-US/aviationalerts/service-advisory-2051-cleaning-disinfecting-guidance/>

CDC Symptoms of Coronavirus

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>