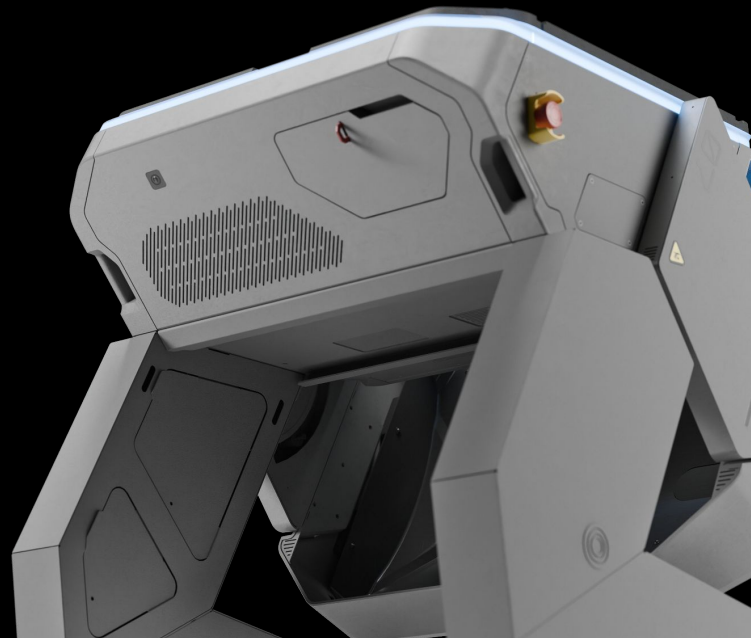
Skydio

Achieving Operational Success with DFR



Jason LaFond &
Deepu John

Skydio

Session Objectives

Achieving Operational Success with DFR

1. Understand the foundational framework of outcomes-based operations
2. Compare roles and responsibilities of the agency Flight Crew
3. Evaluate DFR system configurations based on operational objectives

Skydio

Training Worksheet

Skydio

Developing DFR for Operational Success – Training Worksheet

Section 1: Identify Key Operational Gaps

Think about where your current program is struggling. Consider training, staffing, technology, media [evidence] management, policy, coordination, and community engagement.

1) _____

2) _____

3) _____

4) _____

5) _____

Section 2: Define Measurable Success Criteria

What does "success" look like for your program? Make your criteria measurable (e.g., arrive on scene first, clear calls for service without patrol response, reduce use of force, increase firefighter safety, etc.).

1) _____

2) _____

3) _____

4) _____

5) _____

Notes:_____

_____

Section 3: Risk & Mitigation Planning

Every program faces risks — from weather to staffing to community perception. Identify them and plan mitigations.

Risk 1: _____ → Mitigation: _____

Risk 2: _____ → Mitigation: _____

Risk 3: _____ → Mitigation: _____

Section 4: Stakeholder Engagement

The success of your DFR Program depends on strong communication. List stakeholders and how you'll engage them.

Dispatch/911: _____

First Responders (Police/Fire/EMS): _____

Leadership/Command Staff: _____

Government Leaders: _____

Community Stakeholders: _____

Section 5: Create Post-Flight Report Questions

Use these after each mission to capture success metrics, operational impact, regulatory, and fleet maintenance.

1) _____

2) _____

3) _____

Skydio

Resources

Drone as First Responder (DFR)

Program Guide

Updated: September 2025

Skydio DFR Program Guide

Small Unmanned Aircraft Systems (sUAS) Operations Policy Example

ISSUE DATE: March 19, 2025

NOTE: This policy example is to be used for educational/reference purposes only. Refer to FAA authorizations and waivers, industry best practices, internal policies, mutual aid agreements, and community stakeholders prior to implementing sUAS policy in any jurisdiction.

Abstract

Drone technology is transforming public safety for the better. Fire, emergency management, and law enforcement agencies use drones every day to provide situational awareness during emergency situations when every moment matters. Obtaining real-time awareness in dangerous scenarios results in better outcomes, greater accountability, and increased leadership involvement in events as they unfold. Drones also provide a means of de-escalation--providing a perspective that allows for safe and thoughtful problem solving. Like body-worn cameras, drones provide an account of what occurred, but they also provide a pre-emptive capability to prevent tragedy and protect the community. When used appropriately, drones are a tool for good.

