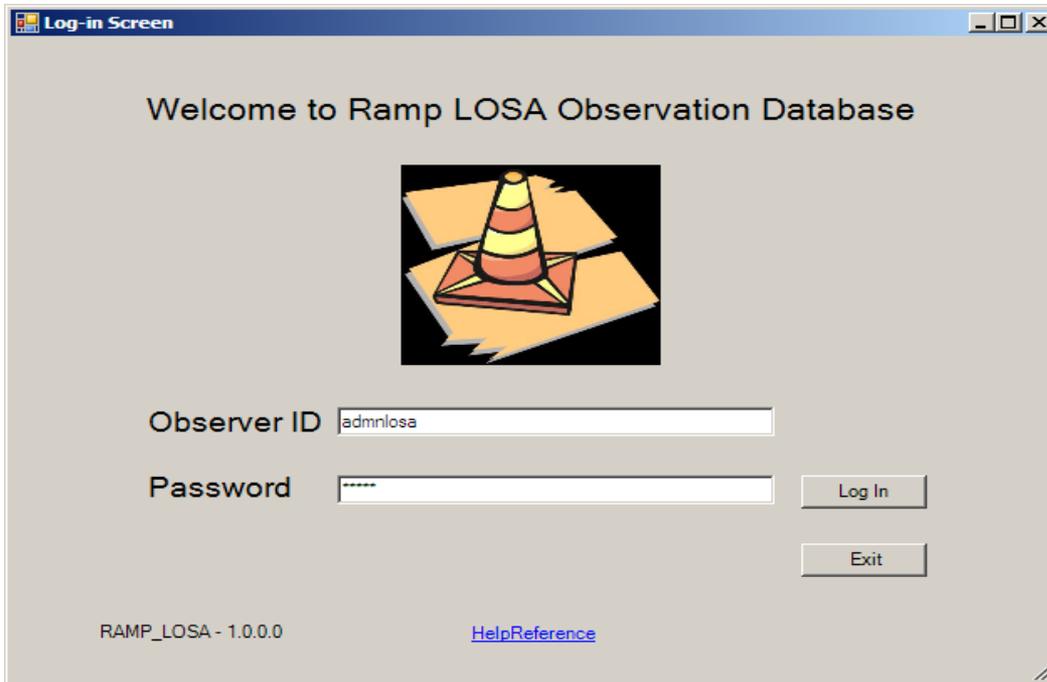


Line Operations Safety Assessment (LOSA): Ramp Operations

Training Scenarios

Observer Training Preparation

- **Prior to the start of this training**
 - **Install a free copy of the Ramp LOSA software**
 - **Use the training Observer ID and Password to log in**



Log-in Screen

Welcome to Ramp LOSA Observation Database



Observer ID

Password

RAMP_LOSA - 1.0.0.0 [HelpReference](#)

Observer ID: admnlosa

Password: X1234

Observation Forms

Download and Print the Ramp LOSA Observation Form from the LOSA Observation Database using the “Ramp Forms” link

The screenshot shows a website interface for the Ramp LOSA Database. The background is a faded image of an aircraft's landing gear. The main heading is "Line Operator Ramp LOSA Database Software and Forms". Below this, there is a large blue button with a download icon and the text "Download Ramp LOSA". Underneath the button, it says "5.18 MB" and "Software Login Information". To the right of the button, there are two links: "Mx LOSA QC Observation Forms (pdf)" and "Mx LOSA QC Threat Codes (pdf)". Below the button, there is a section titled "Ramp Manuals" with three links: "Ramp LOSA Database Administrator Manual (pdf)", "Ramp LOSA Database User Manual (pdf)", and "Ramp Forms". The "Ramp Forms" link is highlighted with a red rectangular box. To the right of the "Ramp Forms" link, there are three more links: "Ramp LOSA Observation Forms (pdf)", "Ramp LOSA Threat Codes (pdf)", and "Ramp LOSA Error Codes (pdf)".

