WYVERN GUIDANCE DOCUMENT

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POST-MAINTENANCE FLIGHT CHECK GUIDANCE

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SCOPE

WYVERN's intent is to consolidate the most important considerations for post-maintenance checks and provide a detailed reference checklist to support a thorough risk assessment and effective operational plan. The recommendations contained herein are intended to help operators develop processes and procedures that improve understanding of the maintenance performed and reduce the potential for pilot error through appropriate crew qualification and competency. Ultimately, the goal is to reduce overall risk while returning aircraft to safe line operations. Pre-induction considerations are outside the scope of this Guidance Document but remain critically important. The qualifications and experience of both internal maintenance organizations and third-party maintenance, repair, and modification providers should be carefully evaluated.

Throughout this Guidance Document, references will be made to several different types of check flights, with differing pilot qualifications for each check flight type. For the purposes of this Guidance Document, there are three categories of check flights discussed:

1. Confidence Flight
    - A lower-risk post-maintenance shakedown flight conducted to confirm normal operations of all aircraft systems, prior to placing into revenue service.
2. Functional Check Flight
    - A medium-risk post-maintenance flight prescribed by certain maintenance activities to validate proper function of affected systems.
3. Test Flight
    - A high-risk post-maintenance flight designed to test certain aircraft systems and ensure that the aircraft performs as designed. These flights can often approach or exceed the normal aircraft operating envelope.

INTRODUCTION

On October 16, 2025, a Hawker 800XP was involved in a fatal accident during a post-maintenance stall system test flight. Maintenance was completed at a prominent maintenance, repair, and overhaul (MRO) facility, requiring removal of the wing leading edges and TKS ice protection access panels for damage and corrosion inspections. The Structural Repair Manual (SRM) required a post-maintenance stall system test flight, a flight typically conducted by pilots experienced in the maneuver with knowledge of the stall characteristics of the Hawker 800XP. According to the NTSB preliminary report (investigation on-going), the operator was provided with a list of appropriately qualified flight-test pilots; however, the assigned crew elected to conduct the flight themselves with a maintenance technician from the MRO riding along. Tragically, that risk decision proved fatal for all three occupants following what the NTSB described as an abrupt departure from controlled flight and a subsequent prolonged stall due to inappropriate recovery inputs.[1]

On February 14, 2002, technicians were performing maintenance checks that required simulating a weight-off-wheels (WOW) condition on a Gulfstream GV by installing tongue depressors in the WOW ‘nutcracker’ sensors. These tongue depressors were not removed when maintenance was completed and were not discovered by the flight crew during the subsequent preflight inspection. When the crew lowered the landing gear for landing, the aircraft erroneously sensed a “ground” mode condition, and when the spoilers were armed, they went to full ground deflection when power was retarded to idle at approximately 50 feet. The aircraft descended rapidly and impacted the runway hard, resulting in substantial damage and subsequent economic write-off.

These accidents are two examples of post-maintenance checking in which preparation, readiness, and execution failed, and in which the potential for maintenance-induced error was not adequately addressed. This Guidance Document is not intended to criticize maintenance technicians, who often perform complex tasks under significant schedule pressure, sometimes without all necessary resources and in challenging environmental conditions. Nor is this the first reference document to highlight the hazards associated with post-maintenance checking. The Flight Safety Foundation published an excellent compendium that outlines these challenges and offers considerations for different types of testing.[2] In addition, a former production test pilot at Hawker-Beechcraft described Hawker stall testing and his experience conducting high-risk stall test events in these aircraft in a memorandum for record prepared for an NTSB investigation related to a fatal Hawker accident.[3]

PLANNING AND PREPARATION

The accidents described above suggest a potential gap in regulatory requirements, written guidance, and operating philosophy regarding the need for, and execution of, post-maintenance functional checks and systems verification. For example, replacing an engine clearly warrants a structured performance validation. By contrast, paint work or installation of a satellite-based internet system may be less intuitive and may make it more difficult to identify disturbed systems and determine what a comprehensive return-to-service (RTS) protocol should include when no specific instructions for continued airworthiness are provided in the Aircraft Maintenance Manual (AMM), Structural Repair Manual (SRM), or Supplemental Type Certificate (STC).

