

Ramp Error Decision Aid (REDA) Results Form

Section I – General Information

Reference #: Interviewer's Name:
Airline: Interviewer's Telephone #:
Station of Error: Date of Investigation:
Aircraft Type/Reg. #: Date of Event:
Equipment Type: Time of Event:
Shift of Event:
Ref. # of previous related event: Date Changes Implemented:

Section II – Event

Please select the event (check all that apply)

1. Aircraft Damage Event

- a. Cargo door
- b. Passenger door
- c. Tail
- d. Nose/radome
- e. Wing/flaps/slats/ailerons
- f. Engine/cowl
- g. Landing gear/doors
- h. Antenna/masts
- i. Other (explain below)

2. Equipment Damage Event

- a. Bag tug/cart
- b. Loading bridge/(jetbridge)
- c. Belt Loader
- d. Container loader
- e. Trucks (lav/fueling/water/etc.)
- f. Other (explain below)

3. Operational Process Event

- a. Flight delay
- b. Flight cancellation
- c. Ground interrupt/gate return/rejected takeoff
- d. Air Interrupt (return to field/diversion)
- e. Other (explain below)

4. Personal Injury Event

- a. Strain
- b. Sprain
- c. Laceration
- d. Contusion
- e. Fracture
- f. Other (explain below)

5. Environmental Impact Event

- a. Spill
- b. Release
- c. Contamination
- d. Other (explain below)

6. Weight & Balance/Cargo Event

- a. Exceeded weight/Center of Gravity (CG) limit
- b. Cargo shifted
- c. Cargo release in aircraft
- d. Live animals (death, escape, etc.)
- e. Dangerous goods incorrectly shipped
- f. Unit Load Device (ULD) failure/used unserviceable ULD
- g. Technically unairworthy conditions (reported after takeoff, reported on Offload)
- h. Spill in aircraft
- i. Contamination of aircraft
- j. Other (explain below)

7. Other Event (explain below)

Describe the specific ramp system failure.

Section III – Ramp System Failure (errors, violation, others)

Please select the system failure (check all that apply)

1. Equipment/Tools

- a. Driven/pushed/towed into
- b. Not for intended use
- c. Defective equipment
- d. Incorrectly operated
- e. Equipment left in wrong place
- f. Signal/connectivity
- g. Battery (e.g., electrical GSE)
- h. Other (explain below)

2. Foreign Object Damage (FOD)

- a. Material left on ramp
- b. Material dropped into open system
- c. Material left in aircraft/engine
- d. Failure to see foreign objects on ramp
- e. Other (explain below)

3. Aircraft Servicing

- a. Servicing not performed
- b. Servicing not performed in required time
- c. Not enough fluid
- d. Too much fluid
- e. Wrong fluid type
- f. Access not closed
- g. System/equipment not deactivated/reactivated
- h. Other (explain below)

4. Aircraft Operation

- a. Driven into equipment/facility
- b. Driven off ramp/taxi way
- c. Other (explain below)

5. Aircraft Handling

- a. Pushed/towed into
- b. Pushed/towed off of
- c. Not pushed/towed
- d. Not pushed/towed in required time
- e. Marshalling
- f. Other (explain below)

6. Maintenance

- a. Maintenance not performed
- b. Maintenance not performed in required time
- c. Equipment/parts not installed
- d. Wrong equipment/parts installed
- e. Incomplete installation
- f. Access not closed
- g. System/equipment not deactivated/reactivated
- h. Other (explain below)

7. Fault Isolation/Test/Inspection

- a. Did not detect fault
- b. Not found by fault isolation
- c. Not found by operational / functional test
- d. Not found by inspection
- e. Access not closed
- f. System/equipment not deactivated/reactivated
- g. Other (explain below)

8. Personal Injury Type

- a. Slip/trip/fall
- b. Caught in/on/between
- c. Struck by/against
- d. Hazard contacted (e.g. electricity, hot or cold surfaces, and sharp surfaces)
- e. Hazardous substance exposure (e.g. toxic or noxious substances)
- f. Hazardous thermal environment exposure (heat, cold or humidity)
- g. Incorrect body position for manual handling

- h. Other (explain below)

9. Weight & Balance

- a. Cargo exceeded weight limit
- b. Cargo loaded in an unbalanced manner
- c. Cargo (e.g., luggage) load/offload tracking error
- d. Incorrect data entries
- e. Delay in reporting error
- f. Other (explain below)

10. Other (explain below)

Describe the specific ramp system failure.