Line Operator Ramp LOSA Database Software and Forms

[Download Ramp LOSA](#)

5.18 MB
Software Login Information

[Mx LOSA QC Observation Forms \(pdf\)](#)

[Mx LOSA QC Threat Codes \(pdf\)](#)

Ramp Manuals

[Ramp LOSA Database Administrator Manual \(pdf\)](#)

[Ramp LOSA Database User Manual \(pdf\)](#)

[Ramp Forms](#)

[Ramp LOSA Observation Forms \(pdf\)](#)

[Ramp LOSA Threat Codes \(pdf\)](#)

[Ramp LOSA Error Codes \(pdf\)](#)

Observer Preparation

- **Take a few minutes before an observation to review the form.**
 - **Make a general plan for your observations.**
 - **Be open to changing your plan and look for the unexpected.**

General Guidelines for Form Usage

- **The form is only a guide and a place to record data for later analysis.**
 - Record relevant details and behaviors that occur during the observation.
 - Form is not a checklist.
 - There are no required fields.
- **The observer may notice threats and errors not included in the list, those should be noted in the comments.**

Form Sections

1. Arrival
2. Downloading
3. Lavatory/Potable Water Service
4. Catering
5. Cleaning Service
6. Fuel Service
7. Uploading
8. Departure
9. A/C Maintenance (Mx)
10. De-Ice/Anti-Ice
11. Pilot Walk-around

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

1. ARRIVAL

Observation Number: _____

Did not observe this section

Scheduled Time of Arrival: _____

Estimated Time of Arrival: _____

Actual Time of Arrival: _____

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO),N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1.Inconsequential 2.Undesired state 3.Additional error	Remarks
Pre-Arrival										
1	Pre-flight briefing (a.k.a. huddle) held	S	AR	DNO	N/A					
2	Ramp/Airside crew ready prior to A/C arrival	S	AR	DNO	N/A					
3	Arrival FOD/trash walk complete	S	AR	DNO	N/A					
4	Gate area cleared (clean and orderly)	S	AR	DNO	N/A					
5	Loading bridge staged/stowed properly	S	AR	DNO	N/A					
6	Equipment staged properly outside clearance area	S	AR	DNO	N/A					
7	Marshaller/wingwalkers in position for A/C arrival with proper wands	S	AR	DNO	N/A					
8	Stop line identified	S	AR	DNO	N/A					
Arrival										
9	Proper hand signals used or automatic guidance system set up to marshal A/C on arrival	S	AR	DNO	N/A					
10	Tow-in/tow-on procedures followed	S	AR	DNO	N/A					
11	A/C was "safe to approach" (e.g., engines spooled down, rotating beacon off)	S	AR	DNO	N/A					
12	A/C properly chocked	S	AR	DNO	N/A					
13	Wing tip/engine markers properly placed before GSE approaches A/C	S	AR	DNO	N/A					
14	Arrival walkaround performed within required time	S	AR	DNO	N/A					
15	GPU tongue disconnected from tractor prior to connecting to A/C	S	AR	DNO	N/A					
16	Fixed GPU properly connected to A/C	S	AR	DNO	N/A					
Errors E/A – General Safety E/C – Errors Usually Occurring During Pre-arrival and Arrival E/B – Driving/Parking Error E/D – Errors Usually Occurring During Download/Upload/Serviceing E/E – Errors Usually Occurring During Pushback/Departure						5	Threats T/A. Aircraft T/D. Documents T/G. Operational T/B. Ground Equipment T/E. Ground Based T/H. Leadership & Commitment T/C. Communication/Interactions T/F. Human Factors T/I. Environmental Threats			

Observation Example

Situation

- **Unscheduled A/C diverted for Mx**
- **No huddle before A/C arrives**
- **No FOD walk**