Development of the RTS operational plan should include knowledgeable maintenance, flight operations, and safety personnel. A disciplined planning approach does not need to be overly complicated or time consuming; however, involvement of the appropriate subject matter experts helps ensure that unique hazards are identified and effective mitigations are implemented to restore the aircraft to revenue service safely and efficiently.

Crew selection and readiness are critical elements of any post-maintenance activity. In the Flight Safety Foundation compendium, former Airbus test pilot Harry Nelson describes the unique and specialized demands placed on a test pilot compared with a line pilot. Test pilots are extensively trained in classical test techniques and in methods for incrementally testing an aircraft in a controlled and safe manner. They are trained to understand the “system under test” and its normal or expected behaviors. An inquisitive mindset is also essential. This does not mean that a line pilot cannot learn and practice specific testing or checking techniques for lower-risk post-maintenance activities. However, the most senior or highest-time pilot may not necessarily be the optimal choice, even when that selection appears intuitive.

Qualifications for designated aircrew should be carefully considered based on the specific type of testing and the residual risk. In addition, the competency and professionalism of assigned pilots should be evaluated before granting an advanced "post-maintenance check pilot" qualification. Significant self-study of aircraft systems and abnormal or emergency procedures is essential. Training center enrichment courses related to advanced aircraft handling and system emergency reviews can also serve as effective preflight mitigations and help maintain currency and proficiency for infrequent check flights. An OEM-hosted or OEM-endorsed technical training course, typically attended by maintenance personnel, can further advance systems knowledge beyond that required for a type rating. Although attendance at a test pilot school represents a significant investment, civilian flight test courses can develop specific skills that are adaptable to many testing environments and provide a foundation for future higher-risk testing.

Before addressing additional considerations for check flight execution, such as weather and airspace, it is useful to define testing and checking categories. In the absence of specific RTS instructions in the AMM or SRM, the operator may need to determine the extent of post-maintenance checks required before confidently declaring the aircraft safe for repositioning or revenue flights. The Flight Safety Foundation compendium is a useful resource for evaluating the scope of post-maintenance evaluations. To the extent possible, and as specified in applicable maintenance instructions, all ground checks should be successfully completed before flight. When determining the appropriate extent of testing or checking, the risk assessment and residual-risk determination can support graduated levels of verification. For example, following a low-risk component replacement, an experienced line pilot with strong familiarity with normal system functionality may be able to validate satisfactory performance safely. These flights may be considered "confidence flights" intended to confirm normal operation and a low probability of repeat failure that could prompt a diversion or cancellation. At the opposite end of the spectrum is an unequivocally high-risk check, such as the Hawker stall system test requirement, for which appropriately qualified flight-test pilots are strongly recommended—not merely someone "familiar with the stall characteristics." A medium-risk category may include aircraft emerging from more intrusive calendar-based maintenance inspections, where checking could involve an extensive series of verifications, including engine shutdowns and restarts. If the checks remain within the normal operating envelope and ground testing has been extensive and successful, a dedicated test pilot may not be required. However, pilot qualifications and preparation become increasingly important to appropriately manage overall risk.

Appendix A provides a comprehensive framework for planning considerations and should be used to stimulate critical thinking about the scope of required verification and checking, as well as the development of prudent mitigations.

Other important considerations include airspace and air traffic coordination. Ideally, exclusive-use airspace allows the crew to focus on testing without the added burden of traffic deconfliction. While dedicated or schedulable airspace may be difficult for non-military operators to obtain, coordination with the controlling ATC facility may still identify suitable non-congested airspace and help avoid typical departure and arrival routes. Requesting a block altitude can also help reduce concern about pilot deviations while the crew focuses on precise test execution.

Weather criteria should be driven by the nature of the test and should include prudent terminal weather minima and cloud-avoidance rationale. Rather than relying on a broad “basic VFR” limitation, operators should consider whether visual meteorological conditions can be maintained throughout an emergency return to landing. In many cases, higher minima should be considered based on maneuver profile, terrain, and emergency return requirements. Unless specifically required by an approved test procedure, check flights should normally be conducted in daytime VMC, and flight in potential icing conditions to reach VMC should be avoided. For maneuvers requiring additional recovery altitude, substantial cloud-free conditions should exist below the entry altitude.

CONFIGURATION CONTROL & DATA RETENTION

Operators should consider developing a control and retention process to capture and retain all test cards, anomaly records, corrective actions, and final RTS disposition.