Purpose & Scope

The purpose of this policy is to:

- Establish guidelines for the use of unmanned aerial systems (UAS) by [AGENCY NAME] ● Establish guidelines for the storage, retrieval, and dissemination of data captured by the UAS.

Applicability

This policy applies to all [AGENCY NAME] employees who perform or manage unmanned aircraft operations. Any unmanned aircraft flown by [AGENCY NAME] personnel, during their scheduled work shift or for official [AGENCY NAME] business, must adhere to this policy.

Definitions

COA	Certificate of Authorization, issued by the Air Traffic Organization to a public operator for a specific unmanned aircraft activity.

Build the program framework

Concept of Operations
Program Policy
SOP
Operational Metrics

Skydio

Concept of Operations
Program Policy and SOP

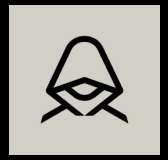
- These are the foundational elements of your program.
- They articulate and document the program's vision, goals, and strategies.
- They should be created in collaboration with internal and external stakeholders
- They are dynamic documents that should be regularly reviewed and updated to reflect evolving circumstances.

DFR Program CONOPS

High level strategic document that outlines the vision, goals and and key components of the program

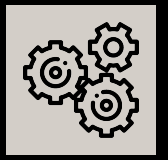
Purpose & Goals

Stakeholders



Use Cases & Scenarios

Roles & Responsibilities



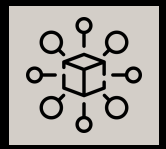
Operational Context & Flow

DFR Program Policy

High level document that serves as a framework and lays out rules, principles and governance structure of the program

Governance

Compliance



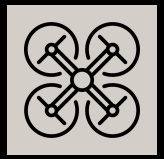
Framework

Oversight

Standard Operating Procedures (SOP)

Terminology

Legal & Regulatory



Pre/In/Post Flight

Safety & Risk Mitigation

Maintenance

Training & Certification

Communication

Evaluation

Skydio

Staffing

Starting with your Program Manager

- In charge of executing the strategic vision of the program
- Must have the right skillset and authority
- Trusted and respected in the department.

