

### Maintenance QC LOSA Demographics

**Instruction:**

*Insert content on*

*(1) how to use the forms (e.g., when/how to intervene safety errors, how to be "a fly on the wall"*

*(2) supervisor's comments (e.g., task to be focused on)*

**Specific QC task observed:** \_\_\_\_\_

**Observation Number:** \_\_\_\_\_ **Observer/Team ID:** \_\_\_\_\_

**Date:** (mm/dd/yy) \_\_\_\_\_

**Observation Start Time:** (hhmm) \_\_\_\_\_ **Observation End Time:** (hhmm) \_\_\_\_\_

**Airline/Company:** \_\_\_\_\_ **Station** (airport code): \_\_\_\_\_

**Location:** \_\_\_\_\_ **Registration/Gear Door #:** \_\_\_\_\_

**A/C Type:** (Make/Model/Series) \_\_\_\_\_ (refer to Appendix 1)

**Maintenance Type:**  
 Base/MRO - In-House       Line - In-House       Component - In-House       Engine - In-House  
 Base/MRO - Contract       Line - Contract       Component - Contract       Engine - Contract

**Type of Operations:**  
 Scheduled       Unscheduled

**Work Environment:**  
 Hangar       Line       Shop       Test Cell       Warehouse      Other (specify) \_\_\_\_\_

**Process/Task Being Observed:**  
 A/C Movement: taxi \_\_\_ and/or tow \_\_\_       Ops Check       Repair  
 Troubleshooting       Rigging       Painting  
 Inspection       Servicing       Cleaning  
 Support Equipment Mx       Jacking       Remove & Replace  
 Other (specify) \_\_\_\_\_

**Scheduled Manhours:** \_\_\_\_\_ **Reported Actual Manhours:** \_\_\_\_\_  
*(refer to scheduling plan)*

**Aircraft Zone (Major Zones):**  
 Lower half of fuselage       Powerplant/nacelle/strut       Landing gear and doors  
 Upper half of fuselage       Left wing       Doors  
 Empennage       Right wing

**ATA Coding (chapter & sub chapter):** \_\_\_\_\_ (refer to Taskcard or N/R)

**Mx Record Information** (mark all that apply):  
 Log Page       AMM/Task Card(s)/EO-EA       MEL/CDL       N/R       None  
 # \_\_\_\_\_

**Lighting Conditions** (mark all that apply):  
 Daylight       Night       Dawn/Dusk       Sun glare       Overcast  
 Artificial Light

**Environmental Conditions** (mark all that apply):  
 Clear       Fog       Windy       Snow/Sleet/Ice       High Humidity  
 Rainy       Dust Storm       Extreme Heat       Extreme Cold       Lightning/Electrical Storm  
 Sand Storm       Others (specify) \_\_\_\_\_

**Ramp/Floor Conditions:**  
 Wet       Dry       Snow/Ice       Contaminated       N/A

**Technician (1)**

*Collect this info after observations*

**Years of experience:**

**Craft:**

Technician \_\_\_\_\_ (yr)    Lead Technician \_\_\_\_\_ (yr)

**Skill:**

Sheet metal \_\_\_\_\_ (yr)    Interior \_\_\_\_\_ (yr)    Avionics \_\_\_\_\_ (yr)    Repairman \_\_\_\_\_ (yr)  
Inspection \_\_\_\_\_ (yr)    Shop \_\_\_\_\_ (yr) (specify) \_\_\_\_\_

**Certificate(s):**

A&P                       Airframe                       Powerplant                       Avionics                       DQC  
 FCC                       Inspector                       Repairman                      Other (specify) \_\_\_\_\_

**The technician felt comfortable with the task.**

Yes                       No

**The technician believed that s/he was qualified for the task (e.g., certification, training).**

Yes                       No

**Regular Workshift:**

Days                       Evening                       Nightshift                       Relief                       Rotating                      Others (specify) \_\_\_\_\_

**Time in Current Work/Bid Position:** \_\_\_\_\_ months \_\_\_\_\_ years

**Consecutive Days Worked:** \_\_\_\_\_

**Consecutive Days Worked including Other Jobs (optional):** \_\_\_\_\_

**Consecutive Hours Worked:** \_\_\_\_\_

**Consecutive Wake Hours:** \_\_\_\_\_

**Hours of Sleep in the Past 24 Hours:** \_\_\_\_\_

**Experience with Aircraft Type:**

Never                       3 Months                       6 Months                       >1 year                       3-5 yrs                       >5 yrs

**Experience with Task:**

1st time                       >=1 yr                       Quarterly                       Monthly                       Daily

**Technician (2)**

*Collect this info after observations*

**Years of experience:**

**Craft:**

Technician \_\_\_\_\_ (yr)      Lead Technician \_\_\_\_\_ (yr)

