

REGULATORY SERVICES

Waiver Application Overview

Starter, Expanded, Advanced, and Pathfinder Packages

Introduction

Skydio's world-leading autonomous flight systems enable data collection and situational awareness that make your organization safer and more productive. With leading experts in regulations and policy, our team is ready to help your organization realize the full benefits of Skydio's autonomous technology.

Skydio's Waiver Application service helps your organization unlock advanced operations—such as Beyond Visual Line-of-Sight (BVLOS) and Remote Operation that can yield increased efficiency and even higher productivity, allowing you to realize the full value and utility of your drone program

Current regulations limit these advanced operations, requiring operators to apply for waivers and exemptions. A successful application hinges on thorough program documentation and a well-constructed safety case. Skydio's Regulatory Team has a proven track record of success, helping many organizations win regulatory approvals, and we're prepared to support your organization. This White Paper breaks down the different Waiver Application packages in detail so you can choose the right solution for your business needs.

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Waiver Application Packages



Skydio offers four Waiver Application packages:

	Starter	Expanded	Advanced	Pathfinder
	BVLOS waiver package (on-site operator-launched)	Dock-based BVLOS use cases (with on-site human presence)	Remotely Operated Dock-based BVLOS use cases (without on-site human presence)	BVLOS Autonomous use cases (without FAA precedent)
FAA Application Package	FAA Application Package	FAA Application Package	FAA Application Package	FAA Application Package
Concept of Operations	✓	✓	✓	✓
Operational Risk Assessment	✓	✓	✓	✓
Skydio Technical Data Supplement	✓	✓	✓	✓
Letter of Petition for Exemption	–	–	✓	✓
Skydio Support	Skydio Support	Skydio Support	Skydio Support	Skydio Support
FAA RFI Responses	✓	✓	✓	✓
Risk Mitigation Technology Strategy	–	–	✓	✓
Regulatory Engagement Plan	–	–	–	✓

Starter Package

The Starter package includes the development of a Beyond Visual Line-of-Sight (BVLOS) Part 107 waiver or Part 91 COA where the remote pilot is located on-site.

STARTER PACKAGE



LAUNCH & MONITOR ONSITE **LAND NEAR PILOT** **FLY PLANNED OR MANUAL MISSIONS**

Skydio supported Chula Vista Police department in receiving Tactical BVLOS approval. The Waiver Application - Starter package expands this concept to greater distances.

The Starter package supports BVLOS operational concepts that have previously been approved by the FAA, such as a BVLOS bridge inspection and industrial facility inspections. The Remote Pilot is co-located with the takeoff and landing location and is able to monitor a volume of airspace surrounding the drone operation, but will not see the drone at all times – such as when it is underneath a bridge, behind a large structure, or at slightly greater distances from the Remote Pilot.

The Starter Package includes:

- FAA Waiver Application to 107.31 (and 107.33 if required)
 - Concept of Operations document with Waiver Safety Explanation Guideline answers
 - Operational Risk Assessment document
 - Technical Data Supplement documents for the applicable Skydio drone(s)
- Walkthrough session of waiver submission through FAA's DroneZone or COA Application Processing System
- Written responses to any Requests for Information (RFI) from the FAA

FAA Waiver Application Development

The Skydio Regulatory Team will meet with your team to discuss the type of BVLOS request and gather information about your organization’s current or future drone program. The Skydio Regulatory Team will then develop three documents on your behalf.

Concept of Operation Document

The Concept of Operation document describes how your organization will conduct the requested flight operation and includes information about your organization’s drone program. The Concept of Operation outline typically includes the contents below.