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

1. ARRIVAL

Observation Number: _____

Did not observe this section

Scheduled Time of Arrival: _____

Estimated Time of Arrival: _____

Actual Time of Arrival: _____

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO), N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1. Inconsequential 2. Undesired state 3. Additional error	Remarks
Pre-Arrival										
1	Pre-flight briefing (a.k.a. huddle) held	S	AR	DNO	N/A					
2	Ramp/Airside crew ready prior to A/C arrival	S	AR	DNO	N/A		No			
3	Arrival FOD/trash walk complete	S	AR	DNO	N/A					
4	Gate area cleared (clean and orderly)	S	AR	DNO	N/A					
5	Loading bridge staged/stowed properly	S	AR	DNO	N/A					
6	Equipment staged properly outside clearance area	S	AR	DNO	N/A					
7	Marshaller/wingwalkers in position for A/C arrival with proper wands	S	AR	DNO	N/A					
8	Stop line identified	S	AR	DNO	N/A					
Arrival										
9	Proper hand signals used or automatic guidance system set up to marshal A/C on arrival	S	AR	DNO	N/A					
10	Tow-in/tow-on procedures followed	S	AR	DNO	N/A					
11	A/C was "safe to approach" (e.g., engines spooled down, rotating beacon off)	S	AR	DNO	N/A					
12	A/C properly chocked	S	AR	DNO	N/A					
13	Wing tip/engine markers properly placed before GSE approaches A/C	S	AR	DNO	N/A					
14	Arrival walkaround performed within required time	S	AR	DNO	N/A					
15	GPU tongue disconnected from tractor prior to connecting to A/C	S	AR	DNO	N/A					

Ramp LOSA Observation

Reference 1 – Threat Codes

Instructions for Use:

1. The following categories provide a number for the “Threat Code” column in the Ramp LOSA Observation Form.
2. Select a letter and number combination (e.g., A1= Aircraft – A/C configuration).
3. More than 1 code per item is possible.

Definitions:

Threat – any condition that increases complexity of the operations and if not managed properly can decrease the safety margin.

Error – a mistake that is made when threats are mismanaged.

Threat Codes

T/A – Aircraft

T/B – Ground Equipment

T/C – Communication/Interactions

T/D – Documents

T/E – Ground Based

T/F – Human Factors

T/G – Operational

T/H – Leadership & Commitment

T/I – Environmental Threats

Threat Selection

Category T/G. Operational

1. Coded operation days (Yellow / Red)
2. Early/unexpected or late gate changed arrival
3. Decision making/planning
4. Delays
 - 4.1 ATC/ground control
 - 4.2 Cabin crew
 - 4.3 Customer service
 - 4.4 Flight crew
 - 4.5 Maintenance
 - 4.6 Weather
 - 4.7 Ramp crew
 - 4.8 Fuel
 - 4.9 Other delays, specify _____

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

1. ARRIVAL

Observation Number: _____

Did not observe this section

Scheduled Time of Arrival: _____

Estimated Time of Arrival: _____

Actual Time of Arrival: _____

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO), N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1. Inconsequential 2. Undesired state 3. Additional error	Remarks
Pre-Arrival										
1	Pre-flight briefing (a.k.a. huddle) held	S	AR	DNO	N/A					
2	Ramp/Airside crew ready prior to A/C arrival	S	AR	DNO	N/A		T/G-2	No		
3	Arrival FOD/trash walk complete	S	AR	DNO	N/A					
4	Gate area cleared (clean and orderly)	S	AR	DNO	N/A					
5	Loading bridge staged/stowed properly	S	AR	DNO	N/A					
6	Equipment staged properly outside clearance area	S	AR	DNO	N/A					
7	Marshaller/wingwalkers in position for A/C arrival with proper wands	S	AR	DNO	N/A					
8	Stop line identified	S	AR	DNO	N/A					
Arrival										
9	Proper hand signals used or automatic guidance system set up to marshal A/C on arrival	S	AR	DNO	N/A					
10	Tow-in/tow-on procedures followed	S	AR	DNO	N/A					
11	A/C was "safe to approach" (e.g., engines spooled down, rotating beacon off)	S	AR	DNO	N/A					
12	A/C properly chocked	S	AR	DNO	N/A					
13	Wing tip/engine markers properly placed before GSE approaches A/C	S	AR	DNO	N/A					
14	Arrival walkaround performed within required time	S	AR	DNO	N/A					
15	GPU tongue disconnected from tractor prior to connecting to A/C	S	AR	DNO	N/A					

