

SCALE YOUR OPERATIONS: BYPASSING THE BVLOS BOTTLENECK

For industrial operations managers, scaling aerial data collection has historically been bottlenecked by visual line-of-sight constraints. Transport Canada's **Level 1 Complex Operations (L1CO)** framework eliminates this constraint, allowing organizations to conduct tactical **Beyond Visual Line of Sight (BVLOS)** flights. Because L1CO utilizes pre-established Transport Canada Standard Scenarios (STSC-004), your enterprise can completely bypass the lengthy administrative delays of applying for individual, project-by-project Special Flight Operations Certificates (SFOC) or undergoing a ground-up Operational Risk Assessment (ORA).

Enterprise Prerequisite: To legally utilize L1CO privileges, your organization must deploy certified pilots and maintain a compliant corporate aviation infrastructure. This requires securing a valid **RPAS Operator Certificate (RPOC)**, implementing standardized company flight manuals (Operations Manual & Maintenance Control Manual), and maintaining documented, Transport Canada-compliant crew training records.

Summit RPAS Compliance & Consulting provides a turnkey partner solution for this transition—building your corporate manuals, SOPs, and compliance systems while qualifying your workforce through approved training pipelines.

L1CO IN THE FIELD: OPERATIONAL BLUEPRINT & BOUNDARIES

In the field, an L1CO deployment utilizes a highly coordinated crew model optimized for industrial safety. Rather than trying to maintain visual contact with a distant drone, your **Visual Observers (VOs)** operate as active airspace scanners. The pilot continuously relays the drone's coordinates, allowing VOs stationed within 2 nautical miles (NM) to focus their visual scan on the sky immediately surrounding the aircraft's flight path. Meanwhile, VOs positioned beyond 2 NM turn outward to scan the horizon, detecting incoming manned aircraft at the earliest possible threshold.

This synchronized observer network extends your safe operational footprint up to **2 NM from any active VO** and up to **4 NM from the Ground Control Station (GCS)**. This multi-observer strategy allows field crews to maintain complete situational awareness over miles of terrain without relying on complex, unvalidated sensor systems.

Parameter	Transport Canada STSC-004 Standard Boundary
Max Operational Range (Pilot to GCS)	Up to 4 NM from the Ground Control Station
Max Range (RPA to Nearest VO)	2 NM (3.7 km) visual tracking limit
Minimum Flight Visibility	Not less than 3 Statute Miles (SM) at all observer locations
Minimum Cloud Ceiling	Not less than 1,000 feet Above Ground Level (AGL)
Airspace Access Privileges	Class G (uncontrolled) + Class C, D, E with ANSP authorization
Mandatory Crew Credentials	Advanced Pilot Cert + ROC-A + 20-hr TP 15530 Ground School

MAXIMIZE ROI: HIGH-YIELD INDUSTRIAL APPLICATIONS

- Long-Range Linear Corridor Mapping:**

Conduct rapid, contiguous inspections of utility transmission lines, oil & gas pipelines, and railway rights-of-way, eliminating the massive friction and downtime of segmented VLOS hops.
- Precision Agriculture & Forestry Management:**

Optimize large-scale crop health monitoring, canopy modeling, and high-volume automated agricultural spraying across vast commercial holdings with contiguous flight coverage.
- Industrial Site Logistics & Safety Auditing:**

Establish secure, rapid aerial transport networks to move critical sensors, parts, or samples across hazardous, sprawling mining facilities or remote construction sites.

LEVEL 1 COMPLEX OPERATIONS (L1CO) | TURNKEY PARTNERSHIP MODEL

This Roadmap establishes the clear division of regulatory and operational responsibilities between your organization (the Certificate Holder) and **SummitRPAS Compliance & Consulting** (your Turnkey Compliance Partner). By leveraging this fractional compliance architecture, your enterprise focuses on high-yield industrial missions and data delivery, while we handle the heavy manual engineering, pilot training pipelines, and mandatory Transport Canada audit protection records.

CLIENT RESPONSIBILITIES	SUMMITRPAS UPFRONT	SUMMITRPAS PERIODIC
INTERNAL OPERATIONS	IMPLEMENTATION SERVICES	ONGOING SERVICES (RETAINER)
1. Appoint Accountable Executive (AE) Designate an internal corporate officer who holds the final financial and organizational control over safety funding (CAR 901.219). 2. Designate PRM Manager Appoint an internal manager to serve as the Person Responsible for Maintenance to oversee airworthiness protocols. 3. Manage Drone Registration Register corporate aircraft (including rented assets) in the DMP. Affix registration markings and carry physical certificates on-site. 4. Hold Operational Control Maintain ultimate on-site authority for pre-flight safety, local crew tasking, and the final 'go/no-go' flight decisions.	1. Custom Aviation Manual Portfolio We engineer and draft your custom RPAS Operations Manual (SOPs) and your Maintenance Control Manual (MCM). 2. Approved L1CO Ground School We deliver the mandated 20-hour instructor-led ground school (TP 15530) required for L1CO complex operation crew members. 3. Operational Proficiency Checks (OPCs) We act as your objective external evaluators, conducting the initial practical company checkrides and signing off crew competency logs. 4. Official L1CO Flight Reviews As certified Flight Reviewers, we conduct the official in-person Transport Canada flight reviews required for your pilots.	1. Annual Crew Re-Evaluations We conduct mandatory annual Operational Proficiency Checks (OPCs) for your pilots and VOs to maintain corporate currency. 2. Quarterly Records Audits We perform fractional, independent audits of your pilot flight logs (CAR 901.219) and maintenance folders to remain audit-ready. 3. Continuous Manual Maintenance We dynamically update your Operations Manual, MCM, and checklists to align with evolving TCCA standards or fleet changes. 4. TCCA Audit Defense (SI SUR-001) In the event of a randomized TCCA inspection (SI SUR-001), we provide immediate expert representation and file prep.

REGULATORY AUDIT SHIELD (SI SUR-001): PROTECTING YOUR CORPORATE CERTIFICATE

Under Transport Canada Staff Instruction **SI SUR-001**, active RPOC holders are subject to randomized on-site compliance inspections. Operating with an active certificate while lacking objective annual crew evaluations (OPCs), carrying unlogged rental aircraft, or neglecting maintenance records (MCM) constitutes immediate non-compliance—exposing your enterprise to severe corporate penalties (up to \$5,000 per violation). Our periodic auditing retainer acts as your corporate shield, keeping your aviation safety program 100% compliant and audit-proof year-round.