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INTRODUCTION

KEY MESSAGES

WAIVER SAFETY EXPLANATION GUIDELINES

OPERATIONAL DETAILS

SMALL UAS DETAILS

PILOT / PERSONNEL DETAILS

107.31 VISUAL LINE OF SIGHT AIRCRAFT OPERATIONS

107.33 VISUAL OBSERVER

CONCEPT OF OPERATION

ORGANIZATION OVERVIEW

Organizational Structure

Emergency Response Plan

SMALL UAS DETAILS

FLIGHT CREW DETAILS

Roles and Responsibilities

Training

AIRSPACE DETAILS

OPERATING ENVIRONMENT DETAILS

OPERATIONS

Type of Operations

Key Assumptions

Standard Operating Procedures

Normal Operating Strategy

Pre-flight activities

Takeoff

Mission operations

Landing

Post-flight activities

Abnormal and Emergency Operation

Loss of C2 Link

Loss of Navigation Systems

Low Battery

Loss of GNSS Signal

Flyaway

Aircraft System Failures

Propulsion System Failure

Battery Faults/Errors

Temperature Warnings

CCS Failure

Emergency Landing / Flight Interruption

Accidents, Incidents, Mishaps

APPENDIX A: DEFINITIONS

APPENDIX B: ENVIRONMENTAL

The first section is a Question and Answer section called the Waiver Safety Explanation Guidelines. Based on your desired operation, Skydio will provide detailed answers to questions about the operation, the small unmanned aircraft, the flight crew, and the specific regulations being waived based.

The next section is the Concept of Operations itself. This section describes what flight operation your organization wishes to conduct and how you will execute it.

Finally, there are appendices that provide definitions for acronyms, and information on environmental impacts.

The final length of the document will vary depending on the type of operation being requested and your organization’s unique situation. It is common for the Concept of Operation document to exceed 25 pages. When finalized, it will be branded with your organization’s logo and style formats and provided in .DOCX and .PDF formats.

Operational Risk Assessment Document

The Operational Risk Assessment document provides information regarding hazards, safety risks, and safety risk controls to FAA decision makers. It follows FAA Order 8040.6 – Unmanned Aircraft System Safety Risk Management Policy. The Operational Risk Assessment is based on the operation detailed in the Concept of Operation document and has an outline as shown below.

Table of Contents

IDENTIFY TEAM MEMBERS

PERFORM SYSTEM ANALYSIS

CONOP DESCRIPTION

AIRCRAFT

AIRMAN

AIRSPACE / OPERATING ENVIRONMENT

IDENTIFY HAZARDS, CAUSES, AND OUTCOMES

ANALYZE SAFETY RISK

CONSIDER VALIDITY OF MITIGATIONS

ASSESS SAFETY RISKS

ADDITIONAL CONTROLS AND RESIDUAL RISK

MONITORING AND TRACKING

APPENDIX A: DEFINITIONS

Severity Likelihood	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
Frequent A	[Green]	[Yellow]	[Red]	[Red]	[Red]
Probable B	[Green]	[Yellow]	[Yellow]	[Red]	[Red]
Remote C	[Green]	[Green]	[Yellow]	[Yellow]	[Red]
Extremely Remote D	[Green]	[Green]	[Green]	[Yellow]	[Red]
Extremely Improbable E	[Green]	[Green]	[Green]	[Green]	[Yellow]
					<div><div>High Risk [Red]</div><div>Medium Risk [Yellow]</div><div>Low Risk [Green]</div></div>

* High Risk with Single Point and/or Common Cause Failures

The final length of the document will vary depending on the risks and controls of the proposed operation. It is again common for the Operational Risk Assessment document to exceed 25 pages. When finalized, it will be branded with your organization’s logo and style formats and provided in .DOCX and .PDF formats.

Skydio Technical Data Supplement Document

Skydio has developed Technical Data Supplements for Skydio drones that are intended specifically for the FAA. The Technical Data Supplements are similar to the drone user manuals, but are organized differently and provide emphasis on safety features that are used as risk controls. These documents are provided in .PDF format to your organization.

FAA Application Phase

Skydio will provide instructions and assistance for completing this important step. However, the FAA Waiver Application package must be submitted by your organization to the FAA through DroneZone, or through the COA Application Processing System (CAPS). It is your organization's responsibility to submit all of the documents in the Starter Package to the FAA through the web portal.

FAA Request for Information Support

Skydio works hard to ensure the developed documentation has all the information necessary for the FAA to review and approve the request. However, when processing your application, the FAA may seek clarity or additional information. A Request for Information (RFI) to your organization from the FAA will contain a set of questions related to your application. If your organization receives a Request for Information, Skydio will support the development of answers to each question. Written responses can then be submitted by you to the FAA.



Expanded Package

The Expanded package includes the development of a Beyond Visual Line-of-Sight (BVLOS) Part 107 waiver or Part 91 COA for Skydio Dock and Remote Operations. The Remote Pilot is located off-site and operates the drone from Skydio Dock using Skydio Cloud.