Build Your Team

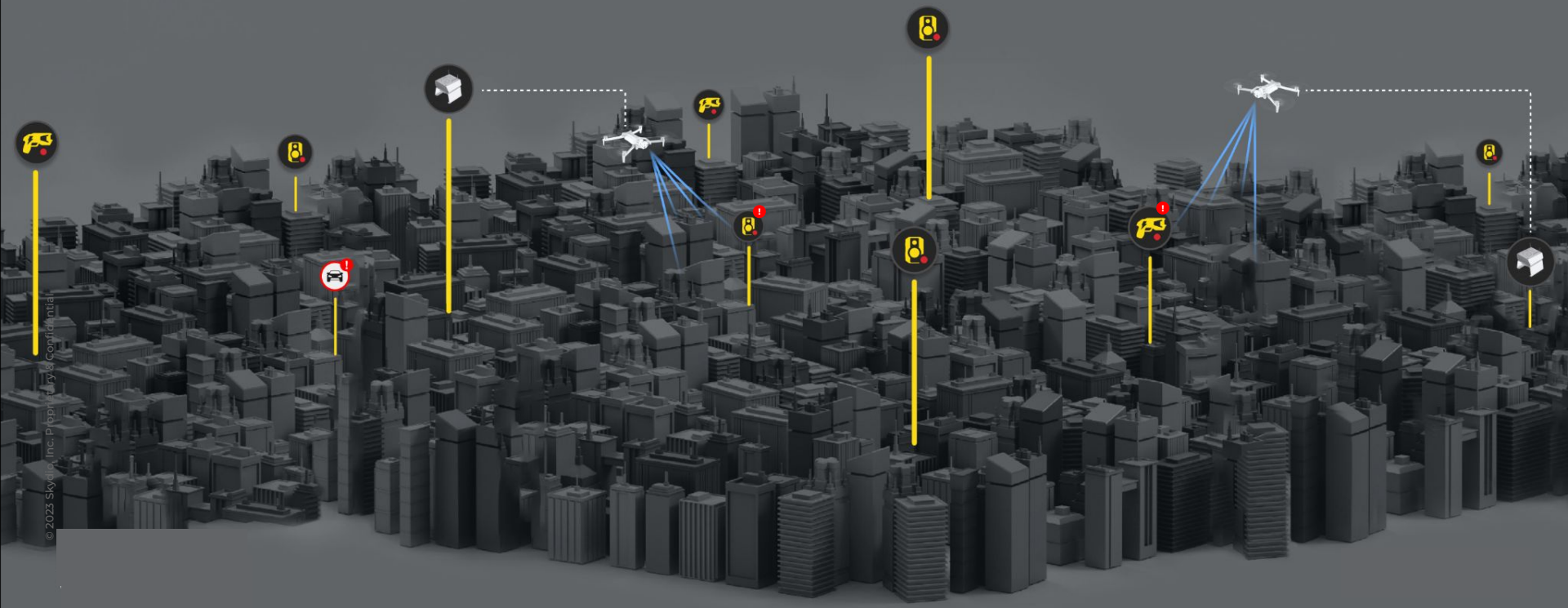
DFR Pilots

Training Coordinator

Flight Ops Coordinator

Fleet Manager

Integrated Systems



Key Integrations for DFR

- Inbound Integrations
  - CAD System
    - Most important integration from a DFR perspective.
    - Enables a multitude of capabilities in Skydio DFR Command
  - Shotspotter/LPR
  - Axon BWC/Fleet
    - Enables “Fly to me” functionality on AB3 or later

Skydio

Key Integrations for DFR

- Outbound Integrations
  - RTCC Systems (Fusus)
    - Single pane of glass view of your jurisdiction.
  - Digital Evidence Management System (Evidence.com)
  - Video Management System (Milestone, Genetec)
  - Third party streaming (Dronesense/Axon air)

Remote Operations Center

Skydio

Remote Operations Center

Key Considerations

- Location
  - Adjacent to RTCC
  - Should be a separate room to avoid distractions
- Equipment
  - Desktop PC with large monitor(s)
  - Communications equipment
- Environment
  - Quiet
  - Dim lighting

Skydio

Success Criteria for a Public Safety Drone Program

Mission Effectiveness
- Drones provide timely situational awareness
- Support search, rescue, and incident response

Safety & Compliance
- FAA/agency approvals in place
- Standard operating procedures minimize risks

Operational Readiness
- Trained and certified pilots available
- Reliable hardware, maintenance, and redundancy

Community Trust
- Transparent policies on privacy & data use
- Engagement with local communities and stakeholders

Cost & Efficiency
- Demonstrated ROI vs. traditional methods
- Sustainable funding and resource allocation

Integration with Public Safety Workflows
- Seamless coordination with dispatch and ground units
- Data easily shared with command centers and RTCC

Law Enforcement Success Criteria

01	Arrive on Scene First	Provide situational awareness to responding units [Arrive on scene first x% of calls for service]
02	Increase Situational Awareness	Provide overwatch video live stream at calls for service and events
03	Create Efficiencies	Force multiplier | Increase Officer Safety | Reduce Use of Force [# of CFS identified as unnecessary or unfounded] [% decrease in response times]
04	Reduce Crime in DFR Zones	[Reduce major crime by x%]

Skydio

Fire Service Success Criteria

01	Arrive on scene first	Perform scene size up and 360° before first due units arrive [x% of incidents where drones arrive before the first apparatus]
02	Increase situational awareness	Provide real-time video overwatch at calls for service, incidents, and events [x% of incidents where aerial intel influenced tactical changes]
03	Create efficiencies	Force multiplier | Increase FF Safety [x# of CFS identified as unnecessary or unfounded] [year-over-year x% decrease in response times and FF injuries]
04	Improve operations	Capture fire investigation (incl C&O) scene documentation and preplanning for high-risk structures. [Drone video / scene modeling used in x% of after-action reviews]

Skydio

Fire Service Success Criteria

1

Arrive on Scene First → Accelerate Situational Control

- Track % of incidents where drones arrive before first due apparatus
- Measure time saved (e.g., “average of 2–3 minutes faster scene size up”)
- Demonstrate early hazard detection (downed power lines, hazardous materials, structural instability) before personnel entry

Impact: Quantifies the direct safety and efficiency gains. Provides leadership with data to justify investment.