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[1] Stuart “Kipp” Lau, “NTSB probes pattern of hazardous Hawker stall test flights,” *Aviation International News*, June 2026: Pg 18.
[2] Flight Safety Foundation. (2012). *Functional check flight compendium*. Retrieved from https://flightsafety.org/wp-content/uploads/2016/09/FCF_Compendium.pdf
[3] National Transportation Safety Board, "Operational Factors/Human Performance – Attachment 1: Interview Transcript of Grommet" (Docket for Investigation WPR24FA083, February 2024), https://data.ntsb.gov/Docket?ProjectID=193761

A PRACTICAL EXAMPLE

Consider an aircraft returning from paint. During coordination between the maintenance director and the paint shop, it is determined that the flight control surfaces were removed, rebalanced, and reinstalled. In addition, the vortex generators and leading edges were removed and reinstalled. The planning team should recognize several potential red flags that warrant detailed hazard identification. First, a thorough post-paint inspection should be planned and conducted separately from the flight event. Verification that masking tape has been removed from static ports, total air temperature probes, and other critical areas must not be overlooked. It is also essential to confirm that the shop performed the required AMM procedures for “breaking flight control rig.” This will likely involve use of throw boards and a hydraulic mule, along with repeated adjustments and rechecks. On the flight line, a well-coordinated ground turn to confirm correct flight control surface deflections is essential. A qualified outside observer is recommended regardless of whether the aircraft has a flight control synoptic display available on the flight deck.

In planning the flight itself, the team should be appropriately concerned about control surface behavior, including buzz or flutter, as well as predictable low-speed awareness cues and protection. This represents higher-risk activity, and the operator would be justified in seeking the services of a qualified test pilot. Although modeling conditions outside the normal envelope is a limitation of most simulators, simulator sessions can still provide a valuable opportunity to practice technique. For any maintenance activity that could significantly affect weight and balance, the aircraft should be reweighed to establish an accurate baseline for center-of-gravity considerations that may be required for the test, typically toward the forward limit.

Using a traditional risk assessment approach, the team should conduct “what if” scenarios for atypical observations or events. If departure from controlled flight is identified as a potential hazard, an appropriate mitigation may include requiring the pilot to have recent upset prevention and recovery training (UPRT). Several providers, including WYVERN-recommended Aviation Performance Solutions, offer this training. This type of deliberate brainstorming should occur well before the expected release date from the maintenance facility. Operators should not allow a “failure of imagination” or reliance on the concept of “unknown unknowns” to limit due diligence in planning post-maintenance checks.

EXECUTION

Continuing with the post-paint example, assume the aircraft displays a minor uncommanded roll during takeoff. Initial cruise with the autopilot engaged is nominal. However, when the autopilot is disengaged, the aircraft exhibits a more pronounced uncommanded roll that requires several degrees of aileron trim to correct. At that point, sufficient evidence exists to support a precautionary return rather than continued testing. These situations require consistently conservative decision-making and can challenge any pilot focused on completing the mission. The guiding principle is clear: do not repeat a test simply in the hope of obtaining a different result.

During the planning and preparation phases, operators should develop test cards, particularly when no prescribed procedures are published. These cards should follow a logical sequence, support required checks, and account for potential airspace and ATC constraints. The full profile should be reviewed for efficiency, such as beginning at mid-altitudes, progressing higher as confidence is established, and then proceeding to lower-altitude work, approach, and landing. The cards should include applicable limits, cautions, and warnings as memory aids. They should be reviewed and understood by all essential crewmembers. Consistent with this approach, only the minimum required crew necessary to conduct the flight should be aboard.

The Flight Safety Foundation compendium contains a comprehensive list of testing types and considerations for executing each. Not all tests will have elevated residual risk. Conducting as many checks as possible on the ground can verify acceptable system functionality, particularly when aircraft displays, alerting systems, and diagnostics provide meaningful feedback. The same risk-based thinking should be applied to ground testing. For example, during high-power engine runs, blast-area considerations, foreign object debris (FOD) control, and large anti-jump chocks should be among the active risk controls.

RECOMMENDATIONS

1. Before inducting an aircraft into a shop or service center, conduct a thorough review of, and agreement on, the scope of work, prescribed instructions for continued airworthiness, and anticipated RTS requirements. This review should form the basis for the RTS operational plan, including the risk assessment and test card development. Use the Appendix A checklist to support completeness.