This package provides your organization with the initial capability to conduct remote operations. A Remote Pilot, located off-site, can operate the drone through Skydio Cloud during flight. Located on-site is a trained and qualified Preflight Technician who conducts a physical pre-flight inspection of the drone and a trained and qualified Visual Observer who monitors a volume of airspace surrounding the drone operation.

The Expanded package includes:

- FAA Waiver Application package to 107.31 and 107.33 for Skydio Dock and Remote Operations
 - Concept of Operations document with Waiver Safety Explanation Guideline answers
 - Operational Risk Assessment document
 - Technical Data Supplement documents for the applicable Skydio drone(s) and Skydio Dock and Remote Operations
- Walkthrough session of waiver submission through FAA's DroneZone or COA Application Processing

FAA Waiver Application Development

The Skydio Regulatory Team will meet with your team to discuss the type of BVLOS request and gather information about your organization's current or future drone program. The Skydio Regulatory Team will then develop three documents on your behalf.

Concept of Operation and Operational Risk Assessment Documents

Similar to the Starter Package, Concept of Operation and Operational Risk Assessment documents are developed for the proposed operation discussed with your team. In this case however, the documents are developed with Dock and Remote Operations and its associated risks and mitigations in mind.

The final length of these documents will vary depending on the type of operation being requested and your organization's unique situation. It is common for each document to exceed 25 pages. When finalized, they will be branded with your organization's logo and style formats and provided in .DOCX and .PDF formats

Skydio Technical Data Supplement Documents

Skydio will provide the aircraft Technical Data Supplements and an additional Dock and Remote Operations Technical Supplement. These documents are provided in .PDF format to your organization.

FAA Application Phase

Similar to the Starter Package, Skydio will provide instructions and assistance with submitting the waiver application package to the FAA through the DroneZone or COA Application Processing System web portals.

FAA Request for Information Support

Similar to the Starter Package, if your organization receives a Request for Information, Skydio will support the development of answers to each question. Your organization can then submit written responses back to the FAA.

Advanced Package

The Advanced package includes the development of a Beyond Visual Line-of-Sight (BVLOS) Part 107 waiver and exemption or Part 91 COA for Skydio Dock and Remote Operations. The Remote Pilot is located off-site and operates the drone from Skydio Dock using Skydio Cloud. To increase efficiency of remote operations, human presence is further reduced or replaced entirely by technical solutions



The Advanced package includes Skydio development and support of two interdependent FAA regulatory processes: a Part 107 waiver to 107.31 and 107.33 (if necessary) and an FAA exemption to 107.15 and 107.49. The Advanced package results in more efficient Dock and Remote Operations by removing the need for an on-site Preflight Technician who in the Expanded package is responsible for physically preflighting the aircraft. Detect and avoid actions must be accomplished by either a Visual Observer at the Dock location or detect and avoid technology. Skydio will work with your organization to identify the best path forward on this matter.

The Advanced package includes:

- Custom FAA Waiver and Exemption Package
 - Letter of Petition for Exemption
 - Concept of Operations document with Waiver Safety Explanation Guideline answers
 - Operational Risk Assessment document
 - Technical Data Supplement documents for the applicable Skydio drone(s) and Skydio Dock and Remote Operations
- Air and Ground Risk Mitigation Technology Strategy material and discussions
- Support and response to any FAA Requests for Information

Discuss and Shape Operation

The Skydio Regulatory Team will hold meetings with your organization to discuss and shape the desired operation. After Skydio has an understanding of the desired operation, the Skydio Regulatory Team will develop the Letter of Petition for Exemption, Concept of Operation, Operational Risk Assessment, and any other supporting documentation needed.

Air and Ground Risk Mitigation Technology Strategy

Requesting an exemption to operate without a Remote Pilot or Visual Observer on-site requires a robust risk mitigation strategy. One area of emphasis for risk mitigation will be the avoidance of crewed aircraft and other airborne hazards. Skydio leverages a concept called "shielded operations", where the drone remains in

However, there may be circumstances where additional technology, such as detect-and-avoid equipment, is necessary to mitigate risk to an acceptable level. Skydio has extensive experience with risk mitigation technology and will inform your organization on technology options and paths forward. Skydio does not develop or sell such technology and does not endorse any particular technology.