Ramp LOSA Observation

Reference 2 – Error Codes

Instructions for Use:

1. The following categories provide a number for the “Error Code” column in the Ramp LOSA Observation Form.
2. Select a letter and number combination (e.g., E/A-1= General Safety – Safety vests not used, improperly used, or in poor condition).
3. More than 1 code per item is possible.

Definitions:

Threat – any condition that increases complexity of the operations and if not managed properly can decrease the safety margin.

Error – a mistake that is made when threats are mismanaged.

Error Codes

E/A – General Safety

E/B – Driving/Parking Errors

E/C – Events Usually Occurring During
Pre-arrival and Arrival

E/D – Events Usually Occurring During
Download/Upload/Servicing

E/E – Events Usually Occurring During
Pushback/Departure

Error Selection

Category E/C – Events Usually Occurring During Pre-arrival and Arrival

1. No pre-arrival briefing
2. FOD check inadequate or omitted
3. No/improper safety wands used on arrival
4. Improper marshaling of A/C

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

1. ARRIVAL

Observation Number: _____

Did not observe this section

Scheduled Time of Arrival: _____

Estimated Time of Arrival: _____

Actual Time of Arrival: _____

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO),N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1.Inconsequential 2.Undesired state 3.Additional error	Remarks
Pre-Arrival										
1	Pre-flight briefing (a.k.a. huddle) held	S	AR	DNO	N/A					
2	Ramp/Airside crew ready prior to A/C arrival	S	AR	DNO	N/A		T/G-2	No		
3	Arrival FOD/trash walk complete	S	AR	DNO	N/A	E/C-2				
4	Gate area cleared (clean and orderly)	S	AR	DNO	N/A					
5	Loading bridge staged/stowed properly	S	AR	DNO	N/A					
6	Equipment staged properly outside clearance area	S	AR	DNO	N/A					
7	Marshaller/wingwalkers in position for A/C arrival with proper wands	S	AR	DNO	N/A					
8	Stop line identified	S	AR	DNO	N/A					
Arrival										
9	Proper hand signals used or automatic guidance system set up to marshal A/C on arrival	S	AR	DNO	N/A					
10	Tow-in/tow-on procedures followed	S	AR	DNO	N/A					
11	A/C was "safe to approach" (e.g., engines spooled down, rotating beacon off)	S	AR	DNO	N/A					
12	A/C properly chocked	S	AR	DNO	N/A					
13	Wing tip/engine markers properly placed before GSE approaches A/C	S	AR	DNO	N/A					
14	Arrival walkaround performed within required time	S	AR	DNO	N/A					
15	GPU tongue disconnected from tractor prior to connecting to A/C	S	AR	DNO	N/A					
16	Fixed GPU properly connected to A/C	S	AR	DNO	N/A					

Practice Observations

Practice Observation Instructions

- **Complete the appropriate section of the observation form for each of the following situations.**
- **Identify and mark down the threats and errors and include any remarks.**
- **Following your observation, please enter your information into the Ramp LOSA software database.**

**Scenario #1:
Towbar Incorrectly Attached**

Situation

During pushback, a CRJ-200 started rolling free when the towbar separated from the tug due to an incorrect attachment by the ground crew.

Please take a few minutes to code this observation

- **Aircraft begins to roll**
 - **Contributing factor: Towbar incorrectly attached**



Threat Code(s)

Threat Selection

T/B. Ground Equipment (e.g., malfunction, poor condition, poor design, poor set-up, stage in the wrong place)

6. Non-motorized ground equipment

...