**Skill:**

Sheet metal \_\_\_\_\_ (yr)      Interior \_\_\_\_\_ (yr)      Avionics \_\_\_\_\_ (yr)      Repairman \_\_\_\_\_ (yr)  
Inspection \_\_\_\_\_ (yr)      Shop \_\_\_\_\_ (yr) (specify) \_\_\_\_\_

**Certificate(s):**

A&P                       Airframe                       Powerplant                       Avionics                       DQC  
 FCC                       Inspector                       Repairman                      Other (specify) \_\_\_\_\_

**The technician felt comfortable with the task.**

Yes                       No

**The technician believed that s/he was qualified for the task (e.g., certification, training).**

Yes                       No

**Regular Workshift:**

Days                       Evening                       Nightshift                       Relief                       Rotating                      Others (specify) \_\_\_\_\_

**Time in Current Work/Bid Position:** \_\_\_\_\_ months \_\_\_\_\_ years

**Consecutive Days Worked:** \_\_\_\_\_

**Consecutive Days Worked including Other Jobs (optional):** \_\_\_\_\_

**Consecutive Hours Worked:** \_\_\_\_\_

**Consecutive Wake Hours:** \_\_\_\_\_

**Hours of Sleep in the Past 24 Hours:** \_\_\_\_\_

**Experience with Aircraft Type:**

Never                       3 Months                       6 Months                       >1 year                       3-5 yrs                       >5 yrs

**Experience with Task:**

1st time                       >=1 yr                       Quarterly                       Monthly                       Daily

**Technician (3)**

*Collect this info after observations*

**Years of experience:**

**Craft:**

Technician \_\_\_\_\_ (yr)    Lead Technician \_\_\_\_\_ (yr)

**Skill:**

Sheet metal \_\_\_\_\_ (yr)    Interior \_\_\_\_\_ (yr)    Avionics \_\_\_\_\_ (yr)    Repairman \_\_\_\_\_ (yr)  
Inspection \_\_\_\_\_ (yr)    Shop \_\_\_\_\_ (yr) (specify) \_\_\_\_\_

**Certificate(s):**

\_\_A&P                      \_\_Airframe                      \_\_Powerplant                      \_\_Avionics                      \_\_DQC  
\_\_FCC                      \_\_Inspector                      \_\_Repairman                      Other (specify) \_\_\_\_\_

**The technician felt comfortable with the task.**

\_\_Yes                      \_\_No

**The technician believed that s/he was qualified for the task (e.g., certification, training).**

\_\_Yes                      \_\_No

**Regular Workshift:**

\_\_Days                      \_\_Evening                      \_\_Nightshift                      \_\_Relief                      \_\_Rotating                      Others (specify) \_\_\_\_\_

**Time in Current Work/Bid Position:** \_\_\_\_\_ months \_\_\_\_\_ years

**Consecutive Days Worked:** \_\_\_\_\_

**Consecutive Days Worked including Other Jobs (optional):** \_\_\_\_\_

**Consecutive Hours Worked:** \_\_\_\_\_

**Consecutive Wake Hours:** \_\_\_\_\_

**Hours of Sleep in the Past 24 Hours:** \_\_\_\_\_

**Experience with Aircraft Type:**

\_\_Never                      \_\_3 Months                      \_\_6 Months                      \_\_>1 year                      \_\_3-5 yrs                      \_\_>5 yrs

**Experience with Task:**

\_\_1st time                      \_\_>=1 yr                      \_\_Quarterly                      \_\_Monthly                      \_\_Daily

**Acronyms:**

A&P (Airframe & Powerplant)

A/C (Aircraft)

AMM (Aircraft Maintenance Manual)

DQC (Designated Quality Control)

EO-EA (Engineering Order - Engineering Authorization)

FCC (Federal Communications Commission)

FOM (Facilitate Other Maintenance)

FPI (Fluorescent Penetrant Inspection)

GSE (Ground Service Equipment)

LOTO (Lock Out Tag Out)

MEL/CDL (Minimum Equipment List/ Configuration Deviation List)

N/A (Not Applicable)

N/R (Non-Routine)

PIV (Powered Industrial Vehicle)

QC (Quality Control)

**Appendix 1: A/C Type**

Use the comprehensive list named "AircraftICAOMarch102010.xls" as a default and each organization will customize base on its own needs.

In general, mx should be more specific than ramp list.

Threat Codes Legend	
T/A.	Task Factors
T/B.	Operator Factors
T/C.	Machine Factors
T/D.	Environmental Factors
T/E.	Social Factors
T/F.	Other Contributing Factors

## Maintenance QC LOSA Observation Form

### QC1. – PLANNING

Observation Number: \_\_\_\_\_

Did not observe this section

		<b>Safety Risk</b> N/A, Safe (S), At Risk (AR), Didn't Observe (DNO)	<b>Threat Code</b> (See Threat Codes List)	<b>Threat Effectively Managed</b> Y/N	<b>Error Outcome</b> 1.Inconsequential 2.Undesired state 3.Additional error & <b>Remarks</b>
<b>Safety</b>					
1	Notes, cautions, and warnings reviewed				
<b>Personnel</b>					
2	Manpower allocated				
3	Company procedures followed to assign manpower				
4	Inspectors have been trained and have skills to do job				
<b>Communication &amp; Coordination</b>					
5	Task plan communicated to all parties & feedback solicited				
6	Coordination conducted between departments, shifts, or flight crew				
<b>Facilities</b>					
7	Facilities (e.g., hangar) available				
8	Facilities (e.g., hangar, shop) allocated				
<b>Publications &amp; Procedures</b>					
9	Inspection publication and procedures (e.g., AMM, Service Bulletin) identified				
10	Inspection publication and procedures (e.g., AMM, Service Bulletin) available				
11	Procedures current and up to date				
12	Inspection publication and procedures reviewed				
<b>Tools &amp; Equipment</b>					
13	Tools identified				
14	Tools allocated				
15	Inspection equipment identified				
16	Inspection equipment assembled				
17	Inspection equipment calibrated				
<b>Inspection Procedures</b>					
18	Part preparation steps completed when applicable (e.g., for FPI)				
19	Component/area-to-be-inspected identified				

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20	Component/area-to-be-inspected accessed				
21	Verified effectivity/configuration				
<b>Readytime</b>					
22	Production expectation/readytime clear				
23	Production expectation/readytime reasonable				
<b>Threat Management</b>					
24	Strategies developed for identified threats				
25	Generated non-routines for work-not-specified in the tech publications				
<b>Turnover or Completion</b>					
26	Task/shift turnover completed				

Describe the threat(s). How did the technician(s) manage or mismanage the threat(s)?

Describe the technician error(s) and associated undesired states

Comments - Good or bad (Please provide examples)

Threat Codes Legend	
T-A.	Task Factors
T-B.	Operator Factors
T-C.	Machine Factors
T-D.	Environmental Factors
T-E.	Social Factors
T-F.	Other Contributing Factors

## QC 2. – ACCESS

Observation Number: \_\_\_\_\_

Did not observe this section

		<b>Safety Risk</b> N/A, Safe (S), At Risk (AR), Didn't Observe (DNO)	<b>Threat Code</b> (See Threat Codes List)	<b>Threat Effectively Managed</b> Y/N	<b>Error Outcome</b> 1.Inconsequential 2.Undesired state 3.Additional error & <b>Remarks</b>
	<b>Safety</b>				
1	Notes, cautions, and warnings reviewed				
2	Notes, cautions, and warnings followed				
3	Safety equipment available and utilized				
	<b>Personnel</b>				
4	Required personnel available				
5	Assignments prioritized				
	<b>Tools &amp; Equipment</b>				
6	Tools staged				
7	Inspection equipment staged				
	<b>Procedures</b>				
8	Current documentation (e.g., task cards, AMM, service bulletins) available and reviewed				
9	Effectivity/configuration verified				
10	A/C configuration verified				
11	Hazardous energy systems (electrical, hydraulics, pneumatics, stored energy) deactivation LOTO procedures followed				
12	Access panels removed				
13	Inspection area located				
14	Inspection area accessed				
15	Inspection area viewed at a close enough level				
16	Parts brought to inspection for component inspection				
17	Correct items presented to inspection system				
	<b>Threat Management</b>				
18	Strategies developed for identified threats				
19	Generated non-routines for work-not-specified in the tech publications				
	<b>Turnover or Completion</b>				
20	Task/shift turnover completed				
21	Individual work step signoff completed				

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Describe the threat(s). How did the technician(s) manage or mismanage the threat(s)?

Describe the technician error(s) and associated undesired states

Comments - Good or bad (Please provide examples)

Threat Codes Legend	
T-A.	Task Factors
T-B.	Operator Factors
T-C.	Machine Factors
T-D.	Environmental Factors
T-E.	Social Factors
T-F.	Other Contributing Factors

**QC 3. -- INSPECTION**

Observation Number: \_\_\_\_\_

Did not observe this section

		<b>Safety Risk</b> N/A, Safe (S), At Risk (AR), Didn't Observe (DNO)	<b>Threat Code</b> (See Threat Codes List)	<b>Threat Effectively Managed</b> Y/N	<b>Error Outcome</b> 1.Inconsequential 2.Undesired state 3.Additional error & <b>Remarks</b>
	<b>Safety</b>				
1	Notes, cautions, and warnings reviewed				
2	Notes, cautions, and warnings followed				
3	Personal protective equipment (PPE) used				
4	Collective protective equipment (e.g., yellow/black streamers, flags) used				
5	Proper identification visible				
6	Personnel use correct manual handling, ergonomics (e.g., proper lifting techniques)				
7	Personnel exhibit appropriate work behavior (e.g., no "horseplay")				
	<b>Personnel</b>				
8	Required personnel available				
	<b>Communication &amp; Coordination</b>				
9	Communication among technicians accomplished				
10	Communication to other departments accomplished				
	<b>Tools &amp; Equipment</b>				
11	Tools and equipment available				
	<b>Parts &amp; Materials</b>				
12	Materials available				
	<b>Procedures</b>				
13	Correct PN verified against approved/accepted data				
14	Effectivity/configuration verified				
15	Hazardous energy systems (electrical, hydraulics, pneumatics, stored energy) deactivation LOTO procedures verified				
16	Protective appliances (e.g., caps, covers) removed				
17	Component/area-to-be-inspected viewed to ensure adequate coverage				
18	Visual scan/search executed using a good strategy				

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	<b>Procedures: Response to Indications</b>				
19	Search stopped when an indication is found				
20	Indication type identified				
21	Indication compared to standards for that indication type				
22	Measure and classify the indication				
23	Outcome decisions made for that indication upon measuring and classifying				
24	Location and details recorded once the indication is confirmed				
25	Defect marked for repair				
26	Paperwork procedures completed				
27	Visual scan/search resumed if the indication is not confirmed				
28	Visual scan/search stopped when all possible non-conformities detected and located				
29	All indications compared to standards				
30	All indications measured and classified				
31	Outcome decisions reached for all indications upon measuring and classifying them				
32	Equipment and other job aids removed from the work area and returned to storage				
33	Actions specified by outcome decisions took place				
	<b>Readytime</b>				
34	Production expectation/readytime clear				
35	Production expectation/readytime reasonable				
	<b>Communication &amp; Coordination</b>				
36	Supervision/logistics support responded when needed				
	<b>Threat Management</b>				
37	Strategies developed for identified threats				
38	Generated non-routines for work-not-specified in the tech publications				
	<b>Turnover or Completion</b>				
39	Task/shift turnover completed				
40	Individual work step signoff completed				

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Describe the threat(s). How did the technician(s) manage or mismanage the threat(s)?

Describe the technician error(s) and associated undesired states

Comments - Good or bad (Please provide examples)

Threat Codes Legend	
T-A.	Task Factors
T-B.	Operator Factors
T-C.	Machine Factors
T-D.	Environmental Factors
T-E.	Social Factors
T-F.	Other Contributing Factors

### QC 4. – BUYBACK

Observation Number: \_\_\_\_\_

Did not observe this section

		<b>Safety Risk</b> N/A, Safe (S), At Risk (AR), Didn't Observe (DNO)	<b>Threat Code</b> (See Threat Codes List)	<b>Threat Effectively Managed</b> Y/N	<b>Error Outcome</b> 1.Inconsequential 2.Undesired state 3.Additional error <b>&amp;</b> <b>Remarks</b>
	<b>Safety</b>				
1	Notes, cautions, and warnings reviewed				
2	Notes, cautions, and warnings followed				
	<b>Personnel</b>				
3	Required personnel available				
	<b>Parts &amp; Materials</b>				
4	Parts, materials, and wastes dispositioned				
	<b>Procedures</b>				
5	Required deactivation and removal procedures followed				
6	Required deactivation and removal procedures documented				
7	Inspection test procedures followed				
8	Repair examined against standards and signed off				
9	Required reactivation and restoration procedures followed				
10	Required reactivation and restoration documented				
11	Access panels secured				
	<b>Communication &amp; Coordination</b>				
12	Communication among technicians accomplished				
13	Communication to other departments accomplished				
	<b>Threat Management</b>				
14	Strategies developed for identified threats				
15	Generated non-routines for work-not-specified in the tech publications				
	<b>Turnover or Completion</b>				
16	Task/shift turnover completed				
17	Appropriate records completed				
18	Individual work step signoff completed				

Maintenance QC LOSA Observation Form

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Maintenance QC LOSA Observation Form

Describe the threat(s). How did the technician(s) manage or mismanage the threat(s)?

Describe the technician error(s) and associated undesired states

Comments - Good or bad (Please provide examples)

### Additional Threat(s) and Error(s)

Observation Number: \_\_\_\_\_

Did not observe this section

Describe any additional threat(s) that you observed but were not directly related to the task you focused on. How did the technician(s) manage or mismanage the threat(s)?

Describe any technician error(s) and associated undesired states that you observed but are not directly related to the task you focused on.

Comments - Good or bad (Please provide examples)