FAA Exemption and Waiver Application Development

The Advanced Package is different from the Starter and Expanded Packages in that a request for FAA exemption must be made in addition to a waiver. Skydio will take the lead on developing this documentation in collaboration with your organization and will provide your organization the opportunity to review and provide feedback on the documents.

Letter of Petition for Exemption

Skydio will help your organization draft a letter of petition for exemption that meets the requirements stated in 14 CFR § 11.81. The letter, broadly speaking, will detail the specific sections of 14 CFR from which your organization seeks relief, why your organization needs this relief, how your operation will ensure an equivalent level of safety, and how the relief benefits the public.

This letter is submitted to the FAA as part of the application and becomes a public document in your docket on the Federal Register. Because this letter becomes a public document, Skydio will work with your organization to protect proprietary information and submit supporting documentation under confidential cover.

Concept of Operations and Operational Risk Assessment Documents

Similar to the Expanded Package, Skydio will develop a customized Concept of Operation and Operational Risk Assessment for the desired operation. These two documents detail how the operation will be conducted and the team's perspective on operations risk and risk mitigation. These documents are often submitted under confidential cover and are therefore not published for the public to view.

Skydio Technical Data Supplement Documents

Skydio will provide the aircraft Technical Data Supplements, a Dock and Remote Operations Technical Supplement, and any other supporting documentation needed for the application.

FAA Application Phase

When the FAA Exemption Package is ready for submission, Skydio will provide instructions for your organization to submit the petition for exemption to the Federal Register. Skydio will also provide instructions and assistance with submitting the waiver application package to the FAA through the DroneZone or COA Application Processing System web portals.

FAA Request for Information Support

The FAA can issue Requests for Information on exemption requests. If your organization receives a Request for Information, Skydio will support the development of written responses to each question that can be submitted back to the FAA.

Pathfinder Package

The Pathfinder package supports your organization's application for precedent-setting complex operations such as scheduled autonomous BVLOS and one-to-many BVLOS operations.

These operations are conducted by an off-site Remote Pilot through Skydio Cloud. However, additional autonomous capabilities are included, such as the ability for a Remote Pilot to simultaneously operate more than one drone, or the ability for the Remote Pilot to schedule the mission and execute it without direct supervision. This package includes:

- Custom FAA Request Package that includes items such as:
 - Letter of Petition for Exemption
 - Customized Concept of Operations document
 - Customized Operational Risk Assessment document
 - Technical Data Supplement documents
- Risk mitigation technology strategy material and discussions
- FAA regulatory engagement plan
- Support and response to any FAA Requests for Information

Risk Mitigation Technology Strategy

Similar to the Advanced Package, the types of operations requested in the Pathfinder Package may require technology such as detect-and-avoid equipment to sufficiently mitigate air risk. As Skydio and your organization discuss and shape the desired operations, Skydio will provide information on any required risk mitigation technology and develop strategies to incorporate any selected technology into the FAA Request Package.

FAA Regulatory Engagement Plan

Skydio will work with your organization to develop an FAA engagement plan that maximizes the likelihood of success in accordance with your organization's goals. Examples of an FAA Engagement Plan include recommendations on participating in special FAA programs, such as FAA's BEYOND program or FAA Technical Assist, that afford organizations the opportunity to work directly with the FAA on advanced concepts before a specific request is made.

Custom FAA Request Package and Application Support

Skydio will take the lead on developing the necessary documentation for the request in collaboration with your organization, and will provide your organization the opportunity to review and provide feedback on the documents. As with all other packages, Skydio will support your organization in submitting the required documents to the FAA and with any requests for information during FAA review.

Taking the Next Step

Skydio is excited to help your drone program pursue advanced operations such as Beyond Visual Line of Sight. Advanced operations can make Skydio drones even more productive which in turn makes your organization safer and more efficient. This eBook gives a general overview of the four packages to help you understand the level of service associated with each package. Skydio's Regulatory team can provide additional detail on each package and help your organization determine which package is the right fit.

In addition to the Waiver Application Service, Skydio offers a Program Documentation Service to support your organization's program development, whether you are just getting started or moving into the advanced concepts supported by the Waiver Application Service. Check out the Program Documentation Overview [whitepaper](#) for more information on these related services.

We recommend contacting us to learn more about each package and to learn how Skydio can support your unique circumstance. Ask your existing Skydio representative (or fill out the [contact form](#) to get one!) to get in contact with the Skydio regulatory team and begin the pursuit of advanced operations.



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