6.7 Lavatory cart

6.8 Maintenance stands

6.9 Mobile stairs

6.10 Rolling bag rack

6.11 Tail stand

6.12 Towbar

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

8. DEPARTURE

Observation Number: _____

Did not observe this section

Scheduled Time of Departure: _____ Estimated Time of Departure: _____ Actual Time of Departure: _____

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO), N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1.Inconsequential 2.Undesired state 3.Additional error	Remarks
Pre-Departure										
1	Ramp/Airside free of any items that could interfere with the safe operation of GSE or cause FOD	S	AR	DNO	N/A					
2	Pre-departure walkaround performed	S	AR	DNO	N/A					
3	Steering by-pass pin installed and towbar hooked up	S	AR	DNO	N/A		T/B-6.12	N	2	Towbar separated from tug
4	Correct size of tractor and towbar used for pushback	S	AR	DNO	N/A					
5	Pushback briefing held	S	AR	DNO	N/A					
6	Ground power removal procedures followed	S	AR	DNO	N/A					
7	Conditioned air removal procedures followed									
8	Pre-pushback procedures followed	S	AR	DNO	N/A					
Passenger Loading Bridge										
9	Confirmed cabin secure before closing A/C door	S	AR	DNO	N/A					
10	Passenger doors closed and secured properly	S	AR	DNO	N/A					

Error Code(s)

Error Selection

Category E/A – General Safety

....

19. FOD on equipment

20. Safety rails not properly deployed

21. Vehicle doors left open when unattended

22. Push tug not properly repositioned to gate area

23. Towbar improperly connected

24. Fall protection not/improperly used

25. Area beneath the loading bridge not clear

....

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

8. DEPARTURE

Observation Number: _____

Did not observe this section

Scheduled Time of Departure: _____ Estimated Time of Departure: _____ Actual Time of Departure: _____



		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO), N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1.Inconsequential 2.Undesired state 3.Additional error	Remarks
--	--	---	--	--	--	------------	-------------	-----------------------------------	---	---------

Pre-Departure										
1	Ramp/Airside free of any items that could interfere with the safe operation of GSE or cause FOD	S	AR	DNO	N/A					
2	Pre-departure walkaround performed	S	AR	DNO	N/A					
3	Steering by-pass pin installed and towbar hooked up	S	AR	DNO	N/A	E/A-23	T/B-6.12	N	2	Towbar separated from tug
4	Correct size of tractor and towbar used for pushback	S	AR	DNO	N/A					
5	Pushback briefing held	S	AR	DNO	N/A					
6	Ground power removal procedures followed	S	AR	DNO	N/A					
7	Conditioned air removal procedures followed									
8	Pre-pushback procedures followed	S	AR	DNO	N/A					
Passenger Loading Bridge										
9	Confirmed cabin secure before closing A/C door	S	AR	DNO	N/A					
10	Passenger doors closed and secured properly	S	AR	DNO	N/A					
11	Loading bridge procedures followed	S	AR	DNO	N/A					
Passenger/Crew Stairs										
12	Confirm cabin is secured before closing A/C door	S	AR	DNO	N/A					

Your sheets entries should contain something similar to the following...

- **Threat codes:**
 - **T/B-6.12 Non-motorized Ground Equipment – Towbar**
- **Error codes:**
 - **E/A-23 General Safety – Towbar improperly connected**

**Scenario #2:
Ramp Worker Struck by Cabin Door**

Situation

- **A CRJ-700's main cabin door struck a ramp worker as it was being opened after arrival. The worker was retrieving wheel chocks (while walking backwards), which were left on the ramp in a location near where a parked CRJ-200's wheels would be located.**

Please take a few minutes to code this observation

- **Ramp worker struck by door**
 - **Contributing factor: chocks incorrectly positioned**



Threat Code(s)

Threat Selection

T/A. Aircraft (e.g., malfunction, poor condition, poor design, poor set-up, stage in the wrong place)

- 1. A/C configuration**
- 2. A/C exterior**
- 3. A/C interface design**
- 4. A/C staging**
- 5. A/C positioning**
- 6. A/C cargo/bulk load positions**
- 7. APU**
- 8. Cabin**
- 9. Other interior, specify _____**
- 10. Doors**
- 11. Electrical**
- ...**

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO), N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1.Inconsequential 2.Undesired state 3.Additional error	Remarks
		S	AR	DNO	N/A					
17	Conditioned air properly connected	S	AR	DNO	N/A					
18	Tail post (or nose tether) used as required	S	AR	DNO	N/A					
Passenger Loading Bridge										
19	Loading bridge pre-use check completed	S	AR	DNO	N/A					
20	Loading bridge positioning procedures followed	S	AR	DNO	N/A		T/A-10	N	3	<i>Ramp worker injured by cabinet door</i>
21	Inspection of the passenger door and surrounding area completed before opening	S	AR	DNO	N/A					
22	Passenger doors opened and secured properly	S	AR	DNO	N/A					
Passenger/Crew Stairs										
23	Passenger/crew stairs pre-use check completed	S	AR	DNO	N/A					
24	Passenger/crew stairs positioning procedures followed	S	AR	DNO	N/A					
25	Inspection of the passenger door completed before opening	S	AR	DNO	N/A					
26	Passenger doors opened and secured properly	S	AR	DNO	N/A					

Error Code(s)

Error Selection

Category E/C – Errors Usually Occurring During Pre-arrival and Arrival

....

16. Bridge warning device (e.g., beacon, bell) ignored

17. Passenger loading bridge lights not utilized

18. Auto leveling system not deployed

19. Passenger doors not cleared prior to opening

20. Passenger loading bridge improperly positioned to A/C door

21. Non compliance with passenger loading bridge guide procedures on approach

....

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 18.0 June 24, 2010

1. ARRIVAL

Observation Number: _____

Did not observe this section

Scheduled Time of Arrival: _____

Estimated Time of Arrival: _____

Actual Time of Arrival: _____

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO), N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1. Inconsequential 2. Undesired state 3. Additional error	Remarks
		S	AR	DNO	N/A					
17	Conditioned air properly connected	S	AR	DNO	N/A					
18	Tail post (or nose tether) used as required	S	AR	DNO	N/A					
Passenger Loading Bridge										
19	Loading bridge pre-use check completed	S	AR	DNO	N/A					
20	Loading bridge positioning procedures followed	S	AR	DNO	N/A	E/C - 19	A - 10	N	3	Ramp worker injured by cabin door
21	Inspection of the passenger door and surrounding area completed before opening	S	AR	DNO	N/A					
22	Passenger doors opened and secured properly	S	AR	DNO	N/A					
Passenger/Crew Stairs										
23	Passenger/crew stairs pre-use check completed	S	AR	DNO	N/A					
24	Passenger/crew stairs positioning procedures followed	S	AR	DNO	N/A					
25	Inspection of the passenger door completed before opening	S	AR	DNO	N/A					
26	Passenger doors opened and secured properly	S	AR	DNO	N/A					

Your sheets entries should contain something similar to the following...

- **Threat codes:**
 - **T/A-10 Aircraft – Doors**
- **Error codes:**
 - **E/C-19 Errors Usually Occurring During Pre-arrival and Arrival – Passenger doors not cleared prior to opening**

**Scenario #3:
Tug Overturned by Jet Blast**

Situation

- **An on-the-ground engine run was conducted on a CRJ-200 after maintenance. The tug driver did not pay attention to the jet blast. The jet blast overturned and damaged a baggage cart behind him.**

Please take a few minutes to code this observation

- **Tug driver enters jet blast and baggage cart is overturned**



Threat Code(s)

Threat Selection

T/A. Aircraft (e.g., malfunction, poor condition, poor design, poor set-up, stage in the wrong place)

...

10. Doors

11. Electrical

12. Engine

13. Fire protection

14. Flight controls

...

Threat Selection

T/B. Ground Equipment (e.g., malfunction, poor condition, poor design, poor set-up, stage in the wrong place)

- 1. Equipment interface/design**
- 2. Equipment staging**
- 3. Equipment positioning**
- 4. Equipment availability**
- 5. Motorized Equipment**

5.1 Bag tug

5.2 Beltloader

5.3 Catering truck

...

Threat Selection

T/F. Human Factors

....

13. Overtime

14. Second/third job

15. Shift/day swap

16. Situational awareness

17. Work practices (non compliance)

18. Workload

Error Code(s)

Error Selection

Category E/A – General Safety

1. Safety vests not used, improperly used, or in poor condition
2. Hearing protection not used, improperly used, or in poor condition
3. Face shield not used , improperly used, or in poor condition
4. Proper footwear not used, improperly used, or in poor condition
5. General aircraft safety (observe clearance zone, buffer zone, etc.) not observed
6. Portable GPU used improperly
7. Equipment and/or personnel in jet blast/engine ingestion area
8. Equipment not marshaled as required

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

2. DOWNLOADING

Observation Number: _____

Did not observe this section

Downloading Start Time: _____

Downloading Finish Time: _____

		Safety Risk				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1.Inconsequential 2.Undesired state 3.Additional error	Remarks
		Safe (S), At Risk (AR), Did Not Observe (DNO),N/A								
14	Dolly ULD locks checked during offload	S	AR	DNO	N/A					
15	Dolly locks are properly set prior to approach to container loader	S	AR	DNO	N/A					
Personnel										
16	PPE worn	S	AR	DNO	N/A					
17	Personnel exhibit appropriate work behavior (e.g., no "horseplay")	S	AR	DNO	N/A					
18	Personnel use correct manual handling, ergonomics (e.g., proper lifting techniques)	S	AR	DNO	N/A					
19	Personnel avoid walking where not authorized (e.g., under the fuselage, stepping over towbar, or between carts)	S	AR	DNO	N/A					
20	All traffic regulations followed	S	AR	DNO	N/A	E/A - 7	T/A-12 T/B-5.1 T/F-16 T/F-17	N	3	<i>Tug blown over by jet blast</i>

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

Your sheets entries should contain something similar to the following...

- **Threat codes:**
 - **T/A-12 Aircraft – Engine**
 - **T/B-5.1 Ground Equipment – Motorized Equipment-
Bag tug**
 - **T/F-16 Human Factors – Situational awareness**
 - **T/F-17 Human Factors – Work practices (non
compliance)**

- **Error codes:**
 - **E/A-7 General Safety – Equipment and/or personnel in
jet blast/engine ingestion area**

**Scenario #4:
Plane Contacts Jet Bridge**

Situation

- **An ERJ-145 contacted the jet bridge with a wing tip when being pushed from a gate. There were several deviations from SOP, including no communication with Tug Driver and no lighted wands.**

Please take a few minutes to code this observation

- **Plane contacts jet bridge**
 - **Contributing factors: Lack of communication and no lighted wands**



Threat Code(s)

Threat Selection

T/B. Ground Equipment (e.g., malfunction, poor condition, poor design, poor set-up, stage in the wrong place)

....

5. Motorized Equipment

...

5.11 Lift trucks

5.12 Mx vehicles

5.13 Passenger loading bridge

5.14 Pick up vehicles

5.15 Pushback tractor

Threat Selection

T/C. Communication/Interactions (e.g., breakdown, disconnection, miscommunication)

...

10. Emergency Responders

11. Flight control

12. Flight crew

13. Fuelers

14. Load control center

15. Maintenance

16. Ramp crew (e.g., loading bridge operator)

17. Regulator Inspector

...

Threat Selection

T/F. Human Factors

....

13. Overtime

14. Second/third job

15. Shift/day swap

16. Situational awareness

17. Work practices (non compliance)

18. Workload

Error Code(s)

Error Selection

Category E/E – Errors Usually Occurring During Pushback/Departure

...

24. Improper marshalling of A/C

25. Headset not used

26. Headset improperly used

27. Safety wands not used on departure

28. Safety wands improperly used on departure

29. Hand signals not used by wingwalkers

...

LOSA Observation Form

Ramp/Airside LOSA Observation Form

Version 12/05/2011

8. DEPARTURE

Observation Number: _____

Did not observe this section

Scheduled Time of Departure: _____ Estimated Time of Departure: _____ Actual Time of Departure: _____

		Safety Risk Safe (S), At Risk (AR), Did Not Observe (DNO), N/A				Error Code	Threat Code	Threat Effectively Managed Y/N	Error Outcome 1. Inconsequential 2. Undesired state 3. Additional error	Remarks
		S	AR	DNO	N/A					
	the bridge until the A/C clears the gate									
16	If headset inoperative, prior to A/C departure, flight crew briefed about the use of hand signals during departure pushback	S	AR	DNO	N/A					
17	Marshaling/Wingwalking procedures followed	S	AR	DNO	N/A					
18	Pushback procedures followed	S	AR	DNO	N/A	E/E-24 E/E-25 E/E-27	T/B-5.13 T/C-12 T/C-16 T/F-16 T/E-17	N	3	<i>Plane contacted jet bridge</i>
19	Steering by-pass pin & towbar disconnect procedure followed	S	AR	DNO	N/A					
20	Final dispatch/release procedures followed	S	AR	DNO	N/A					
Return & Housekeeping										
21	Marshaller/Wingwalkers conducted a FOD walk while walking back into the gate area	S	AR	DNO	N/A					
22	Gate area verified ready for next arrival	S	AR	DNO	N/A					
23	Crew debrief as necessary	S	AR	DNO	N/A					

Your sheets entries should contain something similar to the following...

- **Threat codes:**
 - **T/B-5.13 Ground Equipment – Motorized Equipment-Passenger loading bridge**
 - **T/C-12 Communication/Interactions – Flight crew**
 - **T/C-16 Communication/Interactions – Ramp crew**
 - **T/F-16 Human Factors – Situational awareness**
 - **T/F-17 Human Factors – Work practices**
- **Error codes:**
 - **E/E-24 Errors Usually Occurring During Pushback/Departure – Improper marshalling of A/C**
 - **E/E-25 Errors Usually Occurring During Pushback/Departure – Headset not used**
 - **E/E-27 Errors Usually Occurring During Pushback/Departure – Safety wands not used on departure**

**You complete one final observation for the day
and observe the following problems during
uploading and departure...**



Please take a few minutes to code these observations

Your sheets entries should contain something similar to the following...

- **Loading bridge not in stow box (#1)**
 - **Threat codes:**
 - **T/B-5.13 Ground Equipment – Motorized Equipment-Passenger loading bridge**
 - **Error codes:**
 - **E/E-14 Errors Usually Occurring During Pushback/Departure – Loading bridge not guided to stow box**

- **A/C improperly chocked (#2)**
 - **Threat codes:**
 - **T/F-17 Human Factors – Work practices (non compliance)**
 - **Error codes:**
 - **E/C-10 Errors Usually Occurring During Pre-arrival and Arrival – A/C improperly chocked**

Your sheets entries should contain something similar to the following... (cont'd)

- **FOD (#3)**
 - **Threat codes:**
 - T/E-7 Ground Based – FOD
 - **Error codes:**
 - E/A-18 General Safety – FOD on ramp
- **Using ground equipment as a ladder (#4)**
 - **Threat codes:**
 - T/B-5.2 Ground Equipment – Motorized Equipment-Beltloader
 - T/F-17 Human Factors – Work practices (non compliance)
 - **Error codes:**
 - E/A-27 General Safety – Unsafe work methods
 - E/A-36 General Safety – Equipment not used as intended
 - E/D-31 Errors Usually Occurring During Download/Upload/Service – Improper equipment (i.e. platform, tugs, etc.) used instead of a ladder

This Concludes
the Line Operations Safety Assessment
(LOSA): Ramp Operations

Training Scenarios

Visit the LOSA website: www.MRLOSA.com