2

Increase Situational Awareness → Deliver Actionable Intelligence

- Provide multi-perspective intelligence: thermal imaging, hazardous material detection, and incident monitoring
- Establish decision-making metrics: % of incidents where aerial intel influenced tactical changes
- Enable secure video sharing across command staff and mutual aid partners in real-time with ReadyLink

Impact: Shows how drones move beyond just video to operational decision support tools.

Skydio

Fire Service Success Criteria

3

Create Efficiencies → Reduce Operational Burden

- Measure staff-hour savings: number of unnecessary CFS calls eliminated due to remote drone verification
- Track incident containment improvements: % reduction in property loss and fire spread rates with drone overwatch
- Benchmark injury reduction: year-over-year % decrease in firefighter injuries

Impact: Ties drone use directly to cost savings, operational efficiency, and firefighter wellness.

4

Improve Operations → Build Smarter Firefighting Strategy

- Integrate drone mapping into pre-incident planning databases for high-risk sites
- Track % of investigations where drone data was admissible/used in reporting or insurance recovery
- Show post-incident training value: drone video replay and scene modeling used in % of after-action reviews (apparatus placement)

Impact: Elevates drones as strategic assets beyond emergency response (pre-incident planning, training, compliance, insurance, risk mitigation).

Skydio

Fire Service Success Criteria

5

Transparency → Community and Public Trust

- Proactively build and sustain community trust.
- Deployment transparency into missions where drones assist the Fire Department in protecting lives and property.
- Use of aerial imagery in disaster/incident response for public communication and safety awareness

Impact: When the community understands the 'when' and 'why' behind drone usage, and sees clear benefits in safety and response, transparency becomes trust and community support.

Skydio

DFR Outcomes and Post-Flight Report

Customizable Post-Flight Reports to help you capture the real-world impact of your agency’s drone operations, meet FAA compliance, and streamline internal record-keeping

Post-Flight Reports provide a clear process for tracking important data that can help demonstrate program success, improve operations, and drive informed decision-making.

Skydio

Support Article

How to Create and Use Post-Flight Reports in Skydio Cloud

Published: August 6, 2025 **Updated: September 10, 2025**

Skydio › Skydio Cloud › Using Skydio Cloud

Skydio Cloud offers customizable Post-Flight Reports to help you capture the real-world impact of your agency's drone operations, meet FAA compliance, and streamline internal record-keeping. Post-Flight Reports provide a clear process for tracking important data that can help demonstrate program success, improve operations, and drive informed decision-making.

Post-Flight Reports are automatically linked to your organization's flights in Skydio Cloud and will be presented to pilots directly in Remote Flight Deck after landing (default).

Use the Post-Flight Report to:

- Showcase the value of your drone program to leadership, city councils, and communities
- Track key metrics for your use case
- Identify trends and opportunities to improve your drone operations
- Meet FAA compliance
- Track flight issues

Search

Articles in this section

How to Create and Use Post-Flight Reports in Skydio Cloud

How to manage your Fleet with Device Pages

How to use DFR Command

How to use multiple organizations in Skydio Cloud

How to configure SSO in Skydio Cloud

Skydio

DFR Outcomes and Post-Flight Report

The following fields are automatically completed by Skydio:

- Pilot
- Flight start/end time
- Flight duration
- Drone ID
- Launch address
- Launch coordinates

DFR Outcomes Report includes:

- CAD/CFS ID
- Type of Incident
- Did the drone arrive first on scene?
- Did the drone clear the call without patrol resources?
- How did the drone assist with the call?
- Other notes

All customers have the ability to customize report questions for their use cases.

- Airspace authorization
- Issues with flight
- Pilot and VO information
- Mission details
- Aircraft damage or loss of communication