Section IV -- Contributing Factors Checklist

- N/A. **A. Information (e.g., written procedure, load plan, alerts, HAZMAT paperwork, live animal paperwork)**
- | | | |
|--|---|--|
| <input type="checkbox"/> 1. Not understandable | <input type="checkbox"/> 5. Insufficient information | <input type="checkbox"/> 9. Inefficient procedure |
| <input type="checkbox"/> 2. Unavailable/inaccessible | <input type="checkbox"/> 6. Update process is too long/complicated | <input type="checkbox"/> 10. Uncontrolled |
| <input type="checkbox"/> 3. Incorrect | <input type="checkbox"/> 7. Incorrectly modified manufacturer's MM/SB | <input type="checkbox"/> 11. Other (explain below) |
| <input type="checkbox"/> 4. Too much/conflicting information | <input type="checkbox"/> 8. Information not used | |

Describe specifically how the selected information factor(s) contributed to the failure.

B. Ground Support Equipment/Tools/Safety Equipment [Personal Protective Equipment (PPE) and Collective Protective Equipment (CPE)]

- | | | |
|--|---|---|
| <input type="checkbox"/> 1. Defective/unserviceable | <input type="checkbox"/> 9. Cannot use in intended environment | <input type="checkbox"/> 14. PPE/CPE not used |
| <input type="checkbox"/> 2. Unsafe | <input type="checkbox"/> 10. Incorrectly used in existing environment | <input type="checkbox"/> 15. PPE/CPE used incorrectly |
| <input type="checkbox"/> 3. Unreliable | <input type="checkbox"/> 11. Too complicated | <input type="checkbox"/> 16. PPE/CPE unavailable |
| <input type="checkbox"/> 4. Layout of controls or displays | <input type="checkbox"/> 12. Incorrectly labeled/marked | <input type="checkbox"/> 17. Out of calibration |
| <input type="checkbox"/> 5. Not used | <input type="checkbox"/> 13. Not labeled/marked | <input type="checkbox"/> 18. No instructions |
| <input type="checkbox"/> 6. Unavailable | | <input type="checkbox"/> 19. Inaccessible |
| <input type="checkbox"/> 7. Inappropriate for the task | | <input type="checkbox"/> 20. Past expiration date |
| <input type="checkbox"/> 8. Incorrectly used | | <input type="checkbox"/> 21. Other (explain below) |

Describe specifically how selected ground support ground support equipment/tools/safety equipment factor(s) contributed to the failure.

C. Aircraft Design/Configuration/Parts/Equipment/Consumables

- | | | |
|--|---|--|
| <input type="checkbox"/> 1. Complex | <input type="checkbox"/> 5. Insufficient information | <input type="checkbox"/> 9. Inefficient procedure |
| <input type="checkbox"/> 2. Unavailable/inaccessible | <input type="checkbox"/> 6. Update process is too long/complicated | <input type="checkbox"/> 10. Uncontrolled |
| <input type="checkbox"/> 3. Incorrect | <input type="checkbox"/> 7. Incorrectly modified manufacturer's MM/SB | <input type="checkbox"/> 11. Other (explain below) |
| <input type="checkbox"/> 4. Too much/conflicting information | <input type="checkbox"/> 8. Information not used | |

Describe specifically how the selected aircraft design/configuration/parts/equipment/consumables factor(s) contributed to failure.

D. Job/Task

- | | | |
|--|---|--|
| <input type="checkbox"/> 1. Repetitive/monotonous tasks | <input type="checkbox"/> 5. Requires forceful exertions | <input type="checkbox"/> 7. Requires twisting |
| <input type="checkbox"/> 2. Complex/confusing | <input type="checkbox"/> 6. Requires kneeling/ bending stooping | <input type="checkbox"/> 8. Long duration |
| <input type="checkbox"/> 3. New task or task change | | <input type="checkbox"/> 9. Awkward position |
| <input type="checkbox"/> 4. Different from other similar | | <input type="checkbox"/> 10. Other (explain below) |

Describe specifically how the selected job/task factor(s) contributed to the failure

E. Knowledge/Skills

- | | | |
|---|--|--|
| <input type="checkbox"/> 1. Technical skills | <input type="checkbox"/> 5. Vendor process knowledge | <input type="checkbox"/> 9. English language proficiency |
| <input type="checkbox"/> 2. Task knowledge | <input type="checkbox"/> 6. Airport process knowledge | <input type="checkbox"/> 10. Teamwork skills |
| <input type="checkbox"/> 3. Task planning | <input type="checkbox"/> 7. Aircraft system knowledge | <input type="checkbox"/> 11. Computing skills |
| <input type="checkbox"/> 4. Airline process knowledge | <input type="checkbox"/> 8. Aircraft configuration knowledge | <input type="checkbox"/> 12. Other (explain below) |

Describe specifically how the selected knowledge/skills factor(s) contributed to the failure.

NA.

F. Individual Factors

- | | | |
|---|---|---|
| <input type="checkbox"/> 1. Physical health (including hearing and sight) | <input type="checkbox"/> 5. Complacency | <input type="checkbox"/> 10. Visual perception |
| <input type="checkbox"/> 2. Fatigue | <input type="checkbox"/> 6. Body size/strength | <input type="checkbox"/> 11. Lack of Assertiveness |
| <input type="checkbox"/> 3. Time pressure | <input type="checkbox"/> 7. Personal event (e.g., family problem, car accident) | <input type="checkbox"/> 12. Stress |
| <input type="checkbox"/> 4. Peer pressure | <input type="checkbox"/> 8. Task distractions/interruptions | <input type="checkbox"/> 13. Situation awareness |
| | <input type="checkbox"/> 9. Memory lapse (forgot) | <input type="checkbox"/> 14. Workload/task saturation |
| | | <input type="checkbox"/> 15. Other (explain below) |

Describe specifically how the selected individual factors contributed to the failure

G. Environment/Facilities/Ramp

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> 1. High noise levels | <input type="checkbox"/> 6. Snow | <input type="checkbox"/> 11. Hazardous/toxic substances | <input type="checkbox"/> 16. Lighting |
| <input type="checkbox"/> 2. Hot | <input type="checkbox"/> 7. Wind | <input type="checkbox"/> 12. Power sources | <input type="checkbox"/> 17. Labels/placards/signage |
| <input type="checkbox"/> 3. Cold | <input type="checkbox"/> 8. Lightning | <input type="checkbox"/> 13. Inadequate ventilation | <input type="checkbox"/> 18. Confined space |
| <input type="checkbox"/> 4. Humidity | <input type="checkbox"/> 9. Vibrations | <input type="checkbox"/> 14. Inadequate blast protection | <input type="checkbox"/> 19. Other (explain below) |
| <input type="checkbox"/> 5. Rain | <input type="checkbox"/> 10. Cleanliness | <input type="checkbox"/> 15. Markings | |

Describe specifically how the selected environment/facilities/ramp factor(s) contributed to the failure.

H. Organizational Factors

- | | | |
|---|---|---|
| <input type="checkbox"/> 1. Quality of support from technical Organizations (e.g., maintenance control, dispatch, ground control) | <input type="checkbox"/> 6. Corporate change/restructuring | <input type="checkbox"/> 11. Work group normal practice (norm) |
| <input type="checkbox"/> 2. Quality of support from airport vendors | <input type="checkbox"/> 7. Union action | <input type="checkbox"/> 12. Failure to follow ground guidance |
| <input type="checkbox"/> 3. Quality of support from airport organizations | <input type="checkbox"/> 8. Work process/procedure | <input type="checkbox"/> 13. Failure to follow airport authority guidance |
| <input type="checkbox"/> 4. Company policies | <input type="checkbox"/> 9. Work process/procedure not followed | <input type="checkbox"/> 14. Team building |
| <input type="checkbox"/> 5. Not enough staff | <input type="checkbox"/> 10. Work process/procedure not documented (e.g., use tribal knowledge) | <input type="checkbox"/> 15. Other (explain below) |

Describe specifically how the selected organizational factor(s) contributed to the failure.

N/A **I. Leadership/Supervision**

- 1. Planning/organization of tasks approved
- 2. Prioritization of work

- 3. Delegation/assignment of task
- 4. Unrealistic attitude/expectations
- 5. Does not assure that approved process/procedure is

- followed
- 6. Amount of supervision
- 7. Other (explain below)

Describe specifically how the selected leadership/supervision factor(s) contributed to the failure.

N/A **J. Communication**

- 1. Between departments
- 2. Between staff
- 3. Between shifts

- 4. Between ramp staff and lead
- 5. Between lead and management
- 6. Between flight crew and ramp staff

- 7. Between airline and vendor
- 8. Between vendors
- 9. Between airline and airport
- 10. Other (explain below)

Describe specifically how the selected communication factor(s) contributed to the failure.

N/A **K. Other Contributing Factors (explain below)**

Describe specifically how this other contributing factors contributed to the failure.

Section V Failure Prevention Strategies

A. What current existing procedures, processes, and/or policies in your organization are intended to prevent the incident, but didn't?

- Ramp Operation Policies or Processes (e.g., Ground Operations Manual, specify) _____
- Maintenance Policies or Procedures (specify) _____
- Inspection, Functional Check or Safety Check (specify) _____
- Required Maintenance Documentation _____
- Required Ramp Operation Documentation _____
- Supporting Documentation
 - Training materials (specify) _____
 - All operator letters (specify) _____
 - Inter-company bulletins (specify) _____
 - Other (specify) _____

B. List recommendations for system failure prevention strategies.

Recommendation #	Contributing Factor #	Recommendation
		<p style="text-align: right;">(Use additional pages, as necessary)</p>

Section VI – Chronological Summary of the Event

Summarize the event, including how some Contributing Factors lead to additional Contributing Factors

(Use additional pages, as necessary)