2. Consider any prerequisite training and readiness requirements needed to accomplish the check flight. Review aircraft systems and Quick Reference Handbook (QRH) procedures for abnormal and emergency conditions related to critical systems under test. Use simulators for scenario-based training and to practice procedures that may be unfamiliar, such as manual cabin pressurization control. Formalize UPRT as part of pilot qualification for check flights in which departure from controlled flight is identified as a potential hazard.

3. Make this Guidance Document, the Flight Safety Foundation compendium, and the NTSB memorandum of record provided by Gary Grommet required reading for any designated post-maintenance check pilot. Consider using pilots with flight test experience when staffing permits. Attendance at a recognized test pilot school is highly beneficial; however, some schools also offer short courses that provide focused academics and flying over several weeks, significantly expanding knowledge and competence at a lower cost and time commitment.

4. Reference this Guidance Document in the Safety Management System (SMS) and in applicable sections of flight operations and ground operations procedures. Work collaboratively with internal and third-party maintenance or modification providers, and require transparency regarding work scope, progress, and quality.

SUMMARY

This WYVERN Guidance Document was inspired by recent tragic post-maintenance check flights in which the NTSB cited deficiencies in planning, particularly communication, and execution. Its purpose is to provide a concise reference, including recommendations, to help operators safely and effectively conduct post-maintenance verification through ground and flight checks. A thorough understanding of what was corrected, modified, or installed must include consideration of other systems that may have been disturbed. A broad and disciplined approach to planning and readiness can help identify hazards, support prudent mitigations, and reduce residual risk to as low as reasonably practicable. Closing the gap between testing and operational line flying requires a comprehensive operational plan and careful consideration of what constitutes a qualified and prepared crew. Under no circumstances should aircrew be placed in situations for which they are ill-prepared or uncomfortable. Incorporating post-maintenance activities into the flight department SMS also provides leadership accountability necessary to conduct RTS safely while balancing the operational desire to return the aircraft to revenue service efficiently.

DISCLAIMER

This document is provided for informational and general guidance purposes only. It is intended to stimulate critical thinking about the planning, preparation, and execution of post-maintenance return-to-service activities. The examples are intended to promote awareness of relevant hazards and the importance of thorough risk assessment and active risk control during flight operations. This document does not replace applicable regulations, manufacturer instructions, approved maintenance data, company manuals, operational procedures, or the professional judgment of qualified maintenance and flight personnel. Operators remain solely responsible for ensuring compliance with all applicable regulatory requirements, approved data, and internal policies before conducting any maintenance, inspection, ground run, or flight activity. The recommendations and considerations contained in this document are offered as general guidance and may not be appropriate for every aircraft, operation, or circumstance. WYVERN makes no representation or warranty, express or implied, regarding the completeness, accuracy, or suitability of this material for any particular purpose and assumes no liability for any loss, damage, or injury arising from reliance on or use of this document.

APPENDIX A – SAMPLE POST-MAINTENANCE CHECK FLIGHT CHECKLIST

Check Flight Checklist

ADVISORY ONLY — NOT A SUBSTITUTE FOR REGULATORY OR COMPANY REQUIREMENTS

This checklist is provided for advisory purposes only. It does not substitute for, replace, supersede, or otherwise alter any applicable Civil Regulation, Operations Specification, or any internal company policy, directive, process, or requirement. The intended use of this document is strictly to increase awareness in support of safe and efficient operations. Users remain fully responsible for complying with all applicable regulatory requirements and company procedures, regardless of any content contained herein.

PHASE A: MAINTENANCE RELEASE AUTHORIZATION

Purpose: Before an aircraft is released to service, the maintenance team must complete and have a supervisor verify each of the following steps. These steps reinforce intradepartmental coordination, open communication, quality assurance checks and balances, tool control accountability, recency of experience, adherence to safety practices, readiness of required facilities and technical assets, and applicable operating and maintenance regulatory requirements (14 CFR Parts 43, 91, 121, 125, 135 or equivalent authority regulations, as applicable).

Step	ITEM	Primary Focus Area	Supervisor Verification (Initials / Date)
1	**Work Order, Discrepancy, and AD/SB Closure Review** Confirm every open discrepancy, non-routine work card, and applicable Airworthiness Directive or Service Bulletin tied to the task package has been completed, signed off, and cross-referenced against the aircraft maintenance records in accordance with applicable regulatory requirements.	Quality Assurance / Records	Initials: _______ Date: _______
2	**Independent Quality Assurance Inspection** Ensure all Required Inspection Items and critical/safety-of-flight tasks have received an independent inspection by a qualified inspector who did not perform the original work, providing a built-in check-and-balance against single-point error.	Quality Assurance / Inspection	Initials: _______ Date: _______
3	**Tool, Equipment, and FOD Control Reconciliation** Reconcile all tools, fasteners, and shop aids issued against the tool control log, confirm 100% accountability of the tool inventory, and complete a foreign object debris (FOD) walk-down of the work area, cowlings, and engine/APU inlets before closing access panels.	Tool Control Program	Initials: _______ Date: _______

Step	ITEM	Primary Focus Area	Supervisor Verification (Initials / Date)
4	**Intradepartmental Coordination Briefing** Conduct a coordination meeting/shift-turnover briefing among maintenance, inspection, planning, engineering, and stores to confirm no conflicting work is in progress, all interrelated tasks (e.g., panel removals affecting other systems) are reconciled, and dependencies are closed out.	Intradepartmental Coordination	Initials: _______ Date: _______
5	**Open Communication with Flight Crew / Operations** Brief the flight crew and/or operations control on the work performed, status of any deferred items under the MEL/CDL, and any operational limitations, ensuring a two-way exchange so questions can be raised and addressed before dispatch.	Open Communication	Initials: _______ Date: _______
6	**Adherence to Safety Practices and Hazard Controls** Confirm lockout/tagout, hazardous energy isolation, PPE use, fall protection, fuel/electrical safety precautions, and warning placards/streamers were applied and removed correctly, and that no safety procedure was bypassed during the task.	Safety Practices	Initials: _______ Date: _______
7	**Aircraft Weight and Balance Verification** Verify that aircraft weight and balance have been confirmed for the check flight profile, and that any special ballast, test equipment, or configuration changes required for the check flight have been documented in the aircraft records.	Aircraft Configuration / Weight & Balance	Initials: _______ Date: _______
8	**Facilities and Ground / Test Equipment Readiness** Verify that the hangar/ramp environment, lighting, jacks, stands, and all ground support and test equipment used (including calibrated tooling) were appropriate for the task, within current calibration, and have been returned to serviceable storage.	Physical Facilities & Technical Assets	Initials: _______ Date: _______
9	**Functional/Operational Checks and Test Flight (if required)** Complete all required functional, operational, leak, and rigging checks, including any required for ground or test flight, and confirm results meet the applicable maintenance manual and type-certificate data sheet limits.	Quality Assurance / Airworthiness	Initials: _______ Date: _______
10	**Final Airworthiness Review and Return-to-Service Release** Perform a final review confirming the aircraft, engines, and records meet applicable airworthiness and maintenance recordkeeping requirements, and obtain the appropriate maintenance release and maintenance record entry in accordance with applicable regulatory requirements.	FAA Regulatory Compliance	Initials: _______ Date: _______

USAGE NOTE

Each checklist item carries a Status box (□). All items must be completed and initialed by the responsible party before progression to the next phase. Any item that cannot be completed satisfactorily triggers a HOLD — the check flight may not proceed until the hold is resolved and documented by the appropriate authority.

PHASE B: CHECK FLIGHT (CF) CREW QUALIFICATION MATRIX

Completed by: Director of Operations / Chief Pilot & Safety Officer | *Timeframe: Before CF Brief*

#	ACTION / CHECK ITEM	RESPONSIBILITY	TIMING	STATUS	REMARKS
11	CF Pilot-in-Command holds current FAA (or equivalent) Airman Certificate with appropriate type rating and medical certificate.	Director of Operations	Pre-Brief	□	
12	CF PIC currency verified: flight hours within preceding 90 days, recency of experience requirements met.	Director of Operations	Pre-Brief	□	
13	CF PIC has specific CF training, endorsement, or documented equivalent experience (if required by operator policy or aircraft type).	Director of Operations	Pre-Brief	□	Endorsement #___
14	DETERMINATION: Is this CF profile within the demonstrated competency of the assigned crew, or does it require a designated test pilot or additional flight-test qualified crewmember?	Chief Pilot / Safety	Pre-Brief	□	CRITICAL DECISION
15	If stall series or other demanding CF profile required: CF PIC has completed equivalent simulator training within the preceding 90 days.	Chief Pilot	Pre-Brief	□	
16	CF SIC/FO qualifications and currency verified per operator policy and applicable regulations.	Director of Operations	Pre-Brief	□	
17	Crew Fatigue Assessment completed: both crew members confirm they are fit for duty and free from fatigue factors.	Both Crew Members	Day-Of	□	
18	Crew has reviewed CF Scope of Work and confirms understanding of all planned test items and maneuvers.	Both Crew Members	Pre-Brief	□	
19	Emergency and abnormal procedures reviewed for planned CF profile scenarios.	Both Crew Members	Pre-Brief	□	
20	CF Crew Qualification Matrix signed by Director of Operations and Safety Officer, authorizing crew for this specific CF.	DO / Safety Officer	Pre-Brief	□	Authorization on file

PHASE C: PRE-CF ALL-DEPARTMENTS BRIEFING

Completed by: All Department Representatives | Timeframe: Day of CF, Before Departure

#	ACTION / CHECK ITEM	RESPONSIBILITY	TIMING	STATUS	REMARKS
21	All required department representatives present: Maintenance, Flight (both crew), Operations, QA, Safety.	Safety Officer (facilitator)	CF Day	◻	Attendance logged
22	Lead Maintenance Technician brief: scope of maintenance performed, components affected, known anomalies, expected CF behaviors.	Lead Technician	CF Brief	◻	
23	CF Scope of Work reviewed aloud: all test items, test sequences, altitudes, airspeeds, and area of operations confirmed.	CF PIC	CF Brief	◻	
24	Weather assessment: current METAR, TAF, PIREPs, SIGMETs, Convective SIGMETs, AIRMETs; specific attention to icing, turbulence, visibility relevant to CF profile.	Operations	CF Brief	◻	WX valid ___Z
25	Airspace coordination: NOTAMs reviewed, ATC coordination confirmed for CF airspace requirements.	Operations	CF Brief	◻	
26	Emergency plan briefed: abort criteria, alternate landing airports, emergency contact numbers, emergency frequencies	CF PIC / Safety	CF Brief	◻	
27	Ground communication plan: frequency, responsible personnel, availability window during CF.	Operations / Maintenance	CF Brief	◻	Freq: ___
28	In-flight decision criteria for each test item reviewed: go/continue criteria, marginal result protocol, abort criteria.	CF PIC	CF Brief	◻	
29	CRM briefing: authority gradient, abort call authority (either crew member), communication protocols during test items.	CF PIC	CF Brief	◻	
30	Questions from all departments solicited and resolved; any unresolved issues constitute a HOLD on CF departure.	Safety Officer	CF Brief	◻	

PHASE D: PRE-DEPARTURE RISK ASSESSMENT (GO/NO-GO MATRIX)

Completed by: Safety Officer & Director of Operations | *Timeframe: Immediately Before CF Departure*

#	ACTION / CHECK ITEM	RESPONSIBILITY	TIMING	STATUS	REMARKS
31	MAINTENANCE: All work orders complete, QA-inspected, and signed off. Aircraft airworthy for CF profile.	QA Inspector	Pre-Departure	☐	GO / NO-GO
32	CREW QUALIFICATION: CF crew formally authorized per Phase B matrix. Test pilot determination resolved.	Director of Operations	Pre-Departure	☐	GO / NO-GO
33	WEATHER: All relevant weather factors within acceptable parameters for planned CF profile. No icing, turbulence, or visibility hazards that conflict with CF maneuvers.	Operations	Pre-Departure	☐	GO / NO-GO
34	AIRSPACE: CF area of operations confirmed available, NOTAM-clear, and coordinated with ATC as required.	Operations	Pre-Departure	☐	GO / NO-GO
35	CREW FITNESS: Both crew members self-declare fit for duty; Safety Officer has no observable fitness concerns.	Safety Officer	Pre-Departure	☐	GO / NO-GO
36	DOCUMENTATION: All Phase A, B, and C checklists complete and signed. CF Test Card on flight deck.	QA / Safety	Pre-Departure	☐	GO / NO-GO
37	ABORT CRITERIA: Both crew members verbally confirm understanding of all abort criteria for all CF test items.	Both Crew / Safety	Pre-Departure	☐	GO / NO-GO
38	FINAL ORGANIZATIONAL GO/NO-GO: Director of Operations and Safety Officer jointly authorize CF departure. All items above are GO.	DO + Safety Officer	Pre-Departure	☐	AUTHORIZED / HOLD

PHASE E: IN-FLIGHT CF EXECUTION CHECKLIST

Completed by: CF Crew (PIC & SIC) | *Timeframe: During Check Flight*

#	ACTION / CHECK ITEM	RESPONSIBILITY	TIMING	STATUS	REMARKS
39	DEPARTURE: Confirm CF Test Card is on flight deck. Establish communication with ground CF contact. Departure conditions match briefed parameters.	CF PIC	Departure	◻	
40	CF AREA: Confirm arrival in designated CF area. Airspace clear. Altitude and airspace parameters met per CF scope.	Both Crew	En Route	◻	
41	PRE-TEST CHECKLIST: Complete manufacturer-specified or operator CF pre-test configuration checklist before first test item.	Both Crew	CF Area	◻	
42	TEST ITEM # – As specified in CF Test Card: Test configuration set. Test initiated. Result recorded against success criteria. **If any result is marginal, discontinue the flight check and return to base.**	Both Crew	CF Area	◻	Result: ___
43	ABORT CRITERIA CHECK (continuous): Either crew member may call ABORT at any time. If any pre-briefed abort criterion is met, immediately cease checking, restore aircraft to normal configuration, and return for maintenance evaluation.	Either Crew Member	Continuous	◻	Any time
44	Ensure actual results match expected functionality as “continuance criteria”. **If results are abnormal, unexpected, or if crew is uncertain, discontinue the check flight and return to base.** Upon completion of each item, verify the aircraft is reconfigured as necessary. Satisfy all constraints, including airspace, weather and aircraft state (energy & altitude) prior to next item within the functional check tests.	CF PIC	Mid-CF	◻	
45	ALL TESTS COMPLETE: Confirm that CF Test Card test items are completed (or documented as incomplete/aborted – PRIOR to proceeding to the next item). ENSURE Restoration of aircraft to normal configuration prior to return to land.	Both Crew	Post-Test	◻	
46	RETURN AND LANDING: Normal approach and landing. Notify ground CF contact of CF completion or abort status.	CF PIC	Arrival	◻	
47	POST-LANDING: Do not return aircraft to service. Proceed directly to post-CF debrief. Secure CF flight log.	CF PIC	Post-Landing	◻	

PHASE F: POST-CF DEBRIEF AND DISPOSITION

Completed by: All Department Representatives | Timeframe: Within 2 Hours of CF Completion

#	ACTION / CHECK ITEM	RESPONSIBILITY	TIMING	STATUS	REMARKS
48	CF Crew debrief: PIC presents results of each test item against success criteria. All results formally recorded.	CF PIC / Safety	Post-CF	◻	
49	Anomalies and deviations: All CF anomalies, deviations from planned profile, and marginal results reviewed with Maintenance.	CF PIC / Lead Tech	Post-CF	◻	
50	Maintenance disposition: Lead Technician and QA Inspector review all CF results and determine: (a) Aircraft airworthy—RTS authorized; (b) Further maintenance required—specify; (c) Additional CF required after re-work	Lead Tech / QA	Post-CF	◻	Disposition: ___
51	Crew observations and safety concerns: Both crew members provide unrestricted safety observations. Any concern, however minor, is documented and evaluated.	Both Crew / Safety	Post-CF	◻	
52	Safety Officer review: Safety Officer reviews all CF results, debrief notes, and crew observations for any reportable events or safety improvement actions.	Safety Officer	Post-CF	◻	
53	Documentation complete: CF flight log, test results, crew debrief notes, and disposition decision filed in aircraft maintenance record.	QA Inspector	Post-CF	◻	
54	Return-to-service authorization (if applicable): Director of Maintenance and QA Inspector co-sign RTS authorization. Aircraft logbook entry completed.	DOM / QA	Post-Debrief	◻	
55	Lessons learned: Any lessons, near-misses, procedure improvements, or industry safety information to be disseminated are forwarded to Safety Officer for action.	Safety Officer	Post-Debrief	◻	