INSTALLATION INSPECTION CHECKLIST

Date_____ WO #_____ N #_____ Lead Technician_____

The Lead Installation Technician and Installation Dept. Supervisor will be present for installation steps planning. The Lead Installation Technician is responsible for reviewing every detail of this document, & reporting any problems to the Installation Dept. Supervisor.

Initial block for each item when completed.

Pre-Aircraft Arrival:

1.		Obtain copies of Work Order & Installation Proposal with explicit details of installation.
2.		Inventory all parts & equipment required for the installation (if possible). Group them in your area. Verify equipment installation kits are complete. Notify Installation Dept. Supervisor of any shortages.
3.		Verify proper Airworthiness Documentation exists for all equipment.
4.		Gather appropriate installation data: Manufacturers installation instructions, aircraft wiring diagrams, DER engineering prints, etc.
5.		Verify currency and latest revision of all manuals used for the installation.
6.		Verify proper tooling & materials for the installation is readily available.
7.		Gather preliminary data for FAA Form 337 (if required) & forward to FAA Coord.

Preliminary Inspection: (Mark N/A in block if item is not applicable)

1.		Obtain copies of current W&B, Equipment List, & Aircraft Registration. Record Aircraft Flight Manual Part No., Revision No., & Date (if required).
2.		Check logbook entries for FAR 91.411 & 91.413 (if possible). Note dates nearing expiration or past due.
3.		Note aircraft voltage: _____.
4.		Aircraft walk-around. Look for loose or missing fasteners. Inspect exterior windows & paint for scratches & defects. Inspect static wicks, pitot mast, static ports, & antennas for airworthiness.
5.		Aircraft interior inspection. Inspect cabin doorway, upholstery, seats, carpet, trim, & headliner for condition.
6.		Instrument panel inspection. Inspect panels for security of mounting, scratches & defects, loose switches & instruments. Check glare shield for security & condition.
7.		Flight Controls inspection. Pull controls through full range of travel, note any interference, binding, & noises.

8.		Avionics stack inspection. Inspect existing equipment for security of mounting & appearance. Inspect rack mountings for back-support structure.
9.		Lighting inspection. Inspect all panel, instrument, flood, and radio lighting. Inspect all cabin lighting (reading, map, courtesy, passenger, etc.). Inspect all external lighting (beacons, strobes, taxi/landing, navigation, ice, etc.).
10.		Check Pitot & Static heat for operation.
11.		Check all avionics displays for operation & readability. Check photocells.
12.		Annunciators' inspection. Push to test (if possible) all annunciators, including Marker lights. Check day/night switches where applicable.
13.		Audio inspection. Check all audio selections at audio panel (speakers & phones). Check intercom system at each headset location. Check ANR system operation. Check headset jacks for airworthiness. Check avionics annunciation tones, alerts & warning audio where applicable.
14.		Communications inspection. At each Com, check squelch action, call shop for radio check, or check using local frequencies. Check remote switches.
15.		VHF Nav inspection. At each Nav, ground test using local frequencies, or ramp tester as applicable. Check operation of corresponding indicators.
16.		DME inspection. At each DME, check using local frequencies, or ramp tester as applicable. Check operation of remote switches & indicators. Check remote Nav tuning where applicable.
17.		RNAV inspection. Check using appropriate frequencies.
18.		ADF inspection. At each ADF, check using appropriate frequencies. Check operation of corresponding indicators.
19.		Transponder inspection. At each transponder, check test & reply lights. Ground test using ramp tester (when practical). Check encoding (when practical). Check operation of remote ident, transponder/encoder 1-2 switch, & standby switches where applicable.
20.		RMI inspection. At each RMI, check operation of needles and heading card.
21.		H.S.I. Inspection. At each H.S.I., check slaving & Nav function. Check operation of Nav switching system where applicable.
22.		Glideslope inspection. At each Glideslope, ground test using local frequencies, or ramp tester as applicable. Check operation of corresponding indicators.
23.		GPS inspection. At each GPS, check for correct position data (when practical). Check Moving Map, display, & Annunciators functions where applicable. Check database revision & currency.
24.		Gyro inspection. Check for proper operation & system suction (when practical).
25.		Autopilot/Flight Director inspection. Engage, check left/right, up/down, manual, heading, course 1 & 2, back course 1 & 2, needle 1 & 2, altitude hold, & yaw damper as applicable. Check operation of remote switches, annunciators, & tones.
26.		Altimeter inspection. At each altimeter, check reading against field elevation. Check encoding (when practical).
27.		Rad-Alt inspection. Check test and DH. Check operation of remote switches & annunciators as applicable.
28.		Radar inspection. Check test. Check returns if aircraft is outside & clear of obstructions.

29.		Weather Detection System inspection. Check self test functions. Check system for RF interference (if required).
30.		EFIS/MFD inspection. At each unit, check self-test functions. Check display & annunciator functions where applicable.
31.		TCAS inspection. Check self test functions. Verify proper display at MFD, or other.
32.		TAWS inspection. Check self test functions. Verify proper display at MFD, or other.
33.		Trim inspection. Check operation of electric & manual trim systems.
34.		Static system inspection. At each Pitot/Static system, check system for leaks, security, and operation (when practical).
35.		Circuit breakers inspection. Check breakers for security of mounting, placards, & condition of panel.
36.		Inspect forward & aft avionics bays for available mounting space & accessibility of wiring harnesses as applicable.
37.		Note physical layout of existing avionics, familiarize yourself with how the systems are interconnected. Make sketch or take digital photos (if required).
38.		Inspect aircraft for available antenna mounting space. Perform Skin-Mapping procedure (if required).
39.		List (in detail) all discrepancies noted up to this point.
40.		Enter initials in Preliminary Inspection block, on Work Traveler (k-03.2).

Installation / In-progress Inspection: (Mark N/A in block if item is not applicable)

1.		Install protective covers on seats, floors, & carpet. Install plastic, protective film around all exterior-working areas that may be subject to damage. Clear aircraft of clutter, trash, etc. Gather owner/operators personal belongings and secure them, in an orderly fashion, in an appropriate holding area.
2.		Open up working areas in aircraft (panels, floor boards, etc.), & check for conflicts in mounting parts/equipment. Check harness routes. Make notes.
3.		Review labor figures on Installation Proposal, decide if more labor needs to be approved at this point. Make notes.
4.		Review all notes & Pre-Installation Inspection discrepancies with Installation Dept. Supervisor. Assist with generating Change Orders, additional Work Order tasks, etc.
5.		Gather necessary data & initiate FAA Form 337 paperwork (if required).
6.		Tag any removed equipment using form KA-17 (Removed As Serviceable), and secure in equipment holding cabinet.
7.		Pre-fabricate, mark, and test wiring harnesses on bench as much as possible for new equipment. Use a Parts Charge Out sheet & begin listing all misc. parts, wire, & supplies used during the installation.
8.		Install & interface new equipment wiring harnesses, cables, terminals & connectors in aircraft.
9.		Install proper circuit protection for new equipment and placard appropriately.

10.		Contact Installation Dept. Supervisor for an In-Progress Inspection, at this point before proceeding. Verify that the inspecting Technicians initials are entered in the In-Progress Inspection block on Work Traveler (K-03.2).
11.		Perform continuity checks of all new wiring/interfacing before applying power to aircraft.
12.		Plug on equipment & perform power-on & functional checks of all systems (as practical) prior to harness tie-up and rack mounting.
13.		Install new equipment racks, mounting trays, brackets, etc. using new aircraft hardware.
14.		Tie-up all harnesses. Install any anchors, tywrap mounts, etc. if needed. Make sure to use grommets, or anti-chaff materials where airframe to harness contact may be suspected. Check flight controls for full-unobstructed travel.
15.		Install new equipment in aircraft. Thoroughly clean all aircraft working areas of debris, sheet metal shavings, trash, etc..
16.		Contact Installation Dept. Supervisor for another In-Progress Inspection, at this point before proceeding. Verify that the inspecting Technicians initials are entered in the second In-Progress Inspection block on Work Traveler (K-03.2).
17.		Correct any discrepancies found during In-Progress Inspection. Note changes that may effect Form 337.
18.		Ensure that all affected systems have been successfully configured, tested & are working properly.
19.		Reassemble working areas, close access panels only after inspector's examination. Check seat rails and locks for security (whether you removed them or not).
20.		Verify that all work has been completed per FAA Form 337, &/or STC, & that any necessary placards have been properly installed.
21.		Take a moment to account for all tools & supplies.
22.		Verify that all misc. parts, supplies, wire, etc, are listed on the Parts Charge Out sheet.
23.		Vacuum carpets, arrange seats & seatbelts in a presentable fashion. Return owner/operators belongings to aircraft.
24.		Review all Work Order tasks & Change Orders. Verify that aircraft is ready for final inspection.
25.		Clean shop and bench areas in accordance with good housekeeping practices.

Final Inspection / Sign-off: (Mark N/A in block if item is not applicable)

1.		Update W&B & Equipment List. Install new revision into POH (if possible).
2.		FAA Form 337 completed and mailed to SLC FSDO.
3.		Airframe Logbook entries completed.
4.		All airworthiness documentation, Pilot Guides, Warranty data, placed inside aircraft.
5.		Aircraft approved for return to service by authorized personnel.

Technician Initials_____ **Supervisor Initials**_____ **